

**THE IMPACT OF BUYER SUPPLIER
PARTNERSHIP ON FMCG'S SUPPLY CHAIN
AGILITY: A GROUNDED THEORY APPROACH**

A thesis submitted for the degree of Doctor of Philosophy

by

Nesrine Abdel Halim Abdel Mohsen El Tawy

Brunel Business School

Brunel University London United Kingdom

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Abstract

This research study investigated the influence of maintaining a partnership form of relationship between a Fast Moving Consumer Goods (FMCG) multinational company and its core suppliers, on their abilities to achieve supply chain agility. It took place within the Middle East region, where the in-depth case study used for data collection was Unilever (North Africa Middle East). The research also focused on the role played by information technology within Unilever's (North Africa Middle East) partnership with its core suppliers and the achievement of a high level of agility within their supply chain. In addition to these two main aims, the research also focused on exploring the required attributes of supply chain agility within FMCG industry and also to explore the attributes of buyer-supplier partnership required to help the companies working within this type of industry to achieve agility within their supply chain.

To achieve the aims and objectives of this research, this study used qualitative methods for collecting rich and valuable data. Several data collection methods under the umbrella of the in-depth case study approach were used. The methodological approach used by the research was the Grounded Theory approach (Strauss and Corbin, 1990-1998). Data was collected from the case study managerial level in Unilever's (North Africa Middle East) main clusters within the Middle East in three different rounds, using semi-structured interviews. Data was also collected from five core suppliers for Unilever (North Africa Middle East). The research also used other data collection means, such as documents collected during the researcher's visits to the case studies and observation. Data was analysed using the steps and procedures of the Grounded Theory approach (Strauss and Corbin, 1990-1998). Data analysis took place in three interrelated iterative steps: open coding process, axial coding process followed by the selective coding process, leading to the generated theory of the research.

The findings of the study, as presented in the research's generated theory, showed that the partnership, with its attributes explored during the research, between Unilever (North Africa Middle East) and its core suppliers can be considered as the starting driver helping the companies working within this type of industry to achieve a higher

level of supply chain agility, through the attributes explored during the research. The generated theory also showed that the role played by information technology can be considered as the catalyst in this equation. It played the role of channelling the relationship between the two concepts: buyer-supplier partnership and supply chain agility. Information technology can be considered as the catalyst because the evidence indicates that without it the relationship between Unilever (North Africa Middle East) supplier partnership and supply chain agility would struggle to be achieved. In more detailed, 43 open codes had been derived from the first analysis coding process, and which were derived under the main pre-determined themes: FMCGs industry-based features, Buyer-supplier relationships, Information sharing and information technology, and Agility. These 43 open codes provided the basis for stages 2 and 3 of the analysis. In the axial coding process (the second data analysis), the axial sub categories and the axial categories were determined and the axial paradigm model was used in the analysis. In the final coding process: the selective analysis, the core category of the research was determined to be 'Partnership existence with core suppliers'. The relationship of this core category with the other elements in the paradigm model namely: casual conditions, context, intervening conditions, action/interactional strategies, and consequences.

The research has its own Theoretical, Methodological, and Managerial contributions. Among these contributions is that it can be considered a novel research, using a grounded theory approach to generate a theory, showing the relationship between buyer-supplier partnership and supply chain agility in this dimensional manner.

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List of publications arising from the PhD thesis

Published papers

El-Tawy, N. and Gallear, D. (2010), “Buyer-supplier partnership in agile supply chains: A conceptual view” available on line: <http://bura.brunel.ac.uk/handle/2438/4307>

Papers under review

“Exploring the agility attributes in Fast Moving Consumer Goods Supply chain: An in-depth case in the Middle East” *Futures*

Papers in progress

“The Impact of Buyer Supplier Partnership on Fast Moving Consumer Goods (FMCG)’s Supply Chain Agility: A Grounded Theory Approach”. Targeting *International Journal of Production Economics*

“Agility and open book accounting in Oil supply chain”. *Targeting Supply Chain Management: An International Journal*

“Can agility be an asset in nowadays financial statements?” Targeting *Supply Chain Management: An International Journal*

Reviewing/Editorial Boards

I had been a paper reviewer for the Supply Chain papers submitted EMCIS 2012.

Conference Papers:

El-Tawy, N. and Gallear, D. (2012) “EXPLORING THE AGILITY ATTRIBUTES FOR A FAST MOVING CONSUMER GOODS SUPPLY CHAIN: An IN-DEPTH CASE STUDY IN THE MIDDLE EAST” *ICIM-International Conference on Islamic Marketing and Branding, November 20 – 21, Brunel University London, UK*

El-Tawy, N. and Gallear, D. (2012) “EXPLORING THE SUPPLY CHAIN AGILITY ATTRIBUTES IN FAST MOVING CONSUMER GOODS INDUSTRY: A CASE STUDY IN THE MIDDLE EAST” *European, Mediterranean & Middle Eastern Conference on Information Systems June 7-8, Munich, Germany*

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El-Tawy, N. and Gallear, D. (2010) “BUYER-SUPPLIER PARTNERSHIP IN AGILE SUPPLY CHAINS: A CONCEPTUAL VIEW” *European, Mediterranean & Middle Eastern Conference on Information Systems April 12-13 2010, Abu Dhabi, UAE.*

Dedication

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Chapter one: The Supporting rationale of the research

1.0 Introduction

In this chapter research background for the importance of supply chain and supply chain management is provided. The buyer-supplier relationship, and in particular the supplier partnership concept as a means for improving supply chain management, and its role in achieving agility within supply chains is included and discussed. The chapter sets out the purpose and the rationale of the research and presents the research aims, objectives, questions and main contributions. The thesis structure is presented at the end of the chapter.

1.1 The research background

Supply chain management, as a business and management concept, has received great attention from academics and practitioners (Cousins et al., 2006). This can be clearly shown by the increase in the published articles by both the practitioners, as well as the academics, increase in supply chain management conferences, the increase in the development and training programmes for professionals and even in the supply chain management courses taught by universities (Burgess et al., 2006). This emphasis on the supply chain and its management has increased as a consequence of industrial practitioners and academics recognising that it is a key factor necessary for companies not just to compete, but actually to survive and stay in the marketplace (Li et al. 2005). This is because nowadays companies consider supply chain management as a core vehicle for success inside the competitive business environment and as the factor that enables them to provide a sustainable image for their products or service offerings inside their marketplace (Jones, 1998; cited in Li et al. 2005).

Cousins et al. (2006) argue that companies within both the private and the public sectors have recognised the importance of supply chain management and its role in achieving success for their companies. Christopher (1992) insists on this by arguing:

“competition in the future will not be between individual enterprises but between competing supply chains”. Van der Vorst (2000; cited in Van der Vorst, 2004) suggests that business managers have recognised the importance of effective coordinating, integrating and managing of core processes among all the supply chain members and consider it as the key factor for their organisations’ success. Similarly, Li et al. (2005) argue that most organisations have realised the importance of their supply chains and are increasing their efforts to enhance them. They suggest that it is not enough for the companies simply to improve their internal organisational efficiencies, but they must also improve their supply chains as well in order to strive for or to maintain a competitive position within their market place (Li et al., 2005). This argument had also been proffered by Power et al. (2001) and Moberg et al. (2002) amongst many others, who argue that management attention on achieving effective supply chain management is a necessity for achieving profitable gains.

As alluded to above, there are several factors that have led to the perceived importance of supply chain management. Arguably one of the main factors is an increasingly competitive business environment, especially after the emergence of “global” competition (Jain and Banyoucef, 2008). The “new” competition is affecting how organisations are dealing with organising and operating their supply chains (Jain and Banyoucef, 2008). Li et al. (2005) highlight that competition and especially global competition is now an important challenge facing organisations to provide their products and offer their services in the most suitable places, at the most suitable times, with the lowest possible cost.

Similarly, Kisperska-Moron and Swierczek (2009) summarise the multitude of factors that have led to the importance of supply chain management into two main categories: the economic and the technological environmental changes. These changes have led to increasing globalisation and “international economy”, which have forced the companies to enhance their ability to serve customers, have greater control over new business markets, to face the great competitive pressure, to deal with growing informational and technological pressures, to deal with the new and great variety in customers’ needs and wants, to face the growing trends in new management means

and ways to be able to lower the operational costs, to deal with investment costs and to face new customers' expectations (Kisperska-Moron and Swierczek, 2009).

Although the importance of supply chain management and its various elements is widely recognised, the success stories of effective management are far from widespread. For example, as far back as 1998 Boddy et al. (1998) note that more than half of their survey respondents were not applying supply chain partnering successfully. It therefore appears that its management in an effective manner is still not widely implemented. Much more recently this has also been suggested by other researchers such as Gunasekaran et al. (2004), who argue that although there are several techniques and frameworks of supply chain performance measures in the literature, there is still a gap concerning the empirical testing and analysis of such performance measures in real supply chains. It is reasonable to argue that this is as a result, partly at least, of the supply chain management complexity and the lack in research identifying the means and methods that can help organisations to implement supply chain management effectively (Li et al., 2005). Moreover, Cousins et al. (2006) state that although supply chain management has been studied through different disciplines and from different theoretical perspectives, which leads to richness in the field, this has also led to unclear literature as well as overlapping constructs and inconsistent results. Cousins et al. (2006) argued that this unclear state in the literature lies also in the complex and context specific domain of buyer supplier relationships elements. From their point of view there are many theories for supply chain management and buyer supplier relationships. Based on the work of Chen & Paulraj (2004) it is also suggested there is a lack in supply chain literature of clear constructs' definitions and conceptual models upon which research can be based, which leads to non generalisability. Van der Vorst (2004) suggests that among the factors that make it difficult for companies to implement supply chain management successfully are: the lack of trust between the company and its partners, differing objectives, managerial philosophies and reward systems.

The literature cited above highlights the great attention given to supply chain management as a business concept and emphasises its importance in helping companies to stay competitive inside their marketplace. However, a gap still exists in

the supply chain management literature regarding how the companies can effectively implement supply chain management in a way that can enable them to respond as quickly and effectively as they can to these changes, in this highly dynamic and competitive business world.

Within the literature on supply chain management, buyer supplier relationships have also received much academic focus. Buyer-supplier relationship is suggested to be one of the most critical factors affecting organisations efforts to effectively manage their supply chains (Chen et al., 2004). The important need for the selection of the suitable type of relationships that should exist between the company and its supply chain members as suggested by Cousins (1994), has led to the highlighting of partnership as one unique form of relationship (Veludo et al., 2004). In a study by Ryu et al. (2009), it is implied that trust, commitment and collaboration, as the antecedents of buyer-supplier partnership, have exerted a great impact on supply chain performance. It is reasonable to argue that the supply chain management literature shows the importance of relationships among all members of the same supply chain and especially the relationship between the buyer and its supplier as one core element in any successful supply chain (El-Tawy & Gallear, 2010).

The previous arguments have established that companies working within today's generally volatile and unstable business environment face great challenges in searching for suitable means in order to be able to survive. Different solutions to address companys' problems of how to deal with the environmental changes and uncertainty have been proposed in previous research. Amongst them there are concepts such as *"networking, reengineering, modular organisations, virtual corporations, high performing organisations, employee empowerment, flexible manufacturing, and just-in-time (JIT)"* (Sherehiy et al. 2007, p.445). However, many of these have not always worked in a successful manner (Sutcliffe, 1999; cited in Lin et al., 2006). Much of the research during the 1980s was focused on "flexibility" as the means for companies to adapt to new changes. During the late 1990s a new solution for helping companies to adapt to the new business environment and its challenges emerged, namely agility (Sherehiy et al., 2007), which has subsequently been developed into the concept of agile supply chains (Harrison et al., 1999).

Agility as a concept has been developed as a result of the great changes in the company's business environment. Agility is mainly helping them to solve such problems that they face due to these business changes. A study by Lin et al. (2006) specifies the business environmental changes into five different area sets. The first is the volatility of markets which occurred as a result of niche market growth, the increase in the new product introductions and the increase in the product lifetime shrinkage. The second area in the business environment changes is much related to the great competition which occurred as a result of the high speed in market changes, the increase in costs, the international and global competition, and the short new product development. The changing in customer needs and requirements is the third area of change which occurred as a result of high customisation demand, the increase in quality expectations and the rapid time of delivery. The fourth area is related to the rapid changes in technology which occurred as a result of the new and efficient production facilities developments, and the introduction of system integration. Finally, the social factors changes which occurred with the environmental protection introduction, workplace expectations and the pressures of legal factors. As mentioned before by Kisperska-Moron and Swierczek, (2009) who suggest the business changes that led companies to seek agility in order to face the rapid and unexpected business challenges. Therefore agility, and especially supply chain agility (as a result of the great importance mentioned to supply chain management discussed before) has become a necessity and indispensable area of research. From here, this research is relevant to nowadays academic investigation and need further attention and research.

The agility concept was initially introduced to be applied to the manufacturing function within organisations. The origin of "agile manufacturing" can be traced back to a set of researchers at Iaccoca Institute, Lehigh University (1991, cited in Yusuf et al. 1999). The concept was then expanded to be applied to the whole organisation as a way of doing business and as a way for gaining advantage from the business environment opportunities (Sharifi and Zhang, 1999), and as presented by Dove (1996), to be an organisational strategy. When supply chains became recognised as a crucially important vehicle for competition in the dynamic business environment, the agility approach was introduced to supply chain management as a means for the companies to further fine-tune their approach in their supply chains (Harrison et al.

1999, cited in Sharifi et al., 2006). The literature indicates that the main reason behind the process of applying agility to supply chains is to provide an effective way for the companies and other members within the supply chains to respond to the business market changes (Lee and Lau, 1999, cited in Sharifi et al.2006; Christopher and Towill, 2000).

1.2 The rationale of the research

In the literature several, if not all, of the studies on supply chain agility, appear to emphasise the importance of the relationship between the supply chain members. For example, Goldman and Nagel (1993, cited in Kisperska-Moron and Swierczek, 2009) argue that for a supply chain to be agile, the companies within this supply chain should focus on building relationships among themselves and to give attention to information technology as well as their attention to production techniques and tools. Moreover, Meredith and Francis (2000) suggest that agility enables companies to think in a new way of doing business, where they should focus more on working in boundary spanning teams rather than functionally based structures, and to move from arms-length relationships to working interdependently with other supply chain members (cited in Kisperska-Moron and Swierczek, 2009).

The literature on supply chain agility is developing; however it is arguably still quite limited. Agility, as a business concept, is still a relatively new concept, especially in the supply chain literature. As discussed previously, however, there are studies on supply chain agility that have discussed and emphasised the importance of the relationship between supply chain members as a key factor for supporting an agile supply chain (for example, Kisperska-Moron and Swierczek, 2009).

Paulraj and Chen (2007) suggest that strategic buyer-supplier relationship has a positive impact on agility performance but in an indirect way, through the external logistics integration. They argue that the strategic buyer-supplier partnership and the use of information technology improve the external logistics integration for the companies, which consequently affects their agility performance levels. In a more

detailed manner, the underdoing study investigates the relationship between the buyer-supplier partnership and its impact on supply chain agility in a direct way, exploring other elements used by Paulraj and Chen (2007) study for measuring buyer-supplier relationship and agility.

Nonetheless, it is also clear that most of these studies have dealt with these relationships in a general manner. There is, for example, a distinct lack of literature on how companies can effectively form such relationships within their supply chains and especially with their suppliers as one core factor for successful supply chains (El-Tawy & Gallear, 2010). Of even greater concern however, the literature is lacking in providing an understanding of the nature and type of relationship that can effectively and successfully enable the companies to help each other in achieving and enhancing agility within their supply chains.

As mentioned before, the literature on supply chain agility is still under developing, therefore more research and studies are needed to enrich such practical important concept. Some studies have emphasised on the important benefits and practical needs for supply chain agility. For example, Swafford et al. (2006) and Ismail and Sharifi (2006) determine several benefits for agile supply chain such as: It assists the manufacturing firm to gain higher levels of its overall agility level (Swafford et al. 2006). It assists the firm to respond and deal rapidly to the marketplace changes in an effective manner and therefore this can enable the organisation to achieve higher competitive level (Swafford et al. 2006), organisations that operate in an agile supply chain can have more ability to be market sensitive (Swafford et al. 2006), becoming more able to match demand to supply (Swafford et al. 2006). More able to achieve less cycle times (Swafford et al. 2006), agile supply chain can enable organisations to be more innovative and produce new products and all these consider agility as a key factor for organisations to achieve high global competitive level (Swafford et al. 2006). Among the benefits are also the increase in the company's abilities to respond proactively to business changes and enhancing its ability to catch new business opportunities (Ismail and Sharifi, 2006). Therefore, studying agility and especially supply chain agility is important from the practical and managerial perspective.

It is against this background that the present study took a multinational company working within the FMCG business sector to be its source of empirical evidence. Such type of industry was selected for several reasons. Firstly, most of the supply chain agility literature or even agility in general, is more focused on empirically identifying and examining the agility concept within very few limited types of industries. Among these businesses are the high technology industries such as electronics and telecommunication industries. There is very little literature on other industries such as the FMCG business. Moreover, the agility concept, especially supply chain agility, has been suggested to be a very important business philosophy required by any company to enable it to face its market challenges (Sharifi et al, 2006). It could be argued that it is just as important, if not more important for companies working within FMCGs industry, which depend on speed and flexibility capabilities and operate in a dynamic and volatile business environment (Lowson, 2001). As nowadays FMCG companies are focusing more on collaborative supply chains (Ireland, et al., 2002; cited in Christopher, 2004), this has given the attention to supply chain agility which is based on agile partnerships with other supply chain members (Christopher, 2004).

The research study took place in the Middle East context. The choice of the context area was subject to several reasons. Firstly, whereas much of the supply chain agility and supply chain partnerships research has been conducted in a Western context, little (if any) has been done in Egypt and other Middle East countries. Secondly, it is clear that Egypt and other Middle Eastern areas have become increasingly attractive locations for FMCGs companies to locate, as evidenced by specific examples of such companies that have located there or have expanded their operations there. For example, Unilever has expanded its operations in the Middle East region by combining its three major clusters there which are: Arabia, Mashreq and Maghreb into one major cluster named Unilever North Africa Middle East (NAME). This is explained in their website, as follows *"In 2007, with the objective of driving alignment of its operations as well as to leverage synergies of scale and achieve the benefits of cost arbitrage, the three clusters of Arabia, Mashreq and Maghreb, which until then were operating independently, were combined to create Unilever North Africa Middle East (NAME). Unilever NAME is today operated through 4 Business Units; Maghreb (Morocco, Tunisia, Algeria, Libya), Mashreq (Egypt and Levant countries: Lebanon, Palestine,*

Jordan, Iraq, Sudan, Syria), Kingdom of Saudi Arabia (Saudi Arabia & Yemen) and Gulf (U.A.E, Oman, Bahrain, Kuwait, Qatar) with the regions headquarters situated in Dubai, Jebel Ali” (<http://www.unileverme.com/aboutus/aboutname/>). Thirdly, the context has been selected as it is more familiar to the researcher.

It is, in turn, against this background that the need for the research presented in this thesis was derived. The focus of this research is on the influence of maintaining a buyer-supplier partnership as a unique dyadic form of buyer-supplier relationship on the ability of the manufacturing company working within Fast Moving Consumer Goods (FMCGs) type of industry to achieve agility within its supply chain. The choice of this type of industry is discussed further in section (4.1) in chapter four. In brief, it is considered to be a volatile and fast moving business with heterogeneous market place conditions. The research also focuses on exploring the role played by information flow between the company working within FMCGs and its core supplier for underpinning the application of supply chain agility and managing their supply chain in a more effective manner.

Therefore, the **research question** being addressed in this study is *“How can buyer-supplier partnership affect the achievement of agility within a FMCG manufacturing company’s supply chain?”*

1.3 The research aim and objectives

In today’s business environment which is characterised by being volatile and turbulent in nature, companies are seeking to find ways and techniques to respond to such business characteristics. Many studies have argued the fact that it is not individual companies that are the source of competition; rather it is their supply chains that are competing inside this market place (Christopher & Towill, 2001; Lambert & Cooper, 2000). As a result, companies are focusing on building strong relationships with their supply chain partners to improve their abilities to manage them. Therefore, supply chain partnerships become important means for helping companies to build effective supply chains. It was the intention of this research to explore the necessary elements

required by the companies to help them achieve supply chain agility and hence for improving their supply chain management capabilities. Therefore, the main aim of this research was *“to empirically investigate the influence of FMCG buyer-supplier partnership on achieving supply chain agility by examining interrelationships between partnership attributes and supply chain agility attributes”*.

1.3.1 Research objectives

To achieve the overall aim, the following constituted the key objectives of the research:

1-To determine the significance of buyer-supplier relationship for FMCG companies in managing their supply chains.

2- To identify the significance of agility, including its suitable attributes, as a new business concept, for companies working within FMCG supply chain context.

3- To establish a more comprehensive definition for supply chain agility, with reference to the required attributes necessary to achieve agility within FMCGs supply chains.

4- To empirically explore the attributes of buyer-supplier partnership necessary for achieving agility in the FMCG supply chain context, as well as the supply chain agility attributes that are influenced by having buyer-supplier partnership.

5- To develop a model by generating a theory identifying the attributes and explaining the relationship between supply chain partnership and agility in the FMCG supply chain context.

6- To establish the underlying role played by information sharing and information technology in the relationship between supply chain partnership and agility in the FMCG supply chain.

1.4 Research methodology

The study is considered to be under the interpretivism research paradigm umbrella. Grounded Theory research principles were used as the methodological research approach. Grounded Theory was originally applied based on the work of Glaser and Strauss (1967). However, this research study has used the version of Strauss and Corbin (1990, 1998). Data was collected from an in-depth case study of Unilever North Africa and Middle East (NAME). Unilever is a multinational company which has been working within the FMCG sector for decades. Data was collected from four sites for the case study in the Middle East. The first two sites are located in Egypt and the other two are located in Dubai (UAE). Data was also collected from five core suppliers companies to the case study in the two countries. There is triangulation in the collected data. The data collected in this research came from many sources, namely interviews, observations and website archival documents. Semi-structured interviews were conducted with the production and operations managers, procurement managers, marketing managers and supply chain managers in the different sites of the case study company. The 'semi-structured interview' aims to let the practitioners discuss freely and openly their opinions and provide their own experiences. This is with the aim of enriching the collected data. It is important to mention that all the interviewees were from the managerial level and that they were in management areas that are directly related to the company's relationship with suppliers. Archival data was obtained from two sources, one from the company's records with the permission to be published in this research and the other from the published data on the case study company's website.

The data analysis process has followed Strauss and Corbin (1990), who suggest that the researcher should follow some coding stages or procedures. According to them, the coding process includes three main procedures: open coding; axial coding and

selective coding. It is important to mention that these three processes can be considered as stages; however, it is not necessary for the research to follow them from open to axial to selective in a strict manner. The GT researcher may go forward and backward throughout his/her research. The research methodology is discussed in more detail in Chapter Three.

1.5 Structure of the thesis

This thesis is composed of nine chapters. In brief, the following discussion shows the main focus of each chapter:

Chapter One: This chapter has provided the research background, the rationale of the research, the research question, its aim and objectives, and an overview of the research methodology.

Chapter Two: presents the review of literature on supply chain, supply chain management, buyer-supplier relationships and partnerships, agility and supply chain agility.

Chapter Three: provides detailed discussion for the methodological path used by the research. The means of data collection and the means that are used for data analysis are provided.

Chapter Four: Here, the nature of the business environment surrounding the FMCG industry is provided. The reason for selecting such type of industry and the reason for selecting the company are discussed.

Chapter Five: The primary data analysis is presented in this chapter under the open coding process. The open codes derived from the first set of interviews are discussed in detail.

Chapter Six: In this chapter the groupings among the open codes are achieved under the axial coding process. The paradigm model for showing the relationships between the axial sub categories is provided.

Chapter Seven: In this chapter the core phenomenon of the research is determined and presented. The generated theory is also discussed in this chapter.

Chapter Eight: This chapter provides the required comparison for the generated theory with the existing literature according to Strauss and Corbin (1990, 1998).

Chapter Nine: Conclusions, the research contributions; research limitations and suggested avenues for future research are presented in this final chapter.

Chapter Two: Literature Review

2.0 Introduction

The literature review chapter is an essential part of the study and is considered as a core element in any research. Merriam (1998) describes the literature review as the explanation and the collection of the published previous research studies. Bory and Gall (1989) suggest reviewing the literature includes the activities of placing, understanding and evaluating the research reports and the relationships between different interpretation alternatives.

Therefore, this chapter discusses the different interpretations and explanations for the main study concepts. The importance of supply chain and its management, its origin, its definitions, its practices and the criteria that make supply chain management differ from the traditional approaches are discussed. The origin and need for partnership between the manufacturing company and its core suppliers, including its benefits and attributes, are also examined. The previous research on agility including its origin, definitions, benefits, capabilities and the concepts that are commonly related and used with it are discussed. The aim of this review of previous research on the main study concepts is to understand and identify the gaps in the literature that need to be addressed. Finally, the relationship between the central themes that are the main research constructs: buyer-supplier partnership and supply chain agility is explored from the literature. The role of information sharing through the information technology is also examined.

2.1 Supply chain management

This section examines the background of the research which is supply chain management where it is considered as the platform for the relationship between buyer-supplier partnership and agility within supply chain context. The reasons for the

importance of supply chain and its management are discussed. The origin, definitions and the practices of supply chain management are also provided.

2.1.1 The need for supply chain management

Nowadays, the rapid changes in both the economic conditions and the business conditions have led to several consequences for firms operating in industrial and commercial markets. The changes in economic conditions have led to less attention for trends such as vertical integration including economics of scale, large amount of capital and huge physical infrastructure investments, and have given more attention to issues such as specialisation, speed, agility and high growth (Samaranayake, 2005). Together with business conditions such as deregulation, increases in globalisation, and a business environment characterised by integration, cooperation, sharing in information and information technologies, such changes have led companies not to depend solely on their internal resources and experience only, but to depend on external parties as well in order to deliver high value to their customers (Samaranayake, 2005). Therefore, companies are now searching for a business philosophy that includes the importance of managing and integrating the activities undertaken by several parties either inside or outside the companies' boundaries, and which has been termed as "supply chain management" (Archibald et al. 1999, cited in Samaranayake, 2005). In this global and challenging business environment, many companies have realised the importance of their supply chains and that focusing on improving their supply chains is an important key factor for their survival in this highly dynamic business world (Li et al., 2005). Ismail and Sharifi (2006) argue that the focus and the attention given to supply chains during the 1990s are due to two main drivers. The first one is that many researchers now consider supply chains as the unit of competition, such as Bowerox et al. (1998) and Christopher (1998). The reason for this emphasis on the importance of supply chains is the decreasing interest in using vertical integration with other organisations and the greater competition and globalisation (Lummus and Vokurka, 1999, cited in Ismail and Sharifi, 2006). The other force is to optimise the organisation by integrating with other supply chain organisations' goals and activities (Cooper et al., 1997; Lummus and Vokurka, 1999).

In 2010, Naslund and Williamson critically reviewed the literature on (supply chain) management and have summarised the benefits for companies for managing their supply chains as follows: improving the firm's returns on investment (ROI) and return on assets (ROA), reducing redundancies costs, reducing inventory levels, less lead time, and less demand changes risk. Among other benefits are improvements in the product quality, customer service, market responsiveness level, and improving the access to the target markets as a result of improving the process performance. Performance improvement is also achieved with the effective managing of the firm's supply chain where the effective use of both the internal and the external abilities can lead to a more integrated supply chain (Naslund and Williamson, 2010).

2.1.2 Origin of supply chain management

Supply chain management was firstly introduced in 1982 by logistics researchers to describe an inventory management approach with regard to the managing of raw materials supply (Oliver and Webber, 1982, cited in Van der Vorst, 2004). Until the early 1990s supply chain as a concept of linking value-added activities in a common chain had not been widely applied. However, since the mid-1990s supply chain and consequently its management have become important terms in the business environment at both the practical and the academic levels (Presuti and Mawhinney, 2007). Presuti and Mawhinney (2007) argue that the emergence of the supply chain into the business and economic world may be considered as the most important development in the business environment management after US firms began using the JIT concept in early 1980s. They proposed an answer to the question concerning the reason behind the great importance and consequently the great attention to supply chain. They suggested that managers have recognised the role played by the supply chain to provide their companies a unique and sustainable competitive advantage, in the pursuit of high profitability. They argued that managing effectively the supply chain may lead to gaining competitive advantage in four performance dimensions: cost, quality, response time and flexibility.

Chen and Paulraj (2004) in their research for the origin of the concept, argue that the concept of supply chain has been developed as a result of focusing and emphasising on other related fields, such as the revolution of quality concept (Dale et al.,1994), management of material and logistical management (Carter and Price ,1993; Forrester 1961), industrial markets and networks growing interest (F Rord 1990; Jarillo, 1993), increasing in focus notion (Porter 1987; Snow et al., 1992) and finally, the impact of industry-specific researches (Womack et al., 1990; Lamming, 1993). Therefore, they argue that the researchers from then have found that they are facing some terminologies such as “supply chain”; “demand pipelines” (Farmer and Van Amstel, 1991), support chains and others (cited in Chen and Paulraj, 2004, p.119). Then, they suggest that the concept of supply chain management was firstly introduced by researchers during the 1980s (Oliver and Webber, 1992), and until now has been receiving great attention from both the academics, as well as the practitioners in the business field. They also highlight that supply chain management has been used to describe the flow of materials and information and how well the company is able to plan and control such flow processes, not only inside its borders, but also between the company and other external parties (Cooper et al, .1997; Fisher 1997). According to Chen and Paulraj (2004), from then the concept has been used to describe other related areas. For example, Harland et al. (1999) use it to discuss some strategic internal issues within the company (cited in Chen and Paulraj, 2004). It has been used also to describe other forms for vertical integration alternatives (Thorelli, 1986; Hakansson and Snehota, 1995, cited in Chen and Paulraj, 2004) and has been used to show the relationship between an organisation and its supply company (eg. Helper, 1991; Hines, 1994; Narus and Anderson, 1995, cited in Chen and Paulraj, 2004). Finally, they argue that the concept has been used to discuss the purchasing and supply research areas (eg, Morgan and Monczka, 1996; Farmer, 1997, cited in Chen and Paulraj, 2004). They also suggest that the focus of some academic researchers on fields such as purchasing and supply management; logistical and transportation fields, production and operation management, marketing area, organisational theory, information systems as management information systems, as well as strategic management areas have led to the high growth in the supply chain management concept. However, they argue that this may lead to the concept being raised or treated as a fad unless there is clear well-explained conceptual base (New, 1996). They also show that there are several authors focusing on the need for reliable well defined constructs for supply chain management,

as well as a well-explained conceptual framework for it (Saunders, 1995; Cooper et al., 1997; Babbar and Prasad, 1998; Saunders, 1998).

Ryu et al (2009) argue that supply chain management has been studied from different extended subject areas such as information technology area, variety in products, costs of supply chain information sharing real-time, coordination area, production planning coordination, scheduling of replenishment and trading partners decision making (Kapczak and Johnson, 2003; Kulpet al., 2004, cited in Ryu et al., 2009). They also argue that supply chain management has been extended to cover issues outside the company's borders for the sake of the whole supply chain partners, with support and encouragement from the main companies to decrease operational costs and enhance customer service, which result in a comparative advantage for all the supply chain partners (Subramani, 2004; Wang et al., 2006, cited in Ryu et al., 2009).

2.1.3 Supply chain management definitions

It is important to review the definitions of supply chain management provided by previous studies in order not only to understand the main meanings behind this broad concept, but also to pick up the most suitable definition that will be used by this research. Supply chain management has been defined by several researchers, and from a number of different perspectives. Supply chain management was defined by 'The Council Of Logistics Management' (2000) as *"the systematic, strategic coordination of the traditional business functions and tactics across these businesses' functions within a particular organisation and across businesses within the supply chain, for the purpose of improving the long term performance of the individual organisations and the supply chain as a whole"* (cited in Li et al., 2005, p.618). Supply chain can be considered as a set of activities that are used by any company to provide value to its customers, either ultimately as a product, service or both (Li and Shaw, 1998, cited in Samaranayake, 2005). Samaranayake (2005) defines a supply chain as a network of individual or partially linked business parties combined together upstream or downstream in cooperation to produce goods and/or services to their end users. Supply Chain Management, therefore, is a process of integrating materials and the flow of

information between different parties as customers, manufacturers and suppliers (Samaranayake, 2005).

Supply chain management has been defined by Van der Vorst (2004) as a sequence of making and executing decisional processes and the flow of materials, information and money, with the goal of satisfying the needs of the end customer, and this may occur within supply chain different stages. He also suggests that it does not include only the company and the supplier, rather; however, it also involves other important entities such as the transporters, warehouses, retailers, as well as consumers. Moreover, it also includes functional activities such as the development of new products, the marketing function, the operation and production department, the finance section, as well as the customer service department (Chopra and Meindl, 2001 cited in Van der Vorst, 2004).

In 1990s, the concept (SCM) was used primarily from a theoretical perspective to show the difference between the traditional way to manage the materials' flow and the new one (Van der Vorst, 2004).

In a study by Sharifi et al. (2006), the focus was on the importance of designing supply chains, and they argue that the main function for designing a supply chain is to provide a grounded basis for managing supply chain in an efficient and effective manner, and to play a role as a channel function between the strategy of the supply chain and its operations. In this respect, supply chain design can be considered from two different levels or perspectives (Sharifi et al., 2006). The first one is from a strategic perspective, where it can be considered as a process of identifying all the supply chain elements needed to form its structure and operational activities to match with the customers demand and with the supply chain strategy. The second is from the technical or operational perspective, where it can be considered as a process of determining the supply chain infrastructure and logistical components, such as identifying the plants' location and capacity, centres of distributions, means of transportation, fleet and lanes, manufacturing processes and activities and the patterns of logistical information exchange. They also suggest that there are two main reasons for constructing a supply chain. The first is to satisfy the pre-estimated market demand

requirements and the second one is to help and assist the members of the same supply chain to continue their growth (Sharifi et al., 2006).

Sharifi et al. (2006) suggest after reviewing the literature that supply chain design can be composed of five main components: (a) determining the market demand and knowing the existing conditions of supply chain; (b) identifying the attributes of the supply chain performance based on effective analysis for the market demand requirements and the existing conditions of the supply chain; (c) identifying the dimensions of the supply chain performance; (d) converting supply chain dimensions into functions of supply chain to transform the planned supply chain into a real supply chain; and (e) designing and testing all the planned supply chain elements and issues and comparing them to the market needs and existing conditions. This last step is considered as the most difficult, costly and time-consuming one.

Despite the efforts undertaken and still in progress by academic researchers to define supply chain and its management, until now the literature is lacking a unified accepted definition for it. This has also been observed by Naslund and Williamson (2010), who reached this conclusion after a critical and deep review of a large part of the literature on supply chain management. Therefore, the researcher can argue that there is no unified definition for supply chain management, and still more work is needed to provide a well unified agreed upon definition for such important concept in today's complex and dynamic business environment. Therefore the researcher decided to select the definition provided by the 'Council of Logistics Management' (2000) as the definition for the research background. This definition involves all the coordination and cooperation that can take place either across the organisational functional units or across the supply chain members. This definition can be considered as the main focus of the research. Since the unit of the analysis of the research is the relationship between the supplier and the organisation, therefore this definition is very suitable for this research.

2.1.4 Traditional approaches versus supply chain management

Among the researchers who have compared between both approaches to material flow are Cooper and Ellam (1993). They compared between them in eleven items (cited in Vander Vorst, 2004). They begin with the approach used to manage inventory, where they suggest that under the traditional approach the efforts for managing the inventory are independent, while under supply chain management, there is commonly a reduction in the channel inventories. They also compared the approach for total costs, where they argue that under the traditional means the aim is to decrease the company's costs, while under supply chain management the aim is to achieve cost efficiencies for all of the channel members. The time horizon under the traditional means is short term periods, while under supply chain management it is more long term focused. The information sharing required under the traditional means is to the extent of satisfying the current transactions, while under supply chain management information sharing is needed for planning and monitoring processes. The amount of coordination under the traditional approach is generally limited to the contact required for processing the transactions, while under supply chain management there are several contacts between all members of the supply chain. The common or shared planning under the traditional means is only based on processing the transactions, while under supply chain management it is ongoing and continuous shared planning. The corporate philosophies of different firms under the traditional means are often not compatible, while under supply chain management they are adjusted to become more compatible for the important relationships between supply chain members. The number of suppliers under the traditional approach tends to be large in order to increase the level of competition and decrease the level of risks, while under supply chain management the number of suppliers is small to enhance the coordination level. Channel leadership is not a recognised element required under the traditional approach, whilst it is required for supply chain management to enhance the coordination focus. Under the traditional approach, the sharing of risks and rewards tends to be unique to each member, while the risks and rewards under supply chain management are more likely to be joint for the whole supply chain, and/or for long period of time. Finally, under the traditional management the speed of operations, inventory flow and information are considered under the warehouse oriented-based including interruptions through flow barriers,

while under the supply chain management they are considered as a 'DC' oriented-based depending on interconnecting flows, JIT system and Quick response rate.

In a recent study by Jain and Benyoucef (2008) the traditional approach for material flow has been defined as a network of different organisations for the flow of the materials from the supplier's firm to the end customer. They also argue that the main aim of the traditional approach is to decrease costs of transportation, costs associated with warehousing inventory, processing of orders and information systems. They suggest that the traditional approach was introduced to face a modest competition type and slow response time, and therefore that it is not suitable to deal with the new business environment. However, supply chain management is more complex, including several parallel flows of physical goods, information and financial flows. They argue that the main aim of supply chain management is to ensure that products/services are provided in the correct quantities with the correct quality at the correct place with the effective cost manner at the correct time. (Table 2.1 in the Appendix (B) summarises, for completeness, the main differences between the traditional approach and supply chain management.)

Although supply chain management as a concept has received a lot of attention from the academics, as well as the practitioners, and much empirical research has been published on the concept (Li et al., 2005; Emberson et al., 2001), several comprehensive reviews on the proposed framework for supply chain management analysis are characterised by ambiguity and unclear vision (Bechtel and Jayaram, 1997; Croom et al., 2000; Tan, 2001; cited in Emberson et al., 2001). Despite its size, the literature on supply chain management lacks a comprehensive view for supply chain management practices and how its members should act to contribute to its overall success (Li et al., 2005).

Boddy et al.'s (1998) study showed that about more than half of their survey companies were not successful in forming partnerships with members in their supply chains (cited in Li et al., 2005). Even in highly developed countries and regions such as the US, the supply chain management is not well implemented. For example, a

survey conducted by Spekman et al. (1998, cited in Li et al., 2005), found that 60% of the supply chain alliances are not passing well. In another survey study by Deloitte Consulting (cited in Li et al., 2005), it was found that although 91% of the manufacturing companies undertaking the survey recognise the importance of their supply chains, 2% only considered their supply chains as world class (Thomas, 1999, cited in Li et al., 2005). Li et al. (2005) suggest that most of the failure related or associated with supply chain management is due to its complexity, and due to the lack of guidance in the research literature to guide and manage effectively and efficiently their supply chains. Thomas (1999) supports their argument by providing examples of some researchers focusing on certain issues only in the supply chain (cited in Li et al., 2005). For example, some researchers focus on the integrated inventory inside the company and within their supply chain members (Alvarado and Kotzab, 2001; Bechtel and Jayaram, 1997; Romano and Vinelli, 2001; Van Hoek, 1998). A second group of researchers considers supply chain management as a more advanced extension of the traditional purchasing and supplier management activities (Banfield, 1999; Lamming, 1996). A third group deals with supply chain management by focusing on the internal supply chain, such as dealing with total quality management practices (Tan et al., 2002); internal integration (Pagell, 2004; Braganza, 2002); agile/lean manufacturing (Womack and Jones, 1996; Naylor et al., 1999; McIvor, 2001) and postponement (Beamon, 1998; Naylor et al., 1999; Van Hoek, 1998; Van Hoek et al., 1999).

However there are a few identifiable efforts that have considered the concept of supply chain management as a whole from the supplier to the end customer. For example, the study by Tan et al., (2002, cited in Li et al., 2005) examine the evaluation of the supplier practices and its effect on supply chain management. Similarly, Tan et al. (1998) analysed the relationships between the practices of the supplier management, the practices of customers relationships and the organisational performance and therefore, taking into account the whole supply chain from both backward and forward views (i.e. upstream and downstream).

2.1.5 Practices of supply chain management

Supply chain management includes several sub-processes such as planning of sales and operations management demand, managing customers' orders, planning, controlling and executing of production, quality of orders and inventory management procurement, managing distribution planning process, managing transportation and shipment, and integrated planning for supply and demand (Samaranayake, 2005). Samaranayake (2005) argues that in analysing this process as a whole it seems that it includes several components, suppliers and customers. Therefore, integrating all these elements has become of great importance and a challenge for businesses today. He also suggests that in analysing this process, it can be shown that supply chain management cannot simply be considered as an extension of logistics, rather it goes far beyond this limited function or activity.

Most of the literature on supply chain practices has focused on them from different points of views. However, all practices are directed to achieve one common, agreed upon objective, which is how to improve the company's performance (Li et al., 2005). Li et al. (2005) define supply chain practices as the bundle of activities undertaken by the company to effectively manage its supply chain. They also observe that several researchers have provided frameworks for supply chain practices. For example, Donlon (1996) discusses five practices for supply chain including: suppliers' partnership, outsourcing, cycle time compression, continuous process flow and sharing of information technology. Tan et al. (2002) identify six practices for supply chain management, namely: supply chain integration, information sharing, determining supply chain characteristics, managing customer service, diverse location proximity and JIT. Min and Mentzer (2004) discuss supply chain management as involving: common vision and goals, sharing information, sharing risk and return, cooperating together, high degree of integration, long-term relationship and common supply chain leadership. Li et al. (2005), after analysing and explaining some previous frameworks of supply chain practices, come up with their own framework showing the important and commonly cited practices, that from their point of view can lead to improvement in managing a company's supply chain. They identified six practices, namely: strategic supplier partnership, customer relationship, information sharing, information quality,

internal lean practices and postponements. Table 2.2 provides a summary of research efforts that have sought to identify the salient supply chain practices.

Table 2.2: Supply chain practices in the literature

Reference	Supply chain management practices
Donlon (1996)	Suppliers' partnership, outsourcing, cycle time compression, continuous process flow & sharing of information technology.
Tan et al. (2002)	Supply chain integration, information sharing, determining supply chain characteristics, managing customer service, diverse location proximity & JIT.
Min and Mentzer (2004)	Common vision and goals, sharing information, sharing risk and return; cooperating together, high degree of integration, long-term relationship, & common supply chain leadership.
Li et al. (2005)	Strategic supplier partnership, customer relationship, information sharing, information quality, internal lean practices & postponements.
Lee and Kincade (2003)	Partnership development, use of information technology, flexibility on operations, measuring of performance, commitment of management, & characterising of demand.
Chin et al. (2004)	Development of relationships with supplier & customers, use of information technology & communication, material flow re-engineering, organisational culture change, and development of performance measure

Kuei et al. (2001)	Quality leadership of top management, effective training, management of supplier quality, quality process management, effective reporting of data, relationships with customer, relationships with employees, considering benchmarking, & supplier involvement.
Ulusoy (2003)	Logistics function, relationship with supplier, relationship with customer, & production function.
Burgess et al. (2006)	Leadership, inter-firm relationship, logistics function, process enhancement, clear orientation, use of information system
Chen and Paulraj (2004)	Reducing number of suppliers, developing of long-term relationships, supplier participation & encouraging cross-functional teams

*Adopted from: Li et al. (2005) and Talib et al. (2011)

Despite these efforts, there is still a gap in the literature of supply chain management concerning a truly unified conceptual framework that can guide companies in the management of their internal, as well as external relationships for the sake of their overall supply chain performance and success. Generally speaking, based on the above review (table 2.2), supply chain members should focus on developing and improving six general practices for improving their overall supply chain management performance. These six supply chain practices are these mostly often mentioned and suggested by the researchers in the literature as reviewed by Talib et al. (2011). They reviewed many important research studies on supply chain management and conclude that the most suggested six supply chain practices for improving supply chain performance are: relationship with customer, material flow management, strategic partnerships with suppliers, the focus and use of information and communication technological means, organizational culture change and close supplier partnerships. This highlights the fact that among the most empirically important six supply chain

practices that should be focused on by supply chain members, are two practices related directly to the relationship between two or more chain members, that is to say, partnership. Therefore, in the following sub-section, the focus shifts to reviewing the literature on buyer-supplier partnership.

2.2 Buyer-supplier partnership

There have been several research studies that have focused on the importance of partnership for the sake of both company and its suppliers. Since buyer-supplier partnership is one of the main two concepts of this research, therefore, this section reviews salient studies and a review of partnership's origin, definitions, attributes and benefits.

2.2.1 Origin and need for partnership

As the start, it is logical to discuss the beginning and the importance that lead to the development of this concept. Nowadays manufacturing companies are recognizing that to become world-class companies they should focus on maintaining an ability to build and develop a high level of trust and cooperation with their supply companies (Humphreys et al., 2003). Chen and Paulraj (2004) argue that developing and maintaining effective and successful dyadic relationships between members in the same supply chain is considered a “daunting task” (p.122). Therefore, most companies are now recognizing the importance of supplier management through partnership as a means for achieving competitive advantage inside this international competition environment (Lemke et al., 2003). Goffin et al. (1997 cited in Lemke et al., 2003) define ‘supplier management’ as “*organizing the optimal flow of high-quality, value-for-money materials or components to manufacturing companies from a suitable set of innovative suppliers*” (p.12). Supplier management is important as suppliers can have an important impact on the performance of the manufacturer, as they can contribute to reduce costs, help in designing new products and allow the companies to achieve continuous quality improvement (Monczka et al., 1993; cited in Lemke et al., 2003). Therefore, the forms of relationships, and developing and maintaining such

relationships between buyers and suppliers have received increasing attention from both academic researchers and practicing managers.

Harland (1996) states that there is a strong growing trend towards developing and building appropriate types of relationship between the company and its suppliers (cited in Veludo et al., 2004). This assists to develop what is called as “Partnering” (Veludo et al., 2004). They argue that partnership can be considered as the preferred relationship strategy where there is a high level of beneficial mutual interdependence and where the failure of one party to perform or operate in an effective way could affect negatively the performance of the other party. This is because in a partnership both partners should work closely and interdependently and act as one integrated entity. The successful implementation of supplier management can lead to enhancement in the manufacturing company’s performance levels in such issues as reducing costs, improvement in quality and product design (Monczka et al.,1993; Primo and Amundson, 2002; cited in Goffin et al. 2006). Goffin et al. (2006) argue that to achieve all of these advantages, companies are now recognizing the importance of working together with their suppliers in what is called “partnership” (eg. Fretty, 2001; Kerns 2000; cited in Goffin et al. 2006). Rackham (2001, p.32) (cited in Lemeke et al., 2003, p.12-13) argues that *“successful partnerships are about radically redesigning a business relationship...[and] partnership creates new value that could not be achieved within the existing vendor/customer roles”*

Webster (1992) highlights that there are various types of relationships and that the relationship between suppliers and manufacturing companies may range from simply exchange of transactions, into buyer-supplier partnership where there is high levels of mutual and/or total dependence (Lemke et al., 2003). Also Lambert et al. (1996) argue that relationships may take forms from arm’s length into vertical integration (Lemke et al., 2003). Webster (1992) specifies one type of partnership within the types of relationship, while Lambert et al. (1996) determine three forms of partnerships, based on time, character, nature, namely “short-term”, “long-term” and “long-term, with no end” (Lemke et al., 2003, p.16).

Partnerships are important relationship forms in the supply chain context, and can be formed between the company and other players, either from the market side such as retailers, distributors and wholesalers, or from the supply side such as vendors and suppliers (Ryu et al., 2009). Su et al. (2009) argue that partnerships between suppliers and buyers always lead to higher trust and commitment levels (Ryu et al., 2009). Buyer-supplier partnership should involve a high level of information sharing, as well as a high level of coordination and interdependency. They should involve sharing of investment, common quality levels and decreasing in their production costs and therefore this requires a high level of trust with an effective governance mechanism (Dyer et al., 1998).

Having discussed the importance and the origin of buyer-supplier partnership, it is very important to provide the main efforts provided to define buyer-supplier partnership and the associated attributes related to this concept.

2.2.2 Definitions and attributes of partnerships

This sub section provides the definitions of buyer-supplier partnership from the previous works, and the associated attributes provided to this concept which are very important to one of the questions of this research. Gentry (1996, cited in Lemke et al., 2003) note that partnerships are considered as the basis for developing supply chains in an effective manner. Lemke et al. (2003) suggest that most partnership definitions in the literature are characterised by being vague and do not include enough measures which can help to operationalize the concept. They also suggest that another characteristic for partnership definitions is the lack of measures included which are based on the perceptions of the researchers and are not tested in an empirical manner (Ellram, 1995). Lemke et al. (2003) also argued that they are sharing inconsistency. Lemke et al. (2003) state that although most of the definitions set out their attributes, however they are rarely empirically tested; therefore, as a conclusion, they argue that there is no consistent empirical based definition for partnership (Lemke et al. 2003). Since the mid-2000's however, there have been some efforts to provide a clearer definition for supply chain partnership.

An important characteristic of supply chain partnership is that it has a strategic perspective in its nature and its purpose (Gallear et al., 2012). This can be shown from the definitions given to supply chain partnership by a number of researchers. For example, Mohr and Spekman (1994) define partnerships as strategic relationships with a purpose between individual firms in order to share common goals and achieve a high mutual interdependence level. Maheswari et al. (2006) begin their definition for supply chain partnership by emphasising its strategic nature, defining it as *“a strategic coalition of two or more firms in a supply chain to facilitate joint effort and collaboration in one or more core value creating activities such as research, product development, manufacturing, marketing, sales and distribution, with the objective of increasing benefits to all partners by reducing total cost acquisition, possession and disposal of goods and services”* (p.280).

A more recent definition for supply chain partnership has been provided by He et al. (2011). They define it as *“an enduring relationship between independent firms in the successive stages of the industry chain based on vertical complementarities and loose contractual governance, and which yields superior business performance than would be achieved by the firms operating separately”* (p.59).

In a study by Campbell (1997), four definitions for buyer-supplier partnerships were specified. The first one is “self-centred” partnership, where the partnership is a simple good working relationship between the company and its supplier. In this partnership, the supplier is only determining what the company limitations are and trying to help it to overcome them. The second type of partnership is the “personal loyalty”, where the relationship is like a marriage in which the company and its supplier depend on each other all the time. Both partners are determining the barriers of each one of them and each is trying to help the other partner to overcome them. The third type of partnership is the “mutual investment”, in which the buyer-supplier relationship involves more participation by both the company and the supplier in each other’s processes. It includes shared information exchange, common problem solving, sharing of risks and rewards. The fourth type of buyer-supplier partnership is “political control”, in which the relationship between the buyer and the supplier involves a high level of mutual beneficial dependency level. It includes a high level of cooperation and integration, in

which the supplier can be considered as one part of the company, so that all the processes, activities and tasks are integrated.

Generally, partnerships can be defined as characterized by their attributes, given that the literature lacks one commonly accepted definition for partnership based on empirical evidence (Lemke et al., 2003). Partnership can be considered as a dual relationship based on commitment that exists over an extended period of time, including information sharing and risks and benefits sharing (Ellram and Hendrick, 1995; cited in Lemke et al., 2003).

Lemke et al. (2003) summarize some of the partnerships' attributes for defining it as a concept, arguing that partnership can be defined from some attributes perspectives, such as: "closeness" (Scott and Westbrook, 1991), "commitment" (Ellram and Hendrick, 1995/Ellram, 1995; Graham et al., 1994; Gentry, 1996), "dependency" (Brennan, 1997; Scott and Westbrook, 1991; Stuart, 1993; Webster, 1992), "focus on continuous improvement" (Gentry, 1996), "long-term view" (Graham et al., 1994; Gentry 1996; Stuart, 1993), "resource exchange" (Saxton 1997), "sharing information" (Ellram and Hendrick, 1995/Ellram, 1995; Graham et al., 1994; Gentry, 1996), "sharing of risks and rewards" (Ellram and Hendrick, 1995/ Ellram, 1995; Graham et al., 1994; Gentry, 1996), trust" (Scott and Westbrook, 1991; Webster, 1992), " value of the resource access" (Saxton, 1997), "Voluntary" (Graham et al., 1994).

Veludo and Macbeth (2000) determine the dimensions of partnering as: trust, win-win benefits from sharing in waste reductions and market gains, long term relationship, process coordination, problem solving sharing and high level of flexibility (cited in Veludo et al., 2004).

Lemke et al. (2003) identify the required attributes for buyer-supplier relationship and partnership. They determine attributes of relationships between the company and its suppliers from the previous research studies such as: "focus on continuous improvements", "long-term view", "resource exchange", "sharing of information", "sharing of risks and rewards", "trust", "value of the resource access", "voluntary",

“total costs”, “financial stability”, “environmental standards”, “suppliers technological capabilities”, “strategic contribution”, “industrial relations” (p.29). They also specify some new attributes for the buyer-supplier relationships including “volume of turnover”, “organizational size”, “feedback”, “complaint handling”, “customer-oriented”, “flexibility”, “importance”, “openness”(p.29). From their study they argue some attributes are common with the previous literature on relationship attributes, such as “commitment”, “dependency”, “organisational culture”, “additional service”, “quality”, “delivery performance”, “price level”. They also identify some attributes for partnership as a unique form of relationship. These are: “personal business relationships”, “special product”, “new product development”, “relationship maintenance”, “location nearby” (p.29).

In a recent study Ryu et al. (2009) test the relationship between some buyer-supplier relationship, suggested by Mohr and Spekman, (1994) as the key factors. These are trust, commitment and collaboration. They conclude with the argument that trust and commitment can lead to higher level of collaboration and that these three attributes are considered as critical factors for any partnership success (Ryu et al., 2009).

With the rich literature on partnership as one form of buyer-supplier relationship comes also the confusion of the concept. Although there are some efforts from the researchers to provide more empirical research intensive studies on partnership, still there is no unified common accepted and recognised definition and a well-integrated defined set of attributes empirically tested that can characterise the company-supplier partnership and that can enable the partnership to achieve its successful goals within their supply chains. In the present study it was therefore important to establish the study’s sample’s view of partnership attributes.

2.2.3 Benefits of partnerships

Several research studies have focused on the benefits of working closely with supply chain partners. Generally, the nature of benefits of supply chain partnerships differs from other types of relational linkages. This has been suggested by He et al. (2011) in

their study about the effect of knowledge transfer in supply chain partnerships. They argue that due to the lack of a formal written contract between the company and its partner the benefits can be achieved gradually based on an implicit common understanding of each partner's role on the overall performance.

Among the benefits summarised by Chen et al. (2004) are: the few number of suppliers to contact during ordering; less inventory management costs (Trevelen, 1987); increase in order volume and learning curve leading to increase in economies of scale (Hahn et al., 1986); decrease in lead times resulted from dedicated capacity and work-in process inventory from the company's suppliers; decrease in the logistical costs resulted from the proximal distance between the company and its suppliers (Bozarth et al., 1998); enhancing in product design relationship between the company and its supplier (De Toni and Nassimbeni, 1999), increase in trust resulting from open, frequent communications (Newman, 1988); increase in supplier reliability in production and delivery (Anderson et al., 1994); greater ability to serve the customer and to penetrate new markets (St. John and Heriot, 1993). Chen et al. (2004) suggest that close relationships between supply chain members can encourage and strengthen attributes such as trust and cooperation (Ring and Van de ven, 1994); enhancing the development of knowledge and facilitating exchange processes between different parties (Nonaka and Tekeuchi, 1995); facilitating the process of detection and addressing of operational problems in early stages (Ragatz et al., 1997). Collaborative and integrative relationships can improve organisation's ability to deal in an effective manner to its customer's needs (Chen et al., 2004). They also point out that by reducing the number of suppliers and strengthening the company's relationship with the remaining suppliers the company is more able to achieve cost savings (Guimaraes et al., 2002).

Chen et al. (2004) also note the benefits of developing strong communication with suppliers, arguing that communication characterised by open and frequent flow can improve the relationship maintenance and value (Christopher, 1992; Slack, 1991). The open and frequent flow of strategic and operational information can enhance confidence level and decrease the conflict which may exist between different functional areas and between exchange partners (Dwyer et al., 1987; Anderson and

Weitz, 1992). As suppliers and buyers can have the ability to share the information related to issues such as purchasing of materials and design of products, this can enable them to decrease response time to customers and improve cost savings through achieving a high level of product design and operational efficiencies (Carr and Pearson, 1999; Turnbull et al., 1992; cited in Chen et al., 2004).

Similarly, Chen et al. (2004) also point out some of the benefits associated with long and strong relationship between buyer and their suppliers, which can help the organisation to achieve a higher level of competitive position (Gannnesan, 1994). They also argue that most research studies have emphasized the importance of developing long term relationships with limited number of suppliers to gain high benefits (Helper and Sako, 1995; Krause and Ellram 1997; Guimaraes et al., 2002). If there is a long term relationship between the company and its supplier, this will enable the supplier to become an effective part of a well-managed supply chain and therefore, they can have an important role in achieving high level of competitiveness of the overall supply chain (Choi and Harthey, 1996). Chen et al. (2004) also suggest that a high level of trust existence between a supplier and the buying company can lead to an increase in the communication level that exists between both firms (Bensaou and Venkatraman, 1995). Long-term integrative relationships have a positive effect on the organization's competitiveness level, especially when the business environment is characterized by a high level of uncertainty (Noordewier et al., 1990). When the supply chain integration (Vickery et al., 2003) and the supply capability management (Narasimhan and Jayaram, 1998) are associated by long term relationship, it has been found to have a positive impact on customer responsiveness. Chen et al. (2004) conclude that it becomes a very important asset for organizations to build and develop relationships with their supply chain members. Moreover, how to manage these relationships among supply chain members is a key factor for organizations in this "alliance capitalism" environment (Gerlach, 1992). For the benefits of partnership, Johnston et al. (2004) point out that partnership management has been considered as a type of core competency that can enable the company's partners to gain knowledge-based competitive advantage (Doz and Hamel, 1998; Miller and Shamsie, 1996; Dyer, 1997). Jap (1999) argues that coordination between buyers and their suppliers is the

factor that differentiates these relationships to be more truly collaborative, rather than the traditional one (cited in Johnston et al., 2004).

Specifically from a buyer's perspective, there are several benefits for developing and maintaining partnership with suppliers. Among them are: increase in its ability to enhance its products and services as a result of integrative resources system; decrease in time to market as a result of using concurrent design; decrease in costs for long term, (eg, reduction in its transaction costs (Williamson and Ouchi., 1981; Walker and Poppo, 1991; Harthey and Choi, 1996; cited in Johnston et al., 2004); enhancement of the implementation of their process technology (Johnston and Linton, 2000; cited in Johnston et al., 2004); conformance quality improvement; reduced risks and decrease in capital investments (Lado et al, 1997; cited in Johnston et al., 2004)). Sourcing through effective and appropriate selection of partners (Bensaou, 1999; cited in Johnston et al., 2004) can have a direct impact on financial performance measures in terms of return on investment, net income, as well as the return on sales (Carr and Pearson, 1999). This is beside its positive direct impact on operational performance measures in terms of on-time delivery and responsiveness (Stanley and Wisner, 2001). It can also have an impact on satisfying the supplier role in the relationship (Johnston et al., 2004).

2.3 Agility thinking

This section provides the history of the agile philosophy, as well as its definitions, benefits, capabilities, enablers, practices and the main concepts related to agility.

2.3.1 Origin (history) of agility

The highly dynamic nature of the business environment in today's era which has appeared as a result of the world's new economic feature 'Globalisation', has led to the development of several business market uncertainties (Baramichari et al., 2007). Another feature of today's business environment is the 'high competition', which can

be considered the result of several international trade agreements, as well as due to the highly discerning, knowledgeable and accessible customers (Li and O'Brien, 1999; cited in Swafford et al., 2006). It is argued that the solution to meet all of these uncertainties is finding the appropriate method to manage them (Thompson, 1967; cited in Sharifi and Zhang, 1999). Speed, quality, flexibility and responsiveness, the key elements of the agility concept, are also considered some of the key solutions for dealing with such business market conditions (Baramichai et al., 2007; C-T et al., 2006).

Yusuf et al. (1999) argue that an appropriate solution for companies is to implement the agility principles as an important strategic component to enable it to respond to these business conditions. This idea has also been supported by Van Hoek et al. (2001), who argue that the agile organisational structure is the path for any organisation to be able to face these dynamic and complex business environmental conditions. Sherehiy et al. (2007) suggest that organisations can face these business conditions through the use of several paradigms, such as 'adaptive organisation', 'flexible organization' and 'agile enterprise'.

Agility as a philosophy has started to receive significant attention from both academics and practitioners. It was firstly introduced to be applied as a production manufacturing system and several studies have focused on it as a way for improving the production systems inside organisations (Narasimhan et al., 2006; Yusuf et al., 1999). Agility has also been applied to the whole organisation, and several studies have focused on the concept as a way of doing business to improve the overall performance of the organisation and its ability to react to the market conditions (Sherehy et al., 2007). Recently, others have focused on the concept of being an umbrella combining all the business entities within the same supply chain, and encouraging them to work together to improve the performance of their supply chain collectively and interactively (Van Hoek et al., 2001).

'Agility' as a term was firstly introduced by some researchers at the Iacocca Institute of Lehigh University USA (Sherehiy et al., 2007; Swafford et al., 2006; Yusuf et al.,

1999). The term appears to have been firstly mentioned in the literature, in the '21 Century Manufacturing Enterprise Strategy Report 1991' (McCullen and Towill, 2001). The US government may be considered as the main motive for the development of that concept, when the Department of the US Domestic Defence determined that the defence manufacturing companies have begun to change into producing commercial products after the Cold War in 1989 (cited in McCullen and Towill, 2001). However, they targeted at the same time, to ensure that these domestic Defence companies would have the ability to return to produce the defence products at any point of time (cited in McCullen and Towill, 2001), and to do this they needed to be 'agile'. In addition, the commercial organisations have also begun to search for means for competition against the far eastern companies (cited in McCullen and Towill, 2001). Therefore, the Iacocca Institute Report provided them with 'Agility': a competitive weapon that can enable companies to respond quickly and effectively to any environmental change and at the same time, can meet the highly changeable demand of customers (McCullen and Towill, 2001). Christopher and Towill (2000) argue that 'agility', as a new business philosophy, originated as a developmental concept or as an extension for the flexibility manufacturing system which had received attention, and which subsequently extended into a greater concept called 'agility'. Ganguly et al. (2009) suggest that the main drivers behind agility are the sensitivity of prices, customers' preferences change, technological changes, social and economic changes and the customer cost-benefit analysis.

2.3.2 Agility definitions

Bernardes and Hana (2009) suggest that agility definitions can be characterised by vagueness and variability. They argue that most of the definitions nevertheless contain the concepts of change and unpredictability. This sub-section provides the definitions given to agile manufacturing, agile organisation and agile supply chain. It is very important to discuss the definitions provided of agility at its three levels: manufacturing, organisational, and supply chain, as they are related to each other. The company that needs to achieve high level of supply chain agility needs first to achieve high level of manufacturing agility which can lead to high level of agility at its organisational level and subsequently to high level of supply chain agility. The study

also reviews the research sequential meanings and explanations, including the associated attributes, at its three levels since this sub section is essential for the research question related to provide a comprehensive definition to supply chain agility. Therefore, the following reviews starts with the beginning of the concept at the manufacturing level followed by organisational agility and then supply chain agility.

2.3.2.1 Agile manufacturing definitions

As a result of its importance, 'agility' has been defined by several authors, researchers, and several institutions. As already noted above, 'Agility' is defined by the Iacocca Institute of Lehigh University, USA as "*a manufacturing system with capabilities (hard and soft techniques, human resources, educated management, information) to meet the rapidly changing needs of the market place (speed, flexibility, customers, competitors, suppliers, infrastructure, responsiveness*" (cited in Sherehiy et al. 2007, p.445-446; Yusuf et al., 1999, p. 36). In his book, Kidd (1994, cited in Jackson and Johansson, 2003) defines agility in production as "*...agile manufacturing can be considered as the integration of organisation, highly skilled and knowledgeable people, and advanced technologies, to achieve co-operation and innovation in response to the need to supply our customers with quality customised products*" (p.482-483). Brown and Besant (2003) define agile manufacturing as the ability of the manufacturing function to deal with changes in the business environment market quickly and effectively.

Similarly, Prince and Kay (2003) name it as the ability to react to unexpected changes and deal with highly changeable customer demand concerning price, requirements, quality level, quantity and speed of delivery. Sharifi and Zhang (1999) argue that an agile manufacturing occurs when the organisation possesses a wide vision on the new competitive nature of business environment and which possesses a wide range of abilities to respond to any changes and to have the ability to gain from the business environment as much opportunities as it can. In support to the above, Sharifi and Zhang (2001) define agile production as the ability to determine, react with and deal with the expected and unexpected changes inside the business market place. Goldman

and Nagel (1993; cited in Yusuf et al., 1999, p. 36) define agility in manufacturing as *“assimilating the full range of flexible production technologies, along with the lessons learned from total quality management, ‘just – in-time’ production and ‘lean production’”*.

After reviewing most of the literature presented during the 1990s Yusuf et al. (1999) put forward a comprehensive definition for manufacturing agility, where they define it as the successful induction of the competitive forms such as speed, flexibility, innovation, proactivity, quality level and profitability, and the effective use of resources, practices, and knowledge in order to provide products and services to meet customer needs in a changeable business environment. They argue that this definition differs from others in four points. The first is that it is more comprehensive and as such, provides a definition for agility from input, operational and output terms. Secondly, it provides clear competitive foundations for agile manufacturing, and thirdly, it provides three levels for agility: the individual level of agility, the enterprise level and the inter-enterprise level of agility. Finally, it considers the main four agility concepts: core competence management; virtual enterprise formation, capability for re-configuration and knowledge-driven enterprise. Table 2.3 provides what appear to be the most accepted definitions given to manufacturing agility found in the literature.

Table 2.3: Manufacturing agility definitions in the literature

Reference	Manufacturing agility definitions
Iacocca Institute of Le high University (1991)	A production system with capabilities such as using hard and soft technologies; human resources abilities; educated managerial abilities; and informational abilities in order to match the rapid needs of the changing market place such as speed abilities; flexibility abilities; customers; competitors; suppliers; infrastructure and responsiveness abilities.
	Agility in production is associated with the organizational integration, including people with skilled and knowledgeable abilities, high advanced technological advances in order to

Kidd (1994)	develop high levels of cooperation and innovation to be able to respond to the needs of supplying customers with high quality and customized products.
Goldman and Nagel (1993)	Agility in production is composed of flexible production systems, associated with TQM, JIT production system as well as Lean production systems.
Fliedner and Vokurka (1997)	The ability to deliver low cost, high quality products in much shorter lead time with great variety in volume sizes, in order to be able to improve customer value through customization.
Yusuf et al (1999)	The successful induction of the competitive forms such as speed, flexibility, innovation, proactively, quality level, and profitability, and the effective use of resources, practices, and knowledge in order to provide products and services to meet customer needs in a changeable business environment.
Sharifi and Zhang (1999, 2001)	Agile manufacturing is the organisation that possesses a wide vision on the new competitive nature of business environment and which possesses a wide range of abilities to respond to any changes and to have the ability to gain from the business environment as much opportunities as it can. The ability to determine, react with and deal with the expected and unexpected changes inside business market place.
Prince and Kay (2003)	The ability to react to unexpected changes and deal with highly changeable customer demand concerning price, requirements, quality level, quantity and speed of delivery.
Brown and Besant (2003)	The ability to deal with the changes in the business environment market quickly and effectively.
Narasimhan et al. (2006)	Agile production is the efficient changing of the operating states to enable the response for the dynamic market conditions.

From the above review it can be shown that the beginning and the introduction of agility was in the manufacturing function within the manufacturing plants. The review can show that there are several features that can characterise agile manufacturing. Accordingly, it is reasonable to argue, based on the definitions found in the literature, that ‘agile manufacturing’ is about minimising cost and increasing efficiency. Afterwards, some characteristics have been highlighted by researchers such as speed, price, quality, flexibility and the production systems such as TQM, JIT, and Lean production systems.

2.3.2.2 Agile organisation definitions

As mentioned before agility as a concept does not limit itself only as a manufacturing system to improve the ability to respond quickly and efficiently to production changes. As Jackson and Johansson (2003) argue, agility itself as a concept or a philosophy is an important weapon to keep the whole organisation ‘alive’ inside this dynamic, high competitive business environment. This idea is also supported by the work of Sherhiy et al. (2007), who suggest that several researchers have noted that agility as a concept goes beyond the walls of the production department, and it should be seen as a philosophy for the overall organisational strategy.

‘Organisational agility’ is defined by Sharifi and Zhang (1999) as the potential abilities of an organisation to deal and respond to unplanned changes, as well as the unexpected environmental threats and opportunities. Goldman et al. (1994, cited in Swafford et al., 2006) define organisational agility as the organisation which has a dynamic nature and an ability to gain a competitive advantage through this dynamic nature, which enables it to focus on developing knowledge and flexible processes to be able to react to the environmental market changing conditions. Organisational agility is defined by Christopher (2000) as the organisational ability to quickly respond and react with the demand changes. Kidd (2000) defines the agile enterprise as *“an agile enterprise is a fast moving, adaptable and robust business. It is capable of rapid adaptation in response to unexpected and unpredicted changes and events, market opportunities as customer requirements .Such a business is founded on processes and*

structures that facilitate speed, adaptation, and robustness and that deliver a coordinated enterprise that is capable of achieving competitive performance in a highly dynamic and unprofitable business environment that is unsuited to current enterprise practices” (cited in Swafford et al., 2006, p. 171).

Naylor et al. (1999) define agility as a business concept, as the managing of the market knowledge and the use of virtual corporation in order to gain market opportunities inside changeable market conditions. Christopher and Towill (2000) define the agility philosophy from an organisational structure view where they define it as the ability to adopt the company’s structural forms, information systems, logistical systems, and that flexibility is the most important element of agile organisation. Before all of the above, however, Dove (1996; cited in Baramichai, 2007) suggests that agility as a business concept is the ability of an organisation to live in a high dynamic changeable environment.

Goldman and Nagel (1995) define agility as *“dynamic, context specific, aggressively change embracing and growth oriented...succeeding...winning profits, market share, and customers”* (cited in Yusuf et al., 1999, p. 36). Jackson and Johansson (2003) consider agility as *“a mind set and not very specific as to how to reach the desired goals”* (p.482).

Agility has also been defined from an outcome perspective as the ability of the company to grow in a highly dynamic competitive business market, and to react rapidly to its market, which is characterised by being customer-based and valuing products and services (Gehani, 1995; Kidd 1996, cited in Yusuf et al., 1999). Gehani (1995) defines the agile organisation by the abilities to satisfy customers’ requirements, fast and frequently introduces new products, and fast forms in and out strategic alliances.

From an operational perspective agility can be defined as *“the synthesis of a number of enterprises that each has some core skills or competencies which they bring to a joint venturing operation...”* (Kidd, 1994; cited in Yusuf et al., 1999). Kumar and

Motwani (1995) defines it as “...ability to accelerate the activities on critical path and ...time- based competitiveness” (cited in Yusuf et al., 1999). Swafford et al. (2006b) argues that organisational agility’s definitions considered it as a “dynamic concept”, as the way in which a company can achieve agility today may not be suitable to achieve agility tomorrow. They also regard organisational agility as “context-specific”, as the business environment conditions impact the level or amount of required agility. The authors also consider organisational agility as “change-embracing”, as the concept implies the ability to adapt. Agility definitions also considered organisational agility as “growth-oriented”, as this ability could enhance the ability of the organisation to restructure its vision, redevelop its strategies and revise its techniques (Hamel and Prahalad, 1994). Sambamurthy et al. (2003) define it as the organisation’s ability to quickly redesign their current processes and develop new processes in an effective time manner so that to gain advantage and face unexpected dynamic business conditions. Table 2.4 provides most of the definitions that describe organisational agility in the literature.

Table 2.4: Organisational agility definitions in the literature

Reference	Organisational agility definitions
Goldman and Nagel (1995, cited in Yusuf et al., 1999)	“Dynamic, context specific, aggressively change embracing and growth oriented...succeeding...winning profits, market share, and customers”.
Gehani (1995)	The ability to satisfy customers’ requirements, fastly and frequently introduces new products, and fastly forms in and out strategic alliances.

<p>Kumar and Motwani (1995)</p>	<p>“...ability to accelerate the activities on critical path and ...time- based competitiveness”</p>
<p>Dove (1996, 1999)</p>	<p>Agility as a business concept is the ability of an organisation to live in a high dynamic changeable environment organisational capability to manage and implement effective knowledge system.</p>
<p>Sharifi and Zhang (1999)</p>	<p>The potential abilities of an organisation to deal and respond to the unplanned changes as well as the unexpected environmental threats and opportunities.</p>
<p>Naylor et al (1999)</p>	<p>A business concept, as the managing of the market knowledge and the use of virtual corporation in order to gain market opportunities inside changeable market conditions.</p>
<p>Sharp et al (1999)</p>	<p>An agile organisation is mainly concerned with learning which is characterised by quickness and efficiency.</p>
<p>Kidd (2000)</p>	<p>“An agile enterprise is a fast moving, adaptable and robust business. It is capable of rapid adaptation in response to unexpected and unpredicted changes and events, market opportunities as customer requirements. Such a business is founded on processes and structures that facilitate speed, adaptation, and robustness and that deliver a coordinated enterprise that is capable of achieving competitive performance in a highly dynamic and unprofitable business environment that is unsuited to current enterprise practices”.</p>

Christopher (2000)	The organisational ability to quickly respond and react with the demand changes.
Sambamurthy et al (2003)	The organisation's ability to quickly redesigning their current processes and develop new processes in an effective time manner so that to gain advantage and face unexpected dynamic business conditions.
Jackson and Johansson (2003)	"A mind-set and not very specific as to how to reach the desired goals".

From the above definitions suggested to 'Organisational agility', it can be shown that some characteristics had been strongly supported to achieve agility at the enterprise level (a higher level than the manufacturing agility). These characteristics were speed and responsiveness, where they are an important feature for reacting to the external environment of the company and to enable it to face the changing demand of customers.

2.3.2.3 Agile supply chain definitions

Applying agility to supply chains had been introduced recently. It is argued that agility can enable organisations within the same supply chain to gain the winning advantages of agility collectively (Harrison et al. 1999). Lee and Lau (1999), and Christopher and Towill (2000) argue that applying agility to supply chains is to emphasise the importance of 'responsiveness'. Sharifi et al. (2006) suggest that the drivers behind applying agility to supply chains are similar to those behind the implementation of the agility concept to the manufacturing function, which are to effectively deal with change and uncertainties. This idea is supported by Harrison (2001), who argues that it is not logical to limit the impact of the concept only inside the production department, and that this concept should be extended to the whole company's supply chain.

Christopher (2000) and Van Hoek (2001) expand that the agility concept to the organisation's processes and relationships with other members within the supply chains needs to be able to respond quickly and effectively to the unexpected business environmental conditions. Khan and Pillania (2008) argue that supply chain agility is considered as a main component for any organisation to build its competitive strategy (Nayyar and Bantel, 1994; Goldman et al., 1994; Teece et al., 1997). They suggest that supply chain agility can be developed through possessing the capabilities necessary to enable it to deal and react to the business environmental changes quickly and in different ways (Yusuf et al., 2003). Baramichai et al. (2007) define an agile supply chain as *“an integration of business partners to enable new competencies in order to respond to rapidly changing, continually fragmenting markets. The key enablers of the agile supply chain are the dynamics of structures and relationship configuration, the end-to-end visibility of information, and the event-driven and event-based management....”* (p. 335). Ismail and Sharifi (2006) define the agile supply chain as the whole supply chain's ability to adjust their network rapidly and their operational activities to be able to face the dynamic and changing needs of their demand. Prater et al. (2001) summarise supply chain agility as the company's ability to match its physical resources in sourcing, manufacturing and delivery, with its speed and flexibility capabilities. Table 2.5 provides the agility definitions as suggested by the researchers when applied to the whole supply chain.

Table 2.5: Supply chain agility definitions in the literature

Reference	Supply chain agility definitions
Christopher and Towill (2000)	The ability to adopt the company's structural forms, information systems, logistical systems, and that flexibility is the most important element of agile organisation.

Prater et al (2001)	The company's ability to match its physical resources in sourcing, manufacturing and delivery, with its speed and flexibility capabilities.
Van Hoek et al. (2001)	Agility is related to market turbulence and how to achieve customer responsiveness through abilities that can be developed by the use of lean thinking approach.
Aitken et al (2002)	It is the ability to possess demand visibility, to be flexible, to have fast response capability and to have synchronized operation systems.
Ismail and Sharifi (2006)	The whole supply chain ability and its members to adjust their network rapidly and their operational activities to be able to face the dynamic and changing needs of their demand.
Baramichai et al (2007)	“An agile supply chain is an integration of business partners to enable new competencies in order to respond to rapidly changing, continually fragmenting markets. The key enablers of the agile supply chain are the dynamics of structures and relationship configuration, the end-to-end visibility of information, and the event-driven and event-based management....”
Braunscheidel and Suresh (2009)	A risk management capability that allows the organisation to quickly respond to the market changes and to the present and future problems within its supply chain.

At the widest perspective or level, supply chain agility was suggested to include the characteristics required to achieve manufacturing agility and organisational agility, but at the supply chain partners companies. From the definitions suggested for supply chain, the operational abilities and the organisational abilities are both important to

enable the whole supply chain members to achieve a higher supply chain agility level in order to face the changing environment. This gives importance to speed, cost, flexibility and responsiveness. A broader view for all the definitions given to agility at its three levels, can show that there are some characteristics necessary required to achieve agility, but with different degrees at its three levels.

2.3.3 Benefits of the agility philosophy

Beside the benefits mentioned and discussed in chapter one for supply chain agility, other research and studies have discussed also the benefits for agility in general including manufacturing agility and organisational agility. For example, Narasimhan et al. (2006) argue that agility includes different types of flexibilities and involves the ability to do new tasks to face new unexpected changes to business market conditions or changes in customer demand (Brown and Bessant, 2003; Price and Kay, 2003; Sharifi and Zhang, 2001). Narasimhan et al. (2006) highlight that agile manufacturing techniques can improve organisations' responsiveness, the ability to customise products, to reduce the new product development lead time, to reduce the time and cost of system change over, and could also lead to improvement in the scaling up and down of operational activities. Agility can lead to reducing costs, increase in productivity and increase in satisfaction level of employees, as well as customers (Kavan et al., 1999; cited in Weber 2002). Agility was introduced because organisations are moving towards e-business and moving to reduce inventory and logistics expenses (Schwartz, 2001; cited in Weber 2002).

2.3.4 Agility capabilities and agility enablers

Power et al. (2001) suggest that agility can be considered a holistic concept that is strategically important. In a model presented by Swafford et al. (2006a) for achieving agility in supply chain, they argue that agility in supply chain represents an external focus philosophy or an outcome concept, therefore it is considered as a capability, rather than a competency. Although nowadays every company, in a highly dynamic and complex business environment, should have unique capabilities that can enable it

to achieve agility and make it different from its competitors, there still exist some capabilities or attributes particular to agility that can be considered as unique or core elements for achieving and maintaining agility (Sherehiy et al., 2007).

Goldman et al. (1995; cited in Jackson and Johansson 2003) argue that agility has four main capabilities. Firstly, *'Enriching the customer'*, where the company has to sell solutions to their customers rather than products only. Secondly, *'Cooperating to enhance competitiveness'*, where the cooperation should be within the company and other companies, either locally or internationally through developing virtual companies or using and developing cross-functional teams. Thirdly, *'Organising to master change and uncertainty'*, in which companies should consider changes in their business environment and the level of uncertainty. They argue that there is no correct or best way to form or develop an agile company, but the best approach for developing an agile organisation is to organise the company so that human resources are able to use the available resources to face and deal with the business changing conditions. Finally, *'Leveraging the impact of people and information'*, where the company management should focus on developing an organisational culture that emphasise the role played by the people and information.

In addition, Jackson and Johansson (2003) suggest that agility can be achieved through four sets of capabilities. The first is *"product-related change capabilities"*. This set is related to capabilities such as: customer satisfaction capabilities, customer satisfaction measures, providing more products and services to customers, customisation focus, improving quality level to satisfy the customer, increasing the product's knowledge of contents, reconfigurable products development, customers feedback about the company's flexibility and adaptability levels, and focusing on providing complete solutions to customers.

The second group of capabilities are related to *"change competency"* and are concerned with capabilities related to: reinventing and reengineering the organisation, design changes capabilities, adaptability of the customer requirements and customer changes in designing the product, implementing changes related to delivery dates and

order quantities, the ability to apply new manufacturing techniques, capabilities related to volume fluctuations, abilities related to applying geographically or application changes in markets, and the abilities of applying new product technologies.

The third group of capabilities are related to “*cooperation internally or externally*” and are concerned with: cross functional work on development, suppliers’ cooperation, suppliers’ involvement in product development, the use of cross-functional customer teams, different manufacturing departments’ cooperation, the level of orientation for the organisation process, and abilities related to measuring cooperation.

The final group of capabilities are related to “*people, knowledge and creativity*”; this is concerned with abilities related to the level of the people to think and initiate, the level of the education programmes provided in the organisations, the use of team working, the extent of spending time on new ideas and concepts, abilities related to measuring the organisation’s knowledge, and the motivation level given to people to develop operations.

From their case study analysis Jackson and Johansson (2003) argue that the results of the “*internal and external coordination*” capabilities show that the organisational focus on process orientation, supplier’s coordination and development of cross-functional teams were ranked as the most important capabilities for the future. The results of analysis for “*change competency*” capabilities showed that the capabilities related to design implementation, capabilities for variations and different product mixes and to be able to respond to the customer requirement needs, were ranked to be the most important capabilities for the future. The important future capabilities shown by the analysis of the “*product-related changes*” questions were customisation emphasis, satisfying customers, and making customers believe that the company is characterised by flexibility and adaptability. Finally, for the “*people, knowledge, creativity*” analysis, the results show that motivating people to think and have initiatives, determining and recognition of the core competencies, and working in teams were considered as the most important capabilities for the future.

On their review, based on the agility literature, Yusuf et al. (1999) suggest that most of the definitions by researchers are dealing with the agility concept as related to high quality and customised products (Goldman and Nagel, 1993; Kidd, 1994; Booth, 1995; Hilton and Gill, 1994); focusing on information and value-adding content with providing products and services (Goldman and Nagel, 1993; Goldman and Nagel, 1995); the ability to mobilise core competencies (Goldman and Nagel, 1993; Kidd, 1994); the ability to respond to the social and environmental conditions (Goldman and Nagel, 1993; Kidd, 1994); the ability to synthesise different types of technology (Burgess 1994; Kidd, 1994); the ability to react to business change and uncertainty conditions (Goldman and Nagel, 1993; 1995; Pandiarajan and Patun, 1994); the ability to integrate internally and externally (Vastag et al., 1994; Kidd, 1994; Yussef, 1992; Yusuf, 1996).

Yusuf et al. (1999) suggest 32 attributes for agile organisations and classified them into ten decision domains, which can be considered as agility enablers. The first is “*integration*”, which involves attributes such as implementing of activities concurrent, organisation-wide integration, and accessible information to all employees. The second decision domain is “*competence*”, which includes attributes such as multi-dimensional abilities, building practices that can be hardly imitated. The “*team building*” domain includes attributes such as encouraging employees to team working, focus on cross-functional team working, and developing teams across borders, the decision making process is decentralised. “*Technology*” was another decision domain, which includes awareness of the technology role, technology leadership, the availability of the required skills and knowledge, production system based on flexible technology. The “*Quality*” is another decision domain for agile organisations, which includes attributes such as product life quality, substantial value-addition to products, right product design from the first time, and less development cycles times. Another decision domain was “*change*”, including the emphasis on continues improvement, and focusing on developing culture of change. A further decision domain was “*partnership*”, which includes attributes such as quick formation and development of partnerships, close relationships with customers, strong relationships with suppliers, and developing trustful relationships with customers/suppliers. “*Market*” was another decision domain that includes introducing new products, customer – oriented

innovation, satisfying customers, dealing with market needs changes. “*Education*” includes: focus on building learning organisational structures, having flexible multi-skilled human resources, upgrading of workforce skills, focus on training and development for all human resources, continuously. Finally, “*welfare*”, the final decision domain for agile organisation to focus on, includes emphasising and focusing on satisfying of its employees.

Lin et al. (2006b) propose three sets of capabilities of agility. These capabilities include “*organisational management agility*”, “*product design agility*” and “*product-manufacturing agility*”, and were put forward in an attempt to measure agility. These sets consist of more specific and detailed capabilities. For example, the “*organisational agility*” includes capabilities such as ‘information management agility’, which consists of ‘enterprise information system quality’, ‘network connection extensiveness’ and ‘information and network utilisation rate’. The “*organisational management agility*” also includes ‘inter-organisation cooperation’, which consists of criteria such as ‘degree of cooperation with other enterprises’, ‘application degree of VE’, ‘time needed for production process organisation’ and ‘space needed for production process organisation’. It also includes ‘institutional framework agility’ which includes criteria such as ‘institutional framework form’ and ‘team building speed’. The second general set of capabilities is “*product design agility*”. This contains ‘availability of customer demands information’, which consists of criteria such as ‘information access’ and ‘proportion of information processing time in products’ period. The “*product design agility*” also includes ‘speed of product design’, which consists of criteria such as ‘the period of product design’ and ‘proportion of design period in products period’ and finally, it also includes ‘product design flexibility’ which consists of ‘degree of product seriation’, ‘degree of product structure similarity’, ‘degree of part universalisation’. The “*product manufacturing agility*” set of capabilities include ‘re-configurability’, which consists of ‘integrated modular packaging unit’, ‘supplement tool displacement’, ‘displacement compatibility’. It also includes ‘manufacturing speed’, which consists of criteria such as ‘production and technology preparation time’, ‘period of manufacturing’, ‘proportion of manufacturing period in product period’, and it includes ‘flexibility of

manufacturing process' which consists of 'degree of equipment universalisation' and 'degree of equipment scalability'.

Another classification for agility attributes based on global strategies is provided by Sherehiey et al. (2007). They argue that the agile organisation should include characteristics such as "*customer focus*", which referred to attributes such as 'enriching the customer', 'customer-driven innovation', 'customer satisfaction'. A second characteristic is "*cooperation*", which includes 'cooperating to enhance competitiveness', 'internal and external cooperation', 'strategic relationship with customers', 'close relationship with suppliers'. The third characteristic is "*organisational learning and knowledge*", which includes attributes such as 'leveraging the impact of people, knowledge, information and creativity', 'continuous training and development of people', 'core competence management', 'continuous extraction of tacit knowledge related to customers' preferences, services/production processes and work organisation'. The final characteristic for agile organisation, performed by top and higher managerial levels, is concerned with "*culture of change*". This characteristic includes attributes such as 'continuous monitoring of internal and external environment to identify changes and opportunities', 'continuous updating and revision of business strategies', 'continuous improvement, experimentation and improvisation', 'product-related change capabilities', 'change competency within operations', 'capability for re-configuration' (p.458).

McCullen and Towill (2001) suggest that the importance of developing and building of partnerships and close relationships with the company's suppliers, the use of JIT, and the use of advanced production techniques are the important elements for enabling agile manufacturing to take place. They also emphasise the importance of developing and improving the human resources and skilled and empowered employees. These results were strongly supported by Narasimhan et al. (2006) results, which differentiate lean manufacturing from agile manufacturing.

Gunasekaran (1999) identify four agility dimensions for manufacturing systems namely strategies, technology, people and systems. The author state that there is little

literature on the integration among them and most of the literature tends to focus on strategies or the methods.

It is researchable to argue that classification for the attributes and related concepts of an agile enterprise can be based on its related organisational structure and workforce characteristics. Sherefify et al. (2007) provide such a classification, where they argue that the authority within an agile organisation should be focused on “decentralised knowledge and control”, “fewer power differentials (fewer titles, levels, status dimensions, etc)”, “less adherence to authority and control”, “loyalty and commitment to project or group”, “authority tied to tasks”, “authority change when tasks change”; “wide span of control”. Sherefify et al. (2007) further argue that the rules and procedures for an agile enterprise are those characterised by “few rules and procedures”, “low level of formal regulation (in respect to job description, work schedules)”, “fluid role definitions”, “informally organised”, the coordination is characterised by “informal and personal coordination”, “delegation of tasks and decision making”, “network communication”, and “global-directed”. Moreover, the organisational structure required for an agile enterprise is characterised as being “flat, horizontal matrix networked or virtual structures”, “teamwork, cross-functional linkages” and “loose boundaries among function and units”. They also note that HRM management practices for an agile enterprise should include “employee empowerment”, “employee involvement”, “job rotation”, “job enrichment”, “autonomy in decision making”, “information and knowledge access”, “team work”, “multi-functional teams”, “multiple skills training”, “workforce development and training” and “differentiation and diversity development”.

Finally, for an agile enterprise, they argue that the ‘workforce attributes’ should be characterised by adaptive behaviour. This adaptive behaviour includes three behaviours: firstly, “*proactive*”, which means (Sherehiy et al. 2007, p.456) “*the situation when a person initiates the activities that have positive effort on a changed environment*” (Griffen and Hesketh, 2003). This attribute involves activities such as “*creating problems solving*”, and “*dealing with crises*” (p. 456). The second attribute or characteristic for agile work force is “*Reactive*”, which means the ability to “*changing or modifying oneself or their behaviour to better fit new environment*”

(Sherehiy et al., 2007, p.456). This characteristic includes practices such as “*interpersonal and cultural adaptability*”, and “*new learning*” (p. 456). The third and final workforce attribute for an agile workforce is “*tolerant behaviour*”, which means “*continuing functioning despite changing environment or when proactive or reactive strategies are not appropriate*” (Sherehiy et al. 2007, p.456) and includes practices such as “*coping with stress*” and “*coping with uncertainty*” (p. 456).

Swafford et al. (2006a) put forward a set of general measures for measuring agility in supply chains namely speed, quickness or rapidly, and thus responsiveness. They argue that these agility measures evaluate “*how quickly a firm can reduce manufacturing lead time or increase customer levels but does not include measures of the level of lead time performance or customer service performance*” (p. 177). In other words, they argue that these agility measures assess “how” rapidly these outcomes can be changed and not the level of attainment of the performance outcomes. Swafford et al. (2006a) advocate the following specific measures: reduction in manufacturing lead times (Sharifi and Zhang, 1999); reduction of product development cycle time (Goldman et al., 1994); increase in frequency of new product introduction (Goldman et al., 1994); increase in level of customisation (Van Hoek et al., 2001); increased and adjustable worldwide delivery capacity/capability (Goldman et al., 1994); improvement in level of customer service (Goldman et al., 1994; Sharifi and Zhang, 1999); improve delivery reliability (Sharifi and Zhang, 1999); improvement in responsiveness to changing market needs (Goldman et al., 1994); reduction in set up/changeover time (relates to reducing manufacturing lead time, Sharifi and Zhang, 1999); increase in production capacity (relates to increase in supply chain capacity, Goldman et al., 1994); decrease in ramp-up time for new products (Goldman et al., 1994); reducing delivery lead time (Goldman et al., 1994).

2.3.5 Main concepts related to agility

There are some concepts that are closely related with agility. Determining the relationships between the main concepts that have been suggested by previous studies to be related to agility is provided in this sub section. The literature includes several

technical and managerial concepts that can be characterised by their relatedness to agility. This sub-section (2.3.5) provides the main concepts that were related in the literature to the agility philosophy.

Yusuf et al. (1999) provide four main core concepts for agile manufacturing, including “*core competence management*”. They argue that this core competence is associated to the workforce, as well as the product. It can be identified at both levels: individual, as well as the firm level. They argue that competencies at the individual level include the employees’ skills, knowledge, attributes and experiences (Kidd, 1994), which can improve and enhance through the training programs and education courses to gain benefits from the current and potential human resources.

Yusuf et al. (1999) argue that missing skills can be overcome through “*cooperation*”, which is very important. They argued that (p.38) “... *in agile paradigm, competition and cooperation are mutually compatible*”. They suggest that the proper cooperative activities enable the individual enterprises to respond to changeable market demand, which can be difficult to be achieved individually. They argue that to meet the requirements of the new complex products development and production, the company should cooperate with other businesses in an interactive work, as Goldman and Nagel (1993) note that “*allowing physically dispersed and organisationally segregated personnel from the same company to work collaboratively with one another and with personnel from other companies*” (cited in Yusuf et al., 1999). Agile organisations can increase the degree of velocity and availability of talented personnel (Prehaland and Hamel, 1990; cited in Yusuf et al., 1999). Yusuf et al. (1999) suggest that there are three relationship cooperation forms between companies. The first is where organisations are operating individually without any cooperation. The second is that interactions exist between organisations without any cooperative working at the operational level. The third level is the cooperative working at the organisational levels. This cooperative working enables the diverse skills and other resources to cooperate and integrate to produce simple or complex products based on customer demand.

Yusuf et al. (1999) argue that the third concept for agile manufacturing is “*capability for re-configuration*”. They point out that agile organisations can enable the move to more ‘focus’, to ‘diversify’, ‘configure’, and ‘re-align’ (p. 39), to be better able to achieve a specific aim quickly, as there is chance for new opportunities. They are also more able to pre-empt the degree of competition.

The fourth is “*knowledge-driven enterprises*”, where the researchers are considering knowledge as power. This gives information and knowledge more important roles in the business world. This has been the main reason behind the appearance of what is known “*knowledge-driven enterprises*”, as knowledge and information are considered as main factors differentiating the successful companies from others (Yusuf et al., 1999).

Another study by Sherehiy et al. (2007) suggests seven common concepts usually related to agility. The first concept is “*flexibility*”, which can be defined as the ability to implement different business strategic and tactical alternatives to move rapidly from one activity to another. Flexibility includes attributes such as “flexible product model”, “flexible production systems”, “workforce flexibility”, “flexible organisational structures and practices”, “flexible workplace flexibility”, “flexible business strategies”.

The second concept is “*responsiveness*”, which is defined as the ability to determine business market opportunities and threats and respond reactively or proactively to them. It includes “responsiveness to change in customers’ preferences, demands”, “responsiveness to market and business environment changes and trends”, “responsiveness to social and environmental issues” and “adjustability of business objectives to the changes”.

The third concept is “*culture of change*”, which means “*a description of environment supportive of experimentation learning and innovation and is focused on the continuous monitoring to the environment to identify changes*” (p.457). It includes attributes such as “environment supportive of experimentation, learning and

innovation”, “positive attitude to changes, new ideas, people and technology”, “continuous improvement, learning and employee training, changes management, organisational responsibilities change”.

The fourth concept closely related to agility is “*speed*”, which is the ability to finish the needed requirements for the other agile attributes in the shortest time period. It includes attributes such as “learning, carrying out tasks and operations and making changes in shortest possible time of product/service delivery”, and “time of learning and time of adaptation to change”.

The fifth concept is “*integration and low complexity*” ,which includes “intra-enterprise and inter integration”, “synthesis of diverse technologies, skills, competences”, “low complexity of structure, relationships between structure elements”, “flow of material, communication and information between different organisational structures and systems components”, “enhanced interaction between processes, products and suppliers”, “easy and effortless process of making changes”.

The sixth concept is “*high quality and customised products*”, which includes “products and services with high information and value-adding content”, “quality over product life”, “first time right decision”, “short development cycle time”.

The final concept that is related to agility is “*mobilisation of core competencies*”, which includes “multi-venturing capabilities”, “developed business practices difficult to copy”, “skill and knowledge enhancing technology technologies”, “rapid partnership formation”, “close relationship with customers and suppliers”, and “high rate of new product introduction”.

2.4 The relationship between partnership, agility and information technology

The previous sections have established the importance of partnerships in modern supply chains and have also established what appears to be the rapidly growing

importance of agility, particularly in manufacturing firms. This section now reviews literature that has considered both partnerships and supply chain agility, in other words that has discussed or examined the relationship between the two concepts. Accordingly, section 2.4.1 is concerned with the influence of buyer supplier relationship and partnership on agility in supply chains. Section 2.4.2 is concerned with the role of information sharing and information technology on supply chain agility.

These relationships have been derived from the deep review of the literature. The first is concerned with the impact of the ability of the manufacturing company to maintain a strong partnership with its core suppliers on their supply chain agility level. The second is concerned with the impact and the role played by information sharing through the use of information technology means for channelling and mediating the relationship between buyer-supplier partnership and supply chain agility.

2.4.1 Influence of buyer-supplier relationship and partnership on agility in supply chains

Several agility research studies have highlighted the importance of developing and maintaining effective and successful relationships with supply chain partners and especially with their suppliers for achieving agility in general and in achieving agile supply chains. They considered this as a core element or core strategy planned and performed by any company that needs to be agile and achieve agility within its supply chain. However, few studies exist that have examined the impact of the partnership that may exist between the company and its suppliers as a unique type of relationship on the company's ability to achieve agility within the supply chain. Despite the interest in the literature, it appears that there is still, if any, little theoretical and empirical examination for this effect and the attributes of the partnership required by the company to be able to achieve agility within its supply chain. In addition, and not surprisingly, therefore a gap exists on determining the relationships between the partnership and supply chain agility at the dimensional level with the aim of strengthening our understanding of the required attributes for partnership that can help

in achieving supply chain agility. At the same time, the investigating of the relationship between partnership and supply chain agility at the dimensional level can also help in determining the attributes of supply chain agility that can be enhanced and improved by the existence of a strong partnership between the company and its core supplier.

Among these few studies that have discussed the relationship between partnership and agility is that by Power et al. (2001), who argue, based on their results, that the supplier involvement in the company's implementation of the soft and hard approaches to achieve customer satisfaction is considered as one important factor differentiating "more agile" companies from those "less agile" companies. The "less agile" companies include supplier involvement only in achieving improvement in productivity and process activities, rather than assisting in satisfying the company's customers. Power et al. (2001) also suggest that collaboration plays an important role in achieving supply chain management "best practice" (Bovel and Martha, 2000), and in developing a highly integrated and efficient logistical network structures (Stock et al., 1998). The authors suggest that close supplier relationship, in achieving supply chain agility, is a considerable issue noted by several prior literature studies. Narashimhan and Das (2000) argue that an important factor in improving the manufacturing system to respond to changes is the choosing, developing, and the integrating and coordinating with the suppliers, that is to say being close to the suppliers, possessing the suitable abilities (Power et al., 2001).

Goldman et al. (1995) argue that among the four dimensions for agility (as mention before) is "*cooperating to enhance competitiveness*" where the company has to cooperate and integrate with all supply chain partners to be able to share resources with other organizational entities in order to deliver value, rapidly and effectively. This can show the importance of building a strong relationship with the company's supply chain members to achieve agility.

Christopher (2000) highlights that relationships between companies and their suppliers are considered important ingredient for agility. He also suggests that focusing on

partnership development in a network is an important factor for agility. Brown and Bessant (2003) argue that among the important practices associated with efforts of the company to achieve agility in manufacturing are “supplier alliances”, of which partnership is considered the type of alliance. Among the attributes and practices for agile organizations specified by Yusuf et al. (1999) are forming and developing of partnerships and close relationships with both customers, as well as suppliers. Youssef (1992) argues that the integration and coordination between the internal resources of an organization with its supplier’s resources and customers can lead to improvement in the organisation’s manufacturing performance, as well as its agility level (cited in Prater et al., 2001).

Ismail and Sharifi (2006) argue that the agile supply chain has several methodologies that include all the means to improve the internal firm’s agile capabilities through the sharing of resources among the supply chain partners. The agile supply chain methodologies are concerned with adapting the supply chain to the required changes and new nature of competition and with applying new production processes to all supply chain members and managing the relationships among all the supply chain partners. Ismail and Sharifi’ (2006) model for the agile supply chain emphasizes having and developing good relationships with supply chain partners, and they consider the effective and successful development and management of suppliers as a key strategy among the strategies range for achieving the agile supply chain. Kehoe et al. (2004; cited in Ismail and Sharifi, 2006) similarly suggest in their demand network model that developing a supply chain or network is based on the interaction of two core elements: the “*physical or informational resources*” and the “*relationships*”. Therefore, the effective supply chains should include the successful management of physical and informational resources combined interactively with and supported by successful management of relational interactions in which opportunism is minimised and trustful relationships are maximised.

Beyond the studies examined above no others were found that have examined the relationship between buyer-supplier partnership and agility. Nevertheless, these are important studies in their own right, and they are all agreed that buyer-supplier partnership is either necessary, or highly desirable for achievement of a high level of

agility in the supply chain. However, whilst each study has, either anecdotally or empirically, established the importance of the relationship, none has examined the relationship at a level deeper than at the abstract concept level. No one was found to have examined partnership and agility at its attribute level, and hence that relationship between the more detailed attributes of the two concepts.

2.4.2 The role of information sharing and information technology on supply chain agility

The role of information sharing and its impact on agility has been explained in the literature. The role of information technology and its impact on agility has been also discussed and contradicted in the prior literature. Some research studies are suggesting that information technology can have a great role in enhancing agility as an enabler to achieve it. At the same time, there are some research studies on the opposite side of the thinking. In addition, some studies can be considered as having a mixed perspective to the role of information technology on agility.

Schonsleben (2000) suggests the importance of information technologies to agility, since he argued that agile companies are competing through the use of “knowledge and competency” (cited in Power et al. 2001). Power et al. (2001) also argue in their analysis for “less agile” and “more agile” companies that the “more agile” companies are more willing to use high technology.

Kannan and Tan (2006) point out that the adequate use of information sharing based on information technology between members within the same supply chain can enable them and lead them to achieve long term competitiveness for the whole supply chain. They argue that supply chain relationships based on information technology are important factors for long range plans with a strategic approach (Bernardes and Zsidisin, 2008; Moore and Manring, 2009), and that information sharing through the use of adequate information technological means can be a key factor for achieving operational match between partners (Douma et al., 2009). Therefore, it can be argued

that all these benefits of information sharing and information technology to supply chain performance can also improve the agility measures for the supply chains.

Swafford et al.'s (2008) study suggest that information technology has a positive impact on supply chain flexibility, which in turn results in higher supply chain agility and can increase the firm's competitive performance.

Van Oosterhout et al. (2006) consider information technology as an enabler or in sometimes as a disabler. They found that some of their respondents consider information technology as a disabler to agility. They argue that from their respondents' perspective information technology can slow the process of change and therefore can have a negative effect on agility. They argue that these results coincide with the analysis of Attaran (2004), where he recommends that information technology was the most important barrier for rapid and radical change. This was due to the fact that radical change needs an information system redesign. At the same time, they found that the other part of the respondents was considering information technology to be an enabler to agility.

Retting (2007) has considered the use of advanced information technological means as a disabler to agility. She, in her conceptual study, suggests that the organisational informational systems that are based on data integration and automation for the processes can results in a level of rigidity. She argues that they can also play as unexpected barriers to deal with change. She backed this to the argument that change, accompanied by high level of technology can be complex and uncertain.

2.5 Summary

The above literature review has shown that there are many research studies supporting the importance of supply chain, and so its management. This had been given increasing attention due to today's business environment conditions, which are characterised as having a highly changeable and complex nature. The review

accordingly has provided insights into the important studies in the literature concerned with supply chain management, buyer supplier partnerships, and supply chain agility. This was with the aim to identify the gaps in the literature, and has been established, a major gap exists in the empirical literature linking buyer supplier partnership and supply chain agility as a means for improving supply chain management. The review focused on the role of information technology in enabling supply chain agility through buyer-supplier partnership, has also established that there is very little if any empirical prior work to date. This therefore highlights the need for such investigation. The next chapter (Chapter Three) presents the methodological approach used in this research study and the means of data collection, and discusses by methods used for data analysis.

Chapter Three: Research Theoretical and Methodological Framework

3.0 Introduction

In this chapter the methodological strategy of the research will be discussed. For any researcher there are several approaches available to choose from. The approaches range from qualitative to quantitative, and are used to guide the data collection and analyses. There is a clear and obvious trend when dealing with doing research within the operations management area which is that most of the researchers have depended on quantitative approaches rather than qualitative ones for their methodologies (Binder & Edwards, 2010). However, qualitative means are becoming more prevalent in today's complex and dynamic business world. This has been suggested by Hayes (2000) who states that in researching operations issues in today's business environment there is less need for quantitative approaches and testing hypotheses and that researches should focus more on systematic observation to assist the companies' managers to deal and respond to their business problems (Binder and Edwards, 2010). Therefore, academic researchers can now focus on qualitative approaches as they can help business managers to deal with their real business problems innovatively (Binder & Edwards, 2010). This is true with any business area, but it is particularly important with operations management which is considered to be an "applied discipline setting out to answer concrete problems that emerge within both industry and services" (Filippini, 1997; cited in Binder and Edwards, 2010, p.233). Consequently, there is an important need for operations management researchers to start to focus on qualitative approaches in order to be able to build on theories that can assist operations managers. This has also been suggested by Golicic and Davis (2011), who state that most of the literature on logistics research and supply chain management field is mainly depending on quantitative research designs. The authors suggest that "*knowledge development in logistics and supply chain management relies primarily on single- method quantitative research designs...*" (p. 726).

The grounded theory methodology is being used now with an increasing rate, as observed by Shannak and Aldhmour (2009; cited in Ambe and Badenhost-Weiss,

2011). The grounded theory method has recently been used in ever increasing amounts by management researchers for two main reasons. These are, firstly, including its ability to put new ways of thinking on old theories, because it is much more suitable for practitioners researching complex or underdeveloped phenomenon and secondly, its ability to be used to explain unstudied micro-management problems (Jones and Noble, 2007). Attempting to address and explain supply chain issues and agility problems is a complex task. To examine the impact of achieving successful partnerships between manufacturing companies and their suppliers and the degree or extent of this relationship on their ability to achieve agility within their supply chain, a suitable methodological approach needed to be selected that can enrich the scarce literature that exists on agile supply chains. Most researchers of agile supply chains have supported the use of qualitative interpretive approaches when dealing with agility as a concept and especially agility within the supply chain context (Hoek et al., 2001). This is because agility is still considered a new business concept for the academics, as well as the business practitioners. In addition to this, the interpretive sociology approaches can give a philosophical approach and a research perspective that provides a richer picture and a deep understanding for the actor's experiences under study. For this reason, this research adopted a qualitative (interpretive) approach for its methodological path. It uses "Grounded Theory" as one important interpretive methodological approach.

3.1 Social science research paradigms

The nature of any study is the basis that allows the researcher to select a suitable methodology and methods (Levy, 2006). Any research should start by determining the suitable design for the study. Crotty (1998) suggests that there are four main elements constituting the research design. These elements are: epistemology, theoretical perspective, methodology and methods. These elements are discussed in detail in sections 3.2, 3.3, 3.4 and 3.5 respectively.

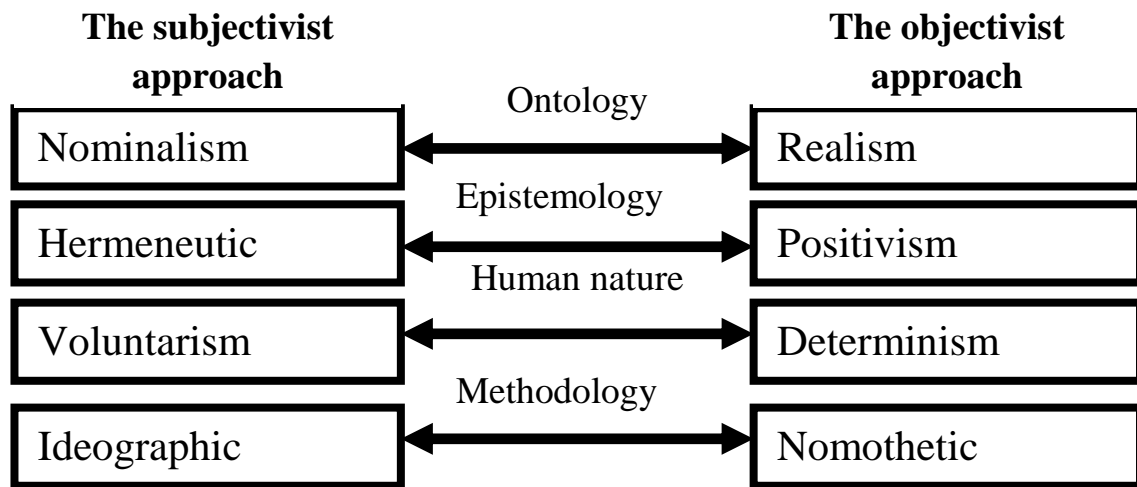
There are several contributions that have discussed the philosophical paradigms in the social science research area and that relate these paradigms to the research

methodologies and methods. It is important to appreciate some of the basics of the main paradigms for social science research. Burrell and Morgan (1979) provide a good starting point for further discussion. Firstly, it is logical at the outset to know what a paradigm means. It has been defined by Guba and Lincoln (1994, p. 105) as “...*the basic belief system or worldview that guides the investigator, not only in choices of method, but in ontologically and epistemologically fundamental ways*”. Burrell and Morgan (1979) have provided researchers with a framework classifying the ontological and epistemological alternatives. This framework was based on some assumptions, as Burrell and Morgan (1979) argue that “*all social scientists approach their subject via explicit or implicit assumptions about the nature of the social world and the way in which it may be investigated*” (Burrell and Morgan, 1979, p. 1). They suggest that these assumptions are very important since they affect the research and consequently these assumptions have to be recognised and to be focused on by the researcher. As a result, most of their explanation has been focused on these assumptions.

Their framework was derived with the aim to help the researcher to identify his/her social research paradigm(s) by classifying the social research paradigms based on two sets of assumptions, namely “assumptions about the nature of social science” and “assumptions about the nature of society”.

The assumptions under the first set are classified relating to ontology, epistemology, human nature and methodology. As shown in figure 3.1, these four levels can be ranked based on a continuum scale, ranging from the extreme subjective approach to social science, to the extreme objective approach to social science.

Figure 3.1: Source: Burrell and Morgan (1979).



The assumptions under ontology are related to the core essence of the phenomenon under study. They are related to questions of ‘reality’; whether it is considered as an external issue to the person or whether it is considered as outcome of the people’s consciousness (Burrell and Morgan, 1979, p. 1).

The second group of assumptions namely under epistemology are related to the basis of knowledge. Epistemology has been considered by Maynard (1994, p. 10) as *“concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate”* (Crotty, 1998, p. 8). This means whether knowledge can be considered as hard and being able to be transformed into tangible manner, or whether it is soft, unique and based on personal experiences and insights (Burrell and Morgan, 1979).

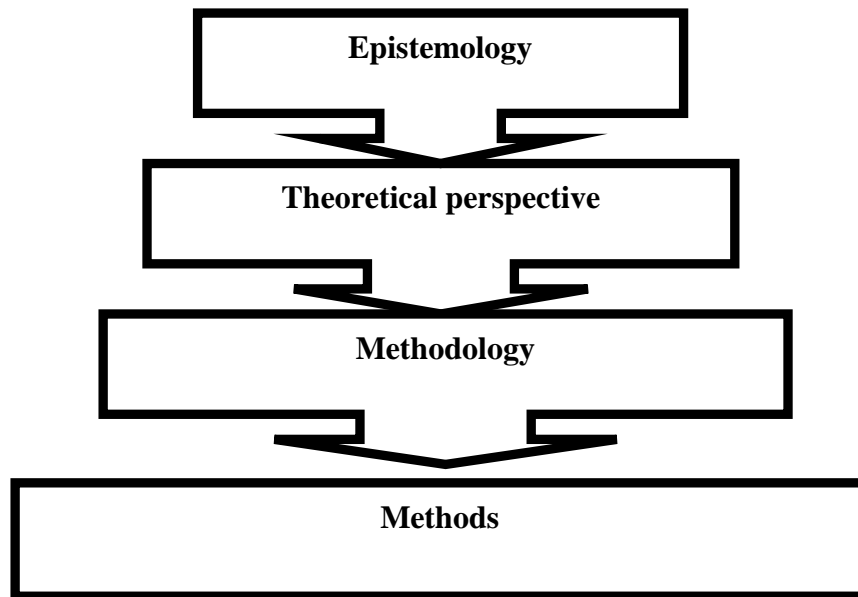
The third group of assumptions, related to human nature, is concerned with the human beings’ relationships with each other and with their environment. It is related to issues such as whether the individual is dealing in a reactive way to surrounding situations or in a more proactive way, such as having a creative and innovative way of thinking (Burrell and Morgan, 1979).

The previous three types of assumption have an impact on the forth type of methodological assumption. If the researcher considers the social world as being hard and external, then the researcher will approach relationships analysis using a more quantitative approach to social science. On the contrary, if the researcher considers the social world as soft and in need of more emphasis on personal subjective insights, then the researcher will use a more qualitative approach to social science, as it is necessary to focus more on understanding and trying to know what is specific and unique to the person, rather than focusing on the general public (Burrell and Morgan, 1979).

Therefore, based on Burrell and Morgan's research (1979) it can be argued that the ontology of this research is based on the subjective "nominalism" approach to social science. The epistemology of the research is firmly rooted in the "interpretivist" path to social science.

Another important model for the classification of research philosophical paradigms is that provided by Crotty (1998), as shown in figure 3.2, which identifies four main elements for research design, including epistemology, theoretical perspective, methodology, and methods. This model is also highly suitable for this research as it classifies the research design stages very clearly. Therefore, the researcher adopted this framework to identify in detail the study's research theoretical and methodological framework. Each of the four elements, as they relate to this study, is discussed, in turn, in the following four sections (3.2 to 3.5).

Figure 3.2: Elements of Research design (source: Crotty, 1998)



3.2 Research Epistemology

Crotty (1998) divides epistemology into two main views: constructionism and objectivism. Crotty (1998) considers the objectivism epistemology to mean “*that things exist as meaningful entities independently of consciousness and experience, that they have truth and meaning residing in them as objects (‘objective ’truth and meaning, therefore), and that careful (scientific) research can attain that objective truth and meaning*” (p.5- 6). The advocates using this do so because they believe that it can lead them to reach the objective truth (Crotty, 1998). Conversely, under the constructionism epistemology, researchers consider that truth can be reached through the interaction with reality and therefore, it can be constructed, rather than discovered, as the objectivists would argue (Levy, 2006). This study uses a constructionism epistemology, because it is not aiming at just describing the phenomenon, but it aims mainly to understand the reasons behind this phenomenon.

3.3 Research theoretical perspective

The second element in Crotty's (1998) model is the 'theoretical perspective' which "*is a way of looking at the world and making sense of it. It involves knowledge, therefore, and embodies a certain understanding of what is entailed in knowing, that is, how we know what we know*" (p 8). It has been defined by Crotty (1998) as "*the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria*" (p. 3). Under the "theoretical perspective" in Crotty's model (1998), the researcher can take either positivism and/or an interpretivism perspective.

3.3.1. Positivism research

The positivism paradigm has been defined by Bryman and Bell (2007) as "*an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond*" (p.730). It is alternatively known by terms such as 'Quantitative', 'Objectivist', 'Scientific', 'Experimentalist' and/or 'Traditional' (Collis and Hussey, 2003; p.47). Under this paradigm, the assumption is usually to focus on a highly structured approach to make replication more easier (Gill and Johnson, 1997; cited in Saunders et al., 2000) and to focus on using quantitative techniques for analysis (Saunders et al., 2000). Therefore, under this method there is independence of the researcher from the research itself and the researcher is not affecting or being affected by the research (Remenyi et al., 1998; cited in Saunders et al., 2000). The positivistic paradigm has its own features, such as: focusing on producing quantitative data, needs large samples, emphasises the use of very specific and precise data, usually uses artificial location, is characterised by high reliability and low validity and focuses on generalising the sample to the whole population (Collis and Hussey, 2003).

3.3.2 Interpretivism research

As mentioned before the present study is primarily rooted in the interpretivism theoretical perspective. This is because the main goal of the research is to build a theory showing the relationship between buyer-supplier partnership (including its attributes) and supply chain agility (including its attributes). Therefore, an interpretive approach was considered as the most suitable approach for achieving this goal (Levy, 2006). It is defined by Bryman and Bell (2007) as a phenomenological paradigm, that is to say “*an epistemological position that requires the social scientist to grasp the subjective meanings of social action*” (p.728). It is also known by other terms including: ‘Qualitative’; ‘Subjective’; ‘Humanistic’ and ‘Phenomenological’ (Collis and Hussey, 2000, p.47). Under the interpretivism design, the focus is on the details of the phenomenon and what is behind those details to provide an explanation (versus description) and more understanding of the reality (Saunders et al., 2000). The phenomenological paradigm has the following features: it focuses on qualitative data; it focuses on a small sample; it focuses on developing theories using rich and subjective data; it depends on natural location settings; it is characterised by high validity but it can be subject to low reliability; it makes generalisation for the results from one setting to another (Collis and Hussey, 2003). Carson et al. (2001) argue that the interpretivism theoretical perspective is totally related to a set of qualitative concepts and means, emphasising understanding what is happening within a specific context under study, taking into account several factors such as various participants experiences, the involvement of the researcher, the context under study and the multiple types of realities. Levy (2006) suggests that interpretivism researchers consider that knowledge, as perceived from people, is the way that can enable researchers to understand the real world, and therefore interpretivism research always focuses on understanding and exploring phenomena under a given context.

This study applied interpretivism research noting that almost all the recent previous studies on buyer-supplier partnerships have depended on using positivism approaches. They have done so because there are several previous research studies in the literature on supply chain management and on partnerships, which enabled successive researchers to use more quantitative approaches to develop their pre-determined

conceptual frameworks and then test them. However, the link between buyer-supplier partnerships and supply chain agility is still very much in its infancy. There have been very few empirical studies and the theoretical underpinning is therefore very underdeveloped. Consequently, it was necessary for this research to focus on the details of the phenomenon, but also to examine what is behind those details and provide an explanation and hence more understanding of the reality. Based on the previous discussion about the nature of positivist and interpretivist approaches, this clearly lies in the domain of the interpretivist approach.

3.4 Research methodology

The third facet in Crotty's model is the research methodology, which is also closely related to the theoretical perspective. Crotty (1998) has suggested that the selection of the appropriate type of methodology is concerned with *"the strategy, plan of action, process or design lying behind the choice of particular methods and linking the choice and use of methods to the desired outcomes"* (p. 3).

A comparison between the suitable methodologies applied under both the positivist and the interpretivist theoretical perspectives is provided by Carson et al (2001). They suggest that under positivism the methodology focuses more on description, whereas under the interpretivist perspective the methodology focuses more on understanding and interpretation. Regarding the techniques and tools used by the researcher under positivism the methodological techniques invariably involve statistical means and mathematical methods. On the other hand, non-quantitative means can be used by the researcher under the interpretivism perspective (Carson et al., 2001; cited in Levy, 2006). Regarding the researcher's role in the study, under the positivism study the researcher intends to be an external observer only, however under the interpretivism study, he/she intends to be a participant in what they are studying (Carson et al., 2001; cited in Levy, 2006). With positivism research the researcher focuses on discovering external reality by using rational, consistent, verbal, and logical means, however with interpretism, the researcher intends to create or understand what is behind the phenomenon depending on his/her pre-understanding for the phenomenon (Carson et

al., 2001; cited in Levy, 2006). Under positivism, it is possible to distinguish clearly between science and personal experience where facts and value judgements are clearly separated. This distinction is clearly less important under the interpretivism perspective, as influence from science and personal experience can be accepted (Carson et al., 2001; cited in Levy, 2006).

Although many research methodology books begin their methodological discussions by distinguishing between quantitative and qualitative research, in Crotty's model the qualitative approach versus quantitative approach differences do not feature until after didn't take place during the discussion for the first two levels; the epistemology and the theoretical perspective. Crotty argues "*...that the distinction between qualitative research and quantitative research occurs at the level of methods. It does not occur at the level of epistemology or theoretical perspective. What does occur back there at those exalted levels is a distinction between objectivist/positivist research, on the one hand, and constructionist or subjectivist research, on the other*" (Crotty, 1998, p. 14-15). After explaining this study's epistemology and its theoretical perspective, the discussion now turns to discuss the features of its qualitative nature. Given the constructionism epistemology and the interpretivism perspective selected for this research, the qualitative approach is clearly the most related approach to this research.

3.4.1 Qualitative research

Business research can be classified depending on the 'process' of gathering and analysing the data into qualitative or quantitative research (Collis and Hussey, 2003). The researcher may use data considered as quantitative data and thus the research is considered as a quantitative one. The researcher collects numerical data and presents figures and statistical ratios where the analysis has used quantitative and statistical techniques (Collis and Hussey, 2003). Bryman and Bell (2007) define quantitative research as "*research usually emphasizing quantification in the collection and analysis of data. As a research strategy it is deductivist and objectivist and incorporates a natural science model of the research process (in particular, one influenced by*

positivism), but quantitative researchers also do not always subscribe to all of these features” (p.731).

The research presented in this study follows the other type of research that is ‘qualitative research’. It has been defined by Strauss and Corbin (1990) as “*any kind of research that produces findings not arrived by means of statistical procedures or other means of quantification*” (p. 17). Bryman and Bell (2007) define it as “*research [that] usually emphasises words rather than quantification in the collection and analysis of data. As a research strategy it is inductivist, constructivist, and interpretivist, but qualitative researchers do not always subscribe to all three of these features*” (p.731). Creswell (1998) similarly defines it as “*an intricate fabric composed of minute threads, many colours, different textures and various blends of materials*” (p.13). Collis and Hussey (2003) argue that the qualitative approach possesses a subjective nature and enables the researcher to examine, evaluate and test subjectively, to obtain a deep understanding of the concept under interest. This has also been suggested by Yin (2003), who argues that on the opposite side of the quantitative methodology, the qualitative one enables the researcher to be more closely related to the participants and to be able to collect information relating to their own thoughts and experience.

Dey (1993) (cited in Saunders et al., 2000) argues that usually the analysis of numbers provides special meanings, but that it is not necessary that meanings only come up from numbers. He states that the more the concepts are elastic and unclear, the less probability is there that the researcher can quantify the data of those concepts. Therefore, qualitative analysis is usually more useful for examining and evaluating such concepts, where qualitative analysis can provide richness and fullness to the phenomenon (Robson, 1993; cited in Saunders et al., 2000). As a result, Saunders et al (2000) suggest that for these reasons qualitative data should be collected in a special manner, where its nature will affect both its collection process, as well as its analysis process.

3.4.1.1 The characteristics of qualitative research

It has been suggested by Creswell (2003, p. 18-182) that there are some specific characteristics for any qualitative research study. The author highlights that qualitative research should take place in the natural setting chosen for the study. This feature has also been suggested by other researchers, for example Denzin and Lincoln (2008) and Collis and Hussey (2003). The second characteristic for qualitative research, according to Creswell (2003), is that it needs a set of interactive methods. Qualitative study can be considered as an emergent research study, more than a prefigured study. Qualitative research is basically interpretive where the researcher has to be able to explain and discuss the data clearly in an understandable manner, taking into account the risk of personal interpretation in the qualitative data analysis. Finally, any qualitative research is also characterised by a holistic perspective towards the social phenomena under study. This is because the researcher may go backwards and forwards in his/her way of thinking during data collection and data analysis.

Another set of considerations for qualitative researchers is put forward by Mason (2004). He argues that the qualitative researcher is responsible for its quality where he/she cannot have his/her personal judgemental position; rather he/she should provide the evidence based on which the reader can judge and evaluate the credibility of the research. The author also suggests that qualitative research should provide explanations and arguments more than providing deep descriptions. Finally, qualitative research has to be conducted taking into account moral context issues.

There are several qualitative research methodologies. Some examples include ethnographic research, phenomenology, action research, discourse analysis and grounded theory (Levy, 2006). This study falls under the umbrella of the 'interpretivism' paradigm. It uses, as a qualitative methodology, the 'Grounded Theory' approach. It was deemed the most suitable one for the purpose of this research, which is building a theory showing the relationship between buyer-supplier partnership and supply chain agility. This study is one that reflects the assumptions of the phenomenological paradigm (Collis and Hussey, 2003) for the following reasons:

the data collected is mainly qualitative data through conducting interviews and collecting documentary; the sample used is considered a relatively small sample compared to positivism studies in order to ensure richness and depth of the data. The data collected has been enriched by the interviewees' experiences as they hold senior managerial positions within Unilever (North Africa and Middle East). The interviewees were given the freedom to discuss and explain what they perceive as important for them. The data collected is therefore considered as subjective, since every interviewee explained and discussed the concepts under investigation from his/her point of view. The research in this study took place in the natural location of the participants as most of the interviews were held inside the company's selected site locations. Finally, the research has not intended to benefit only one manufacturing company; it was intended to provide valuable insights to any manufacturing company working within the FMCG business who is intending to achieve agility within their supply chains and improve the performance. Therefore, this research meets the criteria of the phenomenological paradigm assumed by Collis and Hussey (2003).

3.4.1.2 A note on theory development in qualitative research

Before explaining more about the methodological approach used by this study it is important to establish what is meant by a theory. Theory has been defined as *"a set of statements or principles devised to explain a group of facts or phenomena"* (dictionary.com; cited in Onions, 2007, p4). Strauss and Corbin (1998) suggest that *"theory denotes a set of well- developed categories (eg. Themes, concepts) that is systematically interrelated through statements of relationship to form a theoretical framework that explains some relevant social, psychological, educational, nursing, or other phenomenon. Once concepts are related through statements of relationship into an explanatory theoretical framework the research findings move beyond conceptual ordering to theory"* (p.22). It has been defined by Silverman (1991, p.1) as *"a set of explanatory concepts"* (cited in Collis and Hussey, 2003). Similarly, it has been defined by Kerlinger (1979) as *"a set of interrelated constructs (variables), definitions and propositions that presents a systematic view of phenomena by specifying relationships among variables with the purpose of explaining natural phenomena"* (p.64)

In relation to these observations about theory, the following sub-sections (3.4.1.3. to 3.4.1.5) discuss the grounded theory approach adopted for this study.

3.4.1.3 Grounded theory history

Grounded theory approach was chosen to be the methodological approach or strategy used in this research study. It is a methodological method which aims to organise the ideas that emerge from systematic data analysis of documents, interviews or field studies, by coding and comparing the data continuously to generate a “*well-constructed theory*” (Strauss, 1987, p.23). It is that theory that is based on grounded data (Onions, 2007). It is described by Smith and Bryant, 2000) as “*a theory that has been generated or discovered following the principles and procedures set out initially in the development of grounded theory by Glaser and Strauss (1967), and refined in later works by Glaser*” (cited in Onions, 2007, p.6). Therefore, it can be considered as a means of abstraction or generation of casual relationships that exist (Onions, 2007). Glaser and Strauss argue that theories can be generated from logical assumptions or from observations as a methodological approach, which is an equally valid alternative to qualitative methodologies which are able to draw as their foundation on a more substantial body of existing literature (Onions, 2007).

Grounded theory principles were first introduced by Glaser and Strauss (1967) in the medical field, but have been increasingly used as a methodological approach in other disciplines and academic areas. The ‘grounded theory’ has been defined by Strauss and Corbin (1990, p. 24) as “*a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon. The findings of the research constitute a theoretical formation of the reality under investigation rather than consisting of a set of numbers, or a group of loosely related themes*”. Therefore, the ‘grounded theory’ is established by the observations made during the research, rather than being determined before the research is undertaken.

The aim of the grounded theory is to develop the theory based on the prescriptions and policy recommendations that are “*likely to be intelligible to, and usable by, those in*

the situation being studied, and is often open to comment and correction by them” (Turner, 1981, p. 226; cited in Collis and Hussey, 2003). Its roots as a methodological approach exist in the sociological sciences and its philosophical roots lie in social constructivism (Collis and Hussey, 2003). Its unique feature lies in its systematic and iterative process of data collection and analysis to gradually extract concepts (Strauss and Corbin, 1998). The grounded theory possesses an important advantage as a methodological approach, which is its ability to fill the gap that may exist between what is known about the phenomenon and the empirical research.

In the grounded theory approach, the framework is established by the researcher using both the inductive and the deductive research ways of thinking (Collis and Hussey, 2003). Firstly, the inductive way of thinking is used to enable the researcher to obtain information from the collected data. Secondly, the deductive way of thinking is used by the researcher to be able to transform from the data collected, in a rational manner, the information which can enable him/her to form their conclusions (Collis and Hussey, 2003).

Following its introduction by Glaser and Strauss (1967), the grounded theory has been divided into two versions: the first one is “theoretical sensitivity” developed by Glaser (1978), and the other is “qualitative analysis for social scientists” developed by Strauss (1987). Several researchers have discussed the differences between both versions of grounded theory. Among them is Onions (2007), who argues that the Glaserian approach needs a general idea to begin the research without any previous history, whereas, the Straussian approach begins with a more specific research idea to begin from. Another point of difference between them is that under the Glaserian approach, the emerging theory is based on neutral questions, whereas under the Straussian approach it is based on a forced theory and is based on structured questions. Under the Glaserian approach the aim of the research is to develop a conceptual theory; however, under the Straussian approach it is to describe the situations under study. Under the Glaserian approach, the perceiving of the variables and relationships is based on data immersion; on the other hand, under the Straussian approach the perceiving of the variables and the relationships is based on methods and tools used in the research. The Glaserian approach is based on data grounded, while under the Straussian approach the

theory is based on the observer's interpretation. The theory credibility or verification is based on the grounded data under the Glaserian approach while under the Straussian approach it is based on the method rigour. Under the Glaserian approach, there should be a basic social process, while under the Straussian approach the social processes are not needed to be determined. The researcher under the Glaserian approach is passive, while under the other version is considered an active researcher. Data under the Glaserian approach is ready to reveal the theory while under the Straussian approach should be structured first to be able to reveal the theory. Finally, the coding process under the Glaserian approach is considered less rigorous while under the Straussian approach it is more rigorous and should be identified by the technique used.

This research has followed the Straussian version of the grounded theory. The researcher began the research by reviewing the literature on supply chain management, buyer-supplier relationships and supply chain agility. This was done with the aim to determine the gaps in the literature. This enabled the researcher to be able to identify a central research question and clearly define the research problem.

3.4.1.4 Using Grounded Theory as the research study approach

Grounded Theory as a methodological approach has its unique feature or advantage over other phenomenological approaches, which is its great focus and attention on the theory development. Strauss and Corbin (1994, p.274) suggest that *“researchers can aim at various levels of theory when using grounded theory procedures. Higher level general theory is possible, but when grounded this differs from more deductive types of general theory because of its generalization and development through interplay with data collected in actual research”*. Collis and Hussey (2003) argue that this is the main or core aim of using Grounded Theory methodology, that is to say, to develop or build on a theory for the area's variables under study. In addition, Pettigrew (1989) argue that *“this provides an opportunity to examine continuous processes in context in order to draw out the significance of various levels of analysis and thereby reveal the multiple sources of loops of causation and connectivity so crucial to identifying and explaining patterns in the process of change”*. Goddard (2004) suggests that grounded

theory is a process that integrates data from case studies and from the researcher's theoretical insights. These theoretical insights should be generated from the data and not considered before in the previous researches. Yin (2003) and Benbasat et al. (1987) argue that there are some conditions or guidelines that guide the selection of the suitable methodological approach for any research, which include the research question type, the degree of the manipulation and control over the subjects and events and the extent of focusing on the contemporary versus the previous events (cited in Binder and Edwards, 2010). Applying such guidelines to this research study, can show clearly that the grounded theory was the most suitable methodological approach. Firstly the research study aimed to answer "how" questions. The study focused on answering how the formation of a strong partnership between the manufacturing company working within the FMCG business environment and its supplier is an important driver for both of them to achieve agility within their supply chain, beside the attention to information sharing and information technology in achieving agile supply chains. This could be researched by using the grounded theory approach, as it provides the depth and the richness to the data that can enable the researcher to build on or develop a theory on a contemporary phenomenon with little known knowledge, that is to say, on the effect of buyer-supplier partnership on achieving supply chain agility (Binder and Edwards, 2010). Secondly, grounded theory is used to determine patterns in relationships that exist between the business players and their environments by enabling them to speak freely and openly in order to provide richness and depth to the data that is used to develop the framework (Binder and Edwards, 2010). Finally, unlike most of the grounded theory researchers, this research has followed Strauss and Corbin's (1990) grounded theory approach which does depend on having some little known knowledge from previous literature on the concepts under study and the relationships between them, to the extent that can enable the researcher to identify the existing gaps and try to fill in them through her research. Most researchers use the grounded theory approach with little dependence or even no dependence on the previous literature. This is because they are following one version of grounded theory approach which is that of Glaser (1992).

Gurd (2008) argues that grounded theory is considered as the most suitable methodological approach when dealing with "how" questions rather than "why"

questions and especially when dealing with new situations or new concepts or situations that need “a fresh point of view” (p1). This research adopts the grounded theory as its methodological approach since the agility philosophy, but especially agility within the supply chain context, is considered as a relatively new concept for both academic researchers and business practitioners. In addition, as was noted in chapter two, overall agile supply chain as a business concept has limited literature including its definitions, elements and attributes. Furthermore, the existing literature on agile supply chain is prevalently conceptual with limited empirical analysis evident. Therefore the researcher was not able to depend on the use of a quantitative methodological approach to test a predetermined conceptual framework. While most of the literature on agility and agile supply chains considers strong relationships between the companies and their suppliers to be an important element, how and to what extent such relationships can influence their abilities to achieve agility within their supply chain has received little attention, highlighting a research gap which this research aimed to examine. In addition, it was considering that using a predetermined conceptual framework and then testing its associated hypothesis would severely limit the possibility of identifying any additional variables or attributes pertinent to the relationship that may emerge during data collection. The agility literature needed to be enriched by more data on its elements and attributes, which was deemed to be best achieved using an interpretivist grounded theory approach.

Grounded theory was also adopted in this research to enable the researcher to be able to interpret the data, rather than reporting it only. Parker and Roffey (1997, p.218) suggest that “*rather than focusing exclusively on describing field members’ sense-making activities and interactions, grounded theory aims to incorporate the researcher’s understandings, and attempts to develop explanatory theoretical frameworks representing structures and processes observed*”. Finally, grounded theory was used in this research as it enabled the research to take into consideration the complex issues identified by the literature: partnership, agility and the relationship between them, as suggested by Strauss (1987), as he emphasised the importance of grounded theory in the developing of several concepts and the relationships between them. Other researchers, such as Ellram (1996) and Binder and Edwards (2010) have

also used grounded theory in the supply chain context, thereby showing that it can be a robust and valuable research in this field.

3.4.1.5 Grounded Theory elements

Grounded theory approach as a methodological research strategy has its main elements. They are three core elements: concepts, categories and propositions.

The concepts are defined by Strauss and Corbin (1990, p.61) as *“conceptual labels placed on discrete happenings, events, and other instances of phenomena”*.

The grounded theory categories are discussed by Strauss and Corbin (1990, p.61) as the results of grouping and synthesis of similar concepts together. They define it as *“a classification of concepts. This classification is discovered when concepts are compared one against another and appear to pertain to a similar phenomenon. Thus the concepts are grouped under as a higher order, more abstract concept called a category”*.

Corbin and Strauss (1990, p. 7) describe categories as *“higher in level and more abstract than the concepts they represent. They are generated through the same analytical process of making comparison to highlight similarities and differences that is used to produce lower level concepts. Categories are the “cornerstones” of a developing theory. They provide the means by which a theory can be integrated”*.

Finally, the propositions are defined by Strauss and Corbin (1998, p.102) as the questions that can show the possible relations among phenomena, as they suggest that *“such questions not only enable us to systematically specify what we see, but when they take the form of hypotheses or propositions, they suggest how phenomena might possibly be related to each other”*. Such propositions were initially viewed by Glaser and Strauss (1967) as “hypotheses”, however researchers prefer to call them propositions, as suggested by Pandit (1996). He based his argument on the difference

between the two proposed concepts by Whetten (1989), who suggests that later ‘hypotheses’ is describing measuring relationships, whereas the ‘propositions’ is describing conceptual relationships, which arguably is more in line with the main aim of grounded theory of producing conceptual relationships (Pandit, 1996). These elements will be discussed in more detail during the Analysis chapter.

3.5 Methods

The final element in Crotty’s (1998) research model is the methods. They are the techniques and means used by the researcher to collect and analyse data to answer his/her research question (Crotty, 1998). Since all the stages or elements in Crotty’s model (1998) are interrelated to each other, therefore they are affected and affect each other. As a result, the choice of the suitable methods is affected by the epistemological paradigm, as well as the theoretical perspective of the research. Since this research was to use grounded theory as its methodological approach, the research also used some related research methods such as: case study method, interviews and documentary materials.

Data has been collected from different means. Collecting data for quantitative research is usually considered a relatively easy and rapid process; however, the problems of data collection are usually more apparent during the collection of data for qualitative research (Collis and Hussey, 2003). Therefore, before explaining the means for collecting data for qualitative research, it is beneficial to determine and clarify the sequence or the procedures of the qualitative data collection process. This has been suggested by Creswell (2003, p. 185- 188), who argues that there are three main steps involved in the qualitative data collection process. The first step is to determine the target chosen site and the individuals for the proposed research study, in order to enable the researcher to better understand the research problems. It is important for the researcher to identify the place or setting where the research will take place; the research has also to identify the actors or participants who will be interviewed or observed; the events or the actions undertaken by the observed or interviewed

participants and finally, the actions or the events of the participants (Miles and Huberman, 1994; cited in Creswell, 2003, p.185).

The second step can involve four core data collection means; the first is “observation” where the researcher should determine his/her role as an observer. This way of data collection has an advantage as the researcher, as an observer, can have a first-hand experience with the participants. However, it also has an important disadvantage, which is that unobserved information is not reported and therefore cannot be known. The second data collection means is “interview”, where there are three main recognised types: face- to- face, telephone or group interviews. The third kind of data collection involves the collection/analysis of documents from newspapers, journals, diaries and e-mails for example, hand written work, which provides good evidence and can save money and time. However, there may be some such materials that are not advisable and consider the need to ensure research validity and reliability. Finally, the data collection means also includes other media such as photographs, videotapes, art objects, computer software and film materials. This can provide the benefit of giving the observers the opportunity to directly ‘live’ their realism; however their presence may affect the responses of the participants. Another classification for the available ways for qualitative data collection has been suggested by Collis and Hussey (2003), who argue that there are numerous means for collecting data. Among those not already mentioned are the critical incident techniques, focus groups, protocol analysis and questionnaires (Collis and Hussey, 2003). The selected means used to collect the data in this research will be discussed in more detail later in this chapter.

The third step of the data collection procedure, according to Creswell (2003), is data analysis and interpretation. The data analysis process starts by preparing the data for analysis and determining the different methods of analysis needed to provide the necessary depth of understanding. The ‘results’ of data collection can be expressed in form of tables, graphs and figures if necessary. Interpretation is the process of comparing the findings with the previous literature (and theory if one exists) raising questions and advancing an agenda. Finally, evaluation has to be provided to present the strategies that have been used to ensure the validity of findings.

However, according to Collis and Hussey (2003), there are some challenges to qualitative analysis of data that the researcher needs to be aware of and consider. The first core challenge to qualitative data analysis is to reduce the data, which is defined by Miles and Huberman (1994, p. 11; cited in Collis and Hussey 2003) as “*a form of analysis that sharpens, sorts, focuses, discards, and reorganises and verifies*”. In qualitative research, the researcher may be able to collect a huge amount of data including field notes, documents and interviews transcripts. Therefore, he/she need to be able to condense and manage all these mass amount of data. The solution involves determining a suitable, systematic way to summarise the data, which usually includes some form of coding process. The second main challenge for qualitative data analysis is to structure the data. When data is collected it has usually been collected in a chronological form which may not be the most suitable structure for its analysis. Therefore, the most important solution for this challenge is to have a pre-developed conceptual framework which can act as a guide and help to specify the main categories. If there is already one, it is preferential to use it during data collection stage. The third challenge is data detextualisation, in which this textual data may need to be presented in forms such as diagrams and illustrations for analysis and presentation.

In the following sections (3.5.1 through 3.5.4), the case study selected for the research is discussed and the means of data collection used by the study are defined.

3.5.1 Case Study method

Case study approach is defined as “the development of detailed, intensive knowledge about a single ‘case’ or a small number of related ‘cases’ (Robson, 1993, p.40; cited in Saunders et al, 2000, p.94). It is considered as a process of examining or evaluating a specific phenomenon inside a particular context and is considered as a research methodology under the phenomenological research paradigm (Collis and Hussey, 2003). It is also considered to be the best approach to answer questions of ‘Why’ and ‘How’ (Yin, 1989), as well as ‘What’ questions (Robson, 1993; cited in Saunders et al., 2000).

The case study approach involves gathering of data through several means such as interviews, observations, documentary analysis (Saunders et al, 2000), as well as questionnaires (Collis and Hussey, 2003). There are sequential stages for conducting a case study approach, including: selecting the case, preliminary investigations or drift, the main data collection stage, the analysis and the report stage (Collis and Hussey, 2003, p. 69-70). Stake (1995; cited in Bryman and Bell, 2007) argues that the case study approach is related to examining the nature of the issues in a particular case in study. Bryman and Bell study (2007) notes that this research approach was used by several famous and well-known studies within the business and management field.

The 'case' is defined as a unit of analysis in which the data obtained or the variables under study are examined and analysed (Collis and Hussey, 2003). A case may be a single enterprise, a single location, a person or a single event (Bryman and Bell, 2007). Scapens (1990; cited in Collis and Hussey, 2003) differentiates between four types of case study approaches: experimental, illustrative, descriptive, and finally, the explanatory case study, which is discussed and undertaken to explain and provide greater information about the relationships between variables in actual settings.

Under the grounded theory it is preferred to use a small number of cases to allow the researcher to be able to implement an in-depth approach in an effective and successful manner (emeraldinsight.com, 2009). Therefore, the research in this study depended on one in-depth case study: "Unilever North Africa Middle East" was used as the case study for the research. Four different sites for Unilever North Africa Middle East were visited by the researcher to collect data for this study for several reasons:

- 1- It is a multinational company working within the FMCGs industry, which is characterised as being volatile and turbulent business sector.
- 2- It is one of the multinational companies that has focused on opening new markets especially in developing countries, and the Middle East is one of these attractive markets for such companies.
- 3- The Middle East, and especially Egypt, is the home country of the researcher and this enabled her to get the access to the different location sites more easily.

4- This letter also enabled the researcher to be more aware of the surrounding environment, including the different culture, customer requirements and preferences, logistics issues existing within the Middle East region.

The choice of the business industry and the case study, including the different four location sites, is discussed and explained more fully in chapter 4 (section 4.2).

3.5.2 Interviews

An interview is a discussion with a purpose between two or more people (Kahn and Cannell, 1957; cited in Saunders et al., 2000). Interviews can take many forms. These forms or types have been classified by several researchers; however Saunders et al., (2000) have grouped them into three main classifications, namely; structured interviews, semi-structured interviews and unstructured interviews (Collis and Husseys, 2003; Saunders et al., 2000; Bryman and Bell, 2007). Another classification is that of Healey (1999), Healey and Rawlinson (1993) and Healey and Rawlinson (1994), which classify interviews into standardised interviews and non-standardised interviews (Saunders et al., 2000). A third classification is that based on the work of Powney and Watt (1987; cited in Robson, 1993; cited in Saunders et al., 2000) which classifies interviews into respondent interviews and information interviews. Although all these types of interviews seem to be different based on name, they all share common characteristics.

Since this research took a qualitative research, the main concern was to select the qualitative interview type. Qualitative interviews can be divided into one-to-one interviews, which can be also classified into face-to-face interviews and telephone interviews, or into one-to-many interviews, which mostly typically takes the form of focus group interviews (Saunders et al., 2000).

This research used the semi-structured interviews since they are more relevant to be used with the qualitative research (Collis and Hussey, 2003; Saunders et al., 2000). According to Saunders et al. (2000) semi-structured interviews can be best used to answer and provide the understanding to 'what' and 'how' questions. They also argue

that they are the best for an explanatory research design, which was that being used by this research. Under the grounded theory approach, it is preferred to use questions that are 'open' as much as possible, to enable the research participants to relay accurately on their experiences.

This study used data collected from 25 semi-structured interviews (20 semi-structured interviews from Unilever North Africa Middle East and five semi-structured from its core supplier companies). The interviewees were top managers within Unilever North Africa Middle East, the in-depth case study selected for this research, and its five core supplier companies. These managers were located in four sites for Unilever North Africa Middle East: Cairo and Alexandria headquarters, Egypt and headquarters and Lipton manufacturing plant in Dubai, United Arab Emirates. These interviews took place at the end of 2010, through 2011, and into the beginning of 2012. The process of data collection took place in three stages (or phases), using three sets of interview protocols for the case study and a fourth one for the suppliers. This was with the aim of enriching every phase, where data was built in every phase depending on the analysis of the previous one (according to grounded theory iterative process). The first interview protocol was with the aim of determining the business environment of FMCGs industry, the type of the relationship that exists between the case study and its core suppliers and the need for agility. Nine more questions were added to the second interview protocol based on the analysis of the data analysed from the first set of interviews, aimed to determining the different attributes for both: supplier partnership and supply chain agility. Then in the third interview protocol the emphasis of the questions was based on the relationships between the main concepts as well as the relationships between their attributes. The first set of interviews was face-to-face interviews with senior managers at the first two sites in Egypt. The second set of interviews was face-to-face interviews with senior managers in the other two sites in Dubai. The third set of interviews was divided into face-to-face interviews with senior managers in Unilever North Africa Middle East in Egypt and their core suppliers in Egypt. The other half of the third set of interviews was conducted through the telephone, also with Unilever managers and some core suppliers. This means that although this research is based on one in-depth case study however it includes data collected from six different companies: Unilever North Africa Middle East and its five

core suppliers within the Middle East context. The semi-structured interview let the participants to discuss their experiences more freely and openly and avoid their bias where there were some questions to clarify their opinions. The researcher asked the interviewees to give some specific examples and illustrations to substantiate points in order to avoid any bias and to give more richness to the data. The researcher also tried to avoid any bias where all the interviews were conducted in English and she tried to let them speak without any interruptions except for more clarifications.

The process of data collection started with contacting the interviewees in Egypt and then in Dubai, United Arab Emirates through telephone communication from London to arrange the procedures of data collection. The interviewees expressed their interests to share and contribute to the research study. The interview protocol was sent to the participants before interview meetings for any further questions or clarity directly through their emails. The interview appointments were made directly with the interviewees, based on their timetables, either through email or through telephone communication. All the interviews were recorded using a recording machine after taking the permission of the participants during the interview. The interviews were transcribed, and were sent to those participants who requested, to be checked for any misunderstanding and hence accuracy.

A table summarising the interviewees' managerial positions within Unilever North Africa Middle East, as well as the suppliers interviewed is provided in the following chapter.

3.5.2 Documentary materials

Documents can also be considered as important data sources for the research (Creswell, 1998). They may provide a good opportunity to determine more about the case study, as well as the opportunity to determine more about their way of doing their business. This was especially important in this research where the way Unilever Name Africa Middle East conducts its business and manages its supply chain relationships was an essential factor affecting the data collection, as well as data analysis.

Documents about the company and its core suppliers were collected during the researcher's visits to the company's selected sites. In addition, further documents were sent by the participants to the researcher through e-mail. Documents were also collected from the companies' websites. Documents included materials of how Unilever helps in developing its core suppliers and helps them to learn and grow. They also included materials about how Unilever evaluate their core suppliers. Documents concerning and discussing Unilever 'vertice plus' programme were also collected. These materials gave the researcher a valuable opportunity to enrich the data collected through the interview technique.

3.5.3 Observation

Observation can be considered another means for data collection, it ranges from being a participant to being only an observer (Creswell, 1998). It also may be differentiated into formal observation and informal (Yin, 1994). Formal observation is about observing a meeting, while the informal is about observing things and actions during the researcher's visit. In this study, the informal observation was used as means of collecting more data. The formal observation was not possible. The researcher has asked to attend some formal meetings, however due to the confidentiality of some agenda items the researcher's request has been declined. However, the researcher, during her several visits either to Unilever's four sites or its core suppliers, was able to informally observe many practices that could add to the richness of the research data.

In addition, the research also depends on some audio-visual materials. Some videotapes and small films on the companies and their practices have been collected from the internet as a mean for enriching the collected data. These include some videotapes for some senior managers at Unilever globe.

3.6 Theoretical sampling and saturation of data

In qualitative research theoretical sampling is concerned with the theory construction, unlike quantitative research which tends to be concerned more with the representativeness of the specific population (Levy, 2006). Strauss and Corbin (1998) argue that theoretical sampling depends on the coding procedures used to analyse the data in a logical manner. Strauss and Corbin (1998, p. 206) suggest that “*Sampling is open to those persons, places and situations that will provide the greatest opportunity for discovery*”. Therefore, the sampling can be considered as an open process.

Strauss and Corbin (1998) state that the continuation of data collection should take place until each category is saturated and that saturation is reached when no new categories appear from additional data. They suggest “*the general rule when building theory is to gather data until each category is saturated*” (p. 212). They explained it as follows “*this means until (a) no new or relevant data seem to emerge regarding a category, (b) the category is well developed in terms of its properties and dimensions demonstrating variation, and (c) the relationships among categories are well established and validated*” (Strauss and Corbin, 1998, p.212).

3.7 The research coding process

Coding was defined by Strauss and Corbin (1998) as “*the analytical process through which data are fractured, conceptualized, and integrated to form theory*” (p.3). They also argue that coding includes the processing of the data to be broken down into pieces, grouped and then to be combined together again in new forms. They also consider this process as the main core process upon which theories can be built on. The coding process was criticised as it may lead to a stream of concepts that may make the researcher get lost and confused within all these coding schemes (Denzin, 1994). Therefore, Strauss and Corbin (1990) suggest that the researcher should follow some coding stages or procedures. According to Strauss and Corbin, (1990) the coding process includes three main procedures: open coding, axial coding and selective coding. It is important to mention that these three processes can be considered as

stages, however it is not necessary for the researcher to follow them from open to axial to selective in a strict manner. The grounded theory researcher may go forward and backward throughout his/her research. Sometimes the axial coding may be started before the open coding is finished.

The first type of coding then is the open coding, which is defined as the process through which the data is analysed to be transformed into categories. Strauss and Corbin (1998) describe open coding as aiming to “...*discover, name and categorise phenomena according to their properties and dimensions, it follows that the aim of data gathering at this time is to keep the collection process open to all possibilities*” (p. 206). They emphasise the importance of data analysis and the breakdown of data collected into little piece of data in order to develop the initial categories. The open coding includes the researcher’s analysis for his/her observation/interviews or documental notes on a line-by-line, paragraph-by-paragraph basis. From the first analysis, multiple codes may emerge.

These codes, that at this stage are called categories, are then compared to each other to enable the researcher to identify the possible relationships, as well as the possible groupings. This process is named axial coding. The axial coding has been described by Goddard, 2004 (p.454) as a process “*where by the provisional categories are examined and compared with each other to identify any groupings that existed*”. The research also used the axial paradigm model, suggested by Strauss and Corbin 1990, to figure out the categories to be the basis of the selective coding analysis.

The third process of coding is the selective coding which involves the selection of what is called or considered as central core or main category for the theory integration, which comes up from the axial coding analysis. This focal or core category should be tested, modified and redefined throughout the research process. The other codes come up from the axial coding process and should be linked or related directly or indirectly to this focal or core category (Strauss and Corbin, 1990, 1998). Selective coding includes the “integration” of the themes that have been established to develop the initial conceptual theoretical framework (Pandit, 1996, p.7).

In this research, the analysis coding process is presented in chapter five to chapter seven. The coding process is shown in details in figure 5.1 in chapter five, which summarises the data analysis and coding steps and show the data sources (Unilever-North Africa Middle East- case study and/or the five core suppliers). In chapter five, the open coding process leading to the developing of the open codes derived from the analysis of the first and second data collection rounds (from the case study company) is presented. In chapter six, these open codes are then grouped to lead to the axial paradigm model. In chapter seven, the selective coding analysis, based on the final round of data collection (collected from the case study, plus the five core suppliers) is presented. At the end of this chapter the generated theory is discussed. As mentioned before, this does not mean that the analysis in every chapter was conducted separately, rather an iterative process was taken place during the three types of analysis.

3.8 Theoretical memos

An important task during the coding process is the writing of memos. Corbin and Strauss (1990, p.10) state that “*writing theoretical memos is an integral part of doing grounded theory. Since the analyst cannot readily keep track of all the categories, properties, hypotheses, and generative questions that evolve from the analytical process, there must be a system for doing so. The use of memos constitutes such a system. Memos are not simply “ideas”. They are involved in the formulation and revision of theory and hence analyse the research process*”. Using memos can assist the researcher to abstract his/her thinking of the data and then be able to return to it in order to ground these abstractions in actual reality (Glaser and Strauss, 1967). There are at least three types of memos that can be used with the grounded theory coding process. The first type is code memos, which are related to open coding and conceptual labelling. The second type of memos is the theoretical memos which relate to the axial and selective coding processes, and therefore to the paradigm characteristics. Finally, operational memos, which are concerned with providing directions for the evolving research design and data collection (Pandit, 1996).

3.9 Literature comparison

A final step and an important step in grounded theory methodological research is to compare the generated theory with the existing literature and to determine the similarities, the differences and the reasons for these similarities and differences. This step is recommended by Strauss and Corbin (1990) who suggest the use of literature throughout the whole research process: before, during and then comparing it with the generated theory at the end of the study. Eisenhardt (1989, p.545) argues that *“overall tying the emergent theory to existing literature enhances the internal validity, generalisability, and theoretical level of the theory building from case study research...because the findings often rest on a very limited number of cases”* (cited in Pandit, 1996, p.9)

3.10 Reliability and validity of qualitative research

Reliability and validity are two concepts closely related to quantitative research studies. However, methodological researchers also identify means for evaluating the reliability and validity in qualitative researches. Creswell (2007) argues that to ensure validity in qualitative research, the researcher should at least ensure the achievement of two out of eight guidelines of validity in qualitative research. These eight guidelines include: ‘triangulation’, ‘researcher reflexivity’, ‘member checking’, ‘prolonged engagement in the field’, ‘collaboration’, ‘audit trail’, ‘thick, rich description’ and ‘peer debriefing’ (Creswell and Miller, 2000). Most of these guidelines have been achieved in this study, as described in table 3.1

Table 3.1: Validity guidelines (adopted from Creswell and Miller, 2000)

Guideline	Explanation	Application
‘triangulation’	A process undertaken by the researcher to search for common themes among different	Different data collection means have been used in this research such as: semi-structured interviews,

	types of data collection means.	documentary materials, and observation.
‘member checking’	A process of bringing all the data and the narrative interpretation back to the research participants to check them .	The participants have been given the opportunity (if they wish) to check their transcripts and to review them before used in the analysis.
‘prolonged engagement in the field’,	Staying for a long time within the research site.	This has been achieved where the data collection has been undertaken through three stages in the case study location sites which enable the researcher to stay at these different sites for a period of time.
‘audit trail’	Going to outside parties to review the research.	The research has been also presented in conferences and in operation and supply chain systems group (OASIS) to gain the feedback from outside parties who do not relate to the research to ensure trustworthiness. Also a complete transcription for one complete interview is added in the research appendices.
‘thick, rich description’	A process through which the researcher should describe in more	This has been achieved by giving great and rich information from the

	<p>detail the sites, participants and the themes of the research with an aim of enabling the reader to examine the research's applicability to be applied in other sittings.</p>	<p>interviews' quotations and by highlighting the interviewees and summarising their positions in a separate table (in chapter 4). Also this research has been presented in more than one Brunel Business School Symposium and international conferences to gain feedback in order to achieve higher level of the research credibility.</p>
<p>'peer debriefing'</p>	<p>Reviewing of the research by parties who are experienced in the same field with an aim of supporting, challenging, pushing and asking the researcher</p>	<p>The study is supervised by two supervisors who were checking and reviewing the research stages step by step with the researcher.</p>

Although some researchers, such as Creswell, suggest several guidelines for achieving validity and reliability, others termed the concepts validity and reliability differently in qualitative researchers. Strauss and Corbin (1998) and Corbin and Strauss (1990) suggest two sets of criteria for achieving high quality grounded theory study. These are related to the 'research process' and 'empirical grounding of findings' (Strauss and Corbin, 1998; Corbin and Strauss, 1990). Table 3.2 shows the set of criteria related to the 'research process' and how they have been applied within this study.

Table 3.2: Research process quality criteria (adopted from Strauss & Corbin, 1998)

Criterion no.	Definition (Strauss and Corbin,1998,p. 269)	Application in the study
1	How was the original sample selected? On what grounds?	This has been discussed and explained in this chapter and in more detailed in the next chapter.
2	What major categories emerged?	43 open codes have ben emerged which will be discussed in more detail in chapter 5 (open coding analysis).
3	What were some of the events, incidents, or actions (indicators) that pointed to some of these major categories?	This is discussed in more detail in chapter 5 (open coding analysis) where there are parts of the interview transcripts highlighting such events and actions.
4	On the basis of what categories did theoretical sampling proceed? That is, how did theoretical formulations guide some of the data collection? After the theoretical sampling was done, how representative of the data did the categories prove to be?	The case study, including the sampling procedures, was suitable for the data collection where most, if not all of the interviewees are hold managerial positions, and who add to the data rich and valuable information from their substantial experiences in dealing with partnership and agility in FMCG industry.

5	What were some of the hypotheses pertaining to conceptual relations (i.e., among categories) and on what grounds were they formulated and validated?	This has been achieved as the axial paradigm has been used to show such relationships among categories. This is discussed in more detail in chapter 6 (axial coding analysis).
6	Were there instances in which hypotheses did not explain what was happening in the data? How were these discrepancies accounted for? Were hypotheses modified?	This research doesn't use any hypothesis. So this criterion may not match with this research.
7	How and why was the core category selected? Was this collection sudden or gradual, and was it difficult or easy? On what grounds were the final analytical decisions made?	The core category was selected from the data analysed through the three coding processes: open, axial and selective analysis. This will be shown in the analysis chapters.

The other set of criteria is related to 'empirical grounding of findings which are: 'are concepts generated?', 'are the concepts systematically related?', 'are there many conceptual linkages and are the categories well developed? 'do categories have conceptual density?', 'is variation built into the theory?', 'are the conditions under which variation can be found built into the study and explained?', 'has process been taken into account?', 'do the theoretical findings seem significant and to what extent?', 'does the theory stand the test of time and become part of the discussions and ideas exchanged among relevant social and professional groups?' (Strauss and Corbin, 1998; p. 270-272). The researcher has analysed carefully each of these criteria, and is confident that all have been met. All of these questions will be answered in the discussions presented in chapters from 5 to 7 (the coding and the analysis chapters).

3.11 Summary

The research epistemology view affects the whole research design including its theoretical perspective, methodological approach and the methods used to collect and analyse research empirical data. This research can be considered as an interpretivism qualitative research study. It aimed to establish the importance of supply chain agility and buyer-supplier partnership and the relationship between these two concepts that may assist companies to achieve agile supply chains. The research used grounded theory as a methodological approach guiding its research path. It used a case study approach as the 'umbrella' method for collecting the empirical data. Data was analysed using Strauss and Corbin's (1990) three interrelated stages coding process. The explanation of the methodology presented in this chapter will be built on further in the next chapter which discusses the research specific context. It will provide the reader with a complete description of the in depth case study used in this research including main reasons for selecting the company used from the FMCG industry and its location.

Chapter Four: An in-depth case study: Unilever North Africa & Middle East (NAME)

4.0 Introduction

In this chapter, the context of the research study is discussed. The case study for the research has been selected to be a multinational company working within the fast moving consumer goods industry (FMCGs). The context of the research has been selected to be the Middle East region. The reason behind this selection is explained in this chapter. The nature and the business environment of the market place inside the Middle East region, especially for the fast moving consumer goods industry, is also discussed in this chapter. The chapter includes a discussion about the case study and its practices within the business environment. Finally, a description for the supply companies is provided.

4.1 Fast Moving Consumer Goods industry and Middle East business environment

The Fast Moving Consumer Goods sector is a large investment type of industry, where there are several brand names, that is to say multinational companies working in the sector. Lawson (2002) suggests that retailers and suppliers working within such type of industry are facing a type of demand that can be best characterised as being unprecedented, volatile and complex. He argues that this type of demand may be due to the fact that the products are no longer associated with utilitarian values, however they are now representing a set of symbols, signs, images and different statements (Douglas, 1982). This symbolic meaning approach puts more pressure on companies within the FMCGs industry (Lawson, 2002). Lawson (2002) also notes that this symbolic meaning can be achieved through the emphasis and focus on branding. Therefore, companies working within the FMCG industry are seeking for new ways for improving and enhancing their brand names; this puts more pressure on multinational companies to have diversity in new product, as well as new market strategies.

Lowson (2001) highlights that the multinational companies, together with their retailers and suppliers working within the FMCG industry, have been forced nowadays to focus and emphasise on speed and flexibility in their strategic operational activities. Lowson (2001) argues that this is to enable them to be able to diversify their products and markets in a nimble manner and to be flexible enough to be able to constantly face new types of demand. This gives more attention to several strategic options, such as agility, which has received great attention from the companies working within such type of industry. This has been also recommended by several researchers, such as Lowson (2001) who note the importance of agility and responsiveness for such type of industry in order to be able to effectively and speedily deal with the changing and variable demands. He argues that *“today’s complex and volatile FMGC environment increasingly requires businesses to seek greater product and process variation through agility and responsiveness, a rejection of the principles of mass manufacturing”* (p.102).

Beside the changes in demands, the fast moving consumer goods sector is facing other challenges and trends. Among these are a number of global trends mentioned by SIS International Research (2007). They are:

*the increase of some products demand such as anti-aging, moisturizing, and whitening creams in what are considered to be the emerging markets;

*pharmaceutical and beauty diverse markets;

*the need for global sourcing in order to achieve cost efficiencies; the attention given by FMCGs companies to their core brands over the less important brands;

*the great growth for personal care and household products within emerging markets;

*brand portfolio extensions, either with new brands or new markets;

*the increase in cosmetics products sale in emerging markets especially with organic products;

*the attention to share repurchases;

*the attention given to channel management;

*the expansion of core brands geographically;

*the importance of global supply chain management;

*the increase in male products such as personal care, convenience products, and disinfectants;

*the increase in personal care massage products;

*increase in raw materials cost;

*strong growth has been noticed for both Luxury brands and mass brands;

*IT, back office, and other shared services outsourcing;

*increase in commoditization resulting from price competition;

-*the growth in price-conscious customers' more than value-conscious customers;

*other suppliers and retailers' Private label competition;

*the influence of the increase in food and gasoline prices on spending;

*the increase in spending due to the increase in incomes in Asian economies;

*the focus on supplier and retailer partnerships and joint value developments; the great attention given to greener organic products by Wal-Mart, this last one has been especially important as it has been explained firstly by Wal-Mart in connection with Unilever, which is the research case study.

The context of any research plays an important role in explaining the differences in the organisational processes and outcomes (Child et al. 2010, cited in ElBanna, 2012). This can be clearly shown from the increase in the research studies that focus on non-US countries such as Japan, Germany, and even developing countries such as China and Taiwan (Papadakis et al., 2010, cited in ElBanna, 2012). Therefore this study needs to provide some information about its regional setting which has been selected for the study.

The Middle East Arab countries have been always under studied settings by researchers despite its central geographical location throughout the world, its high valuable natural resources (such as oil and natural gas) and its huge human resources where the latest factor can be one important resource factor for any business working there and an attractive huge market for investors. In a study by Demirbag et al., (2001) for studying the Japanese subsidiaries in this region, they consider the Middle East and North Africa as an attractive region for foreign businesses based on solid structured reforms which provides the opportunities for the investors to invest their liquid assets into projects that lead them with high level of growth. As mentioned before, the Arab Middle East region can be characterised by having a huge population, with considering Egypt as the most populous country in the region. The Middle East market can be considered as an emerging market for several multinational companies working in several types of industries.

From another perspective, doing business within this region is not easy. Although the huge population and high consumption rate may encourage the investor to invest within this region however, this needs more efforts from the investors. In a study by Zahra (2011) about the research in the Arab Middle East, Zahra considers some missing institutions that are important for investments and doing business within these region countries. Among them are: the laws concerning the intellectual and property, and the effective legal and law systems for solving any commercial issues. Zahra (2011) also comments on the restrictions found in the emergence and dominance of the huge informal economics in the Arab Middle East countries, and the existence of bankruptcy laws that manage the exit and the entry from and out of such countries. Zahra (2011) agrees with De Soto (2000, cited in Zarhra, 2011) who suggests that most poor Arab countries within the poor world countries are missing important succeeding institutions and the existence of long bureaucratic procedures that led to the existence of informal economic business. De Soto (2011, p.1; cited in Zarhra, 2011) argues that *“to do business in Egypt, an aspiring poor entrepreneur would have to deal with 56 government agencies and repetitive government inspections”*. This can lead according to DeSoto to high barriers of entry that could prevent the potential investor and restrict free business emergence.

Zahra points out six strategies for the Arab Middle East countries to join the world village and to be able to compete within the world business. These strategies include: enhancing and diversifying their exports, enhancing and effective developing of their technological infrastructures, determining their specialisation with in the global supply chain, enhancing innovation and knowledge creation strategies, developing of new educational systems and research way of thinking, encouraging and learning form more foreign direct investments.

The trends or challenges mentioned above about FMCGs show clearly that it is a volatile and complex industry, and it is reasonable to conclude that it needs to focus on the supply chain management and agility in order to face the global trends and challenges. Despite this fact, from reviewing the literature on agility in general and supply chain agility in particular, it is surprising to find only one research article examining agility in the FMCG industry. It was a research study by Agarwal et al.

(2006), with the aim to explore the relationship among lead time, cost, quality, and service level, in relation to leanness and agility in the FMCG industry in India. There are several research studies examining agility in other types of industries such as auto industries (Agarwal et al., 2007), electronics (Sharifi, and Zhang, 1999), furniture & fixture (Swafford et al., 2008), computer & PC (Christopher and Towill, 2000), clothes & textiles (Bergvall- Forsberg, and Towers, 2007), fabricated metal products (Paulraj, and Chen, 2007), mobile industry (Collin and Lorenzin, 2006), lighting industry (Aitken et al., 2002), transportation equipments (Swafford, et al., 2008), and plastics (Baramichai, and Marangos, 2007). However, Agarwal et al.' study (2006) is the only study locatable in the FMCG context. Recently, research has also focused on agility and agile supply chain in other types of industries that are characterised by other continuous processing manufacturing and logistical features, such as the oil & gas industry (Yusuf et al., 2012), and the steel industries (Prater et al., 2001). Table 4.1 summarises the empirical research studies on agility to show that there is a gap in the academic research on examining agility in the FMCG industry, as well as examining agility within the Middle East region with its distinct environmental, economic, and business conditions. Although there has been some work examining agility within the Middle East countries, the studies are very few and they consider agility in very general terms. For example, the study by Almahamid et al. (2010) examines the impact of agile capabilities and sharing of knowledge at the organisational level on the competitive advantage of Jordan manufacturing organisations. They use the agile capabilities suggested by Sharifi and Zhang (1999, 2000), beside the knowledge sharing as the Independent Variables in their model to examine their impact on helping the Jordan manufacturing companies to achieve better competitive advantage. The aforementioned study by Agarwal et al (2006) drew its empirical data from India and examined the relationship among lead time, cost, quality and service level to distinguish between leanness and agility in Fast Moving Consumer Goods industry. As said before, this research has been undertaken by Agarwal et al. (2006) in India, which is considered a different contextual environment with completely different research aims and objectives.

Given these findings about the location and industry focus of the prior research, the researcher found it beneficial to examine the supply chain agility including its

attributes and the extent of the understanding for the important relationship between supplier partnership and supply chain agility from Multinational Company's view working within the Middle East in FMCGs business conditions. The researcher found that analysing the above literature review for the prior research on agility and the grounded theory is the most suitable approach to be used as the research methodological approach (a more detailed discussion is presented in chapter three) given the limited previous research done within the Middle East region and the limited research done for examining agility within the FMCGs type of industry.

Table 4.1: Summary of the agility literature, based on type of industry and geographical context

Publication Journal/ year	Author	Purpose	Industry	Context	Methodologic al approach & techniques
International Journal of Production Economics (1999)	Sharifi, and Zhang	To discuss the agile manufacturing concepts and the development of a methodology to achieve agility based on them.	Electrical and electronic manufacturing, Aerospace manufacturing, Vehicle parts manufacturing.	UK	A Questionnaire and some industrial interviews followed by a questionnaire survey
Published on- line (2002)	Aitken, Christoph er, and Towill	To evaluate the implementation of agile supply chain of Christopher and Towill model (2001).	Lighting industry	UK	A Case study
The Journal of Supply Chain Management (2007)	Paulraj, and Chen	To explore the connection between strategic buyer supplier relationships and logistics integration, along with the subsequent effect on the agility	Fabricated Metal industries, Industrial machinery and equipment, Electronic and other	USA	A cross-sectional mail survey.

		performance of the firm.	electric equipment, Transportation equipment, Instruments and related products, Miscellaneous manufacturing industries.		
International Journal of Production Economics (2008)	Swafford, Ghosh, and Murthy	To investigate the role of supply chain flexibility and Information technology in achieving supply chain agility and on firm's competitive performance.	Apparel and finished products made from fabric, furniture and fixtures, Rubber and miscellaneous plastic products, Fabricated metal products, Industrial and commercial, machinery and computer equipment, Electronic and other electrical equipment and components, Transportation equipment, Measuring, analysing, controlling instruments, Miscellaneous	USA	A survey

			manufacturing industries.		
Industrial Marketing Management (2007)	Agarwal, Shanker, and Tiwari	To determine variables influencing supply chain agility and to develop a framework showing the interrelationships between them.	Auto company	India	Brainstorming for a case study supply chain (Interpretive Structural Modeling for analysing).
International Journal of Information Management (2005)	White, Danial, and Mohdzan	To explore the role of emergent information systems to provide the high possibility of both deep integration and increased flexibility.	(IBM) Computer hardware and software	USA & UK	A Single case study.
Supply Chain Management: An International Journal (2007)	Baramich ai, and Marangos	To propose a model (named as agile supply chain transformation matrix) and the implementation methodology for a systematic approach to achieve agility in the supplier- buyer supply chain.	Medium- sized plastics manufacturing company.	USA	A Single case study
International Journal of	Ganguly, Nilchiani,	To develop a framework and quantify the agility notion.	Apple digital media (i	USA	A single Case study

Production Economics (2009)	and Furr		Pod, i Tunes, i Phone)		
European Journal of Operational Research (2006)	Agarwal, Shanker, and Tiwari	To explore the relationship among lead time, cost, quality and service level and the leanness and agility	Fast moving consumer goods business	India	A Case study
International Journal of Physical Distribution and Logistics Management (2001)	Power, Sohal, and Rahman	To identify some critical factors for successful agile organisations in managing their supply chains.	Fabricated metal products, Chemical & petroleum, miscellaneous manufacturing, Basic metal products, Non-metallic mineral products, Other machinery, Wood & wood products, Food and Beverage, Transport equipment, Clothing and footwear, Textiles, Paper& paper products,	Austral ia	A survey

			and others.		
Production and Inventory Management Journal (1999)	Narasimh anand Das	To examine the role of supply chain management practices in developing operational flexibilities as a measure of acquiring agility.	Mechanical subassembly manufacturers (pistons, pumps, engines, steering linkages, etc.) Automotive and heavy earthmoving machinery manufacturers, Electronics and electrical Chemicals, coating, dyestuffs, Others including commodities, furniture, nuclear subs, telecom machinery, mirrors, etc.		A survey
Management Decision (2003)	Lau, Wong, Pun, and Chin	An effort to suggest practical and agile approaches and models to avoid a poorly managed supply chain in order to improve productivity and cost-effectiveness to support the business	Manufacturing plant	Hong Kong	A case study
Information Technological	Tallon	To Examine the impact of technical and managerial IT on agility and the	Electronic & computing machinery, Wholesale &	USA	A survey

Management (2008)		extent of different environmental dynamism level on this relationship.	retail, Financial services, Software, Metals & plastics, Pharmaceutical & healthcare, and others		
International Journal of Operation and Production Management (2005)	Sa'nchez and Pe'rez	To explore relationship between the dimensions of supply chain flexibility and firm performance in a sample of some suppliers	Spanish automotive suppliers	Spain	A mail survey
Paper in 16 EDAMBA Summer Academy, Soreze, France (2007)	Wu	To discover the role of information systems in achieving agile capabilities in supply chain management.	Chinese automotive supply chain.	China	A pilot case study (semi structured interviews) followed by multiple case studies (through surveys)
Journal of Operation	Narasimhan Swick,	To determine whether lean and agile forms occur with any regularity in	Manufacturing plants (a diversity of industries,	USA	Regular mail, E- mail, and

Management (2006)	and Kim	manufacturing plants.	different plants sizes and process types).		internet based survey methods.
Journal of Manufacturing Technology Management (2006)	Sharifi, Ismail, and Reid	To prove that key factors relating to how an agile supply chain can be developed and implemented through the merger of supply chain design and design of supply chain.	Sport and play units and item (manufacturing), eye bath and shower (manufacturing), information Kiosk, software (software), and Ultrasonic cleaning system (manufacturing).	UK	Multiple case studies (semi-structured interviews).
Supply Chain Management: An International Journal (2000)	Christoph er and Towill	To propose a cyclic migratory model which describes the Personal computer supply chain attributes during its evolution from traditional to its present customised agile operation.	Dell (personal computer industry)	UK	A case study
Journal of	Swafford,	To identify and develop critical factors	Manufacturing firms	USA	A mail survey

Operations Management (2006)	Ghosh, and Murthy	that determines and influences an organisation's supply chain agility.	including at least 100 employees: Fabricated metal products, Industrial & commercial machinery, Electrical equipment & computers, Transportation, Measuring instruments, optical & watches.		
Integrated manufacturing systems (2003)	Jackson, and Johansson	To answer the questions related to the extent of applying agility within heavy production industry and how it can be analysed within such type of industry.	Heavy production industry	Sweden	Case study through the use of interview technique.
International Journal of Operations and Production Management (2001)	Prater, Biehl, and Smith	To develop a theoretical construct relating the elements of uncertainty with aspects of agility, taking into consideration the two- edged nature of the required capabilities.	General Electric Lighting (GE), Hewlett Packard and Fraure Machette (Printers), Pioneer Hi-Bred (seed procedures), VAI (steel products), and Apple computer products; Inc.	Europe	Multiple case studies through the use of interview technique

International Journal of Operation and Production Management (2001)	Hoek, Harrison, and Christopher	With an aim of establishing an audit of agility within supply chain	UK, Dutch and Belgian-based companies which begins the agility audit programs.	UK, Dutch and Belgian	A survey questionnaire followed by phone interviews
International Journal of Production Economics (2006)	Lin, Chiu, and Tseng	To establish an absolute agility index in an attempt to develop one which is unique and unprecedented using fuzzy logic to introduce the agility evaluation ambiguity	Xi Dian Casting Limited Company (mass customisation of product manufacturing company).	Taiwan	A case study
International Journal of Operation and Production Management (2006)	Swafford, Ghosh, and Murthy	To develop a deep understanding of value chain agility from value added processes view.	Apparel and other finished products made from fabric, Furniture and fixtures, Rubber & miscellaneous plastic products, Fabricated metal products, Industrial & commercial machinery & computer equipment, Electronic and the	USA	A survey

			electronically equipment & components, Transportation equipment Measuring, analysing, and controlling instruments, Miscellaneous manufacturing industries.		
Integrated manufacturing systems (2001)	McCullen and Towill	To show that agile manufacturing can subsume the paradigm if lean production system.	Company (A) UK manufacturing of precision mechanical engineering products.	UK	A single Case study (through interviews, participant observation).
International Journal of Production & Distribution & Logistics Management (2006)	Collin and Lorenzin	To describe how demand planning can increase agility in supply chains.	Mobile infrastructure industry	Finland	A Case study
International Journal of	Lin, Chiu, and Chu	To evaluate the measurement of Supply chain agility using fuzzy	An international IT products and services	Taiwan	A single case study

Production Economics (2006)		agility evaluation method (FAEM).	company with a good reputation among PC vendors		
Institute of customer service (2009)	Voss and Wang	To show the importance of agility recognised by the UK service organizations	Automotive industry, Energy & utility, Financial service, Non- profit & public sector, Retailer, Services, Telecommunication, and Others.	UK	A mail survey
Journal of Manufacturing Technology Management (2008)	Pham, Pham, and Thomas	To provide a fit manufacturing paradigm companies matching lean, agility and sustainability.	SME (manufacturer of specialist casting products)		A single case study
Journal of strategic information systems (2011)	Ngai, Chau, and Chan	To provide supply chain competence and supply chain agility relationship and its impact on firm performance	Fashion and textile companies: Company 1: giant manufacturer, Company 2: large garment manufacturer, and Company 3: fashion-	Hong Kong	Multiple case studies

			driven manufacturer		
International Journal of Retail and Distribution Management (2004)	Christoph er, Lowson, and Peck	The need of agile supply chain in fashion industry	Fashion industry		
Journal of the textile institute (2007)	Bergvall- Forsberg, and Towers	To provide the agile merchandise introduction into the textile and clothing industry	European textile and clothing industry	UK, Swede n, and Italy	Multiple case studies
International Journal of Accounting Information System (2010)	Raschke	To provide an examination of agility components contribution value at the business process level. In addition to providing of the role of Information technology for agility	Apparel and other textile products, Furniture and fixtures, Rubber & & miscellaneous plastic products, Fabricated metal products, Industrial machinery equipment, Electronic and electronically equipments, Transportation	USA	Direct mail and internet survey

			equipments, Instruments & related products, and Manufacturing industries		
International Journal of Production Economics (2009)	Kisperska - Moron and Swierczek	To provide the Polish companies supply chain agility capabilities	Mining sector, Miscellaneous manufacturing, Building sector, Commerce, Financial services, Real estate agencies, Transportation services, Telecommunication, and Other services.	Poland	A questionnaire survey
Management Decision (2008)	Khan and Pillania	To provide the strategic sourcing dimensions and its relationship to supply chain agility and the performance of the company.	Automobiles, Textiles, Pharmaceutical, Rubber & tube industries, Paints, Metals, Chemicals, Engineering, Paper & leathers, and Food & dairy products	India	A questionnaire survey
International Journal of	Whitten, Green Jr,	To provide a model for supply chain Triple- A performance as an	Manufacturing companies, Oil & gas , and Logistics	USA	Questionnaire survey (e- mail,

Operations and Production Management (2012)	and Zelbst	antecedent to supply chain performance which interns is an antecedent to organisational performance	firms		and internet based methodology)
International Journal of Production Research (2010)	Vickery, Setia, Sambamurthy	To provide an explanation for the roles played by supply chain information technologies and supply chain organisational initiatives for agility and business agility within manufacturing sectors.	First tier suppliers to US car companies	US	A questionnaire survey
International Journal of Production Economics (2010)	Bottani	To enrich the agility literature by providing enablers implemented by companies to achieve agility	Manufacturing companies	Europe	A questionnaire survey
Management Information System (MIS) Quarterly	Lu & Ramamurthy	To investigate the role played by IT on the implementation of agility	Banking/finance, Computers/ software, Consulting, Insurance, Manufacturing, Medicine/	Upper Midwestern US	Matched- pair field survey

(2011)			health, Publishing/ communication, Hotel/ restaurant, Transportation, Others (agriculture, oil petroleum, utilities, wholesale/ retail, real estate, construction, travel agency, etc.).	States	
International Journal of Production Economics (2008)	Swafford, Ghosh, and Murthy	To investigate the role of supply chain flexibility and information technology integration in achieving supply chain agility and on the firm's competitive performance level.	Apparel and other finished products made from fabric.	USA	
International Journal of Production Economics (2012)	Yusuf, Gunasekar an, Musa, Dauda, El- Berishy, and Cang	To investigate the influence of sustainability measures within oil and gas industry and their impact on the companies' performance.	UK upstream oil and gas industry: Exploration & production, consultancy, Marine & allied transport services, Engineering services & offshore construction, Computer & communication	UK North Sea	A Questionnaire survey

			equipment, Supply & rental of equipment, Automotive & automotive accessories, Electrical & electronic products, Food, drink & chemical and products, Industrial, hospital & agricultural products, and any other.		
International Journal of Logistics Management (2009)	Li, Goldsby, and Holsapple	To provide a measuring instrument for supply chain agility.	Construction, Food & Kindred products, Furniture & Fixtures, Paper & allied products, Printing, publishing & allied industries, Chemicals & allied products, Rubber & miscellaneous plastics	USA	Case studies (through interviews)

			<p>products, Stone clay glass & concrete products, Fabricated metal products, except machinery and transport equipment, Industrial & commercial machinery & computer equipment, Electronic equipment & components, Transportation equipment, Motor freight transportation, Transportation services, Construction & mining machinery & equipment, Wholesale trade- non-durable goods, Apparel & accessory stores, and Eating & drinking places.</p>		
Management Decision	Yusuf, Adeleye,	To cover the gap in the literature on the benefits of agile manufacturing	Industrial, Hospital & agriculture machines,	UK	A Questionnaire

(2003)	and Sivayogan athan		Food & drinks, Chemicals, and Pharmaceuticals.		survey
Supply Chain Management: An International Journal (2009)	Khan, Bakkapa, and Metri, and Sahay	To determine the impact of agile supply chain's practices on the company's performance.	Automobiles, Textiles, Pharmaceutical, Rubber & tube industries, Paints, Metals, Chemicals, Engineering, Paper & leathers, and a Food & dairy products	India	A questionnaire survey
International Journal of Production Economics (1999)	Sharp, Irani, and Desai	To provide a model determining the best UK's practices for implementing agile manufacturing	Leading manufacturing companies	UK	questionnaire survey
Benchmarking : An International Journal (2012)	Qrunfleh, Tarafder, and Ragu- Nathan	To provide the link between supplier management practices and information technology systems on supply chain integration and supply chain flexibility.	Manufacturing companies	USA	A questionnaire survey

International Journal of Logistics Management (1999)	Bal, Wilding, and Gundry	To provide the importance of virtual teaming within agile supply chains.	Automotive suppliers to Rover Group	UK	A mail survey
The 2012 International Conference on Asia Pacific Business Innovation & Technology Management	Sukati, Hamid, Baharun, Yusoff, and Anuar	To examine the relationship between the companies' practices and agility within supply chains.	Manufacturing firms	Malaysia	A questionnaire survey
Information Sciences (2011)	Tseng, and Lin	To suggest a new agility Development method that link the interface and alignment issues between the drivers, capabilities and providers of agility using the QFD relationship matrix and fuzzy logic.	An internationally recognized IT products-and-services company: PCs and notebooks.	Taiwan	A case study
International Journal of	Sharifi and Zhang	To develop a methodology for achieving agility in manufacturing	Two manufacturing companies: a cooker	UK	Multiple case studies

Operations & Production Management, (2001)		companies	manufacturer, a high-technology electronics components and devices manufacturer.		
International Journal of Operations & Production Management (2003)	Brown, and Bessant	To examine the agility enablers and strategic blockages for implementing agility in manufacturing firms	Two manufacturing sectors: Computing, and automobiles	USA	Longitudinal case studies
International Journal of Production Economics (2003)	Prince and Kay	Integrating lean and agile characteristics through the virtual groups creation.	Power cables manufacturing companies	UK	Two case studies
International Journal of Management (2010)	Almahamid, Awwad, and McAdams	To examine the impact of agile capabilities and sharing of knowledge practices on achieving a competitive advantage	Public shareholding firms at Amman Stock Exchange Market	Jordan	A questionnaire survey
The IUP	Chakraborty	To develop an understand of the	IT and IT Enabled	India	A

Journal of Supply Chain Management (2011)	ty and Mandal	importance of agile attributes from an information technology perspective	Services (ITES) sector		questionnaire survey
International Journal of Production Economics (2011)	Zhang	To examine the three types of agility strategies: quick, responsive, and proactive	Manufacturing companies: high-tech optical/microwave devices for communication manufacturer, special purpose instruments manufacturer, cookers & ovens manufacturer	UK	Multiple case studies (questionnaire)

4.2 The research in-depth case study

Unilever was selected to be the research in-depth case study. This is because Unilever is considered as one of the most important and famous brand names in the FMCGs industry. Moreover, Unilever has expanded its investment in the last several years in the Middle East region. In addition to this, Unilever is known for its excellence management of its supply chains, either globally or locally in specific targeted regions. Therefore, it was a good opportunity to gain from Unilever's experienced and good practitioners' managers to enrich the research on agility and supply chain management from such worldwide successful company.

The following sections (4.2.1 and 4.2.2) discuss Unilever from the global level, and in more specific detail the research case study in the Middle East, which is named Unilever North Africa Middle East (NAME). The managerial offices and the manufacturing plants of the case study are discussed in section 4.2.3. The interviewees and their characteristics and managerial positions are discussed in section 4.2.4. Some of the practices undertaken by Unilever (North Africa Middle East) for improving its supply chain management and supply chain partnership performance are presented in section 4.2.5. Finally, in section 4.3 the details of the five supplier companies are provided.

4.2.1 Unilever Global

Unilever is a public limited company working in the FMCG industry. It produces fast moving products such as food and beverages, detergents and cleaning agents and personal care products. It serves worldwide markets, with an annual revenue in 2012 equal to £ 51.32 billion and net income equal to £ 4.480 billion in 2012 (Unilever web site, visited in 2013). Unilever was founded on the first of January 1930. The founders were Antonius Johannes Jurgens, Samul van den Bergh and William Hulme Lever, 2nd Viscount Leverhulme (Unilever web site, visited in 2013).

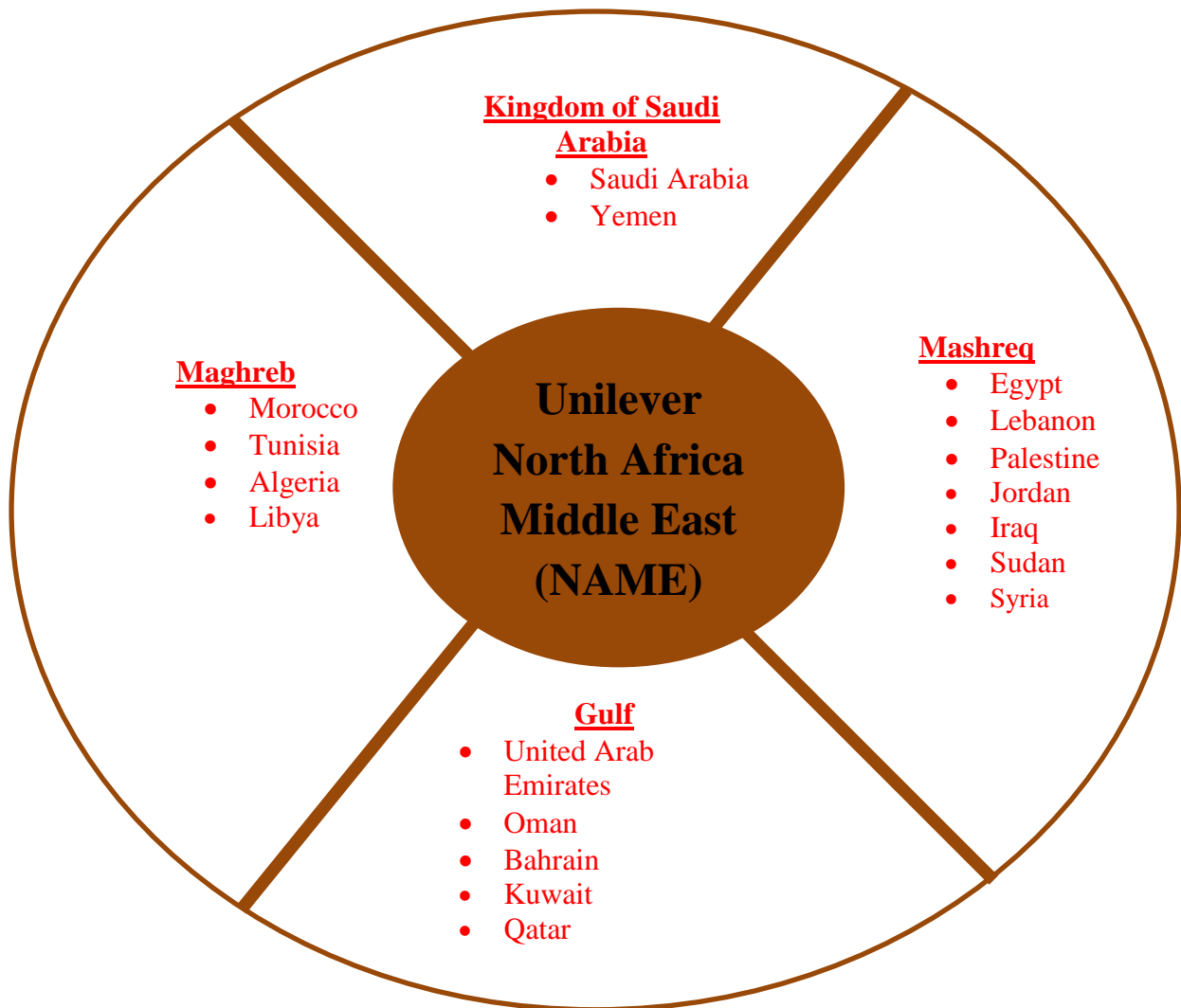
In the 1930s, Unilever began its business growth. It started to form new ventures in Africa and Latin America. Later it entered the Canadian markets and from then Unilever started its growth and expansion all over the world. Now Unilever serves almost the entire world with operating companies and manufacturing facilities in almost every continent (Unilever web site, visited in 2013). Regarding the number of the products working under Unilever, there are now over 400 products brand belonging to Unilever, which ranges from home care, personal care, and food and refreshment, which covers products such as tea, ice-cream and beverages (Unilever web site, visited in 2013).

In the next sub-section Unilever North Africa Middle East (NAME) is discussed, as it is considered the case study for this research for the reasons mentioned in section 4.1. Therefore it needs to be described in more detail as follows.

4.2.2 Unilever North Africa Middle East (NAME)

Unilever (North Africa Middle East) is considered one of the top brand names for FMCGs companies in the Middle East. It is considered as the largest advertiser in the Middle East region TV media (Unilever North Africa Middle East website, visited in 2013). Unilever is considered as the Middle East market leader for almost all the FMCGs products produced within the region (Unilever North Africa Middle East website, visited in 2013). It is spread over 20 countries in the region, with a large number of local offices and partnerships (Unilever Middle East website visited in 2010).

Figure 4.1: Unilever (North Africa Middle East-NAME)



Unilever has been working in the North Africa and Middle East since 1933 (Unilever North Africa Middle East website, visited in 2013). It began through a company's agent in Saudi Arabia. In the same year it began working within the Egyptian market. After several years, in 1954, Unilever entered for the first time the Marghreb area through a local partner in the form of the entry of Omo detergents in Algeria, coming from France. This was followed by the entry to Morocco in 1960 and Tunisia in 1961. Then Unilever products have been spread and placed widely on shore after setting up of its main office in Dubai, United Arab Emirates. At the same year lever Egypt formed its joint venture with the Fine Foods Company, which afterward combined

through a merger to form Unilever Egypt in 1999 (Unilever North Africa Middle East website, visited in 2013).

Almost all the products' categories and Unilever brand names that are marketed and sold within the region are produced locally (Unilever North Africa Middle East website). There are several large manufacturing facilities and plants within the region. For the Home Care products there are manufacturing plants in Algeria, Morocco, Tunisia, Egypt and Saudi Arabia (Unilever North Africa Middle East website). The food manufacturing plants are sited in countries like Morocco and Egypt (Unilever North Africa Middle East website, visited in 2013). The tea facilities are located in Dubai and Egypt (Unilever North Africa Middle East website). Finally, the personal care manufacturing plants are sited in Saudi Arabia, Tunisia, Algeria and Egypt (Unilever North Africa Middle East website, visited in 2013).

Until 2007, the three clusters of Unilever in the Middle East: Arabia, Mashreq, and Maghreb combined together under Unilever (North Africa Middle East) (Unilever North Africa Middle East website, visited in 2013). This was with the aim of encouraging cooperative operations, benefiting from synergies of scale and achieving cost savings. Unilever (North Africa Middle East, visited in 2013) includes four main Business Units. These are Maghreb, which includes countries Morocco, Tunisia, Algeria, and Libya, Mashreq which includes Egypt and the Levant countries (namely: Lebanon, Palestine, Jordan, Iraq, Sudan, and Syria); the Kingdom of Saudi Arabia, which covers only two countries, Saudi Arabia and Yemen, finally the Gulf Business Unit which includes United Arab of Emirates, Oman, Bahrain, Kuwait and Qatar. The leadership team working for Unilever (North Africa Middle East) is leading the operations across the four business units, focusing on cooperating, coordinating and linking the operations among the different region countries (Unilever North Africa Middle East website).

The next section discusses the five sites that took part in this research study.

4.2.3 The case study visited five sites

As mentioned above, Unilever (North Africa Middle East) has four main Business Units. They are Maghreb, Mashreq, Kingdom of Saudi Arabia and Gulf. Two of these Business units were selected to be visited in this research. This was due to the difficulty to visit all four Business units, including the managerial offices and the different manufacturing plants for the main three product categories: Home Care, Food & beverage, and Personal Care across the Middle East region. Accordingly, the managerial offices and the manufacturing facilities in both Egypt which represents the Mashreq business Unit, and in United Arab Emirates (Dubai) as a representative for Gulf, were selected to be visited in this research study.

A number of considerations led to this choice. Egypt is considered as the main holder for the Mashreq business unit (as shown in figure 4.1) which includes about seven countries in the region. In addition to this, Egypt can also be considered as the oldest country in the Middle East, along with Saudi Arabia, to be entered by Unilever in 1933. It also includes large manufacturing plants and facilities for all the products' categories. Egypt includes the tea factory and the soup factory in Borg El Arab, Alexandria. Egypt also includes a manufacturing plant for producing the Unilever personal Care brands in Cairo, and the manufacturing plants for producing Home Care brand products in Cairo. Egypt is also the home country of the main managerial office for managing Mashreq Business Unit. Therefore, Egypt was identified as the only country among the Unilever (North Africa Middle East) region countries which includes the production of the three main product categories produced by Unilever (North Africa Middle East).

Figure 4.2: Main brands for Unilever Global (<http://www.unilever.co.uk/careers-jobs/professionals/working-at-unilever/index.aspx>) (last visited September, 2013)




Jebel Ali, Dubai, United Arab Emirates was considered to be an important location of data collection for the study, because it is considered as the main place for managing the Gulf area. It is the home office for most of the managers who manage Unilever (North Africa Middle East) region as it is the home of the regional headquarters. It also includes a tea manufacturing plant for Lipton Tea. The Lipton Tea manufacturing facility located there is considered as one of the most important Lipton Tea manufacturing plants for Unilever (North Africa Middle East) and the second largest Lipton Tea plant among Unilever’s global manufacturing plants. In 2009 the Lipton Tea Factory in Jebel Ali in Dubai celebrated 10 years of excellence, when the Chairman Unilever North Africa Middle East emphasised the importance of building high technological systems, building high quality levels, and on achieving high efficiency levels as the main reasons for their success. The factory is exporting Tea products to 53 countries all over the world. He mentioned that *“our focus on systems, quality and high levels of efficiencies is what has allowed us to build a global customer base spanning across 53 countries”* (Unilever Middle East website visited in 2010).

4.2.4 The interviewees

The primary data for the research was collected in three rounds of data collection. The researcher used the semi-structured interview as the technique for collecting the primary data. Face-to-face interviews were used throughout the first and second data collection round. In the third data collection round, telephone interview was used as the means of collecting data along the face- to- face interviews.

All of the interviewees that participated in this research study hold senior managerial position within Unilever (North Africa Middle East). This is because it is these senior representatives that are likely to be the most knowledgeable about both the partnerships that Unilever has with its suppliers, and also about the features of agility that are important and practiced by Unilever. As such, they are best placed to be knowledgeable about the influence of partnership on achieving agility in these FMCG supply chains. It is also important to mention here that most of the participants' managerial positions are closely related to the management of the supply chain and the relationships with supply companies, sources and purchasing departments. Even if there are some participants that seem not to be related to the company's relationship with suppliers, however they are very important participants as they are more related to the whole supply chain management. This can be clearly shown in the following table (table 4.2), which describes the managerial positions of the participants and the managerial office locations which were visited by the researcher in the five site locations.

Table 4.2: Positions of the research participants and their locations

In-depth case study (25 interviews with senior top managers)				 Five core suppliers (semi structured interviews and archival documents)
Unilever – North Africa Middle East				
Egypt (Alexandria, Cairo)		United Arab Emirates (Dubai)		
Corporate managerial site (A)	Corporate managerial site (B) [Tea Factory, Personal care Factory]	Corporate managerial site (C)	Corporate managerial site (D)	
Marketing Manager (Levant countries: Iraq & Sudan) (2 interviews) (1 st & 3 rd round)	Lipton Tea Factory Manager (Unilever Mashreq) (1 st round)	General Planner (handling Kuwait and Qatar for all products) (2 nd round)	Planning Manager of Lipton Tea (Unilever Gulf) (2 nd round)	Company (A): Express pack print (Delivery System Manager) (2nd round)
Supply Planning and Logistics Manager (Unilever Mashreq) (1 st round)	Personal care Factory manager (Unilever Mashreq) (1 st round)	The Demand planner (for UAE for all products) (2 nd round)	Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) (2 nd round)	Company (B): NOON for printing and packaging (CEO) (3rd round)
Procurement Operations Manager (Unilever Mashreq) (3 rd round)	National Supplier Development Manager (1 st round)	Planning Manager (for Personal Care for Kuwait and Qatar) (2 nd round)	Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) (2 nd round)	Company (C): SHOROUK for Modern Printing & Packaging (Sales Manager) (3rd round)
Procurement Operations Projects Manager (3 rd round)		Customer Service Manager (for Gulf Business Unit) (2 nd round)	Site Quality Manager (for Lipton Tea Unilever Gulf) (2 nd round)	Company (D): Pan Gulf Plastics (CEO) (3rd round)
		Technical Project Manager (Unilever Gulf for all products) (2 nd round)	HPC (Health Promotion Coordinator) for Lipton Tea Factory (2 nd round)	Company (E) (CEO) (3rd round)
		Supply Chain Manager (Unilever Gulf) (2 nd round)	Procurement Operations Manager (Unilever Gulf) (2 nd round)	

4.2.5 Unilever is a successful business

Unilever can be considered a successful business from several perspectives and measures. In this section some practices undertaken and some results achieved by Unilever that confirm their successes are presented and which is closely related to the research main themes.

In the meeting that had taken place in London, February, 2012 to discuss the Unilever 2011 full results, the Chief Executive Officer for Unilever described Unilever as a fast and agile organisation and that the recent new improvements in the business can enhance their agility and speed abilities. He stated that *“we are also a faster and more agile business, with a much clearer bias for action. The changes to our organisation that we implemented recently will help strengthen this new performance culture further still. With a more category-driven structure we are able to drive innovation faster, reduce complexity further and more rapidly build our global capabilities”* (Unilever Q4 and full year 2011 results, p. 28- 29, Unilever website, visited in 2013). This had been recommended in the same meeting by the Chief Financial Officer when he discussed Unilever’s strong performance working in a challenging business environment. He mentioned that the new way of thinking for Unilever is focusing on investing for the long-term future resulting in several benefits. Among them is building a stronger capability level in several areas such as leadership, organisational agility and in-market execution (Unilever Q4 and full year 2011 results, p. 5, Unilever website, visited in 2013).

It is reasonable to argue that Unilever has continued to be a very successful company in managing their supply chains. In its Middle East website, Unilever positions itself as one of the ‘supply chain top 25’. This ranking is awarded by a research company offering advisory services to supply chain professionals and IT people for the supply chain leaders all over the world (Unilever Middle East website visited in 2010). The winning companies are recommended for their innovation and operational success to their supply chain practices and their

proactive perspective (Unilever Middle East website visited in 2010). The Chief Supply Chain Officer commented on it saying that *“Unilever, like other companies which made the ranking, was assessed both on its operational excellence today and on its future potential as a supply chain leader- which gives us plenty to feel proud and excited about”* (Unilever Middle East website visited in 2010). He continued *“we also received a special commendation for our track record for incorporating CSR into supply chain activities- yet another confirmation of our wide renown as an ethical company. While this is great recognition of our progress, we’re not going to stop there- and are determined to getting even more out of Supply Chain, especially when it comes to customer service and boosting competitiveness”* (Unilever Middle East website visited in 2010).

The importance of information technology is also another essential successful factor in Unilever. This has been noted by the Chief Information Officer for Unilever when he considered the information technology at Unilever as ‘Agile Technology’. He said *“At Unilever, agile technology helps our people work with maximum flexibility and minimum constraints. We believe in giving our people the tools to work anywhere, anytime, working effectively with people across the world. It helps us achieve sustainable growth and is part of what makes our business a great place to work”* (You Tube, visited in 2012). Among the facilities that enable Unilever to build a global scale IT infrastructure are the shared technology framework and the common standards in architecture, main technologies, processes, information and services used to develop the IT operations (Unilever Annual Report and Accounts, 2009). This allows Unilever to reach the regional supply chain members (Unilever Annual Report and Accounts, 2009). Unilever considers information technology as a key enabler to the development of a globally aligned worldwide business (Unilever Annual Report and Accounts, 2009). Developing strategic alliances and global suppliers partnerships, enhancing IT infrastructure and service providing levels with cost reduction, developing IT capabilities, processes and databases in a consistent manner and using strategic outsourcing approach in some areas are considered by Unilever as the resulting means from developing a strong IT function (Unilever

Annual Report and Accounts, 2009). Unilever believes that partnering with core selected suppliers and through the use of strong collective IT systems can enhance agility, flexibility, speed and cost savings. This was mentioned in their Annual Report and Accounts (2009, p. 29) as follows: *“Unilever partners with a selected group of leading suppliers to develop and maintain a limited number of complementary IT systems that collectively cover our business needs. This promotes radical simplification, increased flexibility and agility, faster implementation, and reduced costs”*.

4.3 The supply companies

Since the research was focused on a dyadic relationship because of its focus on partnerships, it was very important to have the other perspective of the partnership to get the full picture of the relationship. The supply companies were selected based on several criteria, among them being the extent of the relationship that exists between the supplier and Unilever, the location of the supplier and the type of the product provided by the supplier. The researcher asked the interviewees to recommend the supply companies that could match with these criteria. This therefore ensured that the suppliers selected were those suppliers that Unilever (North Africa Middle East) consider being core suppliers and had partnerships with, and who supplies the case study company with main components and parts. The interviews with the supply partners were conducted through face-to-face interviews, except two interviews which were conducted through a telephone interview. In addition to the primary data collected through the interviews, some additional secondary data was collected through documentary means, where the researcher asked for more data about the companies and their history, organisational structure and performance and therefore all the mentioned detailed information presented in the description for the five companies in sub sections 4.3.1 through 4.3.5 were cited in the documents collected from the companies as little information was available about them in the accessible public domain. Some of the supply companies agreed and provided additional documents and others refused due to some perceived confidential aspects. In the next five sections the researcher provides a

description for each supply company based on the available data. This is with the aim of helping the reader understand the full picture about the nature of the relationship that exist between Unilever (North Africa Middle East) and its core suppliers working in the Middle East FMCGs business environment.

4.3.1 Company (A): Express pack print

Express pack print is one of the most important providers of corrugated packing working in United Arab Emirates. It is a part of the Express Group of companies that started to work in United Arab Emirates in 1978. To ensure the satisfaction of its core customers, it focuses on three factors, which are: quality, service and flexibility. As an ISO 9001:2008 certified company, it emphasises on quality and seeks to guarantee a high service level to its customers through the use of some techniques and tools. Among them are: the use of JIT delivery, low inventory level, offering consistent and reliable service. It is considered as a core supplier to Unilever (North Africa Middle East) in Dubai, United Arab Emirates.

4.3.2 Company (B): NOON for printing and packaging

This company exists in the form of two branches. It is a printing and packaging company working in the paper and carton industry. The company founded under the name of NEW AMRIYA printing company has existed in the market since 1988. In 2006, the other branch of the company has been founded under NOON for printing and packaging. It provides advanced solutions for printing and packaging problems that suit the customers' needs and preferences. It focuses on helping its core clients search for quality and participates in their businesses success. It provides suitable quality packaging and printing service based on its staff's high experiences and through using the state-of-the art techniques that meet international standards. The company tries always to satisfy its core customers (inside & outside) by meeting their needs through the continuous improvement of services offered with taking into consideration quality and cost and the customers' opinions in mind to produce their products. The company is

considered as a core supply partner to Unilever (North Africa Middle East). Some documents for the increase in sales to Unilever after they form their partnership and the subsequent increase in the company's machine efficiency results have been collected during the researcher's visits and are shown in table 4.3. It serves other multinational and local customers in different types of industries such as Cadbury Egypt and others.

Table 4.3 Results of increases in machine efficiency & increase in sales to Unilever (North Africa Middle East)

Customer Case fill on time (Unilever)		
Years	The efficiency of the supplier's machines	Delivery on time
2008	65% efficiency	92%
2009	71.6% efficiency	95%
2010	73% efficiency	97%
2011	75% efficiency	100%
Sales to Unilever increased from 2008 to 2011 by 63%		

4.3.3 Company (C): SHOROUK for Modern Printing & Packaging

Shorouk Press is a private company for printing and packaging. It was founded in Egypt in 1979. From then it began to grow to become one of the most important printing company in Egypt and the Middle East. It is specialising in printing books, magazines and boxes and folding carton boxes. It is operating from two plants in Cairo, Egypt, with labour force around 1200 employees. Their production lines are equipped with the latest high technology equipment and machinery operated by well-educated and highly qualified and experienced staff. Shorouk press is converting around 35 to 40 Thousands Million Tons of paper per year to: Over 1 billion folded boxes; Over 20 million corrugated boxes; Over 30 million copies of books and magazines. Shorouk Press is considered as the only Press House Certified ISO 9002 and HACCP certified press in Egypt. It can be considered as an important partner to Unilever (North Africa Middle East) in Egypt. It is the core supplier for many multinational companies working in Egypt and Middle East region. Among these companies are: Colgate Palmolive,

Toshiba, Bristol Myers Squibb, Galaxy and others. It is a core supplier for many local companies and institutions working in different types of businesses such as Egyptian Ministry of Education, and some Pharmaceutical companies.

4.3.4 Company (D): Pan Gulf Plastics

Pan Gulf Plastics was opened since 1979 as a branch of Pan Gulf Group. From its introduction, it was the first to use 50L TO 200L drums in packaging business in Africa. Its main focus is to provide innovative solutions to its customers in their packaging products. Now it uses high technologies machines which enable it to increase its efficiency and effectiveness and maintain itself as one of the market leaders in plastic packaging. The company now owns ISO 9001, and is in process for achieving ISO 22000 to ensure the level of quality provided to its customers. The company's mission is to achieve the customers' expectations while emphasising on quality, flexibility and win-win results for the customers and partners. Among its values are: customer focus, integrity and transparency, flexibility, drive for results and quality. It operates in two types of markets: the industrial packaging (paints, oils, chemicals, agriculture) and consumer packaging (cosmetics, food, detergents, pharmaceuticals, and caps and closures).

4.3.5 Company (E)

As mentioned before, not all the five companies permit the researcher to use its informational documents for publication. This company refused to give the researcher the permission to publish any informational data about it, therefore the researcher named it as Company (E) throughout the thesis to refer to it.

4.4 Summary

This chapter has provided the information about the in-depth case study used in this research. Insights into the context of the research study which is the Middle East business environment have therefore been presented. The nature and the type of FMCGs industry has been discussed with the aim of providing a rich picture underpinning the subsequent examination of supplier partnership and its relationship with supply chain agility in such a type of business environment and industry. Information on the supply companies has been also presented. The next chapter discusses the first stage of the analysis of the empirical data collected, that is to say the open codes developed from the analysis of the first round of data collection.

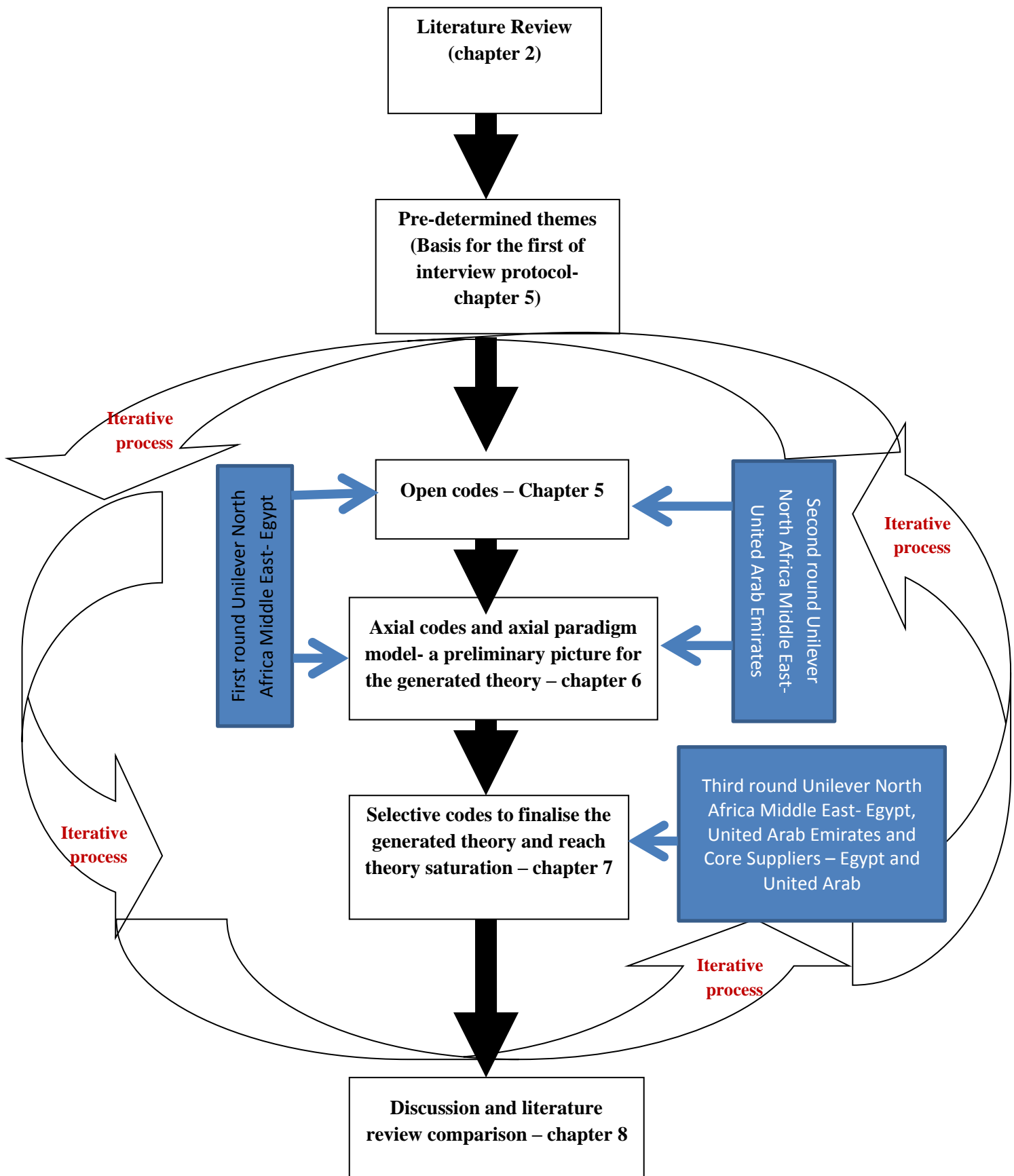
Chapter five: First stage of data analysis: predetermined themes and open coding

5.0 Introduction

This chapter discusses the open codes that were derived from the primary data collection rounds. As shown in figure 5.1, and as previously discussed in section 3.7 (The research coding process), the predetermined themes were deduced from the literature review. These predetermined themes guided the interview protocol and the semi structured questions throughout the first set of interviews. Based on the GT approach (Strauss and Corbin 1990, 1998) the open codes were then derived from these interviews transcripts. The open coding analysis provides the general categories generated from the first phase of the data collection process. These open codes are not yet interrelated to each other, since this step is to develop and generate the general overall codes. The analysis followed the procedures suggested by Strauss and Corbin (1990, 1998). Chapter 6 discusses the axial coding where the grouping for the codes is presented and chapter 7 presents the final stage of data analysis: selective coding, where the developing of interrelationships between the main codes is introduced.

The main coding process idea is to organise the raw data with the research aims and objectives. *“The coding system is a way of labelling certain aspects of your data and sorting the information into distinctive categories. It is an easy way of keeping track of your ideas. Coding lets you use words, phrases, and ideas directly from the text and you can capture information about things and explore them further when you decide it’s time”* (Walsh ,2003; p. 253-254). The empirical coding process included: the development of the pre-determined themes based on the research aims and objectives; the generation of open categories (open codes); clustering and grouping of codes (axial coding) and finally development of selective core categories (selective coding). These coding stages are presented in a chronological order in chapters 5, 6, and 7, however the coding process did not take place in a pure linear way, as it involved iterations based on the Grounded Theory procedures.

Figure 5.1: The flow of data analysis research throughout the thesis



This chapter is divided into the following two main sections: Section 5.1 discusses the development of the pre-determined themes. Section 5.2 then presents the open coding analysis. Then in Section 5.3 a Summary of the open coding is provided.

5.1 Development of pre-determined themes

To guide the analysis and coding of all raw data collected from the first stage of the data collection process, pre-determined themes were developed. These pre-determined themes were developed from reviewing the literature on buyer-supplier relationships, agility and agile supply chain, and information sharing and information technology. This important step is highlighted by Strauss and Corbin (1990, 1998), who argue that theory can be generated with a start from existing literature (as shown in table 5.1). These pre-determined themes are considered as guidance for the GT researcher during the coding process, giving him/her flexibility to provide insightful explanation of the raw text (King, 1998). A theme is a data pattern in which the GT researcher has determined its importance to his/her investigation and is considered as a way through which parts of raw text with similar meaning can be gathered together (King, 1998). Themes can be obtained during the coding and analysis processes, i.e. inductively or developed based on existing theoretical literature, i.e. deductively. In this research, the researcher following, Strauss and Corbin (1990, 1998), decided to commence the process by developing them based on reviewing the literature.

Based on the literature, three main pre-determined themes were developed:

- 1- Buyer supplier relationships: determining the existing attributes, practices and benefits of buyer supplier relationships within FMCGs industry.
- 2- Agility within supply chain: determining the existing attributes, practices, and needs to agility with in FMCGs industry.
- 3- Information sharing/ technology role: determining the impact of information sharing and technology within FMGCs industry.

Table 5.2 shows these pre-determined themes, together with the FMCG industry-based features that can characterise that type of industry, with their related open codes generated from the primary phases of the empirical data collection and analysis process.

Table 5.1: Predetermined Themes, open codes arose from the first round of interviews

Pre-determined themes	Open codes derived from the interviews	
5.2.1 FMCGs industry-based features	5.2.1.1	Diverse markets
	5.2.1.2	Diverse products
	5.2.1.3	Nature of business environment
	5.2.1.4	Importance of supply chains
	5.2.1.5	Socially responsible
	5.2.1.6	Technology
5.2.2 Buyer- supplier relationships	5.2.2.1	Relationship evidence
	5.2.2.2	Partnership evidence
	5.2.2.3	Relationship benefits
	5.2.2.4	Partnership benefits
	5.2.2.5	Improving supply chain partnership
	5.2.2.6	Supplier development
	5.2.2.7	SCC4
	5.2.2.8	Vertice plus
	5.2.2.9	Compliance to work
	5.2.2.10	Reliability
	5.2.2.11	Mutual benefit
	5.2.2.12	Commitment
	5.2.2.13	Trust
	5.2.2.14	Transparency
	5.2.2.15	Openness
	5.2.2.16	Shared targets, vision
	5.2.2.17	Believe in each other
	5.2.2.18	Non- priced basis
	5.2.2.19	Win- win
	5.2.2.20	Integration
	5.2.2.21	Small number of suppliers
	5.2.2.22	Long term contract
	5.2.2.23	Collaboration
5.2.3 Information sharing and information technology	5.2.3.1	Communication
	5.2.3.2	Information sharing
	5.2.3.3	Information technology
5.2.4 Agility	5.2.4.1	Need for agility
	5.2.4.2	Responsibility
	5.2.4.3	Innovation
	5.2.4.4	Speed
	5.2.4.5	Managing by objectives
	5.2.4.6	People way of thinking
	5.2.4.7	Quality
	5.2.4.8	Efficiency
	5.2.4.9	Customer service
	5.2.4.10	Responsiveness
	5.2.4.11	Flexibility

5.2 Open coding analysis

From the analysis of the first set of interviews (16 interviews) undertaken during the first phase of data collection process, 43 open codes were identified. These open codes are discussed in more detailed in sections 5.2.1 through 5.2.4 that follow. It is important to note that within the analysis that follows, certain quotes are repeated, as they apply, and are evidence, often of multiple open codes. This approach has been taken for completeness.

5.2.1 FMCGs industry-based features

The following open codes were extracted.

5.2.1.1 Diverse markets

Unilever is a multinational company working in several countries with different cultures. This was noted by the HPC (Health Promotion Coordinator) for Lipton Tea Factory who said that especially for the tea factory they are exporting their products to almost 80 countries and therefore they are dealing with a diverse number of cultures, stating that *“our business markets are ranging from a wide variety of customers, to all the countries in the world and particularly for this business if especially we look at tea, We are exporting to almost 70/80 countries of the world”*.

This was also suggested by other interviewees, such as the Customer Service Manager (for Gulf Business Unit) who mentioned that they are serving five different countries within this Gulf regional area: *“So basically you have five different markets in this region: Oman, Qatar, Dubai, Kuwait, and Bahrain.”*

The Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) noted that they are working within a competitive global supply chain: *“we are*

supplying around 60 customers, so it's more of a global supply chain and highly cost competitive supply chain environment”.

5.2.1.2 Diverse products

Unilever is a company working with a variety of portfolios mainly in household products. The Customer Service Manager (for Gulf Business Unit) stated that the main product classification for Unilever is the household products: *“Unilever is a FMCG firm, which actually works in almost all sorts of household products which you use on a daily basis, starting from personal care to home care, food and beverage and among the top beverage in our portfolio is tea, and Knorr is also one of our biggest brands...”*.

This observation is also supported by the HPC (Health Promotion Coordinator) for Lipton Tea Factory who mentioned that the portfolios range from food products to home and personal care goods: *“It’s a huge portfolio of products ranging from foods, to Home care, and to personal care”*. As mentioned by the Planning Manager (for Personal Care for Kuwait and Qatar): *“It's basically as the name itself suggests, it's a fast moving consumer goods company. So we deal with brands that are commodity based, day to day, making everyone's life better. So, products that could be from home care to personal care to food and beverages”*.

5.2.1.3 Nature of business environment

On asking the interviewees about the nature of business environment surrounding that type of industry, they answered that it can be characterised by being very dynamic, competitive, and complex. The Customer Service Manager (for Gulf Business Unit) explained that *“The business here is very competitive. It’s very challenging. There is no set trend to follow to be on the top of the market, so it’s an everyday exercise where we have to come up with new plans. We face new problems, we give new solutions and that’s how the business works”*. He also added that *“We are already very dynamic...FMCG stands for Fast Moving Consumer Goods, so therefore this business is very fast”*.

This observation also was supported by the Demand Planner (for UAE for all products) who argued that this type of industry is always fast and complex: *“Definitely, FMCG in general is a very complex industry because we produce products, we sell them almost immediately. It’s very fast moving so the cycle between supply and demand is almost continuous, so it’s a really complex business”*. The same observation was given by the General Planner (handling Kuwait and Qatar for all products) who mentioned that it is a very competitive business environment where they are competing with large multinational corporations: *“In terms of the industry itself, it’s a competitive industry with large multinational companies which we are competing with”*. He added that the development of the companies and the markets, as well as the economic environment, increase the complexity of the business market they are working in: *“There are [many]companies [that] are developing, the market is developing; especially now with the economic situation I think the market is more difficult”*.

Similarly, the Site Quality Manager (for Lipton Tea) said that the complexity of the market and the competition make them focus more on the importance of working closely with their core suppliers: *“as I said, we are working in a very dynamic and changing environment. Things change, there are a lot of requirements, there's a lot of competition, so we need to adapt ourselves into that and to do that, we need our supplier right next to us”*. He also added that *“...there are a lot of changes, the market reacts in different ways, so we need to change with that reaction, if we have a trust in our supplier, and we have this relationship with the supplier, we can adapt into the changes by moulding them and getting all the required supplies that we need”*. However, explaining an implicit part of Lipton’s approach, he commented that *“... it also has a lot of dynamics but generally Unilever believes in simplifying things and narrowing it, making it less complicated and doing it in a simple way. But as an industry it is very dynamic but the way or the environment or the work culture is very simple”*. The HPC (Health Promotion Coordinator) for Lipton Tea Factory also described it as being a difficult business environment characterised by being dynamic, complex and competitive: *“Well it's very complex, highly competitive and dynamic as well”*. The Planning Manager (for Personal Care for Kuwait and Qatar) described the way the company functions to deal with this environment,

explaining that it is so difficult to deal with the ever changing demand of the customers and to be responsible enough to provide what they need to be able to react to their requirements: *“it's a dynamic business in terms of your daily market that is changing, your consumer demands are changing. So how you react to the need of the market itself, so we take it as our responsibility to be able to give to the consumer what they want at the right time”*. The Customer Service Manager in Lipton Tea Factory (Unilever Gulf) had the same opinion, adding that from a supply chain perspective it is a global supply chain working across the world: *“It's highly competitive, a highly competitive brand industry, if I look specifically in the supply chain it is very [much], you can say, a global supply chain, it goes across the world, where we are supplying as a factory to global customers. So we are supplying around 60 [types of] customers, so it's more of a global supply chain and a highly cost competitive supply chain environment”*.

The Supply Chain Manager (Unilever Gulf) described the business environment in which Unilever is working in a similar way, explaining that the dynamic market and the high competition makes the business environment in which Unilever works a complex one: *“Well we work in a very fast, very dynamic environment, as when we can say the basic products: food, personal care, and beverages which are basically very dynamic in terms of the market and the competition as well”*. Similarly, the Planning Manager of Lipton Tea (Unilever Gulf) and the Supply Planning and Logistics Manager respectively, explained the nature of the business industry environment as being characterised as competitive: *“The main characteristics is that we have a very competitive environment and we have real competitiveness and we are in a marketing environment...”* and *“The main characteristics are competition between other competitors, having a lots of challenging business environments, looking at what's happening in the market starting from the commodity prices and economic crisis, down to the consumer needs in each country”*. Adding to these, but in more detail, the Lipton Tea Factory Manager (Unilever Mahreq) explained: *“I think that what takes a big % of Unilever portfolio is FMCGs. It is very dynamic and hard to deal with, uncertainty is high, there was a plan but there is a degree of risk and bias and with FMCGs, there is always high level of risk and this needs very agile and flexible supply chain. For example, the Arab developing countries for example, from how many years the hypermarkets have opened in*

the Egyptian markets, every year the behaviour of the customer differs even within the near future time, the customers are dealing differently, you can't imagine or expect what in the second half of the year will be the behaviour of the customer, so you need to face to deal with your competition. This puts pressure on the supply chain to react in a fast manner to face competition”.

5.2.1.4 Importance of supply chain

On asking the interviewees their opinions on the suggestion argued by Christopher and Towill (2001) that no longer can individual companies compete on their own, instead competition nowadays lies in the hands of the overall supply chains, almost all the interviewees, were in agreement. The Demand planner (for UAE for all products) said *“Very correct, definitely. I mean going back to the definitions of supply chain; it's a function that basically consists of all functions, so definitely I agree with this point that for a company to be competitive the supply chain will definitely have to be [Working] definitely with each other. Supply chain means to be able to produce goods in the cheapest way possible, most efficient way, environmentally friendly and with the quality of course. So as long as you improve quality, and supply and demand, definitely this will improve the competitiveness of your supply chain”.*

Similarly, the Technical Project Manager (Unilever Gulf for all products) explained that the supply chain as a whole needs to be appreciated, where the customer is waiting at one side and therefore they have to work altogether to satisfy that customer: *“We look at the supply chain from end-to-end perspective because if my supplier will not supply me, my customer is also waiting on the other side. I cannot supply to my customer [alone]”.* This is supported by the Planning Manager of Lipton Tea (Unilever Gulf) who agreed with the statement and hence on the importance of the supply chain, as today the companies are doing the same but what makes the difference is how every company can work with its supply chain members to achieve its aims: *“Correct, I agree, because now actually as you see, all the companies speak the same language and so what*

happens is that you are trying for the same KPIs, we are driving for the same targets”

Finally, from a more technical point of view, the Lipton Tea Factory Manager (Unilever Mashreq) explained that he also agreed on the statement: *“[I] agree, from my experience about 80% of lead time to react comes from supply chains. If you decrease the lead time by 1% in supply chains, this will affect positively the time to market and also supply chains are the competing units. If we consider innovations you may find the same innovation found in several companies, however the one who will reach market and customers first will have the initiative, and he will gain”*.

5.2.1.5 Socially responsible

To be socially responsible, or to enhance the environmental sustainability, is an aim that Unilever strives for. This was mentioned by most of the interviewees as an important goal. Unilever global is seeking to improve their environmental sustainability, and so consequently is Unilever North Africa Middle East (NAME). This was mentioned by the Lipton Tea Factory Manager (Unilever Mashreq) who said that *“In Unilever global, there is a new CEO coming with a new way of thinking and a new vision, for example, one of the important goals is to double the size of the business with in the coming five years and at the same time reducing the environmental impact by 50%. He is combing both goals together with each other. Usually any company is seeking for profits; they are not searching always with the mentality of caring for environmental issues. However Unilever is searching for environmental care as one main goal and at the same time doubling the business size”*. Similarly, the Demand Planner (for UAE for all products) described it as one of the important programmes taught by Unilever to its core suppliers: *“...and of course you have to influence your supplier to be environmentally friendly, [you should] make sure [that] your supplier is socially responsible, takes care of its employees, abides by the environmental standards, going green, helping the community, all of these things”*. The Technical Project

Manager (Unilever Gulf, for all products) also insisted on the importance of helping the suppliers to be environmentally friendly: *“It’s on the top of our agenda. Safety, environment, and sustainability, because at the end of the day we source materials and we help also our suppliers, to ensure we have a sustainable supply of materials, and that we also do not harm the environment”*. The Supply Planning and Logistics Manager considered having the environmental issues as one benefit of working closely with core suppliers: *“There’s a lot of benefits starting from getting more business, better business result down to having better environmental impact on the world”*. He also considered that it was a common project through which Unilever and its core suppliers are working together: *“We are having common projects that we can do together [interviewer: Can you give me some examples?] Yes, some examples in this aspect maybe the new projects being launched, environmental projects and so on”*.

5.2.1.6 Technology

Most of the interviewees considered their company as having and using a high level of technological means and advances. For example, the Site Quality Manager (for Lipton Tea, Unilever Gulf) considered his company to be using the latest means of technology: *“...we have to have a technology in place, all the latest technology in place whereby we will be able to compete in the market and be there on top of our competitors”*. He also added that there was in place a collective system through which they are able to increase the ability to react to the market place: *“we have a collaborative system in place [which enables us to determine] what work can be achieved out of our suppliers so we can react”*.

Technology was also highlighted by the Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) where he considered his company as a leader in implementing and applying all new technologies that appear within their industry: *“for example, in the supply chain, in marketing, in sales there are always new techniques coming on the market to which a company needs to adopt and implement. Unilever, I would say, is a leader in this kind of activity, we*

adapt best practices, world [leading] practices but we also, I can say, are diverse in developing new practices. So it's one step further, not only implementing but we also try to do best practice within ourselves, with our suppliers, with our customers, etc”.

5.2.2 Buyer- supplier relationships

The following twenty three open codes emerged from the analysis relating to buyer-supplier relationships.

5.2.2.1 Relationship evidence

On asking the interviewees to describe the relationship their company has with their core suppliers, they described the relationship as being a very good and strong form of relationship. This was highlighted by the Customer Service Manager (for Gulf Business Unit) who explained that *“Definitely we have a good relationship, your relationship with the supplier should be strong and you should have a strong bond with the supplier. So whether it’s a supplier or it’s someone who is distributing your product, if your relationship with that supplier and if the quality of the service of that supplier is not according to your standards then meeting your plans and functioning with them efficiently becomes a bigger issue in the long run”*. Similarly the Demand Planner (for UAE for all products) mentioned that their company possess a strong relationship with their core suppliers: *“This Company maintains a very good relationship with suppliers”*. Very similar argument was expressed by the Technical Project Manager (Unilever Gulf, for all products) who noted: *“We have a very good relationship”*. The Planning Manager (for Personal Care for Kuwait and Qatar) also noted that they have a good relationship with their suppliers, especially important as they are in different countries and therefore the communication between them becomes essential: *“[that is] because it is logistically in a different country, we work very closely with them. So on a day to day basis you will have communication, you will have updates coming in from when, what is required, and how”*.

5.2.2.2 Partnership evidence

On asking the interviewees to describe and specify the form of the relationship their company has with its main suppliers, almost all of them specified it as a “partnership”. For example, the Customer Service Manager (for Gulf Business Unit) said that it is a partnership based on give and take: *“Definitely it’s a partnership because it’s like give and take. So to maintain the standards and the quality of the product they need to adapt the Unilever ways of working as well. So far we are successful in implementing our systems in those partner organisations and they will be fine”*. The Demand Planner (for UAE for all products) added that it is a partnership based on mutual benefit: *“They do have partnerships which of course in the long term will be useful to both this company and the supplier. It’s a mutual benefit”*.

The General Planner (for Kuwait and Qatar, for all products) described the relationship as having the form of partnership, and that they like to consider the suppliers as part of the company: *“we have good partnerships with our suppliers mainly coming from the factory which I’m very well aware of. We’re treating our suppliers the same way a supply chain treats its customers, which is our sales team. So, it’s more of bringing in our suppliers under the umbrella of our own company.”* In a more detailed explanation, the Technical Project Manager (Unilever Gulf, for all products) explained it as follows: *“we are a customer for our supplier. However, we look at the supply chain from end to end perspective because if my supplier will not supply me my customer is also waiting on the other side. I cannot supply to my customer [alone] so, we look at our supplier as a very important partner because if they have problems in their supply chain then for sure I also have a problem with my supply chain”*. Then he added that *“Project Sherik, it’s a partnership between Unilever and suppliers. So, here also we call it Vertice Plus. In Europe we call it also Vertice Plus. So, it’s a partnership between Unilever and a supplier. So, we develop our supplier. We visit their factories, we audit them for quality, for safety, everything”*.

The Site Quality Manager (for Lipton Tea, Unilever Gulf) mentioned that the relationship between Unilever and its main suppliers is based on clear communication and collaboration to ensure for both parties the opportunity to grow: *“We believe in partnership so we call our [core suppliers] in the business as partners. What we believe in as Unilever is as long as we grow and we allow our partner to supply and grow with us, we grow together. So our relationships with our suppliers are very good, we have very clear communications whereby we talk about all issues that they have and we've been able to grow”*.

The HPC (Health Promotion Coordinator) for Lipton Tea Factory also confirmed that the relationship form is considered to be partnership, stating that *“Well I would say any business what we do with suppliers is a form of partnership. It's about a supplier partnership of course. So if we have to grow as a company we believe that we are growing with suppliers and all our business partners hand-in-hand”*. The Planning Manager (for Personal Care for Kuwait and Qatar) described the supplier relationship as a *“marriage”*, explaining that *“Of course, you have to be like partners, it's like marriage, if you're not working as partners you're not working in the same team”*. The Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) supporting the similar stance, said that *“as I said before I was in planning, so in planning means production planning and maintenance planning. So I can say with 90% of my suppliers, it's a partnership relationship with my suppliers”*.

Likewise, the Supply Chain Manager (Unilever Gulf) stressed the partnership orientation: *“We can't supply anymore in this work especially from the company without working in partnerships with your supplier and even their suppliers as well. So we have to work very closely with them, we have to integrate with them as much as possible in the business”*. He added, by giving the example that due to the strong partnership with their suppliers, one of the important global suppliers has opened within the region a factory specifically to serve them and thus bringing them geographically nearer to them: *“Well for example, we have one of our biggest global suppliers and we have one of our big global factories in the region and one of our core materials come from that supplier. So then on*

that relationship, it's a strategic relationship and so on with that supplier. We got that supplier to build a facility for us within the region".

The Planning Manager of Lipton Tea (Unilever, Gulf) described the relationship as having a long term win/win partnership: *"Well we are targeting for a long term partnership with our supplier, in which we're trying to have a win/win relationship with them"*, as did the Supply Planning and Logistics Manager who remarked that *"If I could describe it in one word it's a partnership, we're having a good partnership with our suppliers, and the form of such relationship is a partnership relationship depending on a win/win situation"* .

Finally, and in a more detailed manner, the Lipton Tea Factory Manager (Unilever Mashreq) explained that *"from a traditional point of view, people were thinking that having more than one supplier can guarantee for them or make them feel more safe that if something wrong happen with their supplier or he falls down, they can transfer (move) to another supplier quickly for their sake. However from experience, we can consider that this is a wrong way of thinking and that it is much better to have the least possible number of suppliers with the maximum level of relationships between us as a form of partnerships, for example, There are some activities [that] are managed nowadays by suppliers and there are some common systems between us, for example, there is an electronic data exchange through which he can determine when the stock starts to decrease inside my plant and enable him to fulfil it directly and quickly. I can give you some examples, there are some materials items which are supplied by only one supplier and this is on a global basis. There are one or two suppliers only supplying Unilever the materials for such items on a global level"*. He added that *"...we can consider our relationship with our main supplier as a forecasted based partnership, this means that I don't go and give him orders of purchase, however, we have high level of transparency and openness, he works on this and we are big company even if something wrong out of control happen, we have the ability to manage and compensate him and fulfil our commitment with him, and this is very respected by our supplier"*.

5.2.2.3 Relationship benefits

On asking the interviewees about the benefits that their company as well as the suppliers could gain through the partnership form of relationship, they described several benefits. The Customer Service Manager (for Gulf Business Unit) explained that due to the strong relationship that Unilever (NAME) has with its suppliers they teach them about their quality and other practices that may be beneficial for both of them: *“So if you have a supplier, if the supplier has full faith in you, and if you have full faith in your supplier, then definitely it’s a good thing for the organisation...For the company like Unilever we have enough history to actually train the suppliers as well, because there are a few suppliers who are supplying to an x, y, z of companies whose values and whose standards are not actually with Unilever. So to make them understand why we want to implement a certain system or a certain regulation in the factory of the supplier is because we want a quality product. We cannot compromise on quality as far as our products are concerned with people, for example, if you go and buy Sunsilk shampoo you don’t ask to give a Unilever Sunsilk shampoo, because you know it’s a Unilever product, so you want to buy the brand. So if we [have a problem] with the brand then I’m sure if you find any problem with Sunsilk then you may not even buy Dove, and if you won’t buy Dove then you may say I will not even buy Unilever perfume [brand]. So it’s a game of different brands and each brand needs to maintain its quality, so that’s why the relationship with the supplier is very important”*.

The HPC (Health Promotion Coordinator) for Lipton Tea Factory noted an array of benefits of having a strong relationship with core suppliers as the means for both parties to grow: he said *“I think having the right coordination and particularly a good coordination and high level of commitment and trust with the supplier will definitely help us grow”*. He added, giving an example, that for the production and demand planning function to be effective, there needed to be a high level of relationship between the company and its core supplier: *“...in terms of planning, if you have the planning systems integrated with the suppliers, like what we are trying, for some level we have achieved with a few of the suppliers*

and materials [suppliers]. If you have that flexibility, if you have that trust and if you have that coordination with the suppliers, planning, particularly production planning or demand planning can be enhanced and can be done very effectively”.

The Supply Chain Manager (Unilever Gulf) supported the same idea, suggesting that both parties can grow together under a strong relationship: *“...however the relationship is more important than the price, and that’s where the emphasis is on that, to make sure that we have the strong relationship, which will enable us to get the best, of course, price that is on the market. But at the same time it enables us to grow with those suppliers and for them to grow with us as well, and at the same time minimum debts in the business”.*

The Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) mentioned that he can benefit from such relationship inside his factory in that he can quickly fill any gaps in the operations and ensure shipment of the materials on time and with the required quality level: *“Actually we’re strengthening it through our programme that we call the Vertice Plus. The Vertice Plus is under the umbrella of the service string. This is a factory concept wherein we would like to strengthen our relationship with the supplier itself because it has to be known that the supplier, and we as the main customer of the supplier, should have a very close relationship so that even a single gap in the manufacturing operations can be filled immediately, as quickly as possible”.* He added by explaining that: *“specifically me, when I’m sitting down with the supply chain people, I know my line capacity and they have assured to me, especially the supplier, that whatever line capacity is required, he has to be there at my door with my materials, very specifically with essential for me that I should receive each and every material within this day, ahead of time actually as per my line schedule. That’s why this relationship with the supplier plays a vital role for me”.*

5.2.2.4 Partnership benefits

The interviewees were asked about the benefits that their company and their core suppliers can gain from having a strong partnership. They argued that having a strong partnership form of relationship with their core suppliers can have several advantages. The Demand Planner (for UAE for all products) suggested that because the partnership is based on a long term contract, it is very beneficial for the company: *“Having a partnership will ensure you can have a long term contract, so you don’t have to go around looking for suppliers. Your supplier is there for you for a long time because you’ve signed a long term contract. So this [may be a] kind of ensuring the continuous supply. There won’t be any surprises because you know there is a long term arrangement between the supplier and the company, so that’s one example. At first you can save costs by having a long term partnership with a supplier because you will share data [and] information which will in the long run improve supply and demand”*. The Technical Project Manager (Unilever Gulf, for all products) considered the supplier for the company as one leg of the two legs for any business: *“As I said earlier, you need to define your supply chain end to end, on the other side is your supplier, as the first leg. Because any problem with your supplier you will not obtain your target at the end of the supply chain. Yes, so it’s a very important thing”*. The Site Quality Manager (for Lipton Tea Unilever Gulf) stressed the importance of the supplier in ensuring competitiveness: *“as I said, we are working in a very dynamic and changing environment. Things change, there are lots of requirements, there's a lot of competition, so we need to adapt ourselves into that and to do that we need our supplier right next to us”*.

Both the HPC (Health Promotion Coordinator) for Lipton Tea Factory and the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) both considered the supplier partnership as being beneficial for the continuous flow of products and for continuous operations: the HPC (Health Promotion Coordinator) for Lipton Tea Factory stated that *“We need to maintain the same current industry suppliers; may be for different items, so [that] we're just not to have those minor or major shutdowns or disturbance of flow in terms of our goods, we need to*

make sure that they are also working in partnership”, while the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) explained that to ensure a continuous operation flow there should be a strong partnership: “The benefits for me especially, I’m in the manufacturing, it ensures my continuous operation based on the planning of the supply chain”.

The Customer Service Manager in Lipton Tea Factory (Unilever Gulf) specified that the benefits of the partnerships can include cost savings, high quality levels and better service: *“Benefits of cost, high service levels, quality, are the benefits which we get from partnership with our suppliers”.* Adding that it is very important from the technical perspective: *“Yes, technically, giving you an example, because if I don’t trust the quality which my suppliers are providing me then I will have a quality control department in my factory and checking each individual packaging. But if I trust the supplier and his quality to a certain level and they can reduce the cost here with the double handling because the supplier is servicing, checking quality and I’m also checking on quality. The same partner, with the same everything, if I know that my supplier is quite reliable then I can remove the quality check within my factory. But it doesn’t happen like this, it doesn’t happen very quickly, this is a journey which happens over a long period of time. So we develop the partnership with our supplier and then they basically increase the service, they increase all the KPIs which are their quality and other parameters and now we need our suppliers on different parameters, we need them gold, silver, bronze etc. Then we give them a supplier certification which is basically on a consistent performance, high performance. So once it is a good supplier, I can say that I don’t want to have a quality check for this material. It helps me in reducing my cost as well as it reduces my inventory. It really helps if I trust my supplier in different parameters”.*

The benefits from having partnership with the core suppliers extend to long term benefits, as suggested by the Planning Manager (for Personal Care for Kuwait and Qatar). She mentioned that working in a team with core suppliers can ensure for both parties the achievement of common goals and can lead, at the end, to long term gains: *“When you work like a partner you’re working on the same side*

of the team and if you're working on the same side of the team you're going to work for the same goals, for the same benefit. So you're going to try and figure out how to support each other, so working like partners there's definitely the form of support, there's the ability to openly communicate. If there is a problem and you have open communication with your supplier you're able to resolve those problems together for the benefit of the company and the business. So I think the openness that comes as a partnership that is very important and you're looking at long term goals, so it's not short term, it is not something that's going to come today and not have a long term benefit”.

The National Development Manager reflected on the current benefits of ensuring quality at source through the partnerships versus the historical quality control perspective: *“Now Unilever have realised in the quality of the products and the quality which is inside the product itself, the material itself is all relevant to the supply or the source of the material. We used to always rely on improving our quality internally for Unilever and we wouldn't rely on the supply source. We would filter it, we found out we could filter it by quality control and quality audits and all that stuff. But we never thought about having an extra mile, going to the supplier and developing the supplier and changing even the mindset and the interface, not just the quality of the product, to have a better customer service side”.*

From a slightly broader perspective, the Planning Manager of Lipton Tea (Unilever Gulf) explained the benefits of supplier partnership for achieving agility and becoming more able to react to the business market changes: *“We'll actually [benefit] in terms of the cost saving; we generate a lot of savings while we're working with the supplier. We've become more agile and more ability to react to market changes because we know them, they know us and learn from each other and we become more market competitive and more agile for it”.* From a similarly broader perspective, the Supply Planning and Logistics Manager noted that the benefits include having better, and more, market opportunities and better environmental sustainability: *“There's a lot of benefits starting from*

getting more business, better business result down to having better environmental impact on the world”.

Finally the Lipton Tea Factory Manager (Unilever Mashreq) described the benefits of supplier partnership as follows “*...stability in supplies, imagine you have right forecast, efficient factory with low lead time, and there is insufficiency in supplies or if the supplier tells you he will send one ton after one month and then he sends this one ton after two months, supply chain is a kind of chain and loss comes from the weakest party in the chain and any weakness in any part will affect negatively the whole supply chain and therefore, the benefits for our company is that there will be stability in supplies and a high level of transparency, commitment, when you help him to reduce his losses, so he can give you better prices. In addition, if he is stable and we have with him [a] partnership, he can give us a priority, rather than others”.*

5.2.2.5 Improving supply chain partnership

All the interviewees agreed on the importance of improving and enhancing the supply chain partnerships. The Manufacturing Manger (Lipton Tea Factory, Unilever Gulf) said that it is so important to improve and enhance the partnership and relation with the company’s core suppliers, and that this is what Unilever is continuously striving to do “*Actually we're strengthening it through our programme what we call the Vertice Plus. The Vertice Plus is under the umbrella of the service string. This is a factory concept wherein we would like to strengthen our relationship with the supplier itself because it has to be known that the supplier, and we as the main customer of the supplier, should have a very close relationship so that even a single gap in the manufacturing operations can be filled immediately, as quickly as possible”.* Similarly, the Planning Manager of Lipton Tea (Unilever Gulf) noted that improving supply chain partnership and especially supplier partnership was so essential: “*we have a programme with our suppliers and [in] that programme we have coming KPIs, which we both meet and then both contribute. We evaluate them based on those targets. And we*

drive actually from them, we have regular meetings with them, regular evaluations as well as we are also trying to get their standards into our standards.[For example when] we order their processes, we have targets for minimum mandatory standards for those processes and we do them together and we share our learning, also we give them training. So these are the programmes that we're running”.

The Lipton Tea Factory Manager (Unilever Mashreq) also emphasised on the importance of improving partnership and working closely with other supply chain partners explaining that *“if we talk from a supplier side, the supplier is a factory including staff and employees, we begin to apply the TQM programme and TQM starts from people. We begin to see whether people as a team [have] common goals and aims, need special skills from each operation or business process. The people responsible for supplier development programme can determine where the gap is and help them to overcome by sending [them] for training in some factories”.*

Helping the supplier to solve his supply chain obstacles is also an activity performed by Unilever to assist its core suppliers as mentioned by the Supply Planning and Logistics Manager who said *“Mainly we can look at having integrated supply chain mindset so we know what are the obstacles he is having in his supply chain and being as a customer to him. So we help him to improve himself for our benefit and for his benefit as well”.*

5.2.2.6 Supplier Development Programme

The interviewees gave examples of how they help and assist their suppliers as a means of improving their supply chain partnerships, especially with their core suppliers. They provided some examples under a program implemented within their company called *“Supplier development programme”*. For example the Lipton Tea Factory Manager (Unilever Mashreq) giving an example implemented under this programme, as he said *“we have some ongoing*

programmes, we have supplier development programme, for example, We applied the TQM, and this programme has been transferred by us to the supplier. we have people who [are] fully trained and are responsible only to develop suppliers and how to enhance relationship with suppliers, how to increase the margin of the suppliers. For example, If I have a supplier it becomes very important for me to make him gain more than to have stable and sustainable work operations so one way is to ask him about his losses, and trying to reach with him to reduce them and therefore to grow and we grow with him”.

Training programmes appeared to be frequently provided by Unilever to their suppliers, as discussed by the Customer Service Manager (for Gulf Business Unit): *“For the company like Unilever we have enough history to actually train the suppliers as well because there are a few suppliers who are supplying to an x, y, z of companies whose values and whose standards are not actually with Unilever. So to make them understand why we want to implement a certain system or a certain regulation in the factory with the supplier is because we want a quality product”.*

The Technical Project Manager (Unilever Gulf for all products) explained: *“We develop our suppliers. So, [in] Unilever we have TPM factories, TPM [means] Total Productive Maintenance. There are not so many companies worldwide who are TPM certified. So, our suppliers we help them to be in that standard of operation, one is TPM because they don’t have the money to invest. Because we teach them about Unilever quality standard, because at the end of the day even if they deliver the materials on time, if it will be rejected and then it will create a lot of issues within the supply chain”.* He also added that they help them in their operational activities, mentioning that *“...As I told you earlier also, that we develop our supplier, we help them in the operation, safety, environment, sustainability, because at the end of the day we source materials and we help also our suppliers to ensure we have a sustainable supply of materials, and that we also do not harm the environment”.*

The HPC (Health Promotion Coordinator) for Lipton Tea Factory identified examples of supplier development programmes: *“Well it's quite healthy and there have been a couple of programmes [through] which we tried to train our suppliers, so that they give us consistent business, so that we can get on time deliveries and we also give them support. We also help them [in] their technicians training, so there is a lot of interchange between the technicians and there is also a lot of transfer of knowledge from Unilever, because Unilever has got a lot of best practices within manufacturing and within the supply chain. So Home Server, we partner [with their] business too. We also make sure that they are also brought up to a certain level so that we don't have any business challenges. So if they need any support, we have a lot of programmes like service teams and TPM”. He also added that “There are a couple of teams working on that, dedicatedly, for supply integrations and suppliers [developments]. So there are people who are leading this. So we have some dedicated systems and programmes for suppliers. In terms of working with all the suppliers we make sure that they are getting good business and they are making enough. So in terms of business sustainability they are also profiting by the Unilever business”.*

Another way of helping their supplier to develop is to share with the suppliers what they call *“wow stories”*, as noted by the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf): *“Actually we're sharing our, [what] we call the ‘wow stories’, the factory has the ‘wow stories’ or the success stories which we share it with them. [For example], it was in March, We sat down with one of the suppliers and showed them this is what we've done, may be you can pick up some of our ‘wow success’ stories and they're really impressed. [We] like it because we have this problem, so we try to help them. We bring to their factory this TPM guy here; we call it the TPM role to teach them. For example we have this service system shutdown. For two hours we bring our guys there, so that our guys will also understand how my packaging material is being made or processed by this company. So you see the relationship and the collaboration between the suppliers and our factory”.* He further explained *“You know what the Vertice Plus means? From us to the suppliers, we are also resolving some of*

their operational constraints. This factory is a very well-known TPM factory, we implement TPM very successfully and with the presentation that we showed with the suppliers, they are very encouraged also to understand what is this all about? Because what we are dealing with here is line improvements and we're offering "you like to understand or to improve your lines?" So we are helping them actually, we are not selfish in imparting whatever technology we have right now".

Other examples of a supplier development focus are provided by the Supply Chain Manager (Unilever Gulf) who mentioned that *"With even one of the biggest suppliers in the regions for plastics, for example I am taking an example in this region; we were the one who encouraged them and actually gave them their entry to the plastic industry. And they're now one of the biggest in the region. So that was 20 years ago. And the same thing for example probably in Egypt, That has also happened with one of the carton, biggest carton supplier in Egypt now, because we actually gave them the money to invest in a machine at that time, 20 years ago. And now they're the biggest suppliers in Egypt, not for us only but for their industry".*

Sharing learning and training programmes are implemented under the supplier development programme, as explained by the Planning Manager of Lipton Tea (Unilever Gulf): *"we have a programme with our suppliers and [in] that programme we have coming KPIs, which we both meet and then both contribute. We evaluate them based on those targets. And we drive actually from them, we have regular meetings with them, regular evaluations as well as we are also trying to get their standards into our standards.[For example when] we order their processes, we have targets for minimum mandatory standards for those processes and we do them together and we share our learning, also we give them training. So these are the programmes that we're running".*

Also the National Supplier Development Manager stressed the importance of supplier development and helping the core suppliers *"Because they are the main*

contributors in having the materials on time and having the materials quickly, for instance, when we started the Vertice Plus programme, we had a lead time of the material from certain suppliers like four weeks or five weeks from the same supplier that used to supply it. This supplier when we started supplier development programme with the suppliers, three years ago, they used to deliver materials in four weeks or five weeks. Now the same materials are delivered in 10 days. Now 10 days is much better than four weeks and five weeks". He also added that "we are developing the suppliers with the help and the aid of a consultant which is from a company called Logic. They are developing the supplier, and the actual development of the supplier is going on from a third party developer which is called Logic. They are developing mainly the structure of the company and the supply chain of the company itself. This is based on our KPIs, our targets, our audits that are done, the questions that are done on the suppliers. So all of these are entered as an input for Logic, and Logic executes all the improvements needed to be up to that level, and year after year we have different targets, different KPIs to be able to shift the supplier to a higher level". He also mentioned that as any long term relationship develops, Unilever will add the new partner to the supplier development programme.

5.2.2.7 SCC4

SCC4 is a programme implemented within Unilever (North Africa Middle East) to measure supplier performance. They are trying to measure the effectiveness of their suppliers so that they are able to help and assist them when required. This was highlighted by the Manufacturing manager (Lipton Tea Factory, Unilever Gulf) who stated that *"We have in the factory [a programme] called the SCC4, this is a supplier measurement programme [through which] we are measuring the effectiveness on how our suppliers are complying on our targets here in the factory. It's a simple thing, we plan, and we make the suppliers inform ahead of time, this week's plan so that they can comply which is immediately on the urgency of the materials that we require for this specific day, that's it"*.

5.2.2.8 Vertice Plus

Vertice Plus is a programme applied within Unilever (North Africa Middle East) to manage its relationships with its core suppliers. It is a programme within the broader supplier development programme. It has been explained by the Manufacturing manager (Lipton Tea Factory, Unilever Gulf) who mentioned that *“Actually we're strengthening it through our programme what we call the Vertice Plus. The Vertice Plus is under the umbrella of the service string. This is a factory concept wherein we would like to strengthen our relationship with the supplier itself because it has to be known that the supplier, and we as the main customer of the supplier, should have a very close relationship so that even a single gap in the manufacturing operations can be filled immediately, as quickly as possible”*. He also added *“You know what the Varsity Plus means? From us to the suppliers, we are also resolving some of their operational constraints. This factory is a very well-known TPM factory, we implement TPM very successfully and with the presentation that we showed with the suppliers, they are very encouraged also to understand what is this all about”*.

It was also explained by the Supply Chain Manager (Unilever Gulf): *“We have a programme here called Vertice Plus and that's more or less our programme to manage our relationships with our suppliers, in terms of development. That programme involves people, involves getting the supplier in the business and building that relationship when it comes to quality, service, price, cost, we do build that relationship in order to make sure that we do improve their capability, while we ensure our ability and service in the market”*.

5.2.2.9 Compliance to work

On asking the interviewees about the partnership features that can characterise their partnership with their main suppliers, they agreed on having what they called *“Compliance to work”*. The Customer Service Manager (for Gulf Business Unit) said *“You know that companies like Unilever ... I mean all the big*

corporations have a certain standard that's called the compliance to work with the supplier. If I take an example of our packaging material supplier for our Lipton factory, he has to adhere to certain rules and regulations under which he can work with us. That can be quality, service,...I mean anything which involves the service criteria of the product. So that's the relationship we have with our suppliers".

5.2.2.10 Reliability

Reliability is an important attribute that can characterise the partnership of Unilever (North Africa Middle East) with its main suppliers. The Customer Service Manager (for Gulf Business Unit) provided some examples of how a reliable supplier is important: *"If our supplier is meeting our standards and is producing according to our demands then when we analyse the performance of the supplier we know it's reliable because the reliability of the supplier is very important before we give a commitment or a long term plan, or we tell them that we will be partnering with you in certain instances, so there is a time which we need to check the reliability as well".* Then he added: *"If we have a third party supplier and he's supplying a chemical to one of our factories, right, and because of some custom problem or something his chemicals get stuck at the port, and now our machines are ready to produce, to manufacture, but the machines are on hold because we don't have the chemical. Why we don't have the chemical? Because the supplier failed to deliver us. Why he failed to deliver us? Because he has a problem back at the port. And why he has a problem? Because there is a change in customs regulation. So if you see there is a chain of events which leads to a certain thing to happen, so that's why having a reliable supplier for an agile supply chain is very important".* He also added that *"If I don't trust my quality which my suppliers are providing me then I will have a quality control department in my factory and checking each individual packaging. But if I trust the supplier and his quality to a certain level and they can reduce the cost here with the double handling because the supplier is servicing, checking quality and I'm also checking on quality. The same partner, with the same everything, if I*

know that my supplier is quite reliable then I can remove the quality check within my factory”.

5.2.2.11 Mutual benefits

Mutual benefit is an important attribute for Unilever (North Africa Middle East)-supplier partnership. This was recommended by the Demand planner (for UAE, for all products) as he stated that “...*they do have partnerships which of course in the long term will be useful to both this company and the supplier. It’s a mutual benefit*”. This was also agreed on by the Customer service manager in the Lipton Tea Factory (Unilever Gulf) who mentioned “*[partnership is] coming from transparency and mutual beneficial, you can say, trust*”.

This also was supported by the National Supplier Development Manager who stated that “*paying on time our invoices which is very important, having a mutual benefit which is improving the quality of the source at the same time improving interface, and we have these suppliers and work [with] the suppliers*”.

5.2.2.12 Commitment

Commitment was considered by most of the interviewees as an important attribute characterising the partnership between Unilever (North Africa Middle East) and its core suppliers. For example the Customer Service Manager (for Gulf Business Unit) stated that commitment resulted from the high level of reliability with their core suppliers encourages Unilever (North Africa Middle East) to have a high level of commitment and to form long term relationships as he said “*If our supplier is meeting our standards and is producing according to our demands then when we analyse the performance of the supplier we know he’s a reliable [supplier] because the reliability of the supplier is very important before we give a commitment or a long term plan, or we tell them that we will be partnering with you in certain instances, so there is a time which we need to*

check the reliability as well". He gave an example: "...for example, if you have committed with your supplier that this is the certain amount of business that you will be providing me in the next two years and then he invests himself into his business so that he can produce more, and then you say "No, no, no, I don't want anything" then it's a commitment, that you tell him this is how much of business I want from you," and then at the end of it you say "I'm sorry." But he's already invested, so it's not his fault. It's your commitment that you did not fulfil. On the other hand, looking from supplier's point of view, if the supplier has committed that he's going to deliver a certain commitment to you and he doesn't deliver, the level of commitment has to be very important. By the way this thing is one of the most important things in supply chain.. For example, I'm telling the sales guy I'm going to give you this much amount of stocks and then at the end of the day when he's ready with the order and he's standing, waiting for the order and I don't give him anything. Commitment leads to loss in sales if it's not met"

Commitment also has been suggested by the Site Quality Manager (for Lipton Tea, Unilever Gulf) as one important attribute for partnership: *"It has to be a trust, it also has to be a commitment, there has to be very clear communications and apart from that information sharing"*.

The Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) stated that there is a high level of professional commitment between Unilever (North Africa Middle East) and its main suppliers: *"It's a fact, yeah. But this is what we would like to understand and they would like us, from them to understand also that there will be a respect in between. What do I mean? They visited [us], they see my [production] lines, but it's a professional deal, it's a professional commitment that whatever lays within this Unilever four corners and the building will stay within here. This is a sort of a gentleman's agreement that we believe because you know it's very encouraging"*.

Commitment has been considered also as a starting point of any partnership as stated by the Customer Service Manager in the Lipton Tea Factory (Unilever

Gulf) who mentioned that *“Commitment is a starting point actually, if he's not committed, you wouldn't trust him in future. So commitment is a basic thing actually, if you don't commit, if the supplier is not committed, you don't even start working with that supplier, that's it. I mean it is a basic thing for me”*.

Commitment and trust are considered together as the important attributes that can characterise the partnership between Unilever (North Africa Middle East) and its core suppliers with a win/win situation. This was stated by the Supply Chain Manager (Unilever Gulf): *“I think that trust would be very important because if you have that trust level mutually that's key, one of the core ones..... [When] you're building a new relationship from scratch, win/win would be more or less your starting point so you'll make sure that both parties have win/win and then you move into trust and commitment”*. He also added that Unilever (North Africa Middle East) is working only with committed suppliers: *“We only work with the committed suppliers. Commitment is very important. If we work with someone who will help you always deliver x amount of products for you every day and they don't, that is a problem, and if they don't do it every day that is a commitment problem which we cannot do. But we have factories and we have chains, so there is so many suppliers bringing so many materials ... So everything has to work together, and if someone is not committed then our first approach would not just to be changing, because we don't want to change the partners, it's just you'd have to get to understand what has gone wrong and we would need to get that sort of clarity first. And usually there is a reason behind that commitment. It's more or less [due to] certain circumstances, that is may be a factory problem or some of their [materials] is not available. So there is usually a reason behind it or an operational issue. And most partners where I've seen, they're basically committed to fixing any problems. And being [a partner to] a big company it's very important for our partners as well, not to lose that relationship”*.

Unilever (North Africa Middle East) is having high level of commitment at both the corporate level and the operational level. This was stated by the Planning Manager of Lipton Tea (Unilever Gulf) who said *“We keep it [commitment] on a company level, on the corporate level as well as the personal level through which*

[they] are working with us on our day-to-day operations. As well as their operations, so it's not only on a corporate level but it's also in the [individual] level, so we have commitment and collaboration with our suppliers”.

Finally the Supply Planning and Logistics Manager described the nature of the commitment that exists between Unilever (North Africa Middle East) and its core suppliers as “*mutual commitment*” as he said: “*we and they are committed, so it's like mutual commitment between the supplier and the company itself*”.

5.2.2.13 Trust

The interviewees were asked about the level or degree of trust that demonstrate their partnership with their core suppliers. Most of them answered that trust is a very important attribute characterising their partnership with core suppliers. Some considered it as the initial step for having strong and successful partnership. The General Planner (for Kuwait and Qatar for all products) stated that “*I think trust is the most important, transparency, Information sharing on time*”.

Similarly the Technical Project Manager (Unilever Gulf, for all products) considered high level of trust is an important attribute for partnership: “*high level of trust of course*”, he also added that Unilever’s code of business principles includes trust: “*[in] Unilever we have a code of business principle. So, that's including trust. So, we even have an agreement with each supplier on the level of trust that we expect our suppliers will do for Unilever*”.

The Site Quality Manager (for Lipton Tea, Unilever Gulf) considered trust as one core force for partnership formation: “*It has to be a trust, it also has to be a commitment, there has to be very clear communications and apart from that, Information sharing*”. He also added that trust between Unilever (North Africa Middle East) and its core suppliers can have several benefits. This is because the

supplier is always able to play important roles, as he stated “.....Then if we have a trust in our supplier, we have this relationship with the supplier, we can adapt into the changes by moulding them and getting all the required stuff that we need because we agree like six months before we want to give them the plan or two weeks before we want to give them the plan. Then sometimes we might not be able to, maybe 99% of the time we do it but even that 1% matters a lot for a company like Unilever. So if we have a relationship and we build up a trust, we can manage that with the help of them because supplier plays a very vital role....So having trust is very important because it's one of the most important things to build a relationship because no relationship can be built if there's no trust”.

The Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) considered partnership as “a matter of trust”, as he said: “It's a matter of trust for me, especially that we don't have much of suppliers, we have [small number] actually because, as I've said, we're only in the packaging operation, majority of them around seven. But the trust is there, which I believe is one of the enablers that are why we have a very good relationship when it comes to delivery of the requirements for the manufacturing”. He also added that “This is the situation, you see the communication is two way. They give priority to our operation; they know that when they fail to supply within 24 hours, the requirement of this factory, this will shut down. Can you imagine the concern of this supplier to our business? That's why I said it's just a matter of trust, it's a confidence that we're in. They will immediately give us feedback, how can we resolve it immediately? How can we be your suppliers, will not shut down your factory. So that's it. The level of communication, the engagement of their commitment to sustain the delivery of operations in the factory [is important]”.

Trust that comes from believing in each other is also considered by the Planning Manager (for Personal Care for Kuwait and Qatar) as important element for partnership who said: “... you need to believe in each other, you need to be able trust each other”. Trust that results from transparency and mutual beneficial is also considered as an element for successful partnership. This was recommended

by the Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) who mentioned that: *“[partnership is] coming from transparency and mutual beneficial, you can say, trust”*. He also added, giving an example: *“Yes technically, for example, if I don't trust my quality which my suppliers are providing me then I will have a quality control department in my factory and checking each individual packaging. But if I trust the supplier and his quality to a certain level and they can reduce the cost here with the double handling because the supplier is servicing, checking quality and I'm also checking on quality. The same partner, with the same everything, if I know that my supplier is quite reliable then I can remove the quality check within my factory. But it doesn't happen like this, it doesn't happen very quickly, this is a journey which happens over a long period of time. So we help the partnership with our supplier and then they basically increase the service, they increase all the KPIs which is their quality and other parameters, we need them gold, silver, bronze. Then we give them a supplier certification which is basically on a consistent performance, high performance. So once it is a good supplier, I can say that I don't want to have a quality check for this material. It helps me in reducing my cost as well as it reduces my inventory. It really helps if I trust my supplier in different parameters”*.

Although the Supply Chain Manager (Unilever Gulf) considered win/win situation and high level of trust as the key elements for successful partnership, he added that a high level of trust is important as it enables Unilever to be able to depend on its core suppliers: *“Well we trust them. We definitely trust them. We trust them with the deliveries. If they don't deliver for us our factories don't work, we're not going to be able to supply customers and consumers our products. So, it's a very high level of trust”*. The Planning Manager of Lipton Tea (Unilever Gulf) considered trust as a vital element for partnership from both parties, states that: *“Of course it's very important. So we are trying to be as trustworthy as possible as well as them we are pushing them to be trustworthy”*.

The Supply Planning and Logistics Manager considered trust and open transparency as the key factors for building strong partnership where he

mentioned that *“The extent of the nature of the information is an open book from the supplier side. If he needs to build a good and strong partnership he needs to be very open with a full transparency and integration and trust as well”*.

Trust was considered as the starting point in a partnership development by the National Supplier Development, who said *“We have to have a bit of trust in the planning of the facility for the supplier who is supplying us”*. Finally Lipton Tea Factory Manager (Unilever Mashreq) mentioned that *“firstly, the first attribute and this is the starting point in our supplier development programme is trust, how to build a high level of trust between us and our suppliers and trust creates transparency and in business, transparency means money. if you are very transparent, [and if] you can have an issue, with high level of transparency you can solve it together, so I think that trust is the beginning and first point to start even with the developing of new suppliers not only the old suppliers in which we are trying to build with them high level of trust”*.

5.2.2.14 Transparency

On asking the interviewees to describe the partnership attributes that can characterise their relationships with their supply chain partners and especially with their main or core suppliers, some of them considered transparency as an important attribute or element for achieving partnership effectively. The General Planner (for Kuwait and Qatar for all products) specified important attributes as including trust, transparency and sharing of information on time: *“I think trust is the most important, transparency, Information sharing on time”*. The Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) mentioned that their very good and strong partnership with their core suppliers is based on transparency, mutual beneficial relationship, and trust: *“[partnership is] coming from transparency and mutual beneficial, you can say, trust”*. The Supply Chain Manager (Unilever Gulf) also stated that the transparency of information to softer with the transfer of information within the whole supply chain can have a positive impact and plays an important role to enable the company to become

more capable in responding to market changes, and in a speedily manner: *“And I would say responsiveness depends on one main thing which is transparency of information. And if you can see the information down in your supply chain and you can translate into the whole supply chain, [it] would be an accuracy, that’s where you should become responsive as much as you can. If you can see the order from Carrefour and can transmit that down the chain accurately and in a more automated manner that you’re actually gearing up your orders and your production behind that. And that’s where more or less you can respond faster to chain changes”*. The Supply Planning and Logistics Manager also recommended the importance of transparency as he stated: *“it’s done through regular meetings and open discussion and transparency”*. He added that the supplier should be fully transparent and trustful to enable the partnership to be strong: *“The extent of the nature of the information is an open book from the supplier side. If he needs to build a good and strong partnership he needs to be very open with a full transparency of himself and integration and trust as well”*. Transparency was a concern of the National Supplier Development Manager who insisted that *“it would have to be transparent; I cannot invite the supplier and tell him I have a problem on the lines because of the productivity of your product, and if he asks to see the production line, or to see a trial or to have a trial in our site tell him, “No we are very sorry this is confidential. We cannot let you in our field, we cannot give you a right report about what is going on exactly just the items are not running there is a quality defect. But we cannot tell you what exactly is going on”*. Finally the Lipton Tea Factory Manager (Unilever Mashreq) related transparency to monetary value *“money”*, where on asking him to describe the characteristics of partnership that exists between his company and their main suppliers: *“the first attribute and the starting point in our supplier development programme is trust, how to build a high level of trust between us and our suppliers. Trust creates transparency and in business transparency means money, if you are very transparent you can have an issue with high level of transparency you can solve it together”*.

5.2.2.15 Openness

Openness was considered by many of the interviewees in Unilever as one attribute characterising their partnership with their core suppliers. For example, the Manufacturing manager (Lipton Tea Factory, Unilever Gulf) who focused on the importance of the openness as a key factor for successful partnership and that the company has to be clearly open with its supply chain partner because this ends up with high level and strong relationship: *“It [openness] really plays a vital role because you see how you become open with one another leads to a very good relationship at the end...”*. He also added that *“Relationship with the supplier, we just make sure that whatever we plan for this month, are ahead of time agreed with them. We would like to be as open as possible as far as our planning requirement is concerned. Why? Simply because we don't like stopping this interlink. We are hitting a very ambitious target this year of 93%, being at 93% globally is really ambitious for the factory and we really need a very open book requirement with the suppliers. That's why if you notice we have this practice in the factory that we are meeting the suppliers, especially on the quality and the supply point of view that they are coming here, so that we can discuss, okay. Will it be possible for you to comply with the requirements? [If they say] Yes no problem. So we make it a point, we're really very open with one another because this is the relationship that we would like to establish with them. The relationship is not all about earning money, although we and the suppliers are aiming to grow the business. But as we grow the business we would like to strengthen the relationship within the business”*.

Openness was also considered by the Planning Manager (for Personal Care for Kuwait and Qatar) as an important partnership attribute that can lead to or help to achieve long term gains: *“...so working like partners there's definitely the form of support, there's the ability to [be] open [and] communicate. If there is a problem and you have open communication with your supplier you're able to resolve those problems together for the benefit of the company and the business. So I think the openness that comes as a partnership is very important as you're looking at long*

term goals, so it's not short term, it is not something that's going to come today and not have a long term benefit”.

Open discussions and regular meetings and transparency were considered as important key factors for partnership, as recommended by the Supply Planning and Logistics Manager, who said *“So it’s done through regular meetings and open discussion and transparency”*. He also added that openness can help building a strong and a good partnership: *“The extent of the nature of the information is an open book from the supplier side. If he needs to build a good and strong partnership he needs to be very open with a full transparency and integration and trust as well”*.

5.2.2.16 Shared targets/vision

Shared targets/vision was considered as one attribute for buyer-supplier partnership. Shared targets and common vision is essential factor for implementing beneficial partnership. This was recommended by the Planning Manager (for Personal Care for Kuwait and Qatar) who mentioned that *“...having the vision of a combined goal, both working towards the same direction of achieving targets. So I think you have to have shared targets, shared vision”*.

5.2.2.17 Believe in each other

Another attribute for successful partnership is to believe in each other. This was recommended by the Planning Manager (for Personal Care for Kuwait and Qatar) who mentioned that *“...I think, [it] may be belief would be on top of it, you need to believe in each other, you need to be able trust each other but I think everything else is very close together”*.

5.2.2.18 Non-priced basis

Partnership that is based on the non-priced basis is an important factor recommended by the Supply Chain Manager (Unilever Gulf) who said that *“the old mentality of just rely on a price, the delivery basis with a supplier, it doesn’t work anymore. It can work with stationery order for example, if they’re a stationery supplier, you don’t have a big relationship, and it’s not a big deal. But when it comes to the big [core] supplier you cannot deal with them anymore on the price basis, so going there and getting the best price in the market, that is not the case anymore because in many cases you find that, yes, you can get a better price, however the relationship is more important than the price, and that’s where the emphasis is on that, to make sure that we have the strong relationship, which will enable us to get the best of course. At the same time it enables us to grow with those suppliers and for them to grow with us as well”*.

5.2.2.19 Win-Win relationship

Win-win relationship was an important partnership attribute identified by most of the interviewees as the primary key factor for successful partnership formation. This was supported by the Supply Chain Manager (Unilever Gulf) who mentioned that *“I think we have to start with win/win, that’s the first real thing. They’re all important, but the first thing I would say it’s a win/win, that’s where the relationships picks up, so both parties are agreeing and sharing on a win-win”*. He also added that it is important to start with win-win relationship especially when the company is forming a partnership with a new supplier: *“[if] you’re building a new relationship from scratch, win/win would be more or less your starting point so you’ll make sure that both parties have win/win”*.

Win-win relationship was also considered by the Planning Manager of Lipton Tea (Unilever Gulf) as the most important key element for partnership implementation. He said that *“absolutely of course win/win would be the most important, that there should be no business will commitment to another business*

without having win-win. Win-win is the most important one because unless they don't see the benefits, none of the suppliers will be [willing] to work with you". He also added that win-win relationship always leads to long term partnership with core suppliers: "Well we are targeting for a long term partnership with our supplier, with which we're trying to have a win/win relationship with them".

The Supply Planning and Logistics Manager suggested that the form of partnership that exists between his company and its core suppliers is taking the form of a win-win relationship: *"If I could describe it in one word it's a partnership, we're having a good partnership with our suppliers, and the form of such relationship is a partnership relationship depending on a win-win situation". He also added that win-win relationship is the basis necessary for any partnership to be implemented in a successful manner: "the key success of having a partnership is a win-win situation. So you can find the point when you have a win/ win situation between the company and the supplier".*

Finally the Lipton Tea Factory Manager (Unilever Mashreq) also recommended that win-win situation is a key factor for partnership: *"... second feature that can characterise our partnership with suppliers is win-win situation we are not working to have benefits only for our own company however we are working together to have benefits for both sides and this is very important for him to believe that we are not intending to benefit only for our own sake, there are several examples for this, for example, I was leading a project and we were dealing with one of our suppliers and after he worked on it and spent time and efforts due to changes in the market we were enforced to conceal the project and this is very good example for partnership, and high level of transparency that we met with each other and discussed what is the investment and money spent and we compensate him despite that the project concealed and we didn't work with each other however we gained a high level of trustful supplier who will give me now that priority than others".*

5.2.2.20 Integration

Integration was recommended by the Supply Planning and Logistics Manager as one attribute for building and maintaining strong partnership, alongside openness, transparency and trust: *“The extent of the nature of the information is an open book from the supplier side. If he needs to build a good and strong partnership he needs to be very open with a full transparency and integration and trust as well”*.

5.2.2.21 Small number of suppliers

Small number of suppliers is another important factor characterising the partnership between Unilever (North Africa Middle East) and its core suppliers. This was recommended by the Lipton Tea Factory Manager (Unilever Mashreq) who explained: *“from a traditional point of view, people were thinking that having more than one supplier can grantee for them or make them feel more safe that if something wrong happen with their supplier or he falls down, they can transfer (move) to another supplier quickly for their sake. However from experience, we can consider that this is a wrong way of thinking and that it is much better to have the least possible number of suppliers with the maximum level of relationships between us as a form of partnerships. For example, there are some activities are managed nowadays by suppliers and there are some common systems between us. For example, there is an electronic data exchange through which he can determine when the stock starts to decrease inside my plant and enable him to fulfil it directly and quickly. I can give some examples, there are some materials items which are supplied by only one supplier and this is on a global basis. There are one or two suppliers only supplying Unilever the materials for such items on a global level”*. He also added that *“...we can consider our relationship with our main supplier as a forecasted based partnership, this means that I don’t go and give him orders of purchase, however, we have high level of transparency and openness, he works on this and we are big company even if something wrong out of control happen, we have the ability*

to manage and compensate him and fulfil our commitment with him, and this is very respected by our supplier”.

5.2.2.22 Long term contract

Long term contract was considered by some interviewees as an important partnership attribute. For example the Demand Planner (for UAE for all products) considered it as “*very important*” as he said: “*...long term contract is very important*”. It was also considered by the HPC (Health Promotion Coordinator) for Lipton Tea Factory as characterising their relationships with most of their core suppliers, where he specified that these contracts are almost between three years to five years and sometimes more than five years: “*what we have with the supplier is a long-term relationship with many of our suppliers... most of the contracts are like three year to five years or may be more than that*”. the Planning Manager of Lipton Tea (Unilever Gulf) considered the form of the relationship between Unilever (North Africa Middle East) and its core suppliers as “*long term partnership*” based on win-win situation, as he said: “*Well we are targeting for a long term partnership with our supplier, with which we’re trying to have a win/win relationship with them*”.

5.2.2.23 Collaboration

On asking the interviewees about the level or the degree of cooperation which demonstrate their relationship with their main suppliers, almost all of them answered that they have a high level of collaboration and that there are several collaborative practices that exist between their company and their core suppliers. For example, the Customer Service Manager (for Gulf Business Unit) considered it as a key factor yielding benefits for both parties: the supplier as well as the company: “*You always do the collaboration when you have to share the resources. So, for example, there are machines required to do step 1, 2, 3, 4, and 5. So I’m one company and you are another company. I only have machines to do the first three steps. You only have the machines to do the last two steps. So if we*

collaborate, I don't need to invest in the next two steps and you don't need to invest in the first three steps". Collaboration was also considered as an important attribute for characterising partnership between Unilever (North Africa Middle East) and its main suppliers by the General Planner (for Kuwait and Qatar for all products) who mentioned that "It's more I think of information sharing and working together...Because information sharing and collaboration is essential". He also added that collaboration existence between the company and its core suppliers can enable the core supplier to provide the company with its requirements and needs in a quicker manner: "Second would be taking this collaboration back to your suppliers as well so that they can provide you with what you need as soon as you can". Giving examples for the level of collaboration between Unilever (North Africa Middle East) and its core suppliers, the Site Quality Manager (for Lipton Tea, Unilever Gulf) who mentioned that "we have a system in place where by we identify all the issues that they have in terms of the product that we need and also the response that we need to give them in terms of the problems that we have. So we identify problems on both sides and we work together to sort those problems...there are times when we need to change our innovation, we need to change our product, we need to create some samples. So we can go back to them saying that okay we planned for this and there's an issue with this, let's not produce this, let's produce another product". He also added that high level of collaboration can enable the company to be more able to react to the market: "we have a collaborative system in place as we are so collaborative, we will be able to make out what work can be achieved out of our suppliers so we can react". The Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) also gave an example for the degree of collaboration that exist between his company and its main suppliers: "Actually we're sharing our, [what] we call the wow stories, the factory has the wow stories or the success stories which we share it with them. [For example], it was in March, we sat down with one of the suppliers to which we showed them this is what we've done, may be you can pick up some of our wow success stories and they're really impressed. "[We] like it because we have this problem", so we try to help them. We bring to their factory this TPM guy here; we call it the TPM role to teach them. For example we have this service system shutdown. For two hours we bring our guys there, another supplier. So that our guys will also understand how my packaging

material is being made or processed by this company. So you see the relationship and the collaboration between the suppliers and our factory". This was also recommended by the Supply Chain Manager (Unilever Gulf) who insisted on having different systems that can facilitate the collaborative practices between Unilever (North Africa Middle East) and its main suppliers: "We do have different systems for collaboration. So we've got systems where they can go in and they can basically review our requirements on [a] day-to-day and finish that. And we have another system for basically sending them orders through email. So it depends on the material and the suppliers as well, it's a mixture of both". As an element for successful partnership, collaboration was considered as an important key factor for partnership as recommended by the Planning Manager of Lipton Tea (Unilever Gulf) who added that collaboration is demonstrated at both corporate and operational levels: "We keep it [commitment] on a company level, on the corporate level as well as the personal level through which [they] are working with us on our day-to-day operations. As well as their operations, so it's not only on a corporate level but it's also in the [individual] level, so we have commitment and collaboration with our suppliers". She also emphasised that collaboration is essentially important with high level of communication as she mentioned "We are trying to improve our communications. We have just implemented a communication tool with our suppliers where we have web interfaces, where they see our future for that, our day-to-day call up or our talk information and where we see when they ship the product that you require, what are the goods in transit and as well as they see their future confirmation. We also willing to collaborate too while communicating with them". Common projects such as that on the environmental concerns as commonly worked on by Unilever (North Africa Middle East) and its core suppliers. This was recommended by the Supply Planning and Logistics Manager who said: "We are having common projects that we can do together. [Can you give me some examples?] Yes, some examples in this aspect may be the new projects being launched [to the] environmental projects". Collaboration was combined with trust, mutual benefits and win-win situation as key factors for successful supply chain partnership by the National Supplier Development Manager who mentioned that without collaboration the company will not be able to achieve its targets: "definitely, Collaboration is very important because if

there is no collaboration from both sides ...you can never reach our targets and KPIs". Another means of collaboration that exists between Unilever (North Africa Middle East) and its core suppliers is "*direct interface*" mentioned by the Lipton Tea Factory Manager (Unilever Mashreq) who said that "*now the data is shared through direct interface once the stock is finished, he can directly know and begin to work on it as a direct order of purchase*".

5.2.3 Information sharing

The following three open codes were derived from the open coding analysis; namely communication, sharing of information, and information technology.

5.2.3.1 Communication

Communication is another attribute that was highlighted by several interviewees as an important factor characterising Unilever (North Africa Middle East) supply chain partnership with core suppliers. For example, the Site Quality Manager (for Lipton Tea, Unilever Gulf) suggested that communication between his company and its core suppliers can enable them to grow: "*our relationships with our suppliers are very good, we have very clear communications whereby we talk about all issues that they have and issues that we have and we've been able to grow*". He also added that communication beside trust, are key factors for successful partnerships: "*It has to be a trust, it also has to be a commitment, there has to be very clear communications and apart from that Information sharing*". He emphasised on the importance of communication and information on achieving more agility level as it enables them to be more able to react and respond to market changes: "*it [information, communication] does because information or communication, the name of it is communication, and that's the most important factor for an industry like ours whereby the more information or communication we have, the better we will be able to react and that makes us more agile, more perfect as a company in the market*". He also put it as a means for improving partnerships with core supply chain partners as he recommended that identification of existing gaps and issues from both sides, better

understanding each other and trying to solve existing and future problems can assist in enhancing the supply chain partnerships: *“We improve with clear communications, by identifying all the gaps that we have from their side and our side because problems do not always arise one side, it could be both sides...It's a better understanding, knowing each other's problems in the past or other issues in the past and also knowing the forecast for the future”*. He also gave an example for the level of communication that exists between his company and its core suppliers, where they have to return back to their core suppliers in case of new innovations or changing of existing products in order to take their opinions as their partners: *“...there are times when we need to change our innovation, we need to change our product, we need to create some samples. So we can go back to them saying that okay we planned for this and there's an issue with this, let's not produce this, let's produce another product...”*.

The Manufacturing manager (Lipton Tea Factory, Unilever Gulf) insisted on the importance of communication as key factor for solving several problems and especially in a packaging industry which he described as a “dynamic” industry. He also considered communication as the way through which understanding between both parties can be done effectively, stating that *“..... I mean [in] a packaging operation like this with different scales is really dynamic and only communication can resolve all these issues. It does all about communication will always be the perfect channel of understanding one another”*. He also gave an example for how a clear communication between his factory and its core suppliers can minimise the shutting down or stopping of operations: *“This is the situation, the communication is two way. They give priority to our operation; they know that when they fail to supply within 24 hours, the requirement of this factory, this will shut down. Can you imagine the concern of this supplier to our business? That's why I said it's just a matter of trust, it's a confidence that we're in. They will immediately give us feedback, how can we resolve it immediately? How can we be your suppliers, will not shut down your factory. So that's it. The level of communication, the engagement of their commitment to sustain the delivery of operations in the factory [is important]. Why? Because they believe that this factory has a one role concept, 365 days a year, no stopping of perfecta.*

Perfecta is the technology that we are adapting here to produce a teabag that is running at a 407 teabags per minute. So at the end of the day every hour I'm expecting 1 million teabags delivery for the factory, I have 52 of those. So that's it, I shouldn't fall behind in my production that's why it's very tough and we made sure that these suppliers, they know our target”.

This was recommended also from the planning point of view. For example, the Planning Manager (for Personal Care, for Kuwait and Qatar) specified communication as the most important factor for partnership and she described it as being open with two way communications: *“I think the foremost important factor is communication as two ways, open communication.. Because it is logistically in a different country, we work very closely with them. So on a day to day basis you will have communication, you will have updates coming in from when, what is required, and how...”*. This was supported by Planning Manager of Lipton Tea (Unilever Gulf) who mentioned that Unilever (North Africa Middle East) is improving its communication within its supply chain and especially with their core suppliers where they implement communication tools and systems to facilitate the communication process and enhance their collaboration: *“We are trying to improve our communications. We have just implemented a communication tool with our suppliers where we have web interfaces, where they see our future for that, our day-to-day call up or our talk information and where we see when they ship the product that you require, what are the goods in transit and as well as they see their future confirmation. We also willing to collaborate too while communicating with them”*.

5.2.3.2 Sharing of information

An important element within the empirical partnership evidence gathering part of the interview protocol was to collect rich data on the extent and the nature of information flow that takes place between Unilever (North Africa Middle East) and its supply chain partners and especially its core supply companies. Data sharing was considered to be a risky issue in the past, where the company as well

as the suppliers were worried about sharing of information, however nowadays sharing of information is taking place to a high degree and at all levels. The Lipton Tea Factory Manager (Unilever Mashreq) asserted that there are several interfaces between Unilever (North Africa Middle East) and its core suppliers: *“there are direct interfaces between the company and its suppliers. At the beginning of the interface, even [away from] Egypt, people on both sides were worried. However now the data is shared through direct interfaces, once the stock is finished he can directly know and begin to work on it as a direct order of purchase”*. the Site Quality Manager (for Lipton Tea Unilever Gulf) considered that information sharing was a very important attribute for achieving partnership alongside the existence of trust, commitment, and clear communication: *“It has to be a trust, it also has to be a commitment, there has to be very clear communications and apart from that Information sharing”*. He also added that information and a high level of communication are essential factors for achieving agility and to be better able to respond and react to market changes: *“Yes it does because information or communication, the name of it is communication, and that's the most important factor for an industry like ours where by the more information or communication we have, the better we will be able to react and that makes us more agile, more perfect as a company in the market”*. Sharing of information with core suppliers was also highlighted by the General Planner (for Kuwait and Qatar all products) who said that *“It's more I think of information sharing and working together...Because information sharing and collaboration is essential”*.

Sharing of information arguably is essential when the supply companies are in different countries. Unilever is a multinational working with different suppliers in several countries, so information sharing becomes a necessity for Unilever and its suppliers in order to ensure quality. For example, the Demand Planner (for UAE for all products) noted *“A supplier sitting in a different continent or different country but having visibility on your warehousing and able to check and see whenever the raw materials unit fall below a certain level, the supplier will see this on his system and replenish your warehouse with these raw materials instantly. So information technology has played a significant role in improving*

collaboration between suppliers and customers. This is a good example". The Supply Planning and Logistics Manager mentioned that it was not only the sharing of information that is important, but also the speed of spreading the information. He also emphasised that on the nature of the information coming from the supplier has to be characterised by openness: "As I told you sharing information is important and the speed of sharing is very important as well...The extent of the nature of the information is an open book from the supplier side".

Among the kind of information that is being shared between Unilever (North Africa Middle East) and its many suppliers is the production plans for the future, so that they are able to work on it jointly to fulfil Unilever's requirements, as noted by the Customer Service Manager (for Gulf Business Unit) who stated that *"For example, they would know what they have to produce in the next two years, so they will have production plans for the two years".* This has been recommended by the HPC (Health Promotion Coordinator) for Lipton Tea Factory who stated: *"in terms of planning, if you look into the particular planning, if you have the planning systems integrated with the suppliers, like what we are trying, for some level we have achieved with a few of the suppliers and materials. If you have that flexibility, if you have that trust and if you have that coordination with the suppliers, planning, particularly production planning or demand planning can be increased and can be done very effectively".* He also insisted on another means of sharing information, namely the programmes and training courses in best practices that are shared between his company and its core suppliers who said: *"We have been sharing our knowledge and many other things with all the suppliers, is all about information sharing and learning from the best practices. So if it is particularly our customers and suppliers, we share the best practices. We have design systems and processes for the supply of customers. Our supply chain team works very closely with them and definitely that involves a lot of information sharing on the systems and within the supply chain".* the planning requirements and needs for the future within the manufacturing factory plant were also mentioned by the Manufacturing manager (Lipton Tea Factory, Unilever Gulf) which he described as enabling them to easily able to measure the effectiveness of their suppliers through the SCC4

programme: *“We have this in the factory called the SCC4, this is a supplier measurement wherein we are measuring the effectiveness on how our suppliers is complying on our targets here in the factory. It's a simple thing, we plan, and we make the suppliers inform ahead of time, this week's plan so that they can comply which is immediately on the urgency of the materials that we require for this specific day”*.

The Supply Chain Manager (Unilever Gulf) focused on the importance of information sharing, and especially on the transparency of information and the spread of that information throughout the whole supply chain in terms of the responsiveness of the whole supply chain and on their ability to respond and react to the market changes: *“I would say responsiveness depends on one main thing which is transparency of information. And if you can see the information down in your supply chain and you can translate into the whole supply chain, [it] would be an accuracy, that's where you should become responsive as much as you can. If you can see the order come from Carrefour, and you can see that and can transmit that down the chain accurately and in a more automated manner that you're actually gearing up your orders and your production behind that. And that's where more or less you can respond faster to chain changes”*. Sharing of information is also related to communication. In this vein, Unilever (North Africa Middle East) has implemented some communication means to improve and enhance their information sharing as the Planning Manager of Lipton Tea for (Unilever Gulf) stated: *“We are trying to improve our communications. We have just implemented a communication tool with our suppliers where we have web interfaces, communication with our suppliers where they see our future for that, our day-to-day call up or our talk information and where we see when they ship the product that you require, what are the goods in transit and as well as they see their future confirmation. We also willing to collaborate too while communicating with them”*. Sharing of information was considered as an important element in any supply chain as described by the National Supplier Development Manager who said that *“Definitely, definitely, supply chain is a transformation of goods from side to side and opposite direction is the distribution of the information”*. He also added that *“there was enough sharing*

of information even before having high levels of technological means for sharing information or the required communication tools between Unilever and its main suppliers and now this information sharing is increasing to a satisfied level". He stated that " Information sharing was very important in the first place, even if you don't have the right tools to do it but at least sharing a simple thing like a forecast would make a huge benefit to the supplier in terms of flexibility. If I don't share the forecast of supply [materials] in certain specific period then the supplier is not ready, the supplier can't see the future or my future". Finally the Lipton Tea Factory Manager (Unilever Mashreq) stated that they are using a high level of technology in sharing information between Unilever and its main suppliers: "we deal with ERPs which are high level of technology which can considered as a good example of information flows and information technology that flows between both sides".

5.2.3.3 Information technology

The interview protocol included a question which asked the interviewees about the extent of use of technological advances for sharing of information and helping their suppliers. Most of them agreed on the importance of a high level of use of technological advances. It was apparent that they considered the supply chain to be a complex issue that required the companies to use a high level of technology and information technological advances in order to face the challenges. As the Customer Service Manager (for Gulf Business Unit) argued *"It cannot happen because those days are gone when people used to do things manually and all that. So supply chain is very complex now. Supply chain is too deep as far as IT processes are concerned. There's a huge IT processes influx in this, so I mean without that there is nothing"*. There are systems implemented by Unilever (North Africa Middle East) to facilitate the sharing of information, as mentioned by the Site Quality Manager (for Lipton Tea Unilever Gulf): *"we have a system in place whereby we identify all the issues that they have in terms of the product that we need and also the response that we need to give them in terms of the problems that we have. So we identify problems on both sides and we work together to sort those problems"*. Using a high level of technology for

information sharing can play a vital role in achieving and enhancing the level of collaboration between the company and the suppliers as well as the customer. As the Demand Planner (for UAE, for all products) stated: *“A supplier sitting in a different continent or different country but having visibility on your warehousing and able to check and see whenever the raw materials unit fall below a certain level, the supplier will see this on his system and replenish your warehouse with these raw materials instantly. So information technology has played a significant role in improving collaboration between suppliers and customers. This is a good example”*. The Supply Chain Manager (Unilever Gulf) similarly noted that *“We do have different systems for collaboration. So we’ve got systems where they can go in and they can basically review our requirements on day-to-day and finish that. And we have another system for basically sending them orders through email. So it depends on the material and the suppliers as well, it’s a mixture of both”*. He also added that the transparency of information and its full and accurate spread across the whole supply chain, through some automation, has an important role in increasing the whole supply chain responsiveness level: *“I would say responsiveness depends on one main thing which is transparency of information. And if you can see the information down in your supply chain and you can translate into the whole supply chain, would be an accuracy, that’s where you should become responsive as much as you can. If you can see the order come from Carrefour and you can see that and can transmit that down the chain accurately and in a more automated manner, that you’re actually gearing up your orders and your production behind that. And that’s where more or less you can respond faster to chain changes”*. The Planning Manager (of Lipton Tea Unilever Gulf) highlighted that information sharing and communication through web interfaces can increase and enhance their communication and collaboration: *“We are trying to improve our communications. We have just implemented a communication tool with our suppliers where we have web interfaces, communication with our suppliers where they see our future for that, our day-to-day call up or our talk information and where we see when they ship the product that you require, what are the goods in transit and as well as they see their future confirmation. We also willing to collaborate too while communicating with them”*. She also added that the technological advances can play a role in improving and enhancing the data frequency and this can lead to an increase in

supplier ability to be able to match with their needs and requirements as she said that “*yeah because the information tool improves the frequency and the ability of the data that you are providing to the suppliers, so that they become more able to meet with your requirements*”. The Supply Planning and Logistics Manager focused on the importance of information technology: “[*We*] *talk about using the top-tech technologies between us...We are having emails, video conferences, all this sorts of things, if the supplier is ready*”. the National Supplier Development Manager also accounted importance of information technology where he mentioned that in the past they were working manually , however nowadays they are using a high level of technological advances: “*...returning back to the IT point we used to make everything manual and now lots of things are communicated. Even now the invoices and receipts are communicated through the [technology means]. We don't have to send emails going back and forth about the status of the invoice number. I don't' know what the status of the payment of check no. It's managed by the new system. It reduces the headic and the effort of the people, and it's more accurate of course*”. He also provided an example for a system implemented within Unilever to facilitate the communication and sharing of information with other supply chain partners as previously mentioned: “*Now we have a new system embedded in our supply chain system and ERP system, which sends automatically the forecast automatically ... So now we have this software, which sends automatically the forecast and shows all the time the minimum stock and the maximum stock of this material. Some other more advanced relationships with the supplier even let the planning side be done by the supplier. We think that this is a very advanced level than what we have right now. It's that the cool offs of the material are done by the supplier, not by Unilever. In terms of what, in terms of the planner supplies the minimum stock value and the maximum stock value for this item and supplier goes on the system, logs on the system and sees the level of the material, and once it reaches the minimum level that he supplies automatically without a purchase order and without anything to Unilever with the material. So the call offs, decision making specifications is made by the supplier*”. As mentioned previously in the sub section related the sharing of information, the Lipton Tea Factory Manager (Unilever Mashreq) who said that “*we deal with ERPs which*

are high level of technology which can considered as a good example of information flows and information technology that flows between both sides”.

5.2.4 Agility evidence

The fourth part in the interview protocol was about the agility within the company’s supply chain. It involved questions to substitute the need for agility in supply chain of companies working in FMCGs industry. It also involved questions about the main attributes that can improve and enhance agility levels within the company’s supply chain, and questions about the means or the practices that are implemented by Unilever (North Africa Middle East) to improve or enhance its support to its overall supply chain partners in order to achieve a high level of supply chain agility. Eleven open codes emerged from the analysis.

5.2.4.1 Need for agility

Most of the interviewees suggested that an industry like FMCGs was a very dynamic and complex type of industry which forces all companies working within the industry to improve and enhance their agility. the Demand Planner (for UAE for all products) highlighted this idea mentioning that there is no Unilever business that is not facing changes, and that they have to be able to cope with and deal with such changes, and that the solution for this is to be agile: *“Definitely, I mean no business is ever constant. For you to improve, you need to [solve] coming up changes, so definitely this company is open to changes whenever they come. We adjust. We improve the process. We review and find whatever part of the business needs to be improved. That’s agility to take up the main dynamic changes”*. This view is supported by the General Planner (handling Kuwait and Qatar for all products) who mentioned that with the developing of all the companies and the market as a whole, the need for agility had increased and become more important: *“all companies are developing, the market is developing, especially now with the economic situation I think the market is more*

difficult. So, we need to ensure that we don't lose any opportunity in the market. Being less agile means that we have a loss of opportunity and that's why I think it's very important. If your competitor gets there to the market before you, we lose an opportunity of sales". Agility was also considered as the means or the solution to face all challenges that appear in the market environment FMCG firms as stated by the Technical Project Manager (Unilever Gulf for all products): *"sometimes there are lot of challenges and we need to be agile".* The Site Quality Manager (for Lipton Tea Unilever Gulf) highlighted the importance of agility, noting that there is now a high level of competition in such type of industry and to be at the top of the market, you have to be agile, and especially in relation to your new technological level and innovation as the basis for achieving agility: *"Yeah because if you go to the market there are a lot of innovations every day and there's a lot of competition every day. So to lead that and to be on top of decisions we had to be very agile, we have to be on top of the issues. We need to have all the technology that we need to have; we need to have innovation on the part of our business, so we have to."* Unilever (North Africa Middle East) is working in a type of industry and inside a market environment that needs to have agility within their supply chain for competing on many terms as mentioned by the HPC (Health Promotion Coordinator) for Lipton Tea Factory: *"we believe this market is agile, the whole company is agile in terms of the business, in terms of market capitalisation, in terms of business innovation, in terms of local competitions, in terms of better branding in terms of better business development, in terms of the customer environment and the CMIs, I believe this is the case [and] we need to be".*

From a manufacturing point of view and operational perspective, agility is also very important to enable the company to deal with any challenges and to better react to all operational gaps, as stated by the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) *"in manufacturing you have to be multi-functional in a sense and very specifically because the operation is dynamic, it doesn't follow a pattern. Like for example, there's a set schedule that you have to do this time or this day or this shift of the day. Then I give a situation, there is a negative response from the supplier and we really have to run this factory continuously.*

So agility should always be there because it combines with more on flexibility on how we can be able to cope with all these gaps that we have in our operations”. The importance of agile supply chain and its role in helping the companies to be able to survive inside this dynamic and complex business environment was stressed by the Planning Manager (for Personal Care for Kuwait and Qatar) who argued that *“Of course, the whole world is moving towards an agile supply chain. If we are not going to be agile in the industry that we're performing we'll be left far behind, so there is a very crucial need that we move towards being the most agile supply chain in the industry to be able to survive”.* She also added that the need for agility is increased when dealing with a type of industry like that of the FMCGs, where there is very high competition, and that to be able to cope with it, the company has to maximise its efforts to achieve as a high level of agility as possible within its supply chain: *“in any sort of FMCG business, your competitor is trying to get bigger innovations, better innovations, faster to the market to meet the consumer needs. We're all in it for the same; you want to satisfy the customer faster, quicker, and better than anyone else. my business is dynamic that is the need of the market, The need for agility... so on that context if I want to satisfy my consumer faster than my competitor I need to be agile, I need to be able to deliver in the shortest possible time with the maximum benefit”.*

Working to achieve a high level of agility and flexibility should be common with other supply chain partners and especially with the supply companies, as mentioned by the Supply Chain Manager (Unilever Gulf): *“Of course that agility and flexibility not only in our hands because we have other suppliers who need to be as fast as we are. We've got to deliver products with them”.* He also focused on the importance of agility and flexibility as the reasons for staying inside the market place: *“That's not a negotiable for us. You can't also sustain nowadays without being agile, because in fact you have to be agile, you have to be flexible, and you have to be fast, if you're not, you're out of the game, as simple as that because everyone is actually doing the same. But it's more or less now this is what you have to do”.* The Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) emphasised the idea that without agility, Unilever (North Africa Middle East) will not be able to effectively operate within its industry as market

changes affects Unilever (North Africa Middle East) directly or indirectly: *“definitely in the markets, they're constantly changing. They're changing not only locally but worldwide also. So any issues that are happening or any change happening directly affects us, either directly or indirectly affects us. All companies need to be agile otherwise you will always risk being pushed into a corner in an operation where you are left far behind what the market is doing. So I can say like in the supply chain, in marketing, in sales there are always new techniques coming on the market to which a company needs to adapt and implement. Unilever I would say is a leader in this kind of activity, we adapt best practices, world practices but we also, I can say, are diverse in developing new practices. So it's one step further, not only implementing but we also try to do best practice within ourselves, with our suppliers, with our customers”*. The Planning Manager of Lipton Tea (Unilever Gulf) insisted on the importance of agility, and especially which is based on speed abilities which he described as the most important attribute that helps the company stay inside its marketplace and without it the company may lose out significantly: *“we have some really targets as being agile in our market, to react to market changes as fast as we can. We are targeting to be the market leader in our sector. The market changes are very fast now. And if you don't respond to them quicker, if you are not the quickest you lose”*. The Supply Planning and Logistics Manager also emphasised the importance of being agile to the business environment: *“I think it's very important to be agile especially with the dynamics of the market now”*. Similarly, the National Supplier Development Manager mentioned that with the new management for Unilever global, achieving 100% agility within its supply chain has become one core goal for Unilever: *“our new Vice President and what he's insisted on is that we need to be 100% agile supply chain to improve”*. Finally, the Lipton Tea Factory Manager (Unilever Mashreq) mentioned that they are working in a very dynamic environment which contains a high level of uncertainty, especially in the Middle East where there are several challenges that Unilever (North Africa Middle East) as a company has to face: *“I think that what takes a big percentage of Unilever portfolio is FMCGs. It is very dynamic and hard to deal with, uncertainty is high, there was a plan, but there is a degree of risk and bias and with FMCGs there is always high level of risk and this needs very agile and flexible supply chain, for example, from how many years the*

hypermarkets have opened in the Egyptian markets, every year the behaviour of the customer differs even within the near future time, the customers are dealing differently, you can't imagine or expect what in the second half of the year will be the behaviour of the customer, so you need to face to deal with your competition. This puts pressure on the supply chain to react in a fast manner to face competition”.

5.2.4.2 Responsibility

Responsibility is an attribute for achieving supply chain agility according to the Customer Service Manager (for Gulf Business Unit) who explained “*So he's [supplier] going to be more responsible as well because he's a part of a business now. So when he feels he's part of a business, when he feels the customer trusts him, when he feels that he's the only one that's doing it for them, of course he becomes responsible”*, and that “*[when] you have a reliable supplier. He knows what you expect from him and he knows how important his role in the whole chain. So he has to make sure that he is responsible while servicing you. He has to be responsible”*.”

5.2.4.3 Innovation

Innovation was considered to be an important attribute for achieving a high level of agility within Unilever supply chains. This was suggested by most of the interviewees, for example the Demand Planner (for UAE for all products) who suggested that Unilever gave great attention to innovation and that innovation is considered as the key factor for growth for Unilever: “*In this company I'll say we value innovation very well because definitely innovation is a growth engine for Unilever. So innovation is very important”*. The Technical Project Manager(Unilever Gulf, for all products), on explaining the attributes necessary for achieving a high level of agility within Unilever supply chain, mentioned innovation as the most important factor for achieving agility alongside quality: “*Innovation is one and then you have quality, we need to innovate anyway”*.”

Innovation was also considered an important attribute for agility by the Site Quality Manager (for Lipton Tea Unilever Gulf) where he stated that for Unilever to be able to lead the market it should possess high level of agility based on quality and innovation abilities as he described this as follows *“Yeah because if you go to the market there are a lot of innovations every day and there's a lot of competition every day. So to lead that and to be on top of decisions we had to be very agile, we have to be on top of the issues. We need to have all the technology that we need to have; we need to have innovation on the part of our business”*.

On asking the interviewees about the essential attributes are as factors for achieving agility within their company's supply chain, the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) confirmed innovation as one of these attributes, alongside flexibility, speed, responsiveness, customer service, and quality: *“...And these measurements [Flexibility, speed, responsiveness, customer service, quality, innovation] really plays a vital role because this is how we're strengthening our relationship with them and being agile”*. Answering the same question, the Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) emphasised the importance of the customer to Unilever and described the variable for achieving agility beginning with the customer and his/her service as the most important value to Unilever and therefore all the other abilities are necessary but they focus on improving their agility level which is based on customer service to satisfy their customer in the most effective manner *“Customer service. Particularly consumer, so anything related to the consumer is important to us. So if the consumer wants a new product or model, so it's innovations, it comes into speed,... it comes into all your parameters like responsiveness, flexibility, everything comes in that. So it's all important, but if you ask a whole which is first important, it's what the consumer wants”*.

5.2.4.4 Speed (fast)

Speed was confirmed by the interviews as an important attribute or ability that should be possessed by a company to be able to achieve a high level of agility within its supply chain. It was considered by some interviewees as the most important, and a key factor for being able to face the high competition that exists within the FMCG business environment. For example, the Lipton Tea Factory Manager (Unilever Mashreq) considered speed as a very important and essential factor when he said that it is like “*currency*” and that is the way of thinking for Unilever Global management: “*to double the business in the coming five years, and this is not an easy task,...to do this, you need to take share of the market from competitors and to take share from competitors you need to be faster than them, to be able to reach a high level of speed.., as we previously agreed on that about 80% of your ability to react is in your supply chain and therefore to be leader, your supply chain need to be agile, flexible and to be faster to be able to adapt to any change in the market and to deliver faster than others... I will tell you something, I was recently attending a telecom with the global supply chain manager where he said that speed is our currency, all the new management and managerial levels are insisting on speed*”. He also added that there are several actions taken by Unilever to improve and enhance its speed abilities: “*we have research for better understanding to customers’ needs because the signal comes first from the customer and on how to fulfil these customers’ requirements and needs, second we have research on how to react faster than competitors to face the customers’ needs and requirements. There are several programs at the supply chain level to how to react faster, for example, “time to market”, if there is a new innovation, this program is a system teaches us how to deliver it as fast as possible than competitors. Another program is one dealing with how to have highly efficient factories in order to decrease time to market, because if we say starting from signal of customer and the supplies come, there is lead time and their value processing map, where every process is evaluated and all non-value added activities are determined, and to deal with them as losses and how to be eliminated using sophisticated tools, as second step to compete, for example, to be faster than competitors*”.

Similarly speed was equated to money by the Technical Project Manager (Unilever Gulf for all products) who stated that *“Speed is always what we call is the currency. If you don’t have the speed you will be bitten by the competition. So, speed is very important”*.

The Demand planner (for UAE for all products) argued that without speed abilities the company can’t match with the environmental changes and competition: *“Speed is also very important because you need to be in line with the environment or the business around you because if your competitor grows faster than you are, because [if] he’s faster at producing stuff then you’re going to have to catch up, so speed is important”*. speed was likewise suggested by the General Planner (handling Kuwait and Qatar for all products) as an essential factor for staying in the competitive business environment: *“In today’s competitive industry it’s about getting there to the market first and as fast as we can...If your competitor gets there to the market before you, we lose an opportunity of sales”*. He also added that flexibility, speed and responsiveness abilities are related to each other as he stated that *“If you’re flexible that means you’re fast enough to react”*.

Speed was considered as important factor for Unilever (North Africa Middle East) alongside service excellence and quality as mentioned by the Site Quality Manager (for Lipton Tea Unilever Gulf) and that it is amongst the factors that are at the top of the development programmes that Unilever (North Africa Middle East) is helping their suppliers with: *“It’s the requirement of ours, we were looking for excellence and service, we’re looking for on time and full from our suppliers, there’s no quality problem with the amount of raw materials that we want with the quality we need. So on time and fair with the quality, and that’s what we want to enhance into our suppliers”*.

The Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) focused on a similar meaning where he said that these abilities are shared to be learned and improved by his company and its core suppliers and that these factors are

necessary to achieve agility: “...*And these measurements (flexibility, speed, responsiveness, customer service, quality, innovation) really plays a vital role because this is how we're strengthening our relationship with them and being agile*”. speed was considered as an important factor inside the market place, and a distinguishing factor that makes a company better than others in the market as mentioned by the Planning Manager (for Personal Care for Kuwait and Qatar): “*I think one of the main characteristics of a company that makes it better than the other is speed to market. Speed to market will come with how you are able to perform as a supply chain function. If I can get the demand of the consumer out on the shelves faster than my competitor ... I think it is how fast you can approach your consumer and meet their demand. The company that is able to do that faster is better because [in] innovations and new products, you're coming up with the same thing, [for example], There could be two kinds of detergents, one obviously in terms of quality has to be better but how fast you get it to the consumer, when he or she needs it, makes the difference*”. She also added that speed was a very essential factor especially for companies working inside a business environment like that of the FMCGs: “...*in any sort of FMCG business, your competitor is trying to get bigger innovations, better innovations, faster to the market to meet the consumer needs. We're all in it for the same; you want to satisfy the customer faster, quicker, and better than anyone else. If that is my business dynamic that is the need of the market,... The need for agility... so in that context, if I want to satisfy my consumer faster than my competitor I need to be agile, I need to be able to deliver in the shortest possible time with the maximum benefit*”.

The Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) highlighted the importance of speed as one factor leading to serving the customer is important as he said that “*Customer service. Particularly consumer, so anything related to the consumer is important to us. So if the consumer wants a new product or model, so it's innovations, it comes into speed,... it comes into all [other] parameters like responsiveness, flexibility, everything comes in that. So it's all important but if you as a whole which is first important it's what the consumer wants*”. This was emphasised by the Supply Chain Manager (Unilever

Gulf) who stated that *“it is an essential factor and that it should be possessed also by the supplier in order to achieve a high level of agility and flexibility.....Of course, that agility and flexibility is not only in our hands because we have other suppliers who need to be as fast as we are. We’ve got to deliver products with them”*. He also added that to be able to compete the business environment, the company has to be agile and flexible, and has to achieve a high level of speed in order to achieve this: *“That’s not a negotiable for us. You can’t also sustain nowadays without being agile, because in fact you have to drive, you have to be flexible, you have to be fast, if you’re not you’re out of the game, as simple as that because everyone is actually doing the same. But it’s more or less now this is what you have to do. But there’s no way around it”*.

The Planning Manager of Lipton Tea (Unilever Gulf) also argued that to achieve a high level of agility, agility must be based on speed abilities: *“...we have some really, targets as being agile in our market, to react to market changes as fast as we can. We are targeting to be the market leader in our sector”*. He emphasised the necessity of speed for the company being able not to lose market opportunity: *“The market changes are very fast now, And if you don’t respond to them quicker, if you are not the quickest, you lose”*.

The Supply Planning and Logistics Manager argued that speed, flexibility and responsiveness are the most important factors necessary by any company to achieve agility: *“[for] being agile you can start with flexibility. I [can] take it in two groups. I believe that responsiveness and flexibility and speed ability are one group and others are all coming in the second”*.

The National Supplier Development Manager gave an example of how speed abilities can affect achieving agility: *“having two things that are happening, but we are growing as a company and our complexity is increasing, and the supplier as well is developing and increasing with increasing agility and increasing flexibility and all that stuff, but unfortunately we are moving with almost the same rate, so we can’t feel really the improvement of the supplier. Although the*

lead time is reduced from five weeks to ten days, we as a company still need more. We as a customer, we still feel that 10 days now is too much, that what about three years ago we felt that four weeks was still too much, but if it was three weeks then it would have been perfect. Now we're sitting less than 10 days, so this is about the agility of the supplier".

5.2.4.5 Managing by objectives

The Supply Planning and Logistics Manager identify the need to manage with a focus on objectives as one attribute for achieving agile supply chains: *"So being in an agile supply chain having different faces but one of the most important parts that we're working here is that we are managing by objectives..... So it's not about traditional, classical mode of supply chain, it's more about delivery, what are you delivering? So being an agile is ensuring that you deliver what should be delivered".*

5.2.4.6 People way of thinking

The Supply Planning and Logistics Manager noted that people, and how they are able and willing to accept change, is an important factor for achieving supply chain agility: *"now the strategy is coming that we need to be more agile. So this strategy is divided into several levels of strategic actions and so on. So it's, when understanding, it can be implemented across the people that are running the supply chain themselves. For those people are the people who can make it agile or solid".* This was also identified by the National Supplier Development Manager who noted the importance of people to accept change and new ways of thinking: *"Change matters, people have to change, in terms of they have to think differently. This is not a supplier anymore, I'm not the customer anymore, it's a long supply chain. Transparency, it would have to be transparent, I cannot invite the supplier and tell him I have a problem on the lines because of the productivity of your product. And if he asks to see the production line, or to see a trial or to have a trial in our site, tell him, "No we are very sorry this is confidential. We*

cannot let you in our field, we cannot give you a right report about what is going on exactly just the items are not running, there is a quality defect. But we cannot tell you what exactly is going on". So the people have to change in terms of thinking differently about the supplier, he's not just a supplier; he's a partner that's the first thing". He also added that when people are transparent with other supply chain members, they are willing to be openly transparent this will affect their ability to achieve agility level: "the people have to be widely transparent. The support of mainly the people in having the meetings, we have like a monthly meeting with the supplier discussing lots of things, everything actually".

5.2.4.7 Quality

Quality was also considered an essential factor for achieving supply chain agility, and some interviewees considered quality as an important factor for improving supply chain agility. The Demand planner (for UAE for all products) identified quality as an essential factor: *"Quality also is very important".* The General Planner (handling Kuwait and Qatar for all products) also considered quality alongside flexibility and customer service as the core attribute for achieving agility: *"I would say flexibility would be one of the most important factors. I'd [be] followed by quality and customer service I'd ask about quality, so if I'm quick but my quality is not good, that won't get me anywhere. So, it's not a trade-off that I think we can accept".*

Quality also was considered among the important issues that Unilever (North Africa Middle East) is focusing on and is helping its core suppliers in improving and enhancing their quality level: Technical Project Manager (Unilever Gulf for all products): *"..Quality, we teach them about Unilever quality standard, because at the end of the day even if they deliver the materials on time, if it will be rejected and then it will create a lot of issues within the supply chain".* On asking to explain the core attributes for achieving agility he considered quality and innovation as the core factors necessary for achieving agile supply chains: *"Innovation is one and then you have quality".*

It was also considered alongside customer service as a core attributes for achieving agility within supply chains by the Site Quality Manager (for Lipton Tea Unilever Gulf) *“Customer service I think is the first one because people are very concerned on that, people are very much aware of that. Second thing is the quality; I think that is the only way to last in the market... It's the requirement of ours, So we were looking for excellence and service, we're looking for on time and full from our suppliers, there's no quality problem with the amount of raw materials that we want with the quality we need and without any issues. So on time and fair with the quality we want and that's what we want to enhance into our suppliers”*. He also added that a high level of quality can lead to 90% of solving problems inside the factories: *“...if you don't have the right materials in quality terms, what I say is like getting the right quality product is like solving 90% of your issues in the factory”*.

It was highlighted also by the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) as one core attribute for achieving agile supply chain: *“...And these measurements (Flexibility, speed, responsiveness, customer service, quality, innovation) really plays a vital role because this is how we're strengthening our relationship with them and being agile”*.

The Supply Chain Manager for Unilever Gulf considered quality and customer service as the core factors for Unilever: *“I think customer service and quality; I would say that's always at the top of my mind.. I think those are the first two things that come ... the flexibility would come under customer service. So if you want to provide a high customer service level you have to be flexible. But yeah, those are our customers and we don't allow products to go down, being less in quality”*.

5.2.4.8 Efficiency

It was considered as an important attribute for achieving agile supply chains. the Customer Service Manager (for Gulf Business Unit) mentioned that it is more

important to have efficiency for achieving agile supply chains: *“..I mean you can use the word efficient because efficiency is something where you finish the task in an optimum time, a specific optimum ... I can tell you one hour to interview me but may be the interview should just be for twenty minutes. So optimisation of time is also one of the key roles in supply chain”*.

Efficiency has also been considered important by the Technical Project Manager (Unilever Gulf for all products) who mentioned that the efficiency of the supplier is very essential: *“it’s about efficiency of suppliers”*. This was also considered important by the National Supplier Development Manager who said: *“I mean my mind is more technical about having better agility. It’s like efficiency on the lines; the production lines themselves,[and] having continuous improvement monitored”*.

5.2.4.9 Customer service

Customer service was considered by the most of the interviewees as an important attribute leading to agile supply chains. It was also considered as important aim for Unilever (North Africa Middle East). The Customer Service Manager (for Gulf Business Unit) considered it as the first aim for Unilever (North Africa Middle East) *“I think at the end of the day you have to service your customers”*

Similarly the General Planner (handling Kuwait and Qatar for all products) also considered the customer service as one attribute for achieving agility alongside flexibility and quality: *“I would say flexibility would be one of the most important factors. I’d [be] followed by quality and customer service”*. It was considered by the Site Quality Manager (for Lipton Tea Unilever Gulf) as the most and the first attribute for achieving agility within the company’s supply chain: *“Customer service I think is the first one because people are very concerned on that, people are very much aware of that. Second thing is the quality; I think that is the only way to last in the market”*. He also added that *“It’s the requirement of ours, so we were looking for excellence and service, we’re*

looking for on time and full from our suppliers, there's no quality problem with the amount of raw materials that we want with the quality we need and without any issues. So on time and fair with the quality we want and that's what we want to enhance into our suppliers".

It was considered as one attribute for agile supply chains also by the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) alongside other factors such as flexibility, speed, responsiveness, quality and innovation and that all these factors are essential characteristics resulted from strong relationship with their core suppliers: *"...And these measurements (Flexibility, speed, responsiveness, customer service, quality, innovation) really plays a vital role because this is how we're strengthening our relationship with them and being agile".*

The Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) considered customer service as the essential factor for achieving agility within supply chain because it can lead to all other attributes *"Customer service. Particularly consumer, so anything related to the consumer is important to us. So if the consumer wants a new product or model, so it's innovations, it comes into speed,... it comes into all your parameters like responsiveness, flexibility, everything comes in that. So it's all important but if you as a whole which is first important it's what the consumer wants".* Similarly it was considered by the Supply Chain Manager (Unilever Gulf) who mentioned that customer service and quality are the most important for achieving agile supply chain: *"I think customer service and quality; I would say that's always at the top of my mind.. I think those are the first two things that come ... the flexibility would come under customer service. So if you want to provide a high customer service level you have to be flexible. But yeah, those are our customers and we don't allow products to go down, being less in quality".* With the same meaning the Planning Manager of Lipton Tea (Unilever Gulf) stated that *"Actually customer service includes all of them".*

5.2.4.10 Responsiveness

One of the most important attribute for achieving agility is having a high level of responsiveness. This was suggested that by most of the interviewees. the General Planner (handling Kuwait and Qatar for all products) suggested that responsiveness alongside flexibility and speed abilities are the essential capabilities necessary to achieve agility within their supply chains: *“In today’s competitive industry it’s about getting there to the market first and as fast as we can. So, that comes to flexibility and being able to respond to the market demand... If you’re flexible that means you’re fast enough to react”*. He also added that when the company is able to expect their customer needs and to react to them the company can have an advantage inside its market place: *“If you’re close to your customer you can anticipate what your customer needs. You have more time to react to that so you have an advantage”*.

Responsiveness was considered as an important factor and that it can be resulted from strong relationship and a high level of trust with core suppliers by the Site Quality Manager (for Lipton Tea Unilever Gulf): *“...so there are lot of changes, the market reacts in different ways, so we need to change with that reaction to that, Then if we have a trust in our supplier, we have this relationship with the supplier, we can adapt into the changes by moulding them and getting all the required stuff that we need”*. It has been suggested that responsiveness with other capabilities such as flexibility, speed, customer service, quality, and innovation are essential attributes for achieving agile supply chains by the Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) who stated that *“...And these measurements (Flexibility, speed, responsiveness, customer service, quality, innovation) really plays a vital role because this is how we're strengthening our relationship with them and being agile”*.

It was suggested by the Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) as an important attribute for agility, as, alongside other factors such as flexibility, innovation, and speed capabilities, it can improve the

company's customer service ability which leads to higher agility level: *"Customer service. Particularly consumer, so anything related to the consumer is important to us. So if the consumer wants a new product or model, so it's innovations, it comes into speed,... it comes into all your parameters like responsiveness, flexibility, everything comes in that. So it's all important but if you as a whole which is first important it's what the consumer wants"*.

The Planning Manager of Lipton Tea (Unilever Gulf) mentioned that being agile and responsive is one core aim for Unilever (North Africa Middle East) *"...we have some really, targets as being agile in our market, to react to market changes as fast as we can. We are targeting to be the market leader in our sector...Well about responsiveness, I would rate it as moderate; but we are working to improve that, all our KPIs, all our targets are based on being agile"*. Responsiveness besides flexibility and speed abilities were considered as essential attributes for achieving agility within supply chains by the Supply Planning and Logistics Manager who said that *"[for] being agile you can start with flexibility. I take it in two groups. I believe that responsiveness and flexibility and speed ability are one group and others are all coming in the second"*.

Giving an example, the National Supplier Development Manager mentioned that having good partnership with suppliers ensures the company is able to receive high quality materials which can affect their responsiveness to the market: *"I'll give you an example. When we had a hole, it's very hard to expect that hole in the middle of millions of bottles, The problem is not in the quantity. The problem is in the timing. If this bottle is filled with shampoo and then it's going through the line, when the worker just notices ... By the way our line performance is 160 bottles per minute. So when the worker just observes there's a leakage from a bottle, it will take 10 seconds or 20 seconds to stop the line. You have a stoppage time, and you have a cleaning time, and you have a lot of time so you waste from 15 minutes to 30 minutes on the line. This is the lost time, so lost time affects our responsiveness to market, definitely, this is for a single bottle by the way"*.

Finally the Lipton Tea Factory Manager (Unilever Mashreq) mentioned that responsiveness is related to serving the customer: *“mainly we are speaking about service (responsiveness level) one of our targets to any manager is the customer service level, we are very tough on ourselves in this issue, for example, if a customer orders an order to be reached at first of January before 12 am, if he received as extra unit exceeding the order, the measure will drop or if he received the order 11.5 the system will stop, and if I ship the order 12.05 the system will stop imagine there are sometimes delays from the customer due to some other companies we try to react with such problems on our own despite that it is his own problem and not from us, therefore this can show the degree of responsiveness in our customer service”*.

5.2.4.11 Flexibility

One of the most important attribute for achieving agility within supply chains identified by the interviewees is having a high level of flexibility. This was recommended by most of the interviewees. The General Planner (handling Kuwait and Qatar for all products) emphasised the importance of flexibility and considered it as the most important and the first attribute necessary to achieve agile supply chains: *“I would say flexibility would be one of the most important factors”*. He also added that its importance was increased due to the nature of today’s business environment: *“In today’s competitive industry it’s about getting there to the market first and as fast as we can. So, that comes to flexibility and being able to respond to the market demand”*.

This was also suggested by the Site Quality Manager (for Lipton Tea Unilever Gulf) who mentioned that it is very important for Unilever(North Africa Middle East) to have a high level of flexibility within its market place: *“...We need to be very flexible with the market requirement... there are times with a company like Unilever we need to be very flexible in the market...”*. Similarly the Customer Service Manager (for Gulf Business Unit) insisted on the importance of having a high level of flexibility and ability to change with the changes in the market

place: *“For example, if our competitor has a certain product which is in a different pack size, for example, there is a face cream and he was selling it in 400ml, we were selling it in 400ml, and immediately he’s started selling it in 180ml with 20% discount on it. So women normally want to carry these things in their bag, right, so 400ml is a big pack size and 180 is a small one, so they will probably start buying that one if the product is the same standard we have. So now if we have to react on this then we have enough resources but it’s not the very next day we’ll be able to bring the new product out. There is a specific lead time, but we have the ability to adapt and change ourselves according to the changes in the market”.*

The Manufacturing Manager (Lipton Tea Factory, Unilever Gulf) considered flexibility alongside speed, responsiveness, customer service, quality, and innovation as a key factor for achieving agile supply chains: *“...And these measurements (Flexibility, speed, responsiveness, customer service, quality, innovation) really plays a vital role because this is how we're strengthening our relationship with them and being agile”.* He also added that flexibility is very essential especially within the manufacturing department: *“... in manufacturing you have to be multi-functional in a sense and very specifically because the operation is dynamic, it doesn't follow a pattern. Like for example there's a set schedule that you have to do this time or this day or this shift of the day. Then I give a situation, there is a negative response from the supplier and we really have to run this factory continuously. So agility should always be there because it combines with more on flexibility on how we can be able to cope with all these gaps that we have in our operations”.* This was also noted by the Supply Planning and Logistics Manager who mentioned that flexibility together with responsiveness and speed capabilities are considered as the key supply chain agility attributes: *“[for] being agile you can start with flexibility. I take it in two groups okay. I believe that responsiveness and flexibility and speed ability are one group and others are all coming in the second. Both are important but this is the most important. If you don't have this and you have integration and you have all this sort of degrees of the supply chain from the supplier, down to the*

distribution, to the customer, to everything but you're not that flexible, data flow is very slow and so on, so you're losing a lot. So you're not agile”.

Flexibility was considered by the Customer Service Manager in the Lipton Tea Factory (Unilever Gulf) as an important agility attribute, where he combined it with other attributes such as responsiveness, innovation, and speed capabilities can improve the company’s customer service ability which leads to higher agility level: *“Customer service. Particularly consumer, so anything related to the consumer is important to us. So if the consumer wants a new product or model, so it's innovations, it comes into speed,... it comes into all your parameters like responsiveness, flexibility, everything comes in that. So it's all important but if you as a whole which is first important it's what the consumer wants”.*

Although the Supply Chain Manager (Unilever Gulf) considered the flexibility factor as one factor necessary to be able to stay in today’s market place: *“That’s not a negotiable for us. You can’t also sustain nowadays without being agile, because in fact you have to be a drive, you have to be flexible, you have to be fast, if you’re not you’re out of the game, as simple as that because everyone is actually doing the same. But it’s more or less now this is what you have to do. But there’s no way around it”*, He considered it as one element that can be achieved under the customer service umbrella: *“I think customer service and quality; I would say that’s always at the top of my mind. I think those are the first two things that come ... the flexibility would come under customer service. So if you want to provide a high customer service level you have to be flexible. But yeah, those are our customers and we don’t allow products to go down, being less in quality”*. He also added that being agile and flexible can only be achieved through working closely with other supply chain partners and especially their suppliers: *“... Of course that agility and flexibility [is] not only in our hands because we have other suppliers who need to be as fast as we are. We’ve got to deliver products with them”*.

Flexibility was considered as a very important attribute for achieving agility by the National Supplier Development Manager who considered agility, as the agility to be flexible: “...Agility is flexibility. This is what I understand. Agility is being agile, that you are flexible to supply...”. He also gave an example for the importance of flexibility: “Definitely. If you have car and you’re a very good driver, and this car is limited to a certain speed then you will never beat that. What I’m saying is that if you have really good people, if you have really good people and the machines and the tuning of the machines, and the flexibility of the lines that you have are not there then you can never achieve flexibility or high agility”.

5.3 Summary

In this chapter, the analysis of the first set of interviews undertaken during the first and second phases of data collection process identified 43 open codes. The analysis identified six open codes associated with FMCG industry-based features, twenty three associated with buyer-supplier relationships, three associated with information sharing, and eleven associated with agility. The 43 open codes provided the basis for stages 2 and 3 of the analysis. The next chapter presents the findings of the former, the axial coding.

Chapter Six: Axial Coding

6.0 Introduction

As mentioned previously, grounded theory (Strauss and Corbin, 1998) includes three stages for data analysis: open coding, axial coding and selective coding. The open coding was discussed in the previous chapter. This open coding analysis has to be followed by axial and selective coding following grounded Theory analysis procedures. This chapter presents the axial sub-categories and axial categories derived from the synthesis and grouping of the open coding process, in order to be able to then move to the identification of the core categories which are discussed in the selective coding process in chapter seven. This chapter 6 also presents the findings of the identification of the relatedness for the groupings between the different axial sub-categories following the paradigm model proposed by Strauss and Corbin (1990) for axial coding analysis.

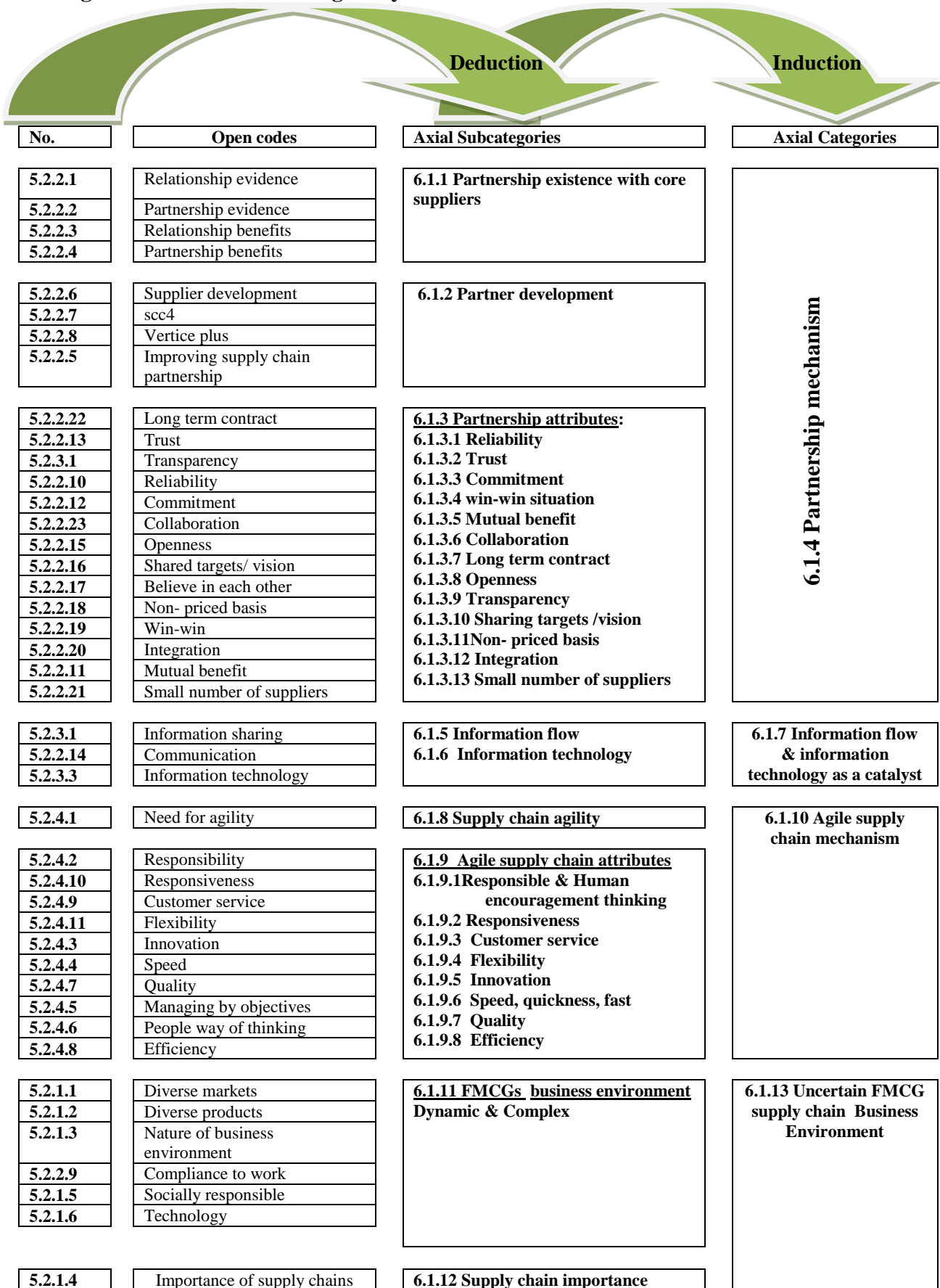
It is important to mention here that it is impossible to completely separate the three coding processes of the grounded theory; however the author divided them into three individual chapters for simplicity and for ease of comprehension. This chapter presents some previously presented information in chapter five. This is unavoidable, however the researcher has tried as much as possible to minimise this. This is because in the open coding process all the data collected relating to the codes was included in the analysis process, and it is the same data which here is transformed into pieces of meaningful information to be used to show the relationships among the open codes during the axial coding process.

The chapter includes two main sections: section 6.1 which presents the axial matrix in which the grouping of the open codes takes place and the induction process for the axial subcategories into axial categories is undertaken. Section 6.2 presents the paradigm model suggested by Strauss and Corbin (1998) to facilitate that axial coding analysis. This includes relating the axial sub-categories to each other.

6.1 The Axial Matrix

This axial matrix shown in figure 6.1 shows the grouping and syntheses of open codes derived from the open coding process. All the open codes are grouped under more clear codes which are considered as the main sub-categories (namely the axial sub-categories), which then lead to core categories, namely the axial categories.

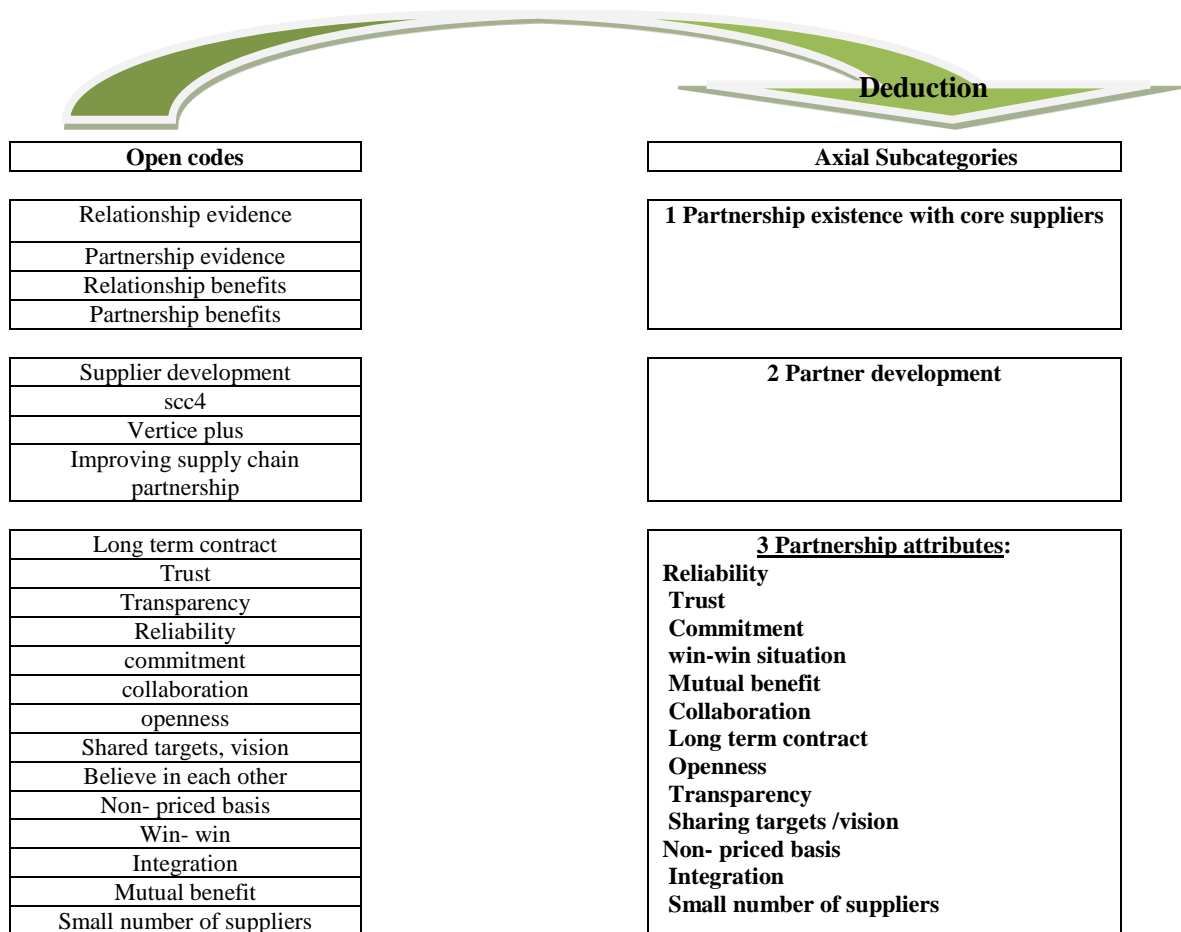
Figure 6.1: The Axial coding analysis



6.1.1 Partnership existence with core suppliers (axial sub-category 1)

The first axial sub category, is ‘partnership existence with core suppliers’, between Unilever (North Africa Middle East) and its core suppliers. From the data collected and analysed in the open coding process, this axial sub-category is the result of grouping four open codes, see figure 6.2 below. These four open codes are ‘relationship evidence’, ‘partnership evidence’, relationship benefits’, and ‘partnership benefits’. The differences between the four codes are not large differences while the similarities between them are evident shown from the data collected. Therefore these four open codes can be grouped together to form one axial sub category which is the existence of the partnership form of buyer supplier relationship between Unilever (North Africa Middle East) and its core suppliers. Accordingly it is named, ‘Partnership existence with core suppliers’.

Figure 6.2: The first, second, and third axial sub-categories



The Demand Planner for UAE (All products) suggested that Unilever (North Africa Middle East) has a strong relationship with its main suppliers. This was also suggested by the Manufacturing Manager who gave an example for the importance of such relationship and the benefits that can be yielded from having a good relationship with the company suppliers, stating that *“.... when I'm sitting down with the supply chain people, I know my line capacity and they have assured to me, especially the supplier, that whatever line capacity is required you have to be there at my door with my materials, very specifically with my materials. Because what our operation here is more on packaging, so it is very [important] for me that I should receive each and every material within this day, ahead of time actually as per my line schedule. That's why this relationship with the supplier plays a vital role for me...”*.

The partnership had been specified by the Technical project manager, Gulf (All products) as the relationship form that can characterise the Unilever (North Africa Middle East) and its core supplier's relationship. The Technical project manager, For Gulf (All products) mentioned that *“Project Sherik [partner], it's a partnership between Unilever and suppliers. So, here also we call it vertice Plus. In Europe we call it also vertice Plus. So, it's a partnership between Unilever and a supplier. So, we develop our supplier. We visit their factories, we audit them for quality, for safety, everything”*.

The Customer Service Manager in the Lipton Tea Factory stated some of the benefits from having a strong partnership with the company's core suppliers: *“Benefits of cost, high service levels..... again cost, service, quality, cost are the benefits which we get from partnership with our suppliers”*.

Another good example was suggested by the Marketing Manager, who stated that the partner supplier can give the company a higher priority rather than its competitors: *“It differs because in this environment which is very fast moving, and the variables inside it are several, so the benefits of this partnership is that the supplier can give me a priority increase of....let's take an example from*

another company". He mentioned an example from another competitor case where he said that *"A company like Reckitt BeckKiser (Egypt) Ltd, when swine flu in [Egypt] occurred, I admired their way to deal with it. They were really fast in responding to the consumer needs to "Dettol". Dettol, in [a] very fast manner was covering the whole market although its market share is .. and its raw product is not available here in Egypt... In a very fast manner all the market was full, and all the Dettol products including Dettol soaps and Dettol wipes were quickly available in the market which means that they are very quick and this means that they should have, with their core suppliers, leverage so they gave them priority and thus such cases may happen. Therefore the relationships with the company's core suppliers affect because we may face unexpected things. We are not walking in a static 'cement type' of industry"*. He also added that there are several other benefits for supplier partnership where he mentioned that *"in some countries such as Philippines, they are opening a production line for one of their packaging component machine inside our manufacturing plant in Unilever. This means no transportation, reducing lead time, and transportation cost"*.

From the above, it is evident that the four open codes can be grouped together to form one axial sub-category. The quotations above illustrated the existence of partnership as a dominant type of the relationship between Unilever and its core suppliers as well as their importance for both of them.

6.1.2 Partner development (axial sub-category 2)

The second axial sub-category was formed by the combination of four other open codes. They are 'improving supply chain partnerships', 'supplier development', 'vertice plus', 'SCC4', see figure (6.2). From the previous axial sub-category, it has been shown that Unilever (North Africa Middle East) has a strong partnership ethos with its core suppliers, but not only forming strong partnership with its core suppliers, also with its supply chain members. Unilever (North Africa Middle East) tries to teach them, develop them, and improve its supply chain as a whole by focusing on enhancing its partner's performance. Developing and teaching

Unilever's (North Africa Middle East) core suppliers is always an aim and an action planned and undertaken by Unilever.

For example the Technical Project Manager, Gulf (All products) mentioned that *"... So, we develop our supplier. We visit their factories, we audit them for quality, for safety, everything"*. The Supply Chain Manager for Unilever Gulf similarly stated that *"With even one of the biggest suppliers in the regions for plastics, for example I am taking an example in this region; we were the one who encouraged them and actually gave them their entry to the plastic industry. And they're now one of the biggest in the region. So that was 20 years ago. And the thing for example probably in Egypt, may be.. that has also happened with one of the carton ... biggest carton supplier in Egypt now, because we actually gave them the money to invest in a machine at that time, 20 years ago. And now they're the biggest suppliers in Egypt, not for us only but for their industry"*.

The Marketing Manager also suggested that Unilever (North Africa Middle East) is developing its core suppliers by several means. He gave an example for this by saying that *"There is something we implement but I can't remember its technical name now, but it focuses on developing the supplier, because for a supplier to become a Unilever supplier, he or she should pass several stages of accreditation as ISO for example. The supplier has to take from Unilever a certain certificate that shows that this supplier becomes up to this level of required level of quality"*. He also added that *"at the same times, as I told you we are investing with them in their investments"*. He concluded by saying that *"Therefore the supplier development team is dealing with the supplier to develop them. This is not just to take the certificate and to be considered as Unilever's supplier; however it is on-going. There are some materials that are coming from abroad. For example now Unilever are usingin plastics because it is environmentally friendly and Unilever in now focuses and emphasizing environmental sustainability so how can we develop these suppliers and their machines and their know how to be able to use ... instead ofso we have to focus on on-going basis"*.

Among the most important programmes established by Unilever to help, assist and develop their suppliers is the “vertice plus” programme. The Manufacturing Manager discussed how this programme facilitates the development of the main suppliers from an operational perspective, by giving an example *“You know what the Vertice Plus means? From us to the suppliers, we are also resolving some of their operational constraints. This factory is a very well-known TPM factory, we implement TPM very successfully and with the presentation that we showed with the suppliers, they are very encouraged also to understand what is this all about? Because what we are dealing here is line improvements and we're offering, you like to understand or to improve your lines? This is it, guys. So we are helping them actually, we are not selfish in imparting whatever technology you have right now”*.

6.1.3 Partnership attributes (axial sub-category 3)

From the open coding process analysis, two codes relating to partnership were very close to each other in meaning to the degree that they can be used interchangeably. Therefore these codes have been combined together to form a single attribute of partnership. The open code ‘trust’ and the open code ‘believe in each other’ have a very similar meaning as trust in its meaning includes believing in each other. Therefore it has been included under one open code named as ‘trust’. Accordingly, from the open analysis process, 13 open codes have been derived to be considered as the attributes characterising the partnership between Unilever (North Africa Middle East) and its core suppliers, that is to say, characterising the third axial sub-category partnership attributes, this is shown in figure 6.2.

6.1.3.1 Reliability

Reliability was considered to be one of the most important partnership attributes. For example, the Customer Service Manager for Gulf Business Unit emphasised the importance of a high level of reliability as it is an essential factor affecting the

development of partnerships. He has argued that: *“If our supplier is meeting our standards and is producing according to our demands then when we analyse the performance of the supplier we know it’s reliable because the reliability of the supplier is very important before we give a commitment or a long term plan, or we tell them that we will be partnering with you in certain instances, so there is a time which we need to check the reliability as well”*.

6.1.3.2 Trust

After reliability, comes trust as the central success factor for achieving effective partnership. This important role of trust in building and maintaining partnerships was discussed by the Site Quality Manager for Lipton Tea Factory who mentioned that *“....So having trust is very important because it's one of the most important things to build a relationship because no relationship can be built if there's no trust”*.

The high level of trust was considered to be important also by the Marketing Manager who highlighted that Unilever (North Africa Middle East) is sharing their new innovation with its core suppliers from the stage of R& D research. He stated that *“Trust is very high. These core suppliers we begin working with them from the stage of R& D because if I need to make any new product development, they should work with me they may know my new innovation from the beginning even if the innovation will come up in the next two years, but these are not locally however this is with the global suppliers that have global deals. I am now working on a new shampoo, I need a specific for example zinc with specific level of quality to be involves in the formula. Therefore this core supplier has to work with me as R& D partner so the trust is existing with very high level”*.

6.1.3.3 Commitment

Commitment was cited by the Customer Service Manager in the Lipton Tea Factory as an essential factor for successfully developing a supplier partnership. He mentioned that *“commitment is a basic thing actually, if you don't commit, if the supplier is not committed, you don't even start working on that supplier, that's it. I mean it is a basic thing for me”*.

6.1.3.4 Win-win situation

Similarly, the interviews findings indicate that partnership should be developed on win-win situation which will lead to trust and commitment, and especially for developing new partnership as suggested by the Supply Chain Manager for Unilever Gulf, who argued that *“you're building a new relationship from scratch, win/win would be more or less your starting point so you'll make sure that both parties have win/win and then you move into the next trust and commitment”*. This also has been considered by the Marketing Manager who mentioned that *“It is a source of win- win situation. We are not dealing with them as suppliers we buy from them materials only, however we [are dealing with them] as we are winning together. We always say that we have to win with our suppliers as well as our customers; you can say all our stakeholders; any one gives us or takes from us”*.

6.1.3.5 Mutual benefit

Partnerships between Unilever and its core suppliers can be also characterised by mutual benefits where both parties recognise that they are benefiting from a strong relationship, as was suggested by the Demand Planner for UAE (All products): *“...they do have partnerships which of course in the long term will be useful to both this company and the supplier. It's a mutual benefit”*.

6.1.3.6 Collaboration

Collaboration was also considered as an important element for maintaining partnership as it is related to achieving a win-win situation as well as mutually beneficial relationship. This was highlighted by the National Supplier Development Manager who stated that *“Collaboration is definitely there because we are focusing on a mutual benefit and a win-win situation”*.

The collaboration between Unilever (North Africa Middle East) and its core supplier takes place at different levels. This has been recommended by the Marketing Manager who mentioned that *“It [collaboration] happens at several levels. It takes place at a global level. It takes place also at a local level because each market has its own needs and requirements and its own characteristics. For example, the supply chain system management may differ from that in New Zealand or Brazil due to the role of the market because everything is related by the market and the customer at the end. Therefore collaboration has to be taken place to be able to modify our system to be able to deal with our markets”*.

6.1.3.7 Long term contract

Long term contract is an essential element for maintaining and increasing partnership success. This was identified by the Demand Planner for UAE (All products): *“...long term contract is very important”*. Likewise, by the Marketing Manager who said that *“In nature, it is long term relationship we are dealing with them as partners. We are not sharing to conduct deals relating to vertical integration, this means that we don't do vertical integration; we don't own our suppliers. However we do conduct long term relationships. I think that the supplier contracts are not yearly based however it is long term contracts which can be reviewed after one year”*.

6.1.3.8 Openness

The degree of openness between the company and its suppliers can affect the success of the partnership. The more openness Unilever has with its suppliers the more partnership is strengthened. This was identified by the Manufacturing Manager, who argued that *“It really plays a vital role because you see how you become open with one another leads to a very good relationship at the end”*.

6.1.3.9 Transparency

To be transparent as a buyer company with your core supplier is considered by Unilever (North Africa Middle East) as another important attribute or dimension for successful partnership. The Supply Planning and Logistics Manager on asking about the means necessary to improve their supply chain partnerships answered that: *“It’s done through regular meetings and open discussion and transparency”*.

6.1.3.10 Sharing targets/vision

Sharing common targets and similar vision is another important attribute characterising Unilever (North Africa Middle East) partnerships with its core suppliers. The Planning Manager for Personal Care for Kuwait and Qatar noted that *“...having the vision of a combined goal, both working towards the same direction of achieving targets. So I think you have to have shared targets, shared vision”*.

6.1.3.11 Non-priced basis

Unilever is emphasising on the importance of building and maintaining a strong relationship with its main suppliers, as this, for a company like Unilever (North Africa Middle East), is much more important than focusing on searching for lower prices. This was explained by the Supply Chain Manager for Unilever Gulf: *“Well you can’t ... the old mentality of just really on a price, the delivery basis with a supplier, it doesn’t work anymore. It can work with stationery order for example, if they’re a stationery supplier, you don’t have a big relationship with supply chains overnight, it’s not a big deal. But when it comes to the big supplier you cannot deal with them anymore on the price basis, so going there and getting that they ... what used to be the case of getting the best price in the market, that is not the case anymore because in many cases you find that, yes, you can get a better price, however the relationship is more important than the price, and that’s where the emphasis is on that, to make sure that we have the strong relationship. But at the same time it enables us to grow with those suppliers and for them to grow with us as well, and at the same time minimise debt in the business”*.

6.1.3.12 Integration

To be fully integrated with your supply chain partners is another important attribute characterising partnership that exists between Unilever and its main suppliers. This was conveyed by the Supply Planning and Logistics Manager, who said that *“The extent of the nature of the information is an open book from the supplier side. If he needs to build a good and strong partnership he needs to be very open with a full transparency of himself and integration and trust as well”*.

6.1.3.13 Small number of suppliers

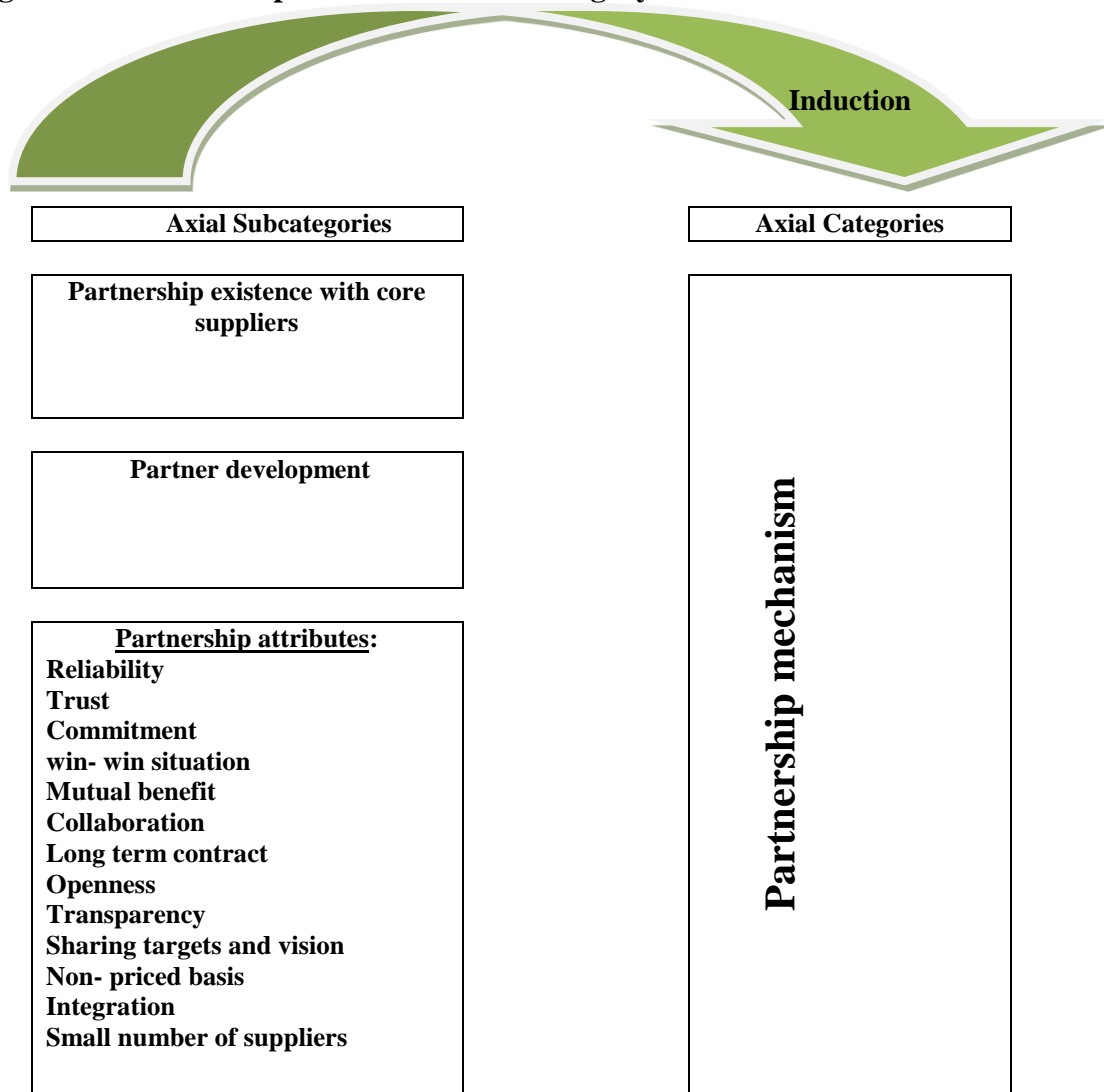
Having and maintaining a Small number of suppliers was, for example, recommended by the Mashreq Tea Factory Manager, who explained that: *“from a traditional point of view, people were thinking that having more than one supplier can guarantee for them or make them feel more safe that if something wrong happen with their supplier or he falls down, they can transfer (move) to another supplier quickly for their sake. However from experience, we consider that this is a wrong way of thinking and that it is much better to have the least possible number of suppliers with the maximum level of relationships between us as a form of partnership..”*.

All the open codes: Long term contract, trust, Reliability, commitment, collaboration, openness, Transparency, Shared targets/vision, Non- priced basis, Win-win situation, Integration, Mutual benefit, and Small number of suppliers were combined together under one axial sub-category. This is because, all these open codes were considered by the interviewees as the main attributes that can characterise the partnership between Unilever (North Africa Middle East) and its core suppliers. Therefore, all these attributes have been combined under one axial sub-category, thus enabling the researcher to be able to generate the theory in a more simplified, and coherent understandable manner. It is important to note that each one of these attribute was still separately examined in the last round of data collection and analysis to determine its own separate effect on achieving a high level of agility within Unilever’s (North Africa Middle East) supply chain.

6.1.4 The first axial category: Partnership mechanism

Figure 6.3 below shows the first axial category derived inductively from the first three axial sub-categories: Partnership existence with core suppliers, Partner development, and Partnership attributes

Figure 6.3: Partnership mechanism axial category



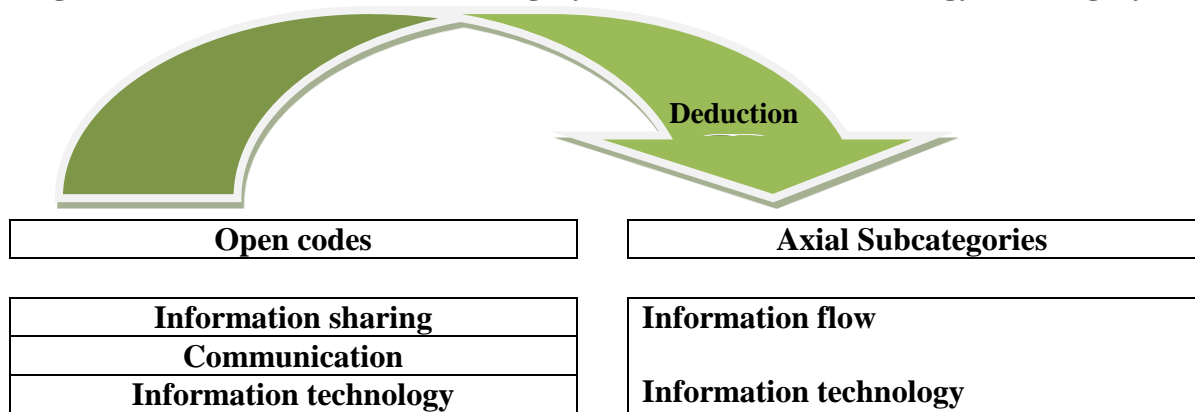
Up to this point in the axial coding, the open codes that represent the partnership attributes have been combined together to form the axial sub-categories. These attributes are considered as core elements for successfully managing supply chain partnerships within Unilever (North Africa Middle East). Now it is important to combine the three axial sub-categories: ‘Partnership existence with core suppliers’, ‘Partner development’, and ‘Partnership attributes’ into one axial category. Based on the nature of these three axial sub-categories, the axial category was ‘Partnership mechanism’ (see figure 6.3). The mechanism starts from developing and maintaining strong relationship between Unilever (North Africa Middle East) and its supply chain members and especially building partnership form of buyer – supplier relationship. Such partnership depends on the

13 attributes which have been considered by all the interviewees as elements for achieving successful partnership between companies working within the FMCGs business environment. It also includes the training and the development of the partner as these activities enhance all the supply chain partners to be able to successfully manage their supply chain. The interview findings indicate that as a result the supply chain members will benefit and be more able to face the competition in such a highly competitive business market.

6.1.5 Information flow (axial sub-category 4)

Sharing of information and communication are much related concepts. They both concern the degree of information flow between Unilever (North Africa Middle East) and its core suppliers. Therefore it is reasonable to argue that they can be used interchangeably. This can be suggested as it has been recommended by some interviewees such as the Site Quality Manager for Lipton Tea Factory who said that “Yes it does because information or communication, the name of it is communication, and that's the most important factor for an industry like ours whereby the more information or communication we have, the better we will be able to react and that makes us more agile, more perfect as a company in the market”.

Figure 6.4: Information flow subcategory and information technology subcategory



This was also suggested by the Planning Manager of Lipton tea for Gulf who emphasised on their focus to have better communication tools for effective communicating and sharing of information between them and their main suppliers. She mentioned that *“We are trying to improve our communications ... also. We have just implemented a communication tool with our suppliers where we have web interfaces communication with our suppliers where they see our future for that, our day-to-day call up or our talk information and where we see when they ship the product that you require, what are the goods in transit and as well as they see their future confirmation”*.

Sharing of information or communication was a critical point during the axial coding analysis process. This is because some of the interviewees have considered information sharing and communication (information flow) as an attribute for achieving successful partnership between Unilever (North Africa Middle East) and its main suppliers such as the General Planner for Kuwait and Qatar (for All products) who stated that *“It’s more I think of information sharing and working together...Because information sharing and collaboration is essential.”*

Another point of view suggested by some other interviewees is that sharing of information and communication can be considered as the underlying ground or means leading to successful partnership, as well as playing a main role in achieving a high level of agility. This was argued by the Site Quality Manager for

Lipton Tea factory where he said that “...*the more information or communication we have, the better we will be able to react and that makes us more agile, more perfect as a company in the market*”. Therefore exploration of the role of information sharing and communication (information flow) will be added as an important lying inquiry for the subsequent set of interview protocol questions and will be asked in the last round of data collection to substantiate the point.

6.1.6 Information technology (axial sub-category 5)

Using high technological advances and technical capability tools in order to share information and communicate with your supplier is considered by Unilever (North Africa Middle East) as an important and essential mediator factor leading to improve both the partnership process as well as improve and enhance their abilities to achieve a high level of agility within their supply chain. On asking about the role played by information technology in achieving a high level of supply chain agility, was stated by almost all the interviewees that information technology played an important role in achieving a better supply chain agility level. For example, the Customer Service Manager in the Lipton Tea Factory (previously a planning manager) argued that sharing of information between the company and its core suppliers is important and especially when based on technological means: “*Yeah I mean particularly there can be different ways of sharing information. So different ways of sharing information particularly, it depends upon the technical capability of yourself as well as your supplier*”.

Some of the interviewees also considered that high technological means of communication between Unilever (North Africa Middle East) and its core supplier play an essential role in improving and enhancing the existing partnership maintained between them. This was considered also by the General Planner for Kuwait and Qatar (for All products) who recommended that using high technology tools can increase speed in the supply process as well as well managing for the company’s logistical processes: “*Yes, technology would*

definitely speed up and harmonise both the supply run to your customer, helping the company and the supplier both to achieve a successful partnership”.

This was also suggested by the Marketing Manager who recommended that the existence of good information technology tools can help or facilitate the process of information sharing and communication which then enables Unilever (North Africa Middle East) to assist and help its core suppliers. He stated that *“We as much as we can are trying to systematize the flow of information between our company and its core suppliers. This means that the suppliers can know my requirements and needs on an annual basis. ...on a systematic basis. He has to know my forecast to be able to meet my monthly requirements every at least next six coming months to know his needs; for example if I have seasonability for some products such as shampoo or tea in winter or soup in Ramadan. So he should know when I may need more in specific point of time. So the nature of information may vary based on product. Sometimes specific product nature may force the company to give more type of information to the supplier and sometimes it doesn't affect especially for products that can be characterized as unseasonable products. The most important thing here is that he should have our forecasts for at least the next coming six months”.*

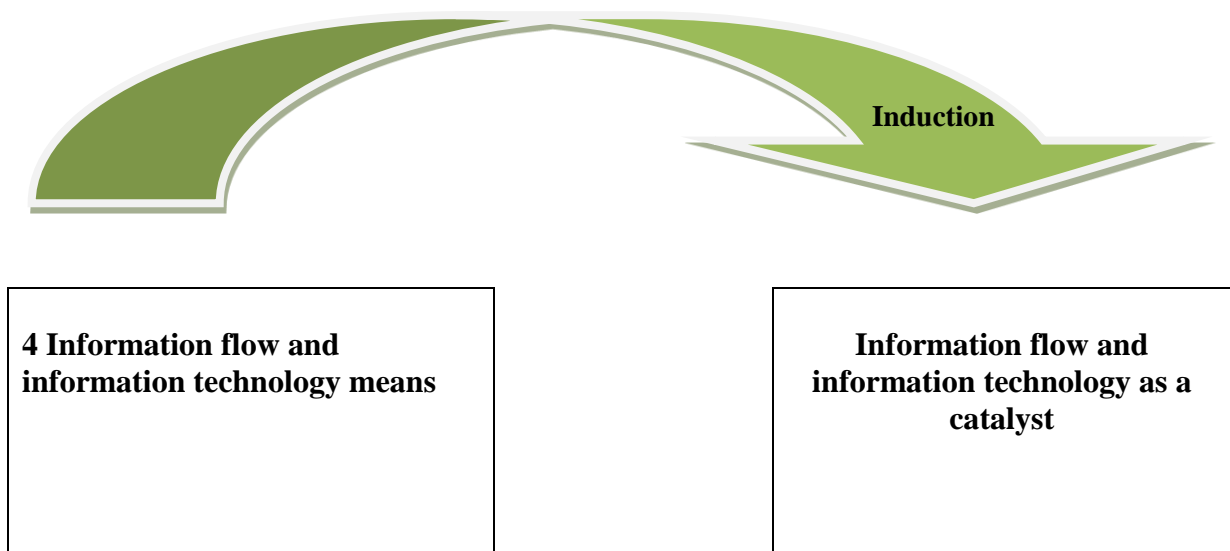
The importance of information technology as a means for communicating between the supplier and Unilever (North Africa Middle East) was also discussed by the Mashreq Tea Factory Manager. He gave an example for how the use of information communication technology can overcome the drawbacks of using manual work. He said that *“..you can wait to send a message in 250 kilometre far city which will take 2 or 3 hours. And if you send this paper after the working time you will wait to the next day and if the next day is Friday and the supplier factory is closed on Friday and Saturday. You will wait to Sunday you can imagine that you will wait for about 3 days until you can receive a paper work to show that he receives my order to start to invoicing me. So we are talking about one week if everything went ok according to schedule so one week delay according to business relationship is huge we are talking about one out of 52 waste spent year this is the difference between having web interface”.* He also added that *“for sure*

if I have a small batch produced and delivered to my site and they are aware of the traditional way of communication. If I have a problem in a batch this means that it is one week still produced in the supplier site with the same defect, today I can send an electronic message to stop producing and fix the problem”.

6.1.7 The second axial category: information flow and information technology as a catalyst

The second axial category is derived inductively as in the below figure.

Figure 6.5: The second axial category



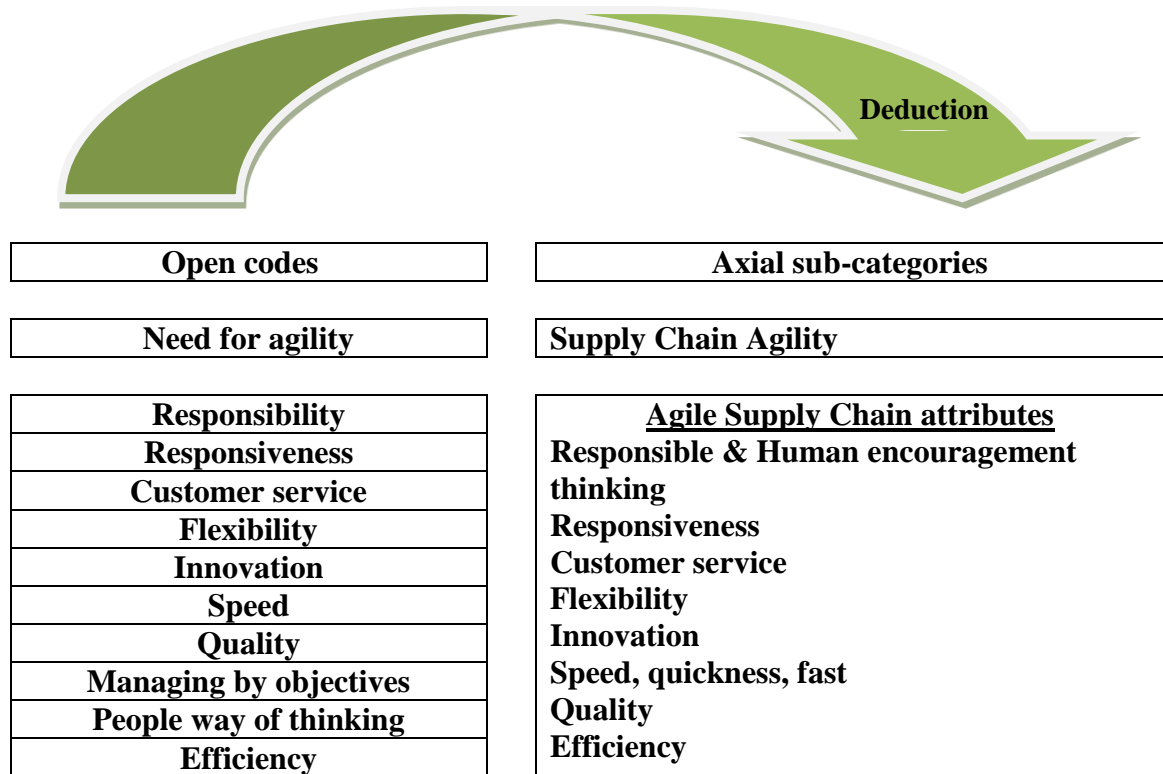
The evidence indicates that information technology and information flow among the supply chain members and especially between Unilever (North Africa Middle East) and its main suppliers can facilitate the transformation of the correct and on time information for improving the partnership process as well as enhancing their ability to achieve higher supply chain agility.

6.1.8 Supply Chain Agility (axial sub-category 6)

Fast moving consumer goods business is considered by Unilever (North Africa Middle East) and its core suppliers as a type of industry that can be characterised

by being dynamic as well as complex business industry. Therefore any company and especially if it is a large multinational company working in such type of business environment need to search for ways to enable it to face this high level of uncertainty.

Figure 6.6: Supply Chain Agility sub-category and Agile Supply Chain attributes sub-category



Agility has been considered as the means through which companies can deal with such problems. Most of the interviewees agreed on the importance of agility and especially within their supply chain as nowadays they can't achieve their goals by their own however they have to focus on their supply chain members and consider them as partners so as to achieve their overall goals together.

‘supply chain agility’ is not derived as a combination of two or more open codes (as shown in figure 6.6), however it was considered as one main axial sub-category derived from the logical thinking behind the open code ‘Need for agility’ analysed during the open coding process analysis.

Customer Service Manager in the Lipton Tea Factory emphasised on the importance of agility and that it is a very essential aim to Unilever (North Africa Middle East). He said that *“definitely in the markets, they're constantly changing. They're changing not only locally but worldwide also. So any issues that are happening or any change happening directly affects us, either directly or indirectly affects us. All companies need to be agile otherwise you will always be at risk being pushed into a corner in an operation where you are left far behind what the market is doing. So I can say like in the supply chain, in marketing, in sales there are always new techniques coming on the market to which a company needs to adopt and implement. Unilever I would say is a leader in this kind of activity, we adopt best practices, world practices but we also, I can say, are diverse in developing new practices. So it's one step further, not only implementing but we also try to do best practice within ourselves, with our suppliers, with our customers”*.

High competition in such type of industry is considered to be one important factor making all the companies working within such business market are searching for agility. This was emphasised by the Planning Manager for Personal Care for Kuwait and Qatar *“...in any sort of FMCG business, your competitor is trying to get bigger innovations, better innovations, faster to the market to meet the consumer needs. We're all in it for the same; you want to satisfy the customer faster, quicker, and better than anyone else. If that is my business dynamic that is the need of the market,... The need for agility... so on that context if I want to satisfy my consumer faster than my competitor I need to be agile, I need to be able to deliver in the shortest possible time with the maximum benefit”*. The importance of agility especially within the supply chain was focused by the Planning Manager for Personal Care for Kuwait and Qatar who added that *“Of course, the whole world is moving towards an agile supply chain. If we are not*

going to be agile in the industry that we're performing we'll be far left behind so there is a very crucial need that we move towards being the most agile supply chain in the industry to be able to survive”.

6.1.9 Agile Supply Chain attributes (axial sub-category 7)

Form the open coding analysis process, there are some codes that are closely related to each other. The three open codes: Managing by objectives, People way of thinking and responsibility are much related to each other as they represent the human responsibility side, way of thinking and their ability and willingness to accept change. Therefore they can be combined under one attribute for agile supply chain named as “Responsible and Human encouragement thinking”.

From the open coding analysis process, 8 open codes can be combined together to form the main axial sub-category ‘Agile Supply Chain attributes’ (as shown in figure 6.6). These codes are considered as the properties representing the attributes required to achieve high level of agility within FMCGs supply chains. Therefore these 8 open codes: responsiveness, Customer service, flexibility, innovation, speed, quality, efficiency, and Responsible and Human encouragement thinking were grouped together to form ‘Agile Supply Chain attributes’.

6.1.9.1 Responsible & Human encouragement thinking

The ability and willingness of people to accept change are suggested to be an important attribute to achieve supply chain agility. Therefore it was considered to be an essential property to achieve a high level of agility within FMCGs supply chain. This was suggested by the Supply Planning and Logistics Manager who said that *“now the strategy is coming that we need to be more agile. So this strategy is divided into several levels of strategic actions. So when understanding,*

it can be implemented across the people that are running the supply chain themselves. For those people are the people who can make it agile or solid”.

6.1.9.2 Responsiveness

It was derived from the open coding analysis process as one open code. Responsiveness was considered as one attribute for achieving agility within FMCGs Company’s supply chain. Therefore it was considered as a property for the axial sub-category ‘Agile Supply Chain attributes’. This was suggested by the Planning Manager of Lipton Tea for Gulf who mentioned that “...*we have some really [important] targets as being agile in our market, to react to market changes as fast as we can. We are targeting to be the market leader in our sector”.*

6.1.9.3 Customer service

Customer service and care is another important attribute or property for achieving high successful partnership between Unilever (North Africa Middle East) and its core suppliers. It was suggested to be one core aim to Unilever (North Africa Middle East).

Due to its great importance, it was suggested by some interviewees to be the top of the entire attributes and the most important one required to achieve high level of agility within Unilever (North Africa Middle East) supply chain. This was argued by Customer Service Manager in the Lipton Tea Factory who said “*Customer service. Particularly consumer, so anything related to the consumer is important to us. So if the consumer wants a new product or model, so it's innovations, it comes into speed,... it comes into all parameters like responsiveness, flexibility, everything comes in that. So it's all important but if you as a whole which is first important it's what the consumer wants”.*

6.1.9.4 Flexibility

Flexibility is an essential attribute for achieving agility. It has been suggested in the literature that sometimes some researchers are using both terms: flexibility and agility in an interchangeable manner. However, it has been also argued that they are different from each other. There are several researchers have suggested that flexibility is an essential element for agility. In this research, this was also suggested. The data collected and analysed had shown that flexibility can be considered as an important attribute for agility within Unilever (North Africa Middle East) supply chain. This was emphasised by the Supply Chain Manager for Unilever Gulf who said that *“You can’t also sustain nowadays without being agile, because in fact you have to be agile, you have to be flexible, and you have to be fast, if you’re not, you’re out of the game, as simple as that because everyone is actually doing the same. But it’s more or less now this is what you have to do”*.

The importance of flexibility as one essential attribute for supply chain agility was also mentioned by the Marketing Manager who said that *“of course, it [flexibility] is very important I think that they (flexibility and agility) can’t be separated or divided form each other”*.

6.1.9.5 Innovation

Innovation was considered to be one attribute for supply chain agility. Innovation is highly emphasised and valued by Unilever (North Africa Middle East). Unilever (North Africa Middle East) is considering innovation to be one attribute that enable it to achieve high level of agility within its supply chain. This was focused on by the Demand Planner for UAE (All products) who said that *“In this company I’ll say we value innovation very well because definitely innovation is a growth engine for Unilever. So innovation is very important”*.

6.1.9.6 Speed, Quickness, Fast

Speed was been considered to be an essential attribute for Unilever (North Africa Middle East) supply chain agility level. How fast the company is able to deal and react to any changes in the market place was considered as a property characterising supply chain agility level. This was widely suggested by most of the interviewees. For example, the Technical Project Manager for Gulf, (for all products) who mentioned that *“Speed is always what we call is the currency. If you don’t have the speed you will be bitten by the competition. So, speed is very important”*.

6.1.9.7 Quality

To be agile within the company’s supply chain working within FMCGs industry, the company should focus and emphasis quality. Quality was argued to be an attribute necessary to achieve agility within the company supply chain. This was insisted on by the Supply Chain Manager for Unilever Gulf who considered quality in addition to customer service to be the most important attributes for achieving agility within Unilever (North Africa Middle East) supply chain. He said that *“I think customer service and quality; I would say that’s always at the top of my mind.. I think those are the first two things”*.

6.1.9.8 Efficiency

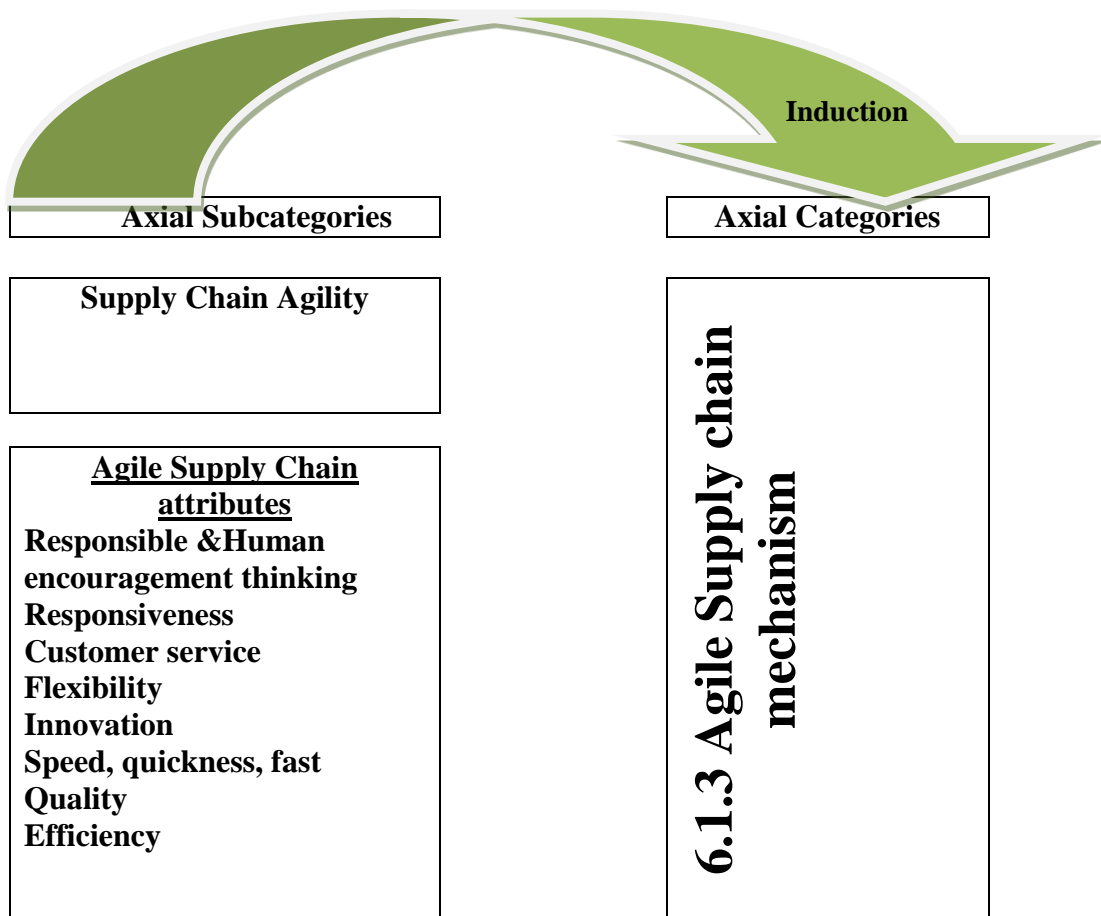
It was considered to be one of the attributes or the properties necessary to achieve supply chain agility for the companies working within FMCGs business environment. This was suggested by the National Supplier Development Manager who insisted on the efficiency of the production lines: *“I mean my mind is more technical about having better agility. It’s like efficiency on the lines; the production lines themselves, having continuous improvement monitored”*. Efficiency of time is another type or area that has to be existed to enable the

company to achieve higher level of agility within its supply chain. This has been suggested by the Customer Service Manager for Gulf Business Unit who said that “I mean you can use the word efficient because efficiency is something where you finish the task in an optimum time, a specific optimum So optimisation of time is also one of the key roles in supply chain”.

6.1.10 the third axial category: Agile supply chain mechanism:

It is derived from the axial sub-categories: Supply chain agility and Agile Supply Chain attributes.

Figure 6.7: the third axial category: Agile supply chain mechanism

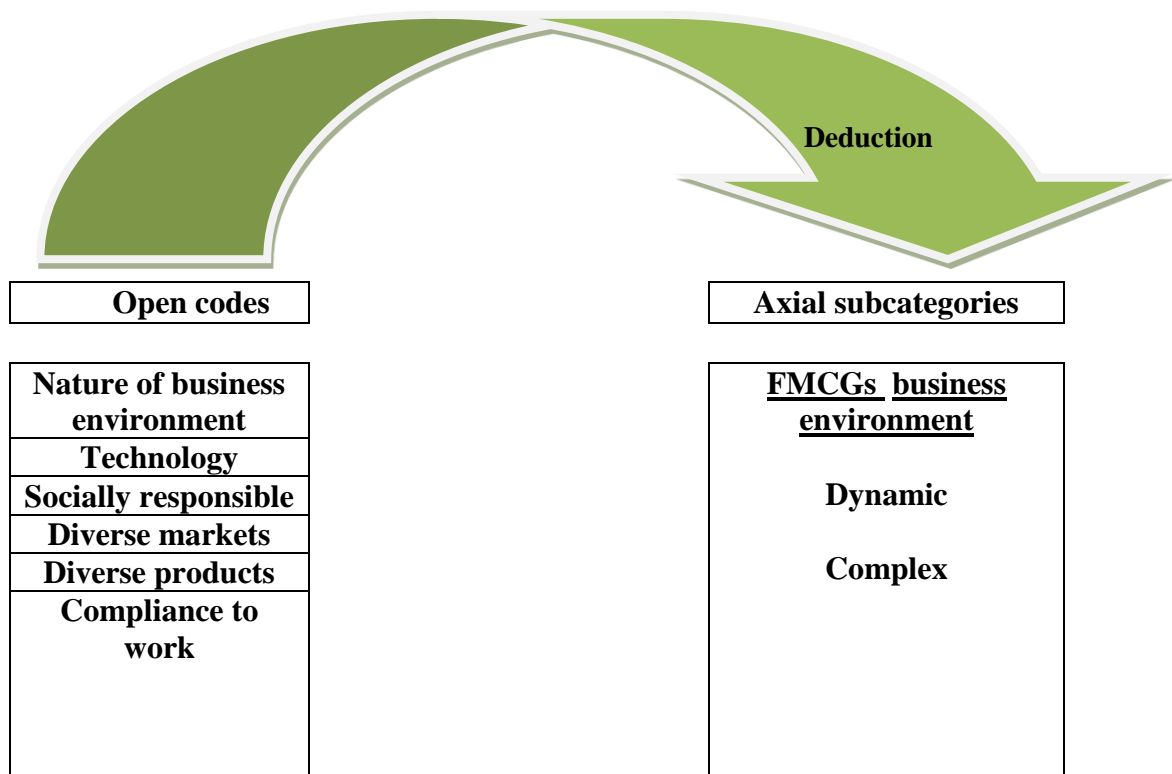


From the above, it can be very logic and rational to group these attributes: responsiveness, Customer service, flexibility, innovation, speed, quality, efficiency and Responsible & Human encouragement thinking to form one axial sub-category named 'supply chain agility attributes'. This axial sub-category can also be combined with the related axial sub-category 'Supply Chain Agility' to form one axial category 'Supply Chain Agility mechanism' (as shown in figure 6.7). Since both axial sub-categories are closely related and concerned with the determining of the importance and the great need of supply chain agility for the companies working within FMCGs business environment, as well as its attributes, therefore it is logical to combine them together to form one axial category.

6.1.11 Dynamic and Complex FMCG Supply chains (axial sub-category 8)

Dynamic and Complex FMCG business environment axial sub-category was produced from the combination and grouping of some important open codes that had characterised the nature and needs of FMCGs business environment. the grouping of following open codes (as shown in figure 6.8): Diverse markets, Diverse products, Nature of business environment, Importance of supply chains, Socially responsible Technology, Compliance to work came up with this axial sub-category. From data collected and analysed during the open coding process, it can be clearly shown that fast moving consumer goods industry can be characterised by being complex as well as dynamic.

Figure 6.8: Dynamic and Complex FMCG Supply chain subcategory.



6.1.11.1 Nature of business environment

The business environment, in which the companies that are working within such type of industry, contains several changeable conditions as well as these changes are always in unstable and changing situation. The Site Quality Manager for Lipton Tea suggested: *“Again as I said, we are working in a very dynamic and changing environment. Things change, there's a lot of requirement, there's a lot of competition, so we need to adapt ourselves into that and to do that we need our supplier right next to us”*.

This was also suggested by the Marketing Manager who said that *“It is FMCGs business industry. As it is called fast moving, therefore it is characterized by being speed, dynamic, by many changes that may happen every day. It is very much related to basic goods, such as soap, tea, so these things are much related to volatiles to prices in petroleum, vegetable tea raw material. So we have to be*

very responsiveness, very fast, and flexible to take decisions, so that not to lose. Because sometimes if you maintain your price and sell, you may lose, you want to sell and at the same gain and grow and so this can characterize this type of business as a general. Another thing is that the consumers are demanding nowadays, and there are a variety of the products in front of them. Advertising is also become very strong. Also competition is very strong where nowadays instead of having an alternative there are ten alternatives for everything”.

6.1.11.2 Technology

It was shown also that this type of industry needs high level of technology especially that the case study is multinational company with a famous brand name, so it is applying high technological advances in order to maintain its competitive level inside its market place. For example, the Site Quality Manager for Lipton Tea who considered his company is using the latest means of technology as he said *“If you want to bring another one for an industry like this we have to a technology in place, all the latest technology in place whereby we will be able to compete in the market and be there on top of our competitors”*. He also added that there is in place a collective system through which they can be able to increase the ability to react to the market place as he said *“..... Like since we have a collaborative system in place or we are so collaborative, we will be able to make out what work can be achieved out of our suppliers so we can react”*.

The importance of technology was considered by the Marketing Manager who said that Unilever (North Africa Middle East) can share technology with its core suppliers to help them improve their degree of efficiency. He mentioned that: *“when we have knowhow that may help him to develop or improve and therefore it may be a chance for him to increase his efficiency, for example, how he can operate his machines or put his orders to plastic raw materials in a manner in which Unilever uses it and achieve success on it”*.

6.1.11.3 Socially responsible

The case study also focused on being social-friendly multi-national company where they are focusing on sustainability as one important aim for Unilever. This was suggested by nearly all the interviewees in the first set of data collection process. For example, the Technical Project Manager for Gulf (for all products) who said: *“It’s on the top of our agenda. So, safety, environment, sustainability, because at the end of the day we source materials and we help also our suppliers to ensure we have a sustainable supply of materials, and that we also do not harm the environment”*.

The importance of environmental Sustainability by Unilever (North Africa Middle East) was also emphasised by the Marketing Manager who argues that they are helping their core suppliers to be able to save the environment and to be environmental friendly as this is considered as a measure used by Unilever to evaluate its core supplier on an on-going basis. He mentioned that: *“This is not to take the certificate and to be considered as Unilever’s supplier; however it is on-going. There are some materials that are coming from abroad. For example now Unilever is not usingin plastics because it is not environmentally friendly and Unilever in now focuses and emphasizing on environmental sustainability so how can we develop these suppliers and their machines and their know how to be able to use ... instead ofso we have to focus on on-going basis”*.

6.1.11.4 Diverse markets

Unilever is a multinational company working within several markets with different people needs and wants. This makes Unilever including Unilever (North Africa Middle East) have to search for ways to enable it to satisfy different needs of people and makes Unilever supply chain more competitive one. This was recommended by Customer Service Manager in the Lipton Tea Factory who said that: *“.... we are supplying around 60 customers, so it's more of a global supply chain and highly cost competitive supply chain environment”*.

6.1.11.5 Diverse products

Unilever is a multinational company working with different product portfolio. However the main products that Unilever is working with are the households' products including home care, personal care, as well as food and beverages. This was suggested also by Unilever (North Africa Middle East). for example, the HPC (Health Promotion Coordinator) for Lipton Tea Factory who said that *“It’s a huge portfolio of products ranging from foods, to HPC, to personal care”*.

This was discussed in more manageable manner by the Marketing Manager who mentioned that: *“There are products such as: food, personal care, home care, and ice cream, but ice cream we are not producing it here. These are the main four products or categories produced by Unilever globe. This after Unilever has sold several other businesses that are not been closely related or considered to be core businesses to Unilever. For example Calvin Klein was Unilever, however it has been sold. Therefore there are these main four products or categories that Unilever global are competing in”*.

6.1.11.6 Compliance to work

Within Unilever and Unilever (North Africa Middle East) there are certain rules and procedures that guide their work. There is what is named as ‘Compliance to work’ which was described by the Customer Service Manager for Gulf Business Unit who mentioned that: *“You know that companies like Unilever ... I mean all the big corporations have a certain standard that’s called the compliance to work with the supplier. If I take an example of our packaging material supplier for our Lipton factory, he has to adhere to certain rules and regulations under which he can work with us. That can be quality, service, I mean anything which involves the service criteria of the product, so that’s the relationship we have with our suppliers”*.

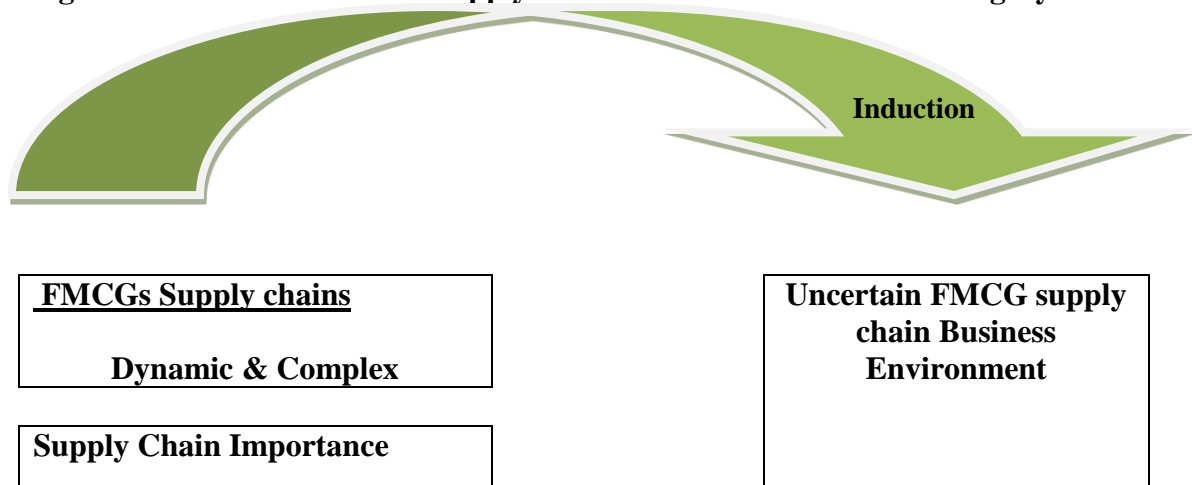
6.1.12 Supply Chain Importance (axial sub-category 9)

Supply chain and supply chain management are nowadays important concepts focused on by Unilever including Unilever (North Africa Middle East). Unilever (North Africa Middle East) is emphasising on improving its supply chain performance and working with its supply chain members as a whole in order to achieve its goals. This is due to the important role played as a supply chain as a whole. So working as one whole team within Unilever supply chain has been insisted on by the interviewees as the Technical project manager, Gulf (for all products) who added that the supply chain is end to end situation where the customer is waiting on the other side of the supply chain and therefore they have to work altogether to satisfy him at the end, as he stated that *“We look at the supply chain from end to end perspective because if my supplier will not supply me my customer is also waiting on the other side. I cannot supply to my customer which are my consumer also, right”*.

6.1.13 Fourth axial category: uncertain FMCG supply chain business environment

The fourth axial category is derived inductively from the axial sub-category 8 and axial sub-category 9.

Figure 6.9: Uncertain FMCG supply chain Business Environment category.



From the proceeding discussions it has been shown that Unilever works within diverse markets and produces a variety of products which increase the dynamic and complex conditions surrounding such type of industry. In addition to this, it is searching for ways to improve their sustainability level and to be socially responsible. Therefore it can be argued that FMCGs companies are working within dynamic and complex business environment. Even if there are rules and regulations developed to guide the work, they are in need to search for ways to improve their supply chains as a whole since they alone can't be able to response and deal with the huge changing business technological and market conditions. The analysis has shown that have to work with their supply chain members as a team in order to face the challenges. Therefore it is logic and rational to combine these axial sub categories: Diverse markets; Diverse products; Nature of business environment; socially responsible; Technology; and Compliance to work together and supply chain Importance, to form one axial category named "Uncertain FMCG supply chain business Environment".

6.2 The paradigm model

Strauss and Corbin (1990) suggested the axial paradigm model to help in the axial analysis stage. It relates the sub categories to axial categories during the axial

coding. The paradigm model here will relate the separate axial sub categories to each other. Such model allows a more systematic way of thinking for the grounded theory researcher to link the collected data in a complex manner (Strauss and Corbin, 1990). They also suggested that the grounded theory analysis of the data collected may be characterised by “density” as well as “precision”, if the researcher doesn’t make any use of such model (Strauss and Corbin, 1990, p.99). This model involves a chain of relationships in a subsequent order named as follows (as shown in figure 6.10)

6.2.1 (A) Casual conditions

These are “*the events or incidents that lead to the occurrence or development of a phenomenon*” (Strauss and Corbin, 1990, p.100). Strauss and Corbin (1990) also argued that in real life, it is possible to find that there is more than one casual condition to develop a phenomenon. There should be a set of properties that can lead to the production or the development of the phenomenon. These casual conditions or the antecedent conditions as alternatively termed usually, may be found in the collected data after instances of the terms “*when*”, “*while*”, “*since*”, “*because*”, “*due to*”, “*on account of*” (Strauss and Corbin, 1990, p.101). They also suggested that if these words are not found within the collected data, the researcher can go backwards to the central phenomenon, and search for such events and conditions.

From the analysis of the data collected from the first set of interviews it can be shown that FMCGs industry is considered by the case study “Unilever North Africa Middle East” to be a business environment which can be considered as including several changeable conditions. In addition to this is the fact that Unilever is a multinational company which is producing a variety of products within several markets. This of course can be also a factor increasing its business environment dynamic and complex characteristics. Therefore these dynamic and complex conditions are considered as the main causes for the core phenomenon.

Therefore the Casual conditions are ‘Dynamic and complex FMCGs business environment’.

6.2.2 (B) Phenomenon

Strauss and Corbin (1990) have defined the phenomenon as “*This is the central idea, event, happening, about which a set of actions/interactions is directed at managing or handling or to which the set is related*” (p.100). They also suggested that this phenomenon can be identified from asking questions about the idea or the event that the collected data is referring to, or about the action/ interactions derived from the collected data.

In this research, the core central phenomenon around which all the collected data is related and concentrated to, is ‘partnership existence with core suppliers’. This is because the main question for this research was to explore the impact of having a partnership between a manufacturing company working within the FMCG industry and its main suppliers on achieving a high level of agility within their supply chain. Therefore the data collected from the case study company has been focused on its relationship with its core suppliers. All the data collected and analysed during the first data collection and analysis shows partnership as one unique form of buyer supplier relationships dominating that relationship. The properties or the attributes of ‘Partnership existence with core suppliers’ includes: Reliability; Long term contract, Trust, commitment, collaboration, openness, Transparency, Shared targets, vision, Non- priced basis, Win- win, Integration, Mutual benefit, and Small number of suppliers. These attributes was considered from the analysis of the primary data collection process as the required attributes necessary to achieve strong partnerships between Unilever (North Africa Middle East) and its core suppliers.

6.2.3 (C) Context

Strauss and Corbin (1990) considered the “context” as “*the specific set of properties that pertain to a phenomenon; that is, the location of events or incidents pertaining to a phenomenon along a dimensional range*” (p. 101). They also argued that context at the same time, can be the particular set of conditions within which the action/interaction strategies are taken to manage, handle, carry out, and respond to a specific phenomenon.

In this research, it has been shown from the primary data analysis that Unilever (North Africa Middle East) is emphasising and focusing on the importance of supply chain and its management. This is due to the argument that they can't complete inside their market place without the hands of the other supply chain members. Therefore all the efforts in which Unilever (North Africa Middle East) are focusing on to improve its partnerships and agility level can be considered as means for improving its overall supply chain management. Therefore the research context is considered as the ‘Supply chain context’.

6.2.4 (D) Intervening conditions

Strauss and Corbin (1990, p. 103) defined intervening conditions as the “*broad and general conditions bearing upon action/interactional strategies. These conditions include: time, space, culture, economic status, technological status, career, history, and individual biography*”. This type of conditions according to Strauss and Corbin (1990) allow and permit, or impose, the occurrence and the development of the action/interactional strategies that are undertaken within a certain type of context.

In this research, it can be very clearly shown that information flow (sharing and communication) and using information technology advances can be considered as the important intervening conditions. Therefore the axial sub-category

‘information flow and information technology’ can represent the intervening conditions in Strauss and Corbin (1990) paradigm model for axial coding analysis process.

6.2.5 (E) Action/interactional strategies

Action/interactional strategies were suggested by Strauss and Corbin (1990, p. 104) as “*..directed at managing, handling, carrying out, responding to a phenomenon as it exists in context or under a specific set of perceived conditions*”. They also suggested that action/interactional strategies as grounded theory are considered as “*action/ interactional oriented method of theory building*” (p.104). They argue that they have to be characterised by features such as: “*processual*”, or “*purposeful, goal oriented*”, or that “*failed action/ interaction is just as important to look for as when action/ interaction is actually taken or occurs*”, or that finally “*the intervening conditions that either facilitate or constrain action/ interaction*” (p. 104).

In this study, the axial sub-category ‘Partner development’ can be considered as the action/interactional strategies. The development training and the assistance for core suppliers by Unilever (North Africa Middle East) represent interactional strategies. Supplier development programmes including ‘Vertice plus’ and all the strategies and practices undertaken by Unilever (North Africa Middle East) to help, assist and develop their core suppliers are considered as the action/interactional strategies. This helps parties, Unilever (North Africa Middle East) as well as its core suppliers, to achieve a higher level of agility within their supply chain.

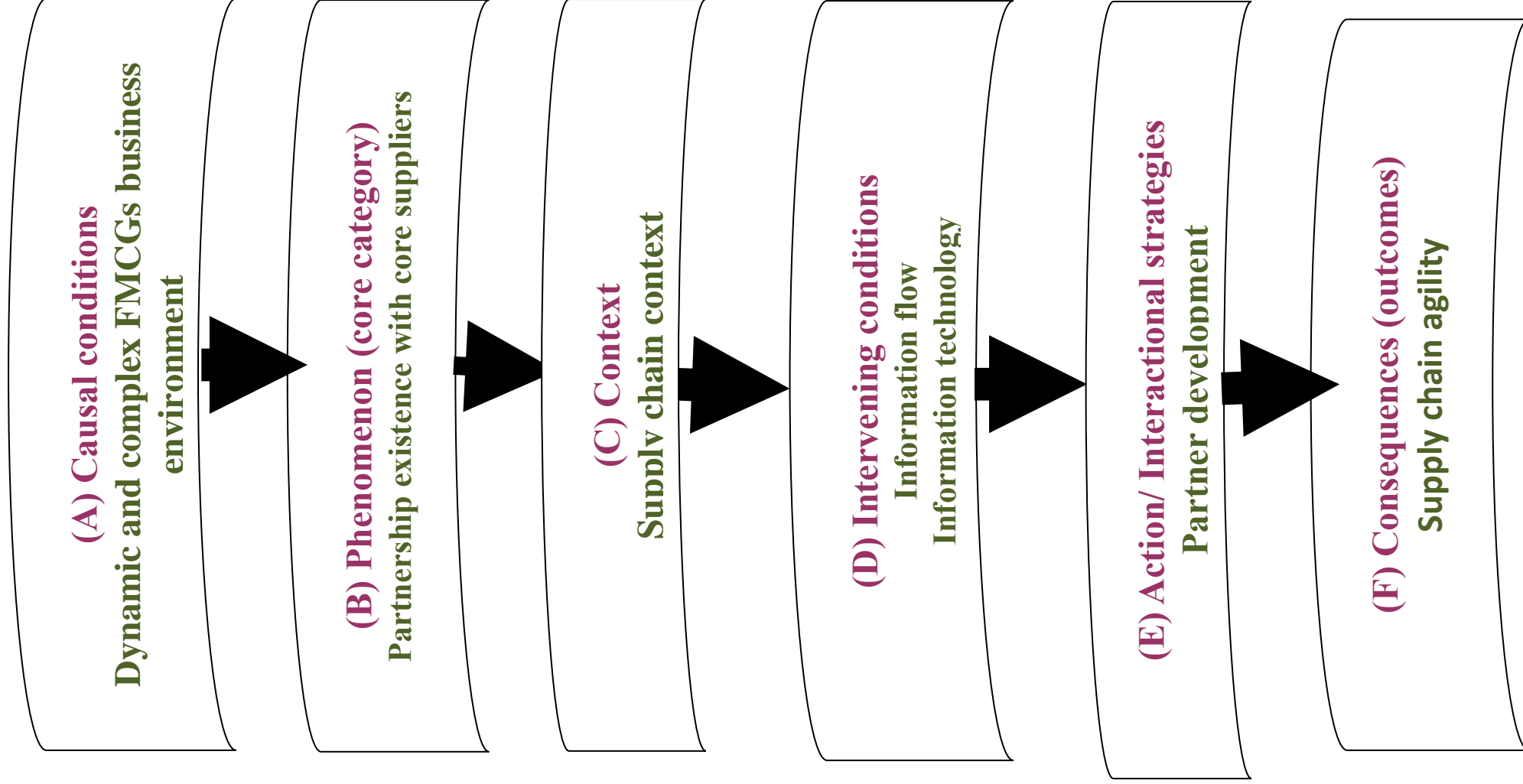
6.2.6 (F) Consequences

Consequences are defined by Strauss and Corbin (1990) as the outcomes of any action/interactional strategies undertaken to deal with, react to and/or manage a

phenomenon. They argued that these consequences or outcomes can be previously predicted or unpredicted by the researcher. They also suggested that the step of determining and searching for these consequences and outcomes is an essential step in applying the Grounded Theory approach. In this research, the consequences or the outcomes are ‘Supply Chain Agility’ and its importance within FMCGs companies’ supply chains. To achieve high agility level within supply chain for companies working in such type of industry, there are some attributes that should be first improved and enhanced to be able to achieve this goal. This set of attributes can be called also properties for supply chain agility is: Responsible & human encouragement thinking, Customer service, flexibility, innovation, speed, quality, efficiency, and responsiveness.

Bringing these six elements together, figure 6.10, diagrammatically represents the resultant research axial Paradigm Model derived through the open coding and axial coding analysis.

Figure 6.10: Research Axial paradigm model



6.3 Summary

This chapter discusses the relationships among the open codes determined in the last chapter (chapter five). This has been undertaken through the axial coding process. The axial sub categories as well as the axial categories have been determined. This is in order to give the opportunity to the core phenomenon to take its clear path as a step for generating a theory. In this chapter the Strauss and Corbin (1990, 1998) axial paradigm model has been used also to shape the primary generated theory which will lead to theory saturation and theory generation. The following chapter discusses the selective coding analysis as a final stage of data analysis.

Chapter Seven: Selective coding analysis: Final analysis stage and theory generation

7.0 Introduction

In chapters five and six respectively, the open and axial coding analyses have been presented. All the open codes that were derived from the first rounds of interviews have been discussed in chapter five. In chapter six, the grouping of such categories was explained. In chapter six also, the paradigm model has been briefly discussed to show these groupings.

In this chapter the continuous iterative flow of analysis is extended and concluded. The selective coding analysis provides the final picture of the theory which is generated from the data collected and analysed. A final round of data collection had been used in this chapter as a source of analysis, beside some documents collected from the case study website. The interviewees were holding managerial positions either in the case study company, Unilever (North Africa Middle East), or in the supply companies (the details of the interviewees are discussed in chapter four in table 4.2). The selective coding process (Strauss and Corbin, 1990, 1998) involves the process through which the core category is selected in a systematic manner in relation to the other categories. It also has another aim which is to validate the relationships between this core category and the others derived from the two preceding analysis stages. It has been defined by Strauss and Corbin (1990, p. 116) as *“the process of selecting the core category, systematically relating it to other categories, validating those relationships and filling in categories that need further refinement and development”*. Hence, the axial coding process is considered as the platform for the selective coding process (Strauss and Corbin, 1990).

Therefore, the main focus of this chapter is to provide a deep discussion for the core phenomenon and the relationships between this core category and the other categories, with the aim to gain more validation for these relationships. This is undertaken with the help of the axial paradigm model explained in the last chapter,

and is built around the four main components: conditions, core category, strategies, and consequences.

7.1 Selective coding and validation process

The selective coding process is considered by Strauss and Corbin (1990) as the way, to be used by the researcher, for integrating all the categories into a grounded theory. Although the integration process is a difficult task, it can be undertaken by the researcher using some important guidelines (Strauss and Corbin, 1990). Strauss and Corbin argue that *“integration is not much different than axial coding. It is just done at a higher more abstract level of analysis”* (p.117). Strauss and Corbin (1990) suggest some guidelines for helping the Grounded Theory researchers to develop, in a systematic manner, a final, real, conceptual, comprehensive and grounded picture from the research findings. Strauss and Corbin (1990) propose that the first procedure for integrating the research findings is *“explicating the story line”* (p.117). Then the researcher has to show the relationships (links) between the research core category and the other categories, where, *“the second [procedure] consists of relating subsidiary categories around the core category by means of the paradigm”* (p.117). The following step according to Strauss and Corbin (1990, p.118) *“involves relating categories at the dimensional level”*. Validating these relationships between the core categories and the other categories, including their dimensions, should be compared with data collected to gain a higher level of validation. Finally, the Grounded Theory researcher has to fill in the gaps that may exist among these relationships and data collected.

The most important inference here is that these steps should not necessarily be considered as steps. Strauss and Corbin (1990, p. 118) argue that *“it is important to understand here that these steps are not necessarily taken in linear sequence nor are they distinct in actual practice”*. They continue to say that *“in reality one moves back and forth between them”*. This has been the case in this research.

According to Strauss and Corbin (1998) it is possible to validate the relationships between categories derived from the open and axial coding processes through either comparing them to the original raw data or by providing the story to the respondents. This research has used both approaches to validation. After the axial subcategories and axial categories were derived and explained, the researcher returned to the original raw collected data with the purpose of gaining a higher level of validation for the primary links derived between the core phenomenon and the other categories. The theoretical framework for the categories' relationships developed was compared to the original raw interviews transcripts for more validation. The second validation approach was also used by the researcher. During the last round of interviews inside the Unilever (North Africa Middle East) manufacturing plants sites, the researcher provided the interviewees with the story and the categories derived from the open and axial analysis of the first rounds of data collection and their groupings/links. Therefore, the fourth step "validation process" took place with the aim of gaining a higher level of validation for the theory thus far generated. Moreover, this validation process served the important function of forming the basis for the final stage of data collection, to fill in any gaps, which is considered as the fifth step in Strauss and Corbin (1990) guidelines for the selective coding process.

The remainder of chapter 7 is divided into three main sections. Section 7.2 presents and discusses the story line of the research and the development of the relationships between the core category 'partnership existence with core suppliers' and the other paradigm categories. The other categories include: the causal conditions, the intervening conditions, the context and the consequence. Section 7.3 presents and discusses the relationship between the core category 'Partnership existence with core suppliers' with the consequence 'supply chain agility' at the dimensional level. Finally section 7.4 explains the developed, generated theory.

7.2 The story line and the development of the core category's relationships

After analysing data in the open and axial coding processes, it is possible to present the story line. The story line was defined by Strauss and Corbin (1990, p.116) as "*the conceptualisation of the story*", which is "*a description narrative about the central phenomenon of the study*". Strauss and Corbin (1990) argue that this story line in any research is considered as the core category of the study. Core category is defined by Strauss and Corbin (1990) as "*the central phenomenon around which all the other categories are integrated*" (p.116). From the analysis of the data and the development of all the categories, it was evident that most data has been concentrated on one category. It is important to note that when selecting the core category, it does not matter whether the chosen core category is an axial category or an axial sub-category. This is because the grounded theory has an important feature, which is the fact that it does not impose a method for its coding process, it permits the grounded theory researcher to choose his/her method for coding and reconstruction of the data in the way that can facilitate its analysis and generating of the theory (Strauss and Strauss, 1998). What is important at this stage of the grounded theory development is that the most appropriate "*conceptual label*" (Strauss and Corbin, 1990, p.121), whether axial or axial sub-category, is logical identified as the core category where it connects the other entire categories together. This selective category is 'Partnership existence with core suppliers'. This category was selected and considered as the core category for the study connecting all the other categories with each other.

The remainder of this section explains the relationships between the core category and the other categories. Some of these relationships have been deeply described in the axial coding process and therefore they are only briefly explained in this section with the aim of validating them and reaching the final generated theory. The sub section 7.2.1 explains the relationship between 'Partnership existence with core suppliers' and the causes of this partnership between Unilever (North Africa Middle East) and its core suppliers. These causes can be combined under the nature of the FMCGs supply chain business environment, which is characterised by being 'dynamic and complex business environment'. Sub-section 7.2.2 presents the

supply chain context through which Unilever (North Africa Middle East) is developing its strategies for ‘partnership existence with core suppliers’. Sub-section 7.2.3 discusses ‘Information technology’ as the intervening conditions. It is considered to be the catalyst for channelling ‘Partnership existence with core suppliers’ with ‘Supply Chain Agility’. Sub-section 7.2.4 presents the relationship between the core category: ‘Partnership existence with main suppliers’ as a driver, and the consequence: ‘Supply Chain Agility’.

7.2.1 ‘Dynamic and complex FMCGs business environment’: the causes for Unilever (North Africa Middle East) ‘Partnership existence with core suppliers’

Most, if not all, of the interviewees during the three rounds of data collection suggested the volatile and unstable nature of the business environment they are working within. To be able to face such industry features, Unilever (North Africa Middle East) is focusing on several practices and techniques. However, it alone cannot stand without the other partners within its supply chain. One of the most important supply chain partners is its main supplier. This was suggested by the Technical Project Manager, Gulf, (for all products) who said that *“As I said earlier, you need to define your supply chain end to end. You know, on the other side is your supplier; as the first leg. Because any problem with your supplier, you will not obtain your target at the end of the supply chain. So it’s a very important thing”*. Therefore it was very important for Unilever (North Africa Middle East) to develop and maintain a strong partnership with its main suppliers so that it is able to face the dynamic and complex market place.

This was also mentioned by the Site Quality Manager in Lipton Tea Factory in Dubai who said that *“... because when we have trust with them and we bring this partnership together... so trust is in everything, so as many other factors. There are times with a company like Unilever, when we need to be very flexible in the market in terms of providing Customer care. We’re all like a supply chain but ultimately we’re fulfilling the demands, so there are a lot of changes, the market reacts in*

different ways, so we need to change with that reaction. Then if we have a trust in our supplier, and we have this relationship with the supplier, we can adapt to the changes by moulding them and getting all the required stuff that we need because we agree, like six months before, that we want to give them the plan or two weeks before we want to give them the plan. Then sometimes we might not be able to, maybe 99% of the time we do it but even that 1% matters a lot for a company like Unilever, So if we have a relationship and we build up a trust, we can manage that with the help of them, this is because the supplier plays a very vital role...". He completed that by giving an example of building a high level of commitment and its importance as one key dimension of supplier partnership in facing and dealing with the changes inside their marketplace. He continued "If the supplier is committed they will do anything. Again as I said, we are working in a very dynamic and changing environment. Things change, there are a lot of requirements, there's a lot of competition, so we need to adapt ourselves into that and to do that, we need our supplier right next to us".

7.2.2 Unilever (North Africa Middle East) strategies ('Partner development') for 'Partnership existence with core suppliers' within 'Supply chain context'

The research's core category 'Partnership existence with core suppliers' was selected because it was agreed by almost all the interviewees that this is the relationship type that Unilever (North Africa Middle East) maintain with its core suppliers. From the data collected it can be argued that Unilever (North Africa Middle East) has shown that it has built and maintained strong partnerships with its main suppliers for the improvement and development of successful supply chain management. Unilever (North Africa Middle East) emphasises the importance of supply chain and its management. It considers the achievement of effective supply chain management as a key point for success.

They achieve the successful supply chain management through their collaboration with their supply chain partners. They focus on developing and helping them with the aim of improving their overall supply chain performance level. Some examples

of the practices or the strategies undertaken by Unilever (North Africa Middle East) are a list of requirements for its suppliers named 'Business Partner Code' introduced in (2004) for improvement (Unilever Middle East website, visited in, 2010). Also Unilever (North Africa Middle East) has published a "Supplier audit program" for determining the gaps and areas its core suppliers' performance that need further improvements. All these efforts are considered important by Unilever (North Africa Middle East) for improving and enhancing its main suppliers performance for increasing their overall supply chain performance.

Further example for Unilever (North Africa Middle East) focusing on improving supply partner within the supply chain context is a programme conducted in October 2007, for assisting suppliers to decrease their carbon effects where *"in October 2007, along with other leading companies, we became founding members of the Carbon Disclosure Project's supply chain Leadership Collaboration. This aims to increase disclosure of carbon impacts among suppliers and thereby encourage reductions in their carbon emissions. We have started by asking suppliers to standardise the data they provide on emissions"* (Unilever Middle East website, visited in, 2010). This was also supported by the Mashreq Tea Factory Manager in Egypt, who described the importance of maintaining supplier partnership for the sake of both: Unilever (North Africa Middle East) and the main supplier within the same supply chain context. He mentioned that *"you know supply chain is a chain, partnership is important for growth for both sides, not only for us"*.

From a supplier's perspective, partnership with Unilever (North Africa Middle East) is an important force for supply chain success, as noted by the Delivery System Manager in Supplier (A), who mentioned that working in harmony and coherence with the other supply chain members is important. This is shown in his answer for the importance of a supply chain mentality, as he agreed on the argument that supply chain is now the point of competition, not the individual firm.

This was also supported by the Technical Project Manager, Gulf (for all products), who insisted on the importance of developing and helping their partnership suppliers in order to improve their overall supply chain. He said that *“we teach them about Unilever quality standard, because at the end of the day even if they deliver the materials on time, it may be rejected [due to quality] and then it will create a lot of issues within the supply chain”*.

7.2.3 ‘Information technology’: a catalyst for enabling ‘Partnership existence with core suppliers’ in achieving FMCGs ‘Supply Chain Agility’

Information technology was considered by almost all the participants as an essential factor supporting the successful implementation of supplier-partnership process. This was advocated by the General Planner (for Kuwait and Qatar; for all the products) who said *“technology would definitely speed up and harmonise both the supply up to your customer, helping the company and the supplier both to achieve a successful partnership”*. The Marketing Manager (Levant countries: Iraq and Sudan) also suggested the same meaning, when he mentioned the importance of information technology in achieving higher levels of integration and communication. He argued that *“Information technology is a tool to improve integration and communication”*. Information technology was considered as a tool for facilitating and improving the planning functions within Unilever (North Africa Middle East) and its core suppliers. This was noted by the Supplier (D), who argued that *“I think a specific example is the way that we use forecasting from Unilever. We have an online view to their demand; we have an online view to their stocks at hand, so we can have better planning from our side to make sure that we are delivering what they need at the right time”*.

In addition to the above, Information technology was considered as an important element in the process of achieving supply chain agility through supplier partnership. Information technology was considered by several interviewees as an essential ground for successful partnership which is the key driver for achieving a high supply chain agility level. The Planning Manager of Lipton Tea (for Gulf),

when asked about this question, suggested that: *“because the information tool improves the frequency and the ability of the data that you are providing to the suppliers, so that they become more able to meet with your requirements and so that we become more able to our requirements..”*. This increase in the company and the suppliers’ abilities can improve their overall supply chain agility level. This was suggested by the Supply Planning and Logistics Manager who stated that *“We talk about using the top-tech technologies between us. {Interviewer: This makes a difference to the agile supply chain.} Big difference”*. A further point made by the Customer Service Manager (for Gulf Business Unit) highlights the importance of information technology to supply chain agility: *“Definitely agile supply chain cannot happen without this”*. On asking the same question to the Planning Manager for Personal Care (for Kuwait and Qatar), she answered by giving the same meaning, that is to say: *“Of course, yes ...The less of the manual working the better, so if I’m able to use systems to transfer information at the right time the supplier is able to use that information to produce the right thing... It will increase agility, reduce time, lead times, so works better”*. The use of information technology tools leads to the improvement in collaboration, as one important attribute for supplier partnership, which helps the company and its supplier to achieve supply chain agility. This was suggested by the Demand Planner for UAE, (for all products) who argued that *“I mean this is an example I told you about. A supplier sitting in a different continent or in a different country but having visibility on your warehousing and able to check and see whenever the raw materials unit fall below a certain level, the supplier will see this on his system and replenish your warehouse with these raw materials instantly. So information technology has played a significant role in improving collaboration between suppliers and customers. This is a good example”*.

The same meaning for the role played by information technology as a catalyst between supplier partnership and supply chain agility within FMCGs business industry was suggested by the Customer Service Manager in the Lipton Tea Factory. She mentioned that most supply chain agility attributes are directly enhanced through the use of information technology tools when communicating with their supply chain partners, when she stated that: *“Now he [the supplier] is*

inputting something that is in your system, against an email communication. It reduces time line, it increases your responsiveness, it increases your speed, it increases your flexibility, it increases your customer service level...”.

Form a supplier’s perspective, using information technology tools is essential for achieving agility within their supply chain. This was advocated by the Supplier Company (B) who explained that: *“Information technology is a very powerful tool that affects the supply chain agility. Information technology helps to manage and control information systems more efficiently. Information technology provide a continuous flow of valuable, accurate, and timely information which helps the manager to take decisions rapidly and control the whole supply chain thus he can respond quickly to market changes and always be flexible to change if the market changed. Thus information technology helped in achieving an agile supply chain”.*

7.2.4 ‘Partnership existence with main suppliers’: a driver for ‘Supply Chain Agility’

To answer the main question of this study the interviewees were asked about their opinions for the role played by the main supplier partnerships in achieving a high level of agility within Unilever’s (North Africa Middle East) supply chain. The data collected and analysed, as presented in chapters 5 and 6, clearly shows that Unilever (North Africa Middle East)’s supplier partnerships are important factors allowing Unilever (North Africa Middle East) to achieve supply chain agility. Some of the interviewees considered ‘Partnership existence with core suppliers’ to be the starting point or the first stage of the process which can lead them to ‘Supply Chain Agility’.

Among them is the Supply Chain Manager (for Unilever Gulf) who insisted on the importance of working with suppliers to achieve high levels of agility and flexibility. He mentioned that *“of course agility and flexibility not only in our hands because we have other suppliers who need to be as fast as we are. We’ve got to deliver products with them, because we can’t do it alone”.* He also considered

‘Partnership existence with core suppliers’ as the starting point for ‘Supply Chain Agility’ when he said: *“I think at the beginning is the starting point which is your supplier, but of course there are very important functions within the supply chain. But of course as an input to all is a very strong partnership which will enable you to achieve the others within your chain. So as a starting point, yes, it is very important..”*

As a starting point, ‘Partnership existence with core suppliers’ was also been considered by the Planning Manager of Lipton Tea (for Gulf), who insisted on the importance of improving partnerships and relationships across all supply chain members internally and externally to achieve a high level of ‘Supply Chain Agility’. He said that *“It’s one of them, not all of them because we are a chain, you can improve the relationship with supplier because if you’re not doing the good and optimised role internally within your supply chain and if you’re not having a good relationship with your supplier then your customer [can be also affected] it’s one of the chains. It’s a starting point, but it doesn’t end there”*. Similarly, the Site Quality Manager in Lipton Tea Factory in Dubai suggested the same meaning, saying *“As a starting point, if you don’t have the right materials in quality terms, I can say getting the right quality product is like solving 90% of your issues in the factory. So yeah it is the point where we start... {Interviewer: But do you think that having a partnership with your supplier is important for having agility within your supply chain?} Exactly yeah”*.

As an enabler for ‘Supply Chain Agility’, ‘Partnership existence with core suppliers’ was suggested by the Supply Planning and Logistics Manager, who said that *“I believe that partnership is an important enabler for the company supply chain agility. {Interviewer: Why?} Because without having a good partner with you, it could help in that you could find some changes in the market and you need a supplier to work within that. If you don’t have a strong supplier and partner that you can rely on and work with, then you will lose a long time”*.

Unilever (North Africa Middle East) ‘Partnership existence with core suppliers’ helped the supply partner to be able to be agile and allowed it to achieve a higher level of agility. This was described by the National Supplier Development Manager who explained: “Yes, exactly. We are working towards that direction but we have working towards this because of the supplier and because of even changing the mind set of some people within the company, not just the supplier. Both ways you have issues here and there to fix ...{Interviewer: Why is the supplier ?... The supplier can be one reason for not achieving agile supply chain?} Yes, of course, yes. {Interviewer: Why?} Because they are the main contributors in having the materials on time and having the materials quickly, and, for instance, when we started the Vertice plus programme, we had a lead time of the material from certain supplier like four weeks or five weeks from the same supplier that used to supply it. {Interviewer: Those suppliers you have already with them partnership}. Yes, and this supplier when we started supplier development programme with the suppliers, three years ago, they used to deliver materials in four weeks or five weeks. Now the same materials are delivered in 10 days. Now 10 days is much better than four weeks and five weeks, but as well we as a company are growing as a company and our complexity is increasing, and the supplier as well is developing and increasing with increasing agility and increasing flexibility but unfortunately we are moving with almost the same rate, so we can’t feel really the improvement of the supplier, Although the lead time is reduced from five weeks to ten days. We as a company still need more. We as a customer, we still feel that 10 days now is too much, that what about three years ago we felt that four weeks was still too much, but if it was three weeks then it would have been perfect. Now we’re sitting less than 10 days, so this is about the agility of the supplier ...”.

The Customer Service Manager (for Gulf Business Unit) insisted on the importance of ‘partnership existence with core suppliers’ on achieving ‘Supply Chain Agility’. He described the nature of the relationship between the supplier partnership and supply chain agility as follows “I think it’s really important. They are actually related to each other to an extent that if one of them goes wrong then the whole chain will break down. That’s how important they are for each other”. he continued by giving an example: “To be agile as well, yes, because if you know that your

partners cannot respond to your demands, right, so if I told the supplier that I want him to change the design of my product, and he said, I cannot do it, Why can you not do it, he said Because I don't have the capability to do it. {Interviewer: So, do you think that Partnership is an important driving enabling for supply chain agility?} Very important”.

The Planning Manager for Personal Care (for Kuwait and Qatar) emphasised the importance of working closely with suppliers to achieve agile supply chain, stating that *“of course. If I was not working closely with my supplier, the reaction to market might be very slow. So we need to work as partners to be able to give us what we want at the right time”*. She insisted on that again when asked directly on the role of supplier partnership on achieving supply chain agility, answering: *“Yes, we've gone through that before so it's positive, great in fact”*. On asking the same question to the Demand Planner for UAE (all products), he answered very similarly: *“Definitely. With collaboration, information sharing, long term commitments, definitely this will improve the agility of any supply chain”*.

On asking the General Planner (for Kuwait and Qatar, for the whole products) on the importance of having supplier partnership on the achievement of supply chain agility, he answered *“Yes. {Interviewer: Why?} If it's successful then it means both of you are satisfied, it's benefitting and you're benefitting. Your requirements are matched. So, this gives you the ability to achieve the agility”*. The same approval for the importance of ‘Partnership existence with core suppliers’ for achieving ‘Supply Chain Agility’ within Unilever (North Africa Middle East) supply chain was argued by the HPC (Health Promotion Coordinator) for Lipton Tea Factory, who mentioned that *“Absolutely, I do believe that”*.

7.3 The relationship between the core category ('Partnership existence with core suppliers') with the consequences ('Supply Chain Agility') at the dimensional level

Exploring the relationship between the core category ('Partnership existence with core suppliers') and the consequences ('Supply Chain Agility') at the dimensional level is highly recommended by Strauss and Corbin (1990). They suggest the importance of relating the categories at their dimensional level. This was the case in this study. This is because the main aim of this research is determining the relationship between Unilever's (North Africa Middle East) partnership with main suppliers and their abilities to achieve higher level of supply chain agility. This was also with the objective of determining the suitable partnership attributes that are required to help achieving higher level of supply chain agility and with the objective of discovering the full range of the required attributes for supply chain agility that can be affected by having successful supplier partnership. Therefore, this step is an important one in evolving the research's theory. It was shown from the data collected and the primary data analysis that the attributes which characterise Unilever's (North Africa Middle East) partnership with its main suppliers includes: Reliability, Long term contract, Trust, Commitment, Collaboration, Openness, Transparency, Shared targets, Vision, Non- priced basis, Win-win, Integration, Mutual benefit and Small number of suppliers (see section 6.1.3). In addition to these attributes, information flow (section 6.1.5) was suggested to be another attribute characterising Unilever's (North Africa Middle East) partnership with its core suppliers in the final data collection stage. Another attribute was emerged during the final data collection round by the Marketing Manager (Levant countries: Iraq and Sudan) who suggested: "*Additional attribute can be the same quality standards & perceptions to quality*". However, this attribute doesn't increase the number of the attributes characterising Unilever's (North Africa Middle East) partnership with its main suppliers. This is because similar quality standards and perceptions to quality can be included under the 'shared vision/targets' attribute as it gives the same meaning of having similar perceptions levels and goals even to quality concepts. From the supplier's perspective, Supplier (C) also added some attributes in the final data collection

round such as: the supplier capabilities including human abilities, equipment and technological abilities, the ability to develop and flexibility. This was evidenced when he said “*Capability: the Supplier has to be able to achieve the client’s needs: Man power, Machines, Technology, and systems; Flexibility; and Ability to develop*”. However, these attributes also can be included under the originally identified primary attributes. The supplier’s abilities including the human, technological and developing abilities can be included under the ‘Reliability’ attribute as all these abilities make Unilever (North Africa Middle East) better able to rely on such a supplier. Also flexibility can be included under the ‘integration’ attribute. This has been suggested by him as Supplier (C) said “*Integration between Unilever and Shorouk as a core supplier means: flexibility, cost reduction, and minimized quality [problems] which leads to a competitive edge over the market for Unilever*”. Accordingly, here was no need to expand the attributes beyond the same set of attributes that was explored from the first rounds of data collection. The attributes required to achieve ‘Supply Chain Agility’ were found to be: Responsible & Human encouragement thinking, Customer service, Flexibility, Innovation, Speed, Quality, Efficiency and Responsiveness (see section 6.1.9).

The data collected in the final, third round to reach the theory saturation, beside the remaining data from the second data collection round, is analysed from three sides:

* The relationships between ‘Partnership existence with core suppliers’ and, every ‘Supply Chain Agility’ attribute

* The interrelationships between both sets of attributes, and,

* Finally the relationships between every ‘Partnership existence with core suppliers’ attribute and ‘Supply Chain Agility’.

7.3.1 The relationship between ‘Partnership existence with core suppliers’ and every ‘Supply Chain Agility’ attributes

The relationship between the ‘Partnership existence with core suppliers’ and each individual attribute of ‘Supply Chain Agility’ is discussed in turn subsections 7.3.1.1 to 7.3.1.8. This relationship was considered by almost all the interviewees as an important one where most of Unilever (North Africa Middle East) ‘Supply Chain Agility’ attributes (explored from the data analysis) are directly affected by Unilever’s (North Africa Middle East) ‘Partnership existence with core suppliers’.

7.3.1.1 The relationship between ‘Partnership existence with core suppliers’ and ‘Responsible and Human encouragement thinking’

The relationship between ‘Partnership existence with core suppliers’ and ‘Responsible and Human encouragement thinking’ as one ‘Supply Chain Agility’ attribute is discussed. Responsibility was derived from the first rounds of data collection and analysed as an important attribute for ‘Supply Chain Agility’. Most of the data collected and analysed during the final stage of data collection showed that responsibility abilities of the FMCGs supply chain are impacted by the company’s partnership degree with its core suppliers. For example, the Procurement Operations Manager (Unilever Mashreq) explained the relationship between having a responsible supply chain and maintaining strong supplier partnership. She mentioned: *“Of course because strong partnership would make both partners, again I wouldn’t use the term supplier, I would use partner, so our partner will have a higher level of responsibility towards Unilever. So for example if we have any quality issues, which we are facing in his product, which is something comes up on our production line and he couldn’t find it over his production line, so the problem, coming from his raw material supply for example, or it may be coming from something in our line. So when we have such kind of partnership and long term vision and he feels the mutual benefits, so they dedicate a quality team for example, a technical team from their side and our side and they work together to solve a problem. They feel responsible that at the end we should*

sort it out and he wouldn't act as if I delivered as per your specification, I don't care. No he would care and he would feel responsible that finally we need to get the product on shelf on time and with the right quality. And vice versa, with this partnership. If our partner is facing a problem in his raw material supply for example which would lead to shortage and he would like to replace it by another raw material supplier, he cannot do this without getting our approval. If he is not our partner, if we don't feel that they are our partner, we will simply say okay fine, no either you give us our pieces or not and we'll take it from another supplier. But as long as there is a partnership, so again we did a team from our side to go with his team and try to approve the new raw material. So this is an example of the high level of responsibility is affected by the partnership". She continued to argue the impact of strong partnership on the human way of thinking by saying "Let me, split into two things here. This kind of change in thinking of management, it will be related to the product the supplier is supplying to us, it will not be in general. Sometimes by the way we could affect it even in a general term because some of our partners are global suppliers, global players, so they also have kind of general systems which they could share with us which could affect our way even of managing things internally. But way of thinking concerning the products of our management with such a kind of partnership, of course it is affected because we have more interaction between us and our partners and we are... it could help us also in understanding the product in a different way. And it could help us in putting a different system, how we deal with the product for example".

This was also argued by the Procurement Operations Projects Manager who suggested the same meaning and the same impact: "Yes. *{Interviewer: How and why?}* whenever I have a partnership with the supplier,[there is] one of the measurement that I can use to measure this partnership with a set of KPIs. One of the main KPIs is the customer care ... and on time. Simply is whether he's delivering the products on time or not, whether he's delivering the products in full or not. So, this is the main KPI that I measure the supplier against. The partnership suppliers, not all the suppliers. So, this is equivalent to responsibility, whether this supplier is responsible about this partnership or not. If his measure is low, whether he is responsible for improving this KPI or not? If he is aware of the

mistakes that lead to a lower KPI or not. So, this gives me responsibility from the supplier side. Again if this KPI is in full or 100% this for sure gives me a flexible supply chain that I work with to deliver my finished goods products to the customers. So, it's a shared responsibility between the supplier and my side.

{Interviewer: And this resulted from having a partnership with your supplier?}

Yes". He also discussed the importance of having a strong supplier partnership on the people's encouragement way of thinking giving the example: "From that side of course because I will give you also a real life example. At the time that we were implementing SAP we made the training for all the partnership suppliers to explain all that new SNC module and things like that. So, we share our managerial or encouragement thinking that we learn from SAP implementing to the supplier. Also another example is that we share any knowledge, any training sessions between our site and the supplier site regarding the managerial levels or the encouragement thinking. Also it helps that we work all in the same area or the same level of thinking". The Marketing Manager (Levant countries: Iraq and Sudan) also notified the importance of strong supplier partnership on responsibility as he said "Strong partnership gives more confidence to the sense of responsibility".

From a supplier's perspective, the supplier (D) emphasised the importance of being responsible for the supply chain and its impact on achieving agility, who said *"Being the sole supplier to Unilever, or rather the core supplier, is a lot of responsibilities on us but it also adds a lot of responsibility on Unilever themselves in providing the right abilities and having the right transparency for the decision-making process and being quite agile in taking decisions as well. So, the delay on their side might eventually affect and mean a delay on our side. So, it is a responsibility from both ways".* On asking about the impact of their partnership with Unilever (North Africa Middle East) on their way of thinking and whether this partnership has improved this way of thinking he answered "yes". Supplier (B) also recommended the same relationship between responsibility and 'Supply Chain Agility'. He expressed his opinion by saying *"Partnership had changed the style of our relationship with Unilever. After the partnership our relationship was a win-win relationship as our company and its main customer became an integrated company that is interested in each of the company's benefits. Thus after the*

partnership our sense of responsibility towards our customer had increased". He also continued to emphasise the importance of partnership on the encouragement of people way of thinking by saying *"Our partnership with Unilever had forced management encouragement thinking as to maintain the partnership we must always develop to meet our customer's standards"*.

7.3.1.2 The relationship between 'Partnership existence with core suppliers' and 'Responsiveness'

It was also shown that 'Partnership existence with core suppliers' can affect the FMCG supply chain's responsiveness level. This was noted by the Procurement Operations Projects Manager who explained: *"Yes, sure. {Interviewer: How and why?} That gets us back to the same example. How can I make a partnership with the supplier rather than another? It's about his responsiveness or he's willing to give me flexibility, is he good in responding to my demand if I have a fluctuation in demand is he willing to respond to this or not? So, whenever I choose a supplier to build a partnership with it's for sure the supplier which has the maximum flexibility and responsiveness to my demand or my innovations and fluctuations in demand and seasonality and things like that. So, whenever I build a partnership with the supplier I need to ensure that this supplier has the full responsiveness to my demand. And this gets us back to Unilever. Whenever I am working with these suppliers, so for example, if I have seasonality in the summer or something I will get back to my supplier to back me up with extra products and innovation and new specifications and things like that. Whenever he has high responsiveness, I will have high responsiveness to the customer. So, the whole chain is closed for in the responsiveness attribute"*.

This was also expressed by the Procurement Operations Manager (Unilever Mashreq) who recommended the same relationship, stating that *"Yes, again as we said with the partnership, there would be a high level of communication. So as an example we share with them the long term vision, we share with them the forecast, the plan, our requirements, our annual plan and we give them a regular rolling*

monthly forecast. With the partnership it happens, it could happen that and it happens actually that we could have a booming of 20% in one month or another with a very short notice because of promotion, because of whatever, so we go and sit with our partner and they actually care to give us a high response and meet the requirements, either by building stocks at their site or by producing in advance and supplying to us. So in other words it reflects high responsiveness and vice versa. Again if they are having a plan for example to reduce their products, if for example, they have a maintenance plan which would affect their monthly or their weekly output for two or three weeks for example. So again, because of the partnership they will update us with this, they will communicate to us and we will sit with them to plan how we sort it out. Such a kind of high responsiveness we will not have without having a partnership”. The Marketing Manager (Levant countries: Iraq and Sudan) also mentioned the same impact of strong partnership on responsiveness of FMCGs supply chain who explained: “Reliability leads to strong partnership & this accelerates speed of responsiveness”.

7.3.1.3 The relationship between ‘Partnership existence with core suppliers’ and ‘Customer Service’

Customer service was suggested as one important attribute for achieving agility within FMCGs supply chain. It was also suggested by the data collected and analysed to be affected by maintaining strong supplier partnership. This was supported by the Procurement Operations Projects Manager who explained “from Unilever’s side whenever I form a partnership with the supplier – I form partnership with the major suppliers, I go for them with the major KPIs that I’ve talked about, which is the in time and full. I work with the supplier aggressively to reach like 100% of this KPI. So, whenever I am already having old materials that I’m working with this will ensure that I am satisfying my customer with the finished goods. But if I have a supplier that always having issues on deliveries, whether on time or in full, this will hurt my customer service to the customers as well. {Interviewer: But actually the partnership between you and your supplier affect your customer service level?} Yes. It is a main contributor of my customer service Level”. This was also mentioned by the Procurement Operations Manager

(Unilever Mashreq) who explained the importance of building and maintaining strong supplier partnership for a FMCGs supply chain customer service level. She argued that: *“Again it is linked to the customer, the high level of customer service, how we evaluate the customer service that we give the product on shelf, on time, in full. {Interviewer: How such partnership with your core supplier affects your supply chain customer service level?} As the example I said in the responsiveness, so again if there is a request from our sales department based on that we need to reach a certain level; [for example] we need to increase the demand. Or even without increasing the demand, even if with the partnership and with the regular communication would assure that we will be able to supply the product on shelf and on time, which would affect directly our customer service level. And vice versa for the partner also. So yes it affects, of course partnership would affect the customer service level within the supply chain”.*

The relationship between ‘Partnership existence with core suppliers’ and ‘Customer Service’ within FMCG supply chain was also supported from the supplier point of view. This was shown by Supplier (D) who argued that due to their successful partnership with Unilever they became much more able to successfully serve Unilever (North Africa Middle East). He said *“Well, yes, I think we’ve done that quite successfully between our suppliers, based on planning with Unilever. So, the way that we deal with our own material suppliers, the way we deal with flexible taxing suppliers, we basically try to maintain some sort of a model which we are committed to Unilever on. And so for I think it’s been quite a comfortable engagement from both sides, between us and our suppliers and, in return, makes our commitment to Unilever much more secure”.* This was also suggested by Supplier (B) who said *“Partnership made us more concerned about our customer as our relationship with our customer is now a long term relation thus we started to serve Unilever better. Thus the partnership had improved our customer service”.*

7.3.1.4 The relationship between ‘Partnership existence with core suppliers’ and ‘Flexibility’

Flexibility is an important attribute for achieving agility within FMCGs supply chain. This view was supported by almost all the participants. It was shown that strong partnership with core suppliers can affect Unilever’s (North Africa Middle East) supply chain flexibility level, for example, the Procurement Operations Projects Manager said *“Yes, that goes back to what [has said before], I have a real life example which is the supplier that we are dealing with as supplier network collaboration or it’s actually called Vendor Manage Inventory; that they manage the inventory at their site. They build stocks at their site and replenish from these stocks. This gives me a very big flexibility that I make an order and this order is replenished from their stocks. I never wait for the production process at this site. This gives me flexibility. I cannot do that with the small suppliers that I’m not working with in ... I do that only with the suppliers that I am having partnerships with it and they are ready to have stocks values carried for Unilever and things like that. And this never comes without partnering with the supplier”*. Similarly, the Procurement Operations Manager (Unilever Mashreq) noted that supply chain flexibility level of Unilever (North Africa Middle East) is affected positively by their supplier partnership. She proposed that *“Yes, it affects our level and it would lead to high level of flexibility within supply chain because again and I will come again to that term communication, with regular communication, first sharing the long term vision, they will be updated or they will be aligned as our partner with our innovations with our plans for the next year. So they will be ready by their investments and their equipments to meet and be also flexible to meet our requirements, including not only the vision, including also having some spare capacity for us in case of any kind of warning which leads to higher responsiveness and will make us flexible. Sometimes we need, due to change in the market, we need to make special packs for example which needs some changes in the packaging material, I am just giving an example on packaging material. In the case of working with one of our partners, we would sit with our technical team and marketing team from Unilever and go and sit with the partner and they will develop together a kind of packaging which is needed for such promotion. And such a kind*

of flexibility, which would lead to increase in or High level of flexibility in supply chain, we'll never have such kind of flexibility without having a partnership". The same direct relationship between the strong 'Partnership existence with core suppliers' and flexible supply chain was mentioned by the Marketing Manager (Levant countries: Iraq and Sudan) who expressed it as follows *"Strong partnership puts the company on the top of the supplier's priority list & this increases the degree of flexibility"*.

From the supplier's perspective, they also argued that it is important to have a strong partnership with their main customer to achieve higher level of flexibility within their supply chain. This was evident from Supplier (D), who mentioned: *"Well, flexibility depends on how much rules and guidelines are put from Unilever, or restrictions are put from Unilever, in terms of maintaining stock levels, in terms of maintaining levels of raw material and all of that. The better and the closer you are as partners, the better that you can manage and bring these levels down and help becoming more agile"*. It was argued by Supplier (B) that flexibility of the supply chain is directly impacted by the 'partnership existence with core suppliers'. He explained this by giving an example of their partnership with Unilever (North Africa Middle East) by saying: *"The partnership contact had a term concerning flexibility. Unilever was interested in a flexible supplier and we were interested to have Unilever as a customer. Thus we started to be more flexible and innovating more products to respond with the markets ups and downs to serve them better"*.

7.3.1.5 The relationship between 'Partnership existence with core suppliers' and 'Innovation'

Innovation was suggested to be a 'Supply Chain Agility' attribute. It was shown that it can be affected positively by 'partnership existence with core suppliers' within FMCGs business environment. This can be shown by the Procurement Operations Manager (Unilever Mashreq) who argued the importance of strong supplier partnership on Unilever (North Africa Middle East) innovation abilities. She explained: *"Yes of course, how simply again when we shared the long term*

vision we include the innovations, they make the investments which is needed, especially investments or equipments needed for this innovation and even sometimes it comes up that the innovation which we have in front of us, and it is time of development, we face a problem to develop it with the agency. We go to our partner, we sit with them and they develop for us with the agency and with our technical team how we can make this innovation which can run at our partner line and our line. So of course high level of partnership would affect our level of innovation such a way. Actually also another example, sometimes our innovations are coming from our partner, so we just think of a smaller pack for example but we don't know how it looks or what shape it would be. We could get it from our partners and they could share their own innovation with us“.

The relationship between ‘Partnership existence with core suppliers’ and ‘Innovation’ with in FMCG supply chain was also suggested by the Marketing Manager (Levant countries: Iraq and Sudan) that innovation is affected by the strong supplier partnership as he mentioned: *“Strong partnership facilitates the exchange & sharing of knowhow & technology & this leads to a high level of innovation”*.

From a supplier’s side, it was also agreed that innovation level throughout the whole supply chain could be greatly impacted by the ‘partnership existence with the core suppliers’. This was recommended by supplier (B) who said *“Since partnership with Unilever we started sharing the same interests. Thus we now care much more for them as our interests are now the same. This increased our responsiveness as when we see anything new that could improve our product we quickly do it, which led to the development of the research and development department, which is only concerned by innovating new styles of packages that are more attractive”*.

7.3.1.6 The relationship between ‘Partnership existence with core suppliers’ and ‘Speed’

The relationship between ‘Partnership existence with core suppliers’ and ‘Speed’ was suggested in the data analysed. For example, the Supply Chain Manager (for Unilever Gulf) argued that among the benefits of ‘Partnership existence with core suppliers’ is to achieve higher speed and innovation abilities. He said “... *Another one is actually using your lead time through new innovations. So instead of taking six months to apply an innovation we can do it in three months*”. On asking about other supply chain agility attributes, he continued by giving an example with one global supplier partner opening within the Middle East to be near Unilever (North Africa Middle East) for improving their overall supply chain flexibility and responsiveness levels. He continued: “*Well for example, we have one of our biggest global suppliers and we have one of our big global factories in the region and one of our core materials come from that supplier. So then on that relationship, it’s a strategic relationship and so on with that supplier. We get that supplier to build a facility for us within the region; {Interviewer: this has effects in terms of you flexibility level?} Definitely, definitely, imagine if one of the biggest suppliers can supply on a daily basis instead of monthly or weekly, I think it will make you more flexible to respond*”. This was also supported by the Procurement Operations Manager (Unilever Mashreq) who discussed the importance of ‘Partnership existence with core suppliers’ on Unilever (North Africa Middle East) supply chain speed abilities: “*Of course having a partnership with our partner or with our suppliers, our strategic suppliers would lead to high level of flexibility as we said, high level of responsiveness and we would have also innovations which at the end would lead to high level of speed in launching any product, any promotion or any innovation and meeting any increase, unexpected increase in forecast. So yes partnership has an impact in having high level of speed*”.

The importance of having a ‘Partnership existence with core suppliers’ on supply chain speed abilities was also argued by the Marketing Manager (Levant countries: Iraq and Sudan) who said “*Partnership can lead to integration of systems & unification of processes that should transform directly into more speed*”.

This was also recommended by the partnership core suppliers. For example Supplier (B) emphasised the importance of ‘partnership existence with core suppliers’ on achieving higher speed abilities, who said *“Partnership increased speed to respond to customer needs by finding new ways and techniques to decrease the lead time which led to a high speed of production and on delivery time dates”*.

7.3.1.7 The relationship between ‘Partnership existence with core suppliers’ and ‘Quality’

The relationship between ‘Partnership existence with core suppliers’ and ‘Quality’ with FMCG supply chain was suggested from the data collected and analysed. For example, the Procurement Operations Manager (Unilever Mashreq) recommended the importance of building and maintaining partnership with the main suppliers on Unilever (North Africa Middle East) supply chain quality level. She noted: *“Again yes it does, because when we have a partnership with our partners or with our suppliers, so we make sure that first the suppliers or these partners have kind of training, they visit our factory, our sites, they understand our quality parameters, they understand how we are inspecting our incoming products and vice versa. As I said, we make a kind of way of training at their site to understand how production takes place, what parameters they are considering and what criteria we should consider. Having a partnership between us and our partners and sharing the long term vision, they understand what we are looking for in future and they start to work accordingly to it. Not only for example they can invest in certain equipment to reach a higher level of quality and so yes partnership would affect the level of quality”*. This also was supported by the Procurement Operations Projects Manager who said *“Quality, yes, for sure. Because one of the major KPIs that also I’m measuring my partnering suppliers is the quality of receiving goods and also quality, the online quality. So, again it’s one of the major KPIs that I measure all the partnerships applied with. And the major suppliers that I give him more volumes and more shares from my volume. They are more aware of my quality specifications. They are more focused to give me the highest quality. They are keen to develop this and I am keen to develop their quality department and help to*

share the knowledge between my quality department and their quality department rather than any other small suppliers that is willing to do... to give quality products. But it's not that issue for him to give me a defective ...". The same impact and relationship between supply chain quality and 'partnership existence with core suppliers' was also suggested by the Marketing Manager (Levant countries: Iraq and Sudan) who said: *"Partnership facilitates sharing the technology & knowhow & this improves the level of quality"*.

The relationship between 'Partnership existence with core suppliers' on the supply chain quality was also supported from the supplier's side. This can be shown from the words of the supplier (D) who answered *"Definitely. We've learned a lot from Unilever as a large multinational and the standards that they provide. We try to incorporate some of our standards and extend them by how we have with Unilever"*. Supplier (B) also showed the importance of such partnership on achieving better product quality when saying *"Partnership increased our concern about our customer, thus it encouraged us to always try to improve our product quality. Because we believe that the packaging of the products affects consumer trends"*.

7.3.1.8 The relationship between 'Partnership existence with core suppliers' and 'Efficiency'

The relationship between 'Partnership existence with core suppliers' and 'Efficiency' within the FMCG supply chain was also argued during the data analysis. For example, on describing the benefits gained from Unilever (North Africa Middle East)-supplier partnership on supply chain agility attributes, the National Supplier Development Manager explained this and its impact on improving their efficiency, as well as other attributes: *"Definitely, yes. I will give you an example that was happened a couple of months back. We had a supplier which we acknowledged, sending lots of emails. The supplier kept for like six months with zero defects, not a single defect; therefore we were able to increase our overall equipment efficiency by like 20% or 30%. Our lines used to be 60%*

efficient. Now it's 90% or 80% efficient because of one of the main contributors is the supplier. He improved the quality aspect. They didn't stop anymore due to quality defects.. So definitely the impact here improves everything". He continued by giving another example for the importance of supplier partnership on their 'Efficiency' and responsiveness levels. He said: *"I'll give you an example. When we had a hole, it's very hard to expect that hole in the middle of millions of bottles, okay. The problem is not in the quantity. The problem is in the timing. If this bottle is filled with shampoo and then it's going through the line, when the worker just notice. By the way, our line performance is 160 bottles per minute. So when the worker just observes there's a leakage from a bottle, it will take 10 seconds or 20 seconds to stop the line. Yes, you have a stoppage time, and you have a cleaning time, and you have a lot of time so you waste from 15 minutes to 30 minutes on the line. This is the lost time, so lost time affects our responsiveness to market, definitely, this is for a single bottle by the way".* Similarly the General Planner for Kuwait and Qatar (for the whole products) insisted on the importance of supplier knowing what has to provide to Unilever (North Africa Middle East) and its impact on the a fast supply chain as he mentioned *"Yes, well like the way I look at it an ultimate customer supplier relationship is for the supplier to be even to meet our demand in terms of time, quality and quantity. Given these three are met, and then it is the supply chain's responsibility to be able to get to the market as fast as it can".*

It was discussed by the Procurement Operations Projects Manager that 'partnership existence with core suppliers' Unilever (North Africa Middle East) can also affect positively their supply chain efficiency level. He discussed it by saying *"Yes, because efficiency is like something related to quality point. If I have quality products from the supplier then I will have a high efficiency in my manufacturing site. And helping the supplier getting my products with high quality this back will help my efficiency. And sharing my quality knowledge to the supplier will help his efficiency. One of the real life examples is that we deployed one of our Unilever staff quality departments in the supplier site fully to be only at this supplier site. So, he manages the source, quality and the source from the supplier site. So, for to ensure he develops the quality aspects in the suppliers and he ensures to my side*

that all the products coming are with a high quality. So, sharing this knowledge between both sites improved efficiency at my site and improved efficiency at the supplier site. {Interviewer: And this can improve the efficiency for the whole supply chain?} Yes, sure”. The relationship between strong ‘partnership existence with core suppliers’ on the level of efficiency was supported also by the Marketing Manager (Levant countries: Iraq and Sudan) who mentioned: *“Strong partnership encourages sharing information like medium & long term forecast that increase the level of efficiency”.*

It can be shown also that ‘partnership existence with core suppliers’ can lead to higher efficiency from the supplier’s side. This can be shown from the words of supplier (B) who explained the importance of partnership on efficiency level by giving an example. He expressed this by saying *“The supplier development department helped in developing suppliers after the partnership agreement that was done between Unilever and its suppliers. A team from the department came to our company and started to discuss with us our problems to try to solve it. They offered solutions that helped us in cutting our costs and producing our products more efficiently. Thus they put us on the right track and now we are developing our self-much more and started to be innovative in the techniques we use to cut the costs or develop new products”.*

7.3.2 The interrelationships between Unilever (North Africa Middle East) ‘Partnership existence with core suppliers’ attributes and Unilever (North Africa Middle East) ‘Supply Chain Agility’ attributes

Some relationships between ‘partnership existence with core suppliers’ attributes [the attributes that characterise the partnership between Unilever (NMAE) and its core suppliers] and Unilever (North Africa Middle East) ‘Supply Chain Agility’ attributes was derived from the analysis of the data collected in the three rounds of data collection. Therefore, in this sub section the relationships between some attributes that characterise ‘partnership existence with core suppliers’, and some attributes that characterise ‘Supply Chain Agility’ is presented.

For example, the Site Quality Manager insisted on the importance of trust as one attribute for Unilever's (North Africa Middle East) partnership with main suppliers and its role in improving their responding abilities. He said *"it could play a role because if you have trust in your supplier they react in all the possible ways they could do it. But if you do not have trust then they might not always react to you. So having trust is very important because it's one of the most important things to build a relationship because no relationship can be built if there's no trust"*. He also agreed on the importance of having trust with the supply partner on achieving higher level of speed within their supply chain by saying *"Yes"*. Similarly he agreed on the importance of high commitment partnership with main suppliers on achieving higher flexibility level within their supply chain by saying *"Yes it does"*. On asking about commitment, he also explained its role in achieving higher level of responsiveness within their supply chain as he mentioned that *"when we have highly committed and responsive suppliers, there are times when we need to change our innovation, we need to change our product, [and] we need to create some samples. So we can go back to them saying that okay we planned for this and there's an issue with this, let's not produce this, let's produce another product, for example, {Interviewer: This affects your supply chain responsiveness?} Exactly"*.

He agreed also that having high level of collaboration between Unilever (North Africa Middle East) and its partners can lead to better responsiveness level by saying *"A lot"* and better speed level by saying *"Yes it does"*. He continued to give example for the importance of collaboration on their flexibility and responsiveness levels. He continued *"Again it plays a direct role into the flexibility because when we have a joint project we get to know each other very well. Sometimes when we have changes and we have different requirements and we have some urgent requirements, since we know our supplier very well and we are so well collaborated that we can predict or identify before even going to them saying that we could do that, we cannot do this. We will be able to make it. Like since we have a collaborative system in place or we are so collaborative, we will be able to make out what work can be achieved out of our suppliers so we can react"*.

The importance of information flow (information sharing and communication) was also recommended to help in achieving higher level of supply chain flexibility. This was suggested by the National Supplier Development Manager who said *“Information sharing is very important at the first place, even if you don’t have the right tools to do it but at least sharing a simple thing like a forecast would make a huge benefit to the supplier in terms of flexibility”*. The importance of supplier collaboration, transparency and commitment was suggested by the National Supplier Development Manager, who agreed on their role for improving speed, responsiveness and flexibility levels by saying *“Definitely, Yes”*. He also suggested that the existence of a mutual benefit view with the supply partner can improve the quality level as he mentioned *“...having a mutual benefit which is improving the quality of the source at same time...”*.

This was supported by the Customer Service Manager (for Gulf Business Unit) who explained the importance of commitment: *“I think it does definitely affect because, for example, if you have committed with your supplier that this is the certain amount of business that you will be taking from him in the next two years and then he invests himself into his business so that he can produce more, and then you say No, no, no, I don’t want anything then it’s a commitment, right, that you tell him this is how much of business I want from you, and then at the end of it you’re like I’m sorry. But he’s already invested, so it’s not his fault. It’s your commitment that you did not fulfil”*. On the other hand, looking from supplier’s point of view, if the supplier has committed that he’s going to deliver a certain commitment to you and he doesn’t deliver then it is related to the level of commitment which is very important. By the way this thing is one of the most important things in supply chain, this word commitment, so that’s what commitment is all about. Commitment leads to loss in sales if it’s not met. *{Interviewer: It can affect your flexibility level?} Definitely”*. Flexibility can be also affected by the degree of collaboration that exists between the company and its main supplier, as suggested by the Customer Service Manager (for Gulf Business Unit), who argues by explaining the importance of collaboration by saying *“you always do the collaboration when you have to share the resources. So, for example, there are machines required to do step 1, 2, 3, 4, 5, so I’m one company and you are another company. I only have*

machines to do the first three steps. You only have the machines to do the last two steps. So if we collaborate, I don't need to invest in the next two steps and you don't need to invest in the first three steps. {Interviewer: And this would affect the flexibility level?} Definitely". He also suggested the importance of reliability as one supplier partnership attribute on quality and responsibility as he said respectively *"..if I know that my supplier is quite reliable then I can remove the quality check within my factory...."* and *"...that you have a reliable supplier. He knows what you expect from him and he knows how important his role in the whole chain. So he has to make sure that he is responsible while servicing you. He has to be responsible"*. Responsibility was also suggested by the Customer Service Manager (for Gulf Business Unit) to be affected by having high level of supplier commitment relationship. Responsibility was also suggested by the Customer Service Manager (for Gulf Business Unit) to be affected by the existence of a strong level of trust between Unilever (North Africa Middle East) and its relationship partner, as he recommended its importance by: *"It definitely increases. For example, you trust me, so if you tell me to do something I have to be more responsible in doing it because I know that you know that I can do it. So if there is a supplier, for example, we have a supplier who supplies boxes to us, packaging material to us, he knows how important it is to make a quality package for us because he knows this product sells for a higher price at Carrefour. So he's going to be more responsible as well because he's a part of a business now. So when he feels he's part of a business, when he feels the customer trusts him, when he feels that he's the only one that's doing it for them, of course he becomes responsible"*. Trust can also affect the speed ability, as recommended by the Customer Service Manager (for Gulf Business Unit), who explained *"definitely, as I told you if we have reliability then we have trust. If we have trust then we have a better delivery from the supplier, so it does affect"*.

The relationships between some attributes for 'partnership existence with core suppliers' and some of the attributes of 'Supply Chain Agility' were also recommended by the Planning Manager (for Personal Care for Kuwait and Qatar). She argued that flexibility can be affected by trust and commitment. She suggested: *"for example, if I want a change in plans, for them to accommodate that change is*

only possible if they trust us that this change is important” and “So if I, as a company, promise my consumer that I will want to get you what you want when you want it, maybe, for example in summer there's a demand for sun blocks, hypothetically. If I promise to get you that as a company then my supplier has to be committed to it as much otherwise I will not get it for you. {Interviewer: And this affects the flexibility level?} Yes”. Trust can also influence the responsiveness, as suggested by the Planning Manager (for Personal Care for Kuwait and Qatar) as she agreed by saying *“definitely positive”*. She argued also that speed can be influenced by the degree of commitment and collaboration. For example, collaboration with the supply partner can improve both learning abilities: Unilever (North Africa Middle East) and its core partners and consequently they will be able to become faster. This can be shown from her words: *“You learn day to day, so we learn from the supplier, they learn from us and together we grow. {Interviewer: Would this affect your speed and responsiveness level?} Of course, if we're learning together, you're not reinventing the wheel so basically you've learned something, you apply it and then you're faster”*. For the role of commitment on speed she also suggested *“It's a positive impact; if you're committed only then will you work to ensure that you achieve it at the right time. If you're not committed there will be so many loopholes in the middle that you'll keep missing your target dates, your times, everything”*.

Some relationships between ‘Partnership existence with core suppliers’ attributes and Unilever (North Africa Middle East) ‘Supply Chain Agility’ attributes were also suggested by the Demand Planner (for UAE, all products) who said *“definitely, when I would trust you, this can lead to a good flexibility level because when you [the company] can be quite assured that whatever happens because your supplier is very trusted, he will do whatever meets your demand, so you can be flexible. I mean, at that time you don't have enough resource to produce something, you can always rely on your trusted supplier to help you closing the gap or trying something different, so this is flexibility. This helps in flexibility”*. Also he recommended the importance of commitment on flexibility as he mentioned *“yes, if from the past you've seen your supplier always meets his commitments then you can rely more on the supplier, so this will definitely improve the flexibility of your supply chain*

because you know whatever he commits he actually meets that commitment, so this will affect positively". The importance of collaboration on flexibility was also supported by the Demand Planner (for UAE; for all products) who mentioned that "Definitely it will. Like I said previously, this is where I said sharing of information between the core supplier and the company. When you collaborate, yes, in most cases this will improve flexibility. {Interviewer: Why?} I'll say because I mean the supplier can always come up with new ways and tell you about them, and this may be a better way of achieving something. So if you try this, if you're flexible to try this new way and it works then yes this will improve; collaboration will improve positively flexibility level".

The Demand Planner (for UAE; for all products) also suggested speed as one important attribute for 'Supply Chain Agility', which can be impacted by some 'partnership existence with core suppliers' attributes such as the trust, collaboration, and commitment. This can be shown from his words as he agreed on the influence of trust on speed ability: *"Definitely I agree, yes"*. He also expressed his agreement for the importance of commitment and collaboration on speed abilities by explaining: *"Yes, because if your supplier meets all his commitments and your speed is not impacted due to non-availability of materials then definitely if they happen to work positively"*. He said for explaining the influence of collaboration on speed abilities: *"Yes, it can actually because collaboration means in fact you can have an agreement with a supplier to replenish your warehouse, for example, if you've just had the raw materials you need you already have an agreement with the supplier. Always monitor your warehousing and see whenever let's say this raw materials falls below a certain level get replenished. So as long as the suppliers meet that commitment and you never run out of the raw materials then definitely this will improve your speed. And if the supplier didn't meet his commitment, if you run out of the raw materials this will impact negatively on your speed"*. To complete explaining his agreement of the importance and influence of some 'Partnership existence with core suppliers' attributes on 'Supply Chain Agility' attributes, the Demand Planner (for UAE; for all products) completed his explanation on how responsiveness abilities can be influenced by some important 'partnership existence with core suppliers' attributes such as trust, commitment and

collaboration. He argued that if the company can trust and rely on its supplier, this can enable it to achieve better levels in innovation and responsiveness abilities. He mentioned this by saying *“Yes, definitely. It will. Innovations are ways you can keep upgrading yourself, meeting the current market demands, responding to the needs of the customer. So if you know you’re going for an innovation and you can rely on your customer or your supplier to supply those raw materials you need for the innovation then definitely yes this will impact positively on responsiveness”*. In addition to this he also suggested the importance of commitment and collaboration: *“Yes, again, there should be a positive relationship there because as long as the supplier meets his commitments then definitely this will improve your responsiveness because if you know whatever you want will be there when you want it then definitely you’re going to respond positively to any market demand or change if the customer requests it”*, and *“Yes, I mean going back to the same points, when you collaborate with the supplier you know the supplier will always be there for you whenever you want to try something new. If you want to change and the supplier responds positively then yes this will have a positive impact on your responsiveness”* respectively.

Similarly, the General Planner (for Kuwait and Qatar; for all products) argued on the influence of some ‘Partnership existence with core suppliers’ attributes on ‘Supply Chain Agility’ attributes. He agreed on the importance of trust in the company’s supplier to achieve flexible supply chain. This can be shown from the following: *“Of course, you can’t be flexible if you don’t have what you should take from the beginning of the chain. So, having a better partnership and trust with your supplier, that will help you compete better in terms of being more flexible”*. He continued to explain: *“Yes, if you believe in your supplier and you have a well agreement established between both parties, this will have a positive impact on your supply chain flexibility”*. He emphasised also on the importance of commitment on speed, responsiveness and flexibility: *“A positive impact, I think they all apply the same”*. He also explained the importance of information sharing and collaboration on responsiveness levels: *“Yes. {Interviewer: How and why?} This is because, information sharing and collaboration are essential. If you have*

poor information sharing and collaboration with your supplier you will surprise him. If you surprise him he will not be able to react.

In addition to the above, the Technical Project Manager (for Gulf) supported some of these relationships. He argued: *“Of course, yes”* on the influence of commitment on flexibility, speed, and responsiveness. He continued to explain: *“It’s very simple. I need a 1,000 from a supplier; he needs to give me a 1,000. That commitment he needs to give it to me, that he will supply whatever I need. If he gives me 500 what will happen do you think with my supply chain? Of course my commitment with my customer and my consumer also will be jeopardised. {Interviewer: And this will affect negatively your responsiveness level and speed level?} Of course, yes”*. He also agreed on the importance of having collaborative projects and high level of collaboration between them as Unilever (North Africa Middle East) and their partnership suppliers on some of their essential abilities such as speed, flexibility and responsiveness. This can be shown from his answer: *“Yes, that one [collaboration] is very important. As I told you earlier also, that we develop our supplier, we help them in the operation. {Interviewer: This can affect your flexibility, responsiveness and your speed levels within your supply chain?} Yes, of course”*.

Trust and sharing of information were also suggested to have an impact of the responsiveness and innovation abilities by Customer Service Manager in the Lipton Tea Factory (previously a planning manager) in Dubai. He gave an example: *“for example, let’s say I have an innovation or let’s say I’m giving my demand to my supplier of a different scheme, one scheme is 100 and another scheme is 200. If I am, on a daily or a weekly basis, I’m sharing my information which is again coming from trust; my supplier is in a better position to respond to my fluctuation in demand because I am always sharing my demand with him”*. He also suggested the importance of commitment on three ‘Supply Chain Agility’ attributes such as flexibility, speed and responsiveness. He said that *“Definitely, positively, if the supplier is not committed there is no flexibility coming from that end”*. On the impact of commitment on speed and responsiveness he mentioned *“Yes, if you’re committed, the supplier is already committed, you trust him after a given point of*

time, and he's already delivering. He's at the next stage of doing this, he's already good at responsiveness; he is already good at speed. So he's already past that stage if he's not committed he won't come to that stage. So commitment is the starting point, that's what I'm saying. If he's not committed there is no speed nor responsiveness". He also recommended the importance of collaboration with the core supplier on some essential 'Supply Chain Agility' attributes such as speed, responsiveness, customer service, cost, and flexibility. He agreed on the impact of collaboration on flexibility: *"It has a high level of effect on our flexibility".* He continued by recommending the following *"when It's high, collaborative and sharing of information, partnership relationship with your supplier it's a plus on all the key indicators whether it be collaboration speed, whether it be responsiveness, whether it be flexibility, whether it is cost or whether it is customer service level".*

The HPC (Health Promotion Coordinator) for Lipton Tea Factory recommended some relationships between some 'Partnership existence with core suppliers' attributes and some 'Supply Chain Agility' attributes. For example, he argued that it is important to have high level of trust, commitment and coordination with your core supplier to be able to effectively manage your planning activity and to have higher level of flexibility. He mentioned: *"I think having the right coordination and particularly a good coordination and high level of commitment and trust within the supplier will definitely help us grow. {Interviewer: Specifically on flexibility level?} Yes because in terms of planning, if you look into the particular planning, if you have the planning systems integrated with the suppliers, like what we are trying, for some level we have achieved with a few of the suppliers and materials. If you have that trust and if you have that coordination with the suppliers, If you have that flexibility, planning, particularly production planning or demand planning can be increased and can be done very effectively".*

The Manufacturing Manager in Lipton Tea in Dubai agreed also on some of these relationships. He said "Yes" on the impact of trust on flexibility, speed and responsiveness. He also gave an example for the importance of trust on responsiveness by saying *"In the operation you cannot avoid what we call unplanned change over. What is this unplanned change over? It's a changeover out*

of the plan within the week. There are situations, as I've told you a while ago, the supplier has breakdowns also. We believe in the factory nowadays since we started it in 2010, what we call just in time. There's a 24 hour lead time for this to which the supplier has to comply the delivery. But in spite of the lead time, you cannot avoid, recently that there is a major breakdown with the supplier. So this one, as I've said, trust placed in between, plays a vital role because being dynamic in our operation we should react positively and they reacted as well positively to the requirement to which where will you shape your production now". In addition to the above, he also gave an example for the collaboration between Unilever (North Africa Middle East) and its main suppliers and how this collaboration helps and enhances their overall supply chain. He described: "Actually we're sharing our; we call it, the wow stories, the factory has the wow stories or the success stories wherein we share it with them. As a matter of fact ... We sit down with one of the suppliers to which we showed them this is what we've done, may be you can pick up some of our wow, and the success stories and they're really impressed. They may say that they like it because we have this problem, so we try to help them. We bring to their factory this TPM guy here; we call it the TPM role to teach them. For example, if they say that we have this service system shutdown, for two hours we bring our guys there... So that our guys will also understand this is how my packaging material is being made or processed by this company. So you see the relationship and the collaboration between the suppliers and our factory. {Interviewer: This can enhance the supply chain speed, flexibility and responsibility levels?} Yes of course enhances".

Information flow (Information sharing and communication) between Unilever (North Africa Middle East) and its core supply partners was also considered to have an impact of their responsiveness and speed abilities. This was suggested by the Supply Chain Manager (for Unilever Gulf area) who answered "Yes, definitely, definitely. I mentioned before that's very important when it comes to responsiveness. And when we talk about responsiveness and having a flow of information available within the system, that was more or less answering the question, like if you see the signal from your customers then you can translate that to the whole supply chain. And improving the supply chain by that, we basically

have much shorter time to react to change in the market”. He continued by saying “... And I would say responsiveness depends on one main thing which is transparency of information. And if you can see the information down in your supply chain and you can translate into the whole supply chain, would be an accuracy, that’s where you should become responsive as much as you can. If you can see the order come from Carrefour, your business and you can see that and can transmit that down the chain accurately and in a more automated manner, that you’re actually gearing up your orders and your production behind that. And that’s where more or less you can respond faster to chain changes”.

7.3.3 The relationships between every ‘Partnership existence with core supplier’ attribute and ‘Supply Chain Agility’

The exploring of the relationship between each individual ‘Partnership existence with core supplier’ attributes and ‘Supply Chain Agility’ was focused on during the data collection stages. Most of the data collected showed that there are relationships linking every individual ‘Partnership existence with core supplier’ attributes with ‘Supply Chain Agility’. For example, The National Supplier Development Manager also recommended the impact of some ‘Partnership existence with core supplier’ attributes such as trust, collaboration, commitment, transparency on ‘Supply Chain Agility’. He suggested that if such elements do not exist, they could not be able to achieve agile supply chain by saying *“Or negatively in the absence of them”*. In more detailed manner the following sub section is presenting the impact of every Partnership existence with core supplier’ attribute on achieving FMCGs ‘Supply Chain Agility’.

7.3.3.1 The relationship between ‘Long term orientation’ and ‘Supply Chain Agility’

On asking about the impact that long term orientation that may exist between a company like Unilever (North Africa Middle East) and its suppliers, most of the interviewees recommended that having long term orientation with the company’s

main suppliers can increase their supply chain ability to achieve higher level of agility. This was discussed by the Marketing Manager (Levant countries: Iraq and Sudan) who explained the extent of this impact by saying *“Great extent as it will help the suppliers cope faster to the long term requirements of the company. This can be done through sharing medium to long term forecasts of the required materials, future innovations for examples”*.

This was also expressed by the Procurement Operations Manager (Unilever Mashreq) who insisted on the importance of having long term orientation with their strategic partnership suppliers: *“again long term orientation which means that you will have a kind of shared vision between you and the supplier and the strategy for a long term, but you could sign a contract for one or two years of course. Fine, so again it is not many suppliers, we have some selected strategic suppliers with whom we have long term orientation. Of course it[long term orientation] would affect it [Supply Chain Agility], actually agility will not take place unless you have such kinds of agreement or sharing vision with the supplier because based on this long, based on sharing this vision, the supplier will understand what is your plan as a volume, the forecast, what is your plan in innovations, so he will build his capacity planning and his investment based on what you are going to share. Can I give you examples?”*. She continued by giving an example where she explained: *“for example I am handling tubes and labels. So for tubes, our suppliers for tubes, all of them are strategic suppliers, why, they open for us. So we present either 100% from their total turnover, the total turnover or minimum share, the minimum share is 70%. So we represent a big share of their turnover, so what we do with the suppliers, we share with them the plan for the next at least three years. Accordingly they build the machine capacity and investment and they invest for us, although that in some cases we sign a one year contract, but we have a commitment for these three years, so they build capacity accordingly, why? Because the machine, from the time you confirm, it takes six months to begin running. So you need to share at least three years volume. Also they consider whatever plans you have in innovations, in this investment. So for example today we are running what is called a certain type of tubes, but we are planning in the next year to change the specification of these tubes. So they plan the investment accordingly and whatever*

tools is needed, whatever equipment is needed to be added to these machines to adapt to this. And accordingly this affects our agility, so when we plan it and we share the vision, we are ready to meet the innovation on time and sometimes, plus that when we share with them this, we plan spare capacity. Spare capacity plus or minus certain percentage and this helps us because most probably the forecast, which is the factories working on, it changes. We never get the exact figure; usually it is plus or minus. So we succeed to reach this plus or minus through sharing the long term contract, sharing the vision with suppliers. Also sometimes we do build stock at the suppliers to meet this requirement and this helps”.

This was also supported by the Procurement Operations Projects Manager who also recommended this relationship in which long term orientation with core suppliers can influence Unilever (North Africa Middle East) ‘Supply Chain Agility’. This can be shown from his words: *“Yes, when you are having a long term contract with one of the suppliers or two of our suppliers, this comes whether we share our forecast or long term forecast with the supplier. So, the supplier gets ready and gets all the extra machines, extra lines, and extra capacity for our forecast. So, that gives agility within Unilever supply chain”.*

The relationship between ‘Long term orientation’ and ‘Supply Chain Agility’ was also argued from the supplier side. The supplier (C) suggested that long term orientation with Unilever (North Africa Middle East) can affect their ‘Supply Chain Agility’ clearly. He mentioned: *“A long term orientation between Shorouk [supply company (C)] and Unilever can help in achieving agility within FMCGs supply chain to the furthest extent, because this sort of relationship enables Unilever to compete and deal with any unexpected changes in the market easily, knowing that they are backed up with a solid supplier that has solutions to solve these situations”.* Supplier (E) also supported the same relationship: *“Long term orientation between any supplier and customer helps in achieving agility by giving the concerned time to develop a relationship. With time the supplier can almost predict buyer behaviour and vice versa. This helps in agility as it arms the supplier beforehand and when the change is required they are almost ready for it. With Unilever the relationship is mostly stable but the long term orientation has taught*

me to be in a state of preparedness to change at short notice". The same type of relationship between 'Long term orientation' and 'Supply Chain Agility' was also recommended by supplier (B), who mentioned: "Our relationship with Unilever started in 2002, it is a continuous relationship that was there for about 10 years, thus a contract stating that we have a long term relationship with them differs as there was a lot of mutual benefits between us and Unilever. However, a contract that assuring that the relationship is continuous and for long term had affected us. It increased our commitment and responsibility towards our customer. We started to be interested in the growth of our customer, as when our customer grows we will grow as well. Thus we are now more concerned about the customer, we are focusing on developing our self to satisfy the customer by various techniques, most importantly we started to focus on customer needs then we found that we have to be more flexible so we had to improve thus we are now responding rapidly to any change which gives us flexibility which helped us improving our products at the end, long-term contract led to having an agile supply chain".

7.3.3.2 The relationship between 'Trust' and 'Supply Chain Agility'

Trust, as one explored essential 'partnership existence with core suppliers' attribute, was also recommended by almost all the interviewees to have a positive impact on achieving agility within FMCGs supply chain. This was expressed by the Procurement Operations Projects Manager who explained: *"Coming back to the point that I just mentioned earlier which is the minimum mandatory standard, it's all built on trust. So, when we do those audits on the suppliers we go inside all departments, all functions, finance, planning, delivery manufacturing, and all functions within the supply. And also share all our learning, all our files or things like that which is not copyrighted to Unilever, we share it with the suppliers. So, trust is the main word that you can use in this minimum mandatory standard sharing with Unilever and suppliers. {Interviewer: And this can affect your agility level within your supply chain?} Yes, not the basics of the trust but what comes behind trust. What comes behind trust that we share forecast. What comes behind trust that we share our standards with the supplier, what we share our learning with the supplier. This all comes behind the whole trust".*

On asking the question about the trust and its impact on achieving high level of supply chain agility, Procurement Operations Manager (Unilever Mashreq) explained this by giving the following example: a core supplier who built a factory facility especially for Unilever and invested for more than the written contract period due to the high level of trust that exist between Unilever (North Africa Middle East) and this core supplier. She expressed: *“Of course, otherwise they will not invest. Simply if they don’t trust us, and we share with them, we sign only one year contracts and this is a real case, today I have one year contract with the tube suppliers but actually they have made investment for more than one year and they wouldn’t set this factory for us, unless it is run for at least five or six years. Because it is only running for us, so they are getting the building and the machines only for us. , so although the contract is a one year contract and we renewed by the end of the year, but they are committed, they are getting machines without any further signatures from our side, based on trust”*.

The Marketing Manager (Levant countries: Iraq and Sudan) also explained the importance of trust in decreasing the bureaucratic practices which in turn will result in higher level of ‘Supply Chain Agility’. He mentioned: *“Trust reduces debates & bureaucracy & those two results in more action oriented culture that result in more agility”*.

Trust and its impact of achieving higher level of agility within their supply chain was also emphasised by the supply partners. This can be shown from the words of supplier (D) who mentioned: *“Definitely. If Trust is not there, the implications are not only on agility, the implications vary across the chain completely. Trust is definitely a core attribute and one which you build on almost everything in working relationships”*. The same relationship between ‘Trust’ and ‘Supply Chain Agility’ within FMCGs business was recommended also by supplier (C) who expressed: *“Trust has an effect on achieving agility within FMCGs supply chain. Trust means firm reliance on the integrity, and ability of the supplier, and therefore trust is an important attribute to depend on especially when problems occur. Trust makes solving problems much faster regardless who is responsible of the problem”*. Supplier (E) also commented: *“Trust is important in any business relationship.*

With a corporation like Unilever mutual trust is important because Unilever invests a lot in its suppliers. With such kind of trust, agility becomes a mutual endeavour. Unilever trusts in our ability and capability and we also trust that whatever changes they bring our interests as supplier are also taken into account. We are willing to invest in new machinery if this will align us with Unilever's plans. Since our relationship is not only based on monetary margins trust, reliability, commitment and all the other things that we mentioned before become the other currencies that we get in our interactions with Unilever. This in turn helps us to be more responsive not only to Unilever but to other customers as well". From a supplier side, supplier (B) also recommended the same relationship between 'Trust' and 'Supply Chain Agility'. He argued: "Unilever is our main customer, our relationship with them is built on trust, and this helped achieving agility in our supply chain. As trust helped being open and communicate with our customers and suppliers quickly if any problem occurs which enhanced us to respond to any problem as fast as possible".

7.3.3.3 The relationship between 'Reliability' and 'Supply Chain Agility'

'Reliability' as one 'Partnership existence with core suppliers' attribute was considered having an impact on achieving agile supply chain. This was suggested by the Customer Service Manager (for Gulf Business Unit). He mentioned this by giving an example: *"If we have a third party supplier and he's supplying a chemical to one of our factories, and because of some custom problem or something his chemicals get stuck at the port, and now our machines are ready to produce, to manufacture, but the machines are on hold because we don't have the chemical. Why we don't have the chemical? Because the supplier failed to deliver us. Why he failed to deliver us? Because he has a problem back at the port. And why he has a problem? Because there is a change in customs regulation. So if you see there is a chain of events which leads to a certain thing to happen, so that's why having a reliable supplier for an agile supply chain is very important".*

The Marketing Manager (Levant countries: Iraq and Sudan) also described this impact from both sides: the company and the supplier. From both sides, higher reliability between both of them can lead to higher level of 'Supply Chain Agility'. He expressed: *“Reliability of the suppliers gives more confidence to the Supply Chain in responding to the complex & changing needs of sales & marketing & hence increases agility. Reliability of the company in terms of reliable forecasts, clear vision & clear targets gives confidence to the suppliers in case of new investments are required to increase capacity or to accommodate for new technologies, which increases agility”*.

The relationship between 'Reliability' and 'Supply Chain Agility' was also supported by the Procurement Operations Manager (Unilever Mashreq), who recommended that reliability on the supply partners do achieve 'Supply Chain Agility', but at the same time it should be well managed. She explained a real case faced by them: *“It has both side effects; it could be positive and negative. {Interviewer: How?} Because if you are relying, you mean by relying on the supplier and vice versa, that they represent a big share of our business and vice versa. Yes it helps in agility but as a positive because they are dedicated for you or you are the biggest customer, so they will give you the first priority. If there is any problem at that supplier and your back up supplier doesn't have enough capacity to fulfil this requirement it will be a problem”*. On asking on the way that Unilever use to solve and face such problems, she answered *“I'll give you an example from the tubes because this is the case. We build, as I said we build on spare capacity, plus or minus within the local country, plus or minus 20%, between us and our partner. Usually this case we wouldn't say supplier, we say partner. Actually just to tell you that we changed this wide communicating with our partners, we don't use supplier term anymore, we write partner. So we build plus or minus 20% per capacity and this is across Unilever globally for the tubes. Then we try to build with other suppliers outside the country. So for example here in Egypt we have the suppliers plus or minus 20% and this supplier, who is based in Egypt, is falling under a big global company, this global company having other sites in other countries. So we agreed with them, in case of any first measure or if the factory cannot supply us, they are going to supply us from other sites with the same price as we are supplied*

as the agreed local supplier, as long as the mistake is from their side. But the problem is coming from the partner's side. They are on the opposite, when we have a problem and for example we had a problem on January, this year because of the revolution and it was something which is out of control. You cannot blame neither the supplier or Unilever, so he got for us from the Indian side, using the ex-work price, is the same as the local price, but we pay the freight and the customs block. So in this case we didn't face any shortage because we were supplying from this Egyptian site as a partner, , to Saudi Arabia for example, when the revolution took place we had to find another source. So based on the agreement the other source is the Indian side and they supplied directly from India to Saudi Arabia. So this is how it goes. So there is a positive and negative impact, it should be balanced”.

Reliability was suggested to have a positive impact on FMCGs ‘Supply Chain Agility’ as recommended by the Procurement Operations Projects Manager, who answered: *“Yes, because whenever the supplier is reliable I just give him more share than another supplier. If I have two suppliers or three suppliers the first one that I will give him the biggest volumes and the biggest share of my supply will be the one that helped me, the one who is reliable to me that gives me on time deliveries, gives me the quantities right... with the right figures that I've asked and things like that. So, reliability equivalent to agility, whenever the supplier is reliable this gives me agility in my supply chain”.*

The impact of ‘Reliability’ on ‘Supply Chain Agility’ was also suggested by the suppliers. Supplier (D) explained: *“Reliability is definitely from both sides, so reliability in terms of having the supplier ready to deliver the requirements from Unilever adds a lot within agility, so that means lower stock levels on their side. But on the same thing, when you look at it from a different perspective, reliability or forecasting reliability of the manpower at Unilever is also translated to each department at the same thing. It means lower stock levels of my side, on the partner's side”.* Supplier (E) supporting the same relationship between partnership ‘Reliability’ on FMCGs ‘Supply Chain Agility’, he commented *“Reliability is at the core of every supply chain. For one to be a good supplier they must be reliable in terms of delivery, response to market issues, quality, productivity, planning,*

efficiency and all the other factors that make up a good supply chain mix. If these can be achieved reliably then the organization that achieves that can be as agile as they want to be, there would be no limits because all changes will be based on a reliable platform". Supplier (B) suggested: "...our company is always searching for new ways to improve and is willing to gain more knowledge. Thus our concern of always being reliable had forced us to always search for new improvement techniques and to be flexible, change quickly, to be innovative, gaining more knowledge, which led us to have an agile supply chain".

7.3.3.4 The relationship between ‘Commitment’ and ‘Supply Chain Agility’

Commitment was explored from the data analysis as one important ‘partnership existence with core suppliers’ attribute that can characterise Unilever (North Africa Middle East)-supplier partnership. Unilever (North Africa Middle East)-supplier ‘Commitment’ was recommended by some interviewees to help in achieving ‘Supply Chain Agility’ within FMCGs industry. This can be shown from the answer of the Procurement Operations Projects Manager who said: *“Yes, commitment from the supplier to give me exactly the specifications that I have required. Exactly the quantities that I’ve required on the time that I’ve required, this gives me agility. Also a commitment from my side regarding the forecast that I give, regarding the orders that I order from the suppliers. If I committed to these orders this gives agility to the suppliers. So, it’s a mutual beneficial way, both ways. My commitment gives him agility and his commitment gives me agility. {Interviewer: And this improves of course the overall agility of your supply chain?} Yes, sure”.*

This impact can be shown also from the answer of the Marketing Manager (Levant countries: Iraq and Sudan) who explained the effect of partnership ‘Commitment’ on the achievement of better ‘Supply Chain Agility’ level from its impact on achieving higher responsiveness level. He mentioned: *“Commitment is seen through specific actions & cannot be measured in absolute sense. Commitment is rigor in continuously meeting all deadlines with excellence. Building on the above,*

witnessing commitment from the supplier to deliver on time in full across a long period of time provides the confidence to supply chain that it can better respond to the market needs which increases agility”.

This also was recommended by the Procurement Operations Manager (Unilever Mashreq) who argued *“of course, because it reflects directly into trust, so if there is no high level of commitment from both sides, they will not trust us and honestly that is why you would find that our partners, strategic partners, they would talk with one person, usually they have one point of contact by the way, and such to keep a high level of commitment, we usually keep the discussion concerning investment, concerning cost, with one person, of course there is a backup for that person in case he is not available but usually they take the word of that person. So it reaches a level that they can take our word, verbal word, even without writing emails, even without signing a contract. So of course, yes, a high level of commitment would affect agility and if there is no commitment, to that extent I’ll just tell you, if there is no commitment and there is a contract, they may not respect the contract you know. So there should be a high level of commitment. It is more important, and trust is even more important than contracts. Contracts, finally we consider it as a legal formal document to formalise things, but what we care about is that trust and the commitment”.*

The impact of ‘commitment’ on FMCGs ‘Supply Chain Agility’ level was also recommended by the supply partners. For example, supplier (C) commented: *“In return of reliability of Unilever, a high level of commitment from Shorouk is generated. This translates to dependent delivery dates, therefore minimizing risk factors, which helps to build up dependent market plans. As an example to a high level of commitment, Unilever had a previous quality issue with one of the boxes supplied, and an urgent meeting had occurred, where Shorouk had committed to supply with the required quality, and in producing and supplying the boxes in 24 hours (standard lead time 21 days). Shorouk met the delivery date, which lead to meeting the supply chain needs and achieving the planned schedule for Unilever”.* Supplier (E) commented on the same relationship, who suggested that the amount of agility is completely dependent on the commitment throughout the supply chain.

He expressed: *“Commitment is what drives all the processes through the challenges of supply chain management. With a commitment to be agile being part of your strengths then the amount of agility that can be achieved is limited only by the amount of commitment”*. The same meaning was also mentioned by supplier (B) who insisted on the importance of commitment on achieving higher level of supply chain agility. He explained: *“Commitment is essential, as our company is committed towards Unilever to deliver the products in the right time with the best quality possible which led our supply chain members to be all committed and focused resulting achieving an agile supply chain”*.

7.3.3.5 The relationship between ‘Collaboration’ and ‘Supply Chain Agility’

Collaboration is also an explored ‘Partnership existence with core suppliers’ attribute that characterise the relationship between Unilever (North Africa Middle East) and its core suppliers. Collaborative projects that exist between Unilever (North Africa Middle East) and its core strategic suppliers help them achieve higher level of agility within the supply chain.

This can be shown from the answer of the Marketing Manager (Levant countries: Iraq and Sudan) who explained this impact by giving some achieved collaborative practices examples such as the sharing of knowhow and technologies. He expressed: *“Collaboration in the sense of sharing technologies & learning can increase agility as it reduces the lead time to respond to new technologies or sudden increases in demand”*.

This was also recommended by the Procurement Operations Manager (Unilever Mahsreq) who explained: *Of course it affects 100% and to give you an example it may have been covered during your discussion, which is about the Vertice plus programme. Vertice plus programme is supplier development programme which is between us and some selected strategic suppliers and within this programme you will find that we have been doing training to the suppliers at Unilever’s site to see for example how we are from the point we get the consignment, how we make the*

inspection, how we receive it and we agree the way on which we could make it easier and quicker and vice versa, we make training at the supplier sites for our Unilever team. So of course any kind of and high level of collaboration would impact positively on the agility level". This was also argued by the Procurement Operations Projects Manager who expressed: "I can give you one real life example that we are working. It's not live yet but we are working on it. One of our major suppliers for the cartons, folding cartons, we've reached to a development level for this supplier and a commitment and a partnership with this supplier to the extent that we are now in the finishing or the finalising phase of getting one of his machines, end line machines, to be put in our site. So, the whole idea is about one line coming from the supplier to Unilever, there's to be one line. So, we are going to bring one of his machines to be put in our site and he will give us semi-finished products and we will finish it and get it inside our line directly. {Interviewer: And this helps your agility level within your supply chain?} Sure, it helps in agility for the minimum changeovers, quick changeovers, flexibility to the demand and gives us something called quality at the source. So, inside our site will be small supplier for the end item for the supplier".

Collaboration in a supplier partnership has an impact on achieving higher level of 'Supply Chain Agility'. This was also suggested by the Unilever (North Africa Middle East) suppliers. This was argued also by supplier (E) as he said *"With collaboration, we work together to achieve the extent of agility we want. Unilever knows my limitations and I know their commitment. Together we can work around our issues to achieve a level of agility that is mutually satisfying and with maximized utilization of available resources"*. Supplier (B) recommended the same relationship between 'Collaboration' and 'Supply Chain Agility'. He expressed: *"Collaboration is essential important which leads to an agile supply chain...The Collaboration between us and our customers also help us a lot in developing our company. Collaboration helped us as our customers started to cooperate with us to develop by giving new ideas, pinpointing our mistakes and giving us ideas to overcome our mistakes. For instance, our main customer (Unilever) had taught us a lot by cooperating with our company which had highly contributed to our success. Unilever cooperate through its supplier development program to give us*

new ideas on how to develop, look at the performance of each department in our company, detect the mistakes and help us to correct them. Therefore the cooperation between the company and its customers, and the cooperation between departments in the company led to fast detection of mistakes, continuous flow of new ideas, continuous flow of information about the market. Thus, the cooperation helped in collecting information which led to detecting any problems quickly and also responding to customer needs. Thus it led to achieving agility in the supply chain”.

7.3.3.6 The relationship between ‘Openness & transparency’ and ‘Supply Chain Agility’

Openness & transparency are combined here under one attribute. This was suggested by some participants as they felt that they both are the same and are very closely related to each other. For example, the Marketing Manager (Levant countries: Iraq and Sudan) said *“I can’t find a big difference between openness & transparency. They both stem from the same behaviours & lead to the same response”.*

A degree of Openness between supply chain partners and especially between the company and its core supplier can have an increasing impact on their ability to achieve higher level of agility within their supply chain. This was suggested by most of the interviewees. From them was the Procurement Operations Manager (Unilever Mashreq) who explained: *“Of course and again it adds to trust. So yes and for our strategic partners we are transparent with them in communicating the plan and if there is any drop we communicate to them and also in the innovations and we have a kind of confidentiality agreement on the innovations and also an example of transparency is the open book. So we have a kind of open book policy and we have detailed cost model between us and our partners. So that this kind of transparency increases trust and increases agility of course. Otherwise it will not work”.*

To be transparent with your supply chain partners and especially your core supplier is an important factor to achieve higher of 'Supply Chain Agility' within FMCGs business market. This can be shown from the answer of the Procurement Operations Projects Manager who agreed on this and said "Yes. *{Interviewer: Why and how?}* Again transparency gets us back to the point of forecast. Whenever I set a forecast or give the forecast to my supplier I need to be very transparent about the accuracy of this forecast. So, he can build his materials, his raw materials that he works on it so he can build his capacities, his machines can give a share to us at cost within his plant. So, transparency is very helpful in supply chain agility".

7.3.3.7 The relationship between 'Sharing targets/vision' and 'Supply Chain Agility'

'Sharing targets/vision' between FMCGs Company and its core supplier has a positive impact on their ability to achieve an agile supply chain. This was explained by the Procurement Operations Manager (Unilever Mashreq) who agreed and said: "Of course and again it is linked as I said to that we share with them: the plan, not for one year but even for three years and we share with them the target as a volume. Also sometimes we share with them our innovations plan and we share with them our target to reduce the cost". Although it was mentioned by the Procurement Operations Projects Manager that is important to have shared targets by saying "Yes, sure", however he also commented: "This is a bit of a rare case to share targets and visions between Unilever and the main suppliers because most of the cases we have two or three suppliers giving us the same materials. So, it's not about targets and visions, it's about the share of this total portfolio. So, most of the case the supplier only know his share from my sales, not all my sales. And this is where the transparency is. However, he's not aware of my total volume is, and this is very confidential. However, in some cases that we are using one supplier there is totally sharing of targets and forecast whether it's a growing forecast or a declining forecast. This is all shared".

The Marketing Manager (Levant countries: Iraq and Sudan) explained also this relationship between ‘Sharing targets/vision’ and ‘Supply Chain Agility’ as he said: *“having the incentive scheme strongly tied to achieving the targets within the contract can help direct the company & its suppliers to the same goal which can improve agility”*.

From a supplier perspective, having a shared and common target/vision can affect positively the ‘Supply Chain Agility’ level. For example supplier (D) discussed this relationship by emphasising on the importance of having a common or shared target to improve the overall supply chain performance. He described it as follows: *“We work in a team manner with customer like Unilever, so having the same goal or having the same objective within the team definitely helps the performance”*. This can be supported by the answer of supplier (B) who said *“Sharing targets and visions between us and our main customer had helped us a lot in achieving agility in our supply chain. 5 years ago, when Unilever decided to change the style of the relationship between it and our company to be built on a partnership basis we started to share our targets and visions with each other’s. Sharing targets and visions had increased our responsibility towards our customers as we started to feel how difficult their targets and visions, consequently, we started to set hard achievable targets and split the targets into small targets for each department in the supply chain to meet the customer's target therefore we started to increase the efficiency and speed of our product as much as possible to help our customer to achieve the set target. This resulted to be more innovative, improving quality, updating new technology, continuous improvement which led to an agile supply chain”*.

7.3.3.8 The relationship between ‘Non-priced basis partnership’ and ‘Supply Chain Agility’

‘Non-price basis partnership’ was derived from the first rounds of interviews. It has been considered by some interviewees as one attribute that can characterise the Unilever (North Africa Middle East) partnership with its core suppliers. It was argued by some interviewees that price is important but it cannot come in the first priorities from Unilever’s (North Africa Middle East) perspective. This can be shown from the words of the Procurement Operations Projects Manager who said: *“I think that non-price basis is never separated from working with the suppliers. However, working with the supplier or development with supplier or developing a partnership with the supplier is not based only on price. However, price is one of the main pillars that we are working on or we are seeing when developing a partnership with the supplier. However, it’s not the main pillar”*.

At the same time the Procurement Operations Manager (Unilever Mashreq) mentioned and agreed on the importance of such attribute on their ability to achieve agility within their supply chain. She explained: *“It affects it because it adds again to the trust and the commitment. The point is that whenever we deal with any partner and we consider quality, service and price, not only price. So I will not benefit from having a cheap price without having quality products on the shelf, for example, so that is why we should consider quality and service or if they are having good quality and good service, then we consider the price after that. I am not saying that I am going to buy from a supplier who is double priced for example, but there is a certain level of okay plus or minus which is fine for us. So if we only consider price there will be no trust by any means because if today the supplier price is okay and then after a year for example, another supplier comes up giving us a better offer, and usually whenever a supplier, a new supplier, or potential supplier would like to get into business he will offer a price which is below the market price. So if we are only following price, in this case we will just move from one supplier to another, so we will not build any trust with a supplier and we’ll lose credibility and in this case there will be no partnership and of course there will be no agility. So of course it is not only about price”*.

From a supplier side, it was recommended also that ‘Non-priced basis partnership’ can lead to higher level of ‘Supply Chain Agility’. This can be shown from the words of supplier (B) who explained this and supported his opinion by saying: *“our relationship with Unilever is a continuous relationship that started 10 years ago. We are now more than 2 businesses dealing with each other’s, we share a lot with each other’s, success and hard memories. Thus the price in the relationship is not the most important aspect as we care much more about their growth and we always trying to innovate new ideas to help them achieve their targets, which made us more responsive to the market and flexible to change quickly in order to achieve customer satisfaction”*.

7.3.3.9 The relationship between ‘Win to win partnership situation’ and ‘Supply Chain Agility’

It was supported from most of the interviewees that their suppliers’ partnership should be based on win-win situation. Most of them explained this attribute to have a positive impact on helping higher level of ‘Supply Chain Agility’. For example, the Procurement Operations Projects Manager who said: *“Yes, sure. {Interviewer: Why and how?} Because in a win to win situation whenever the supplier is winning and the supplier is having a profitable business, he can give me all the commitment that I’ve asked; he can give me all the flexibility that I’ve asked. So, that gives me agility. But whenever the supplier is having issues regarding the profitability of the lines of his machines, he won’t sacrifice about his flexibility and his commitment to me”*. This was also recommended by the Procurement Operations Manager (Unilever Mashreq) who also agreed on its importance and its ability to affect their supply chain agility level. She explained: *“Of course and actually what we covered in the above points reflects the win/win situation and as I said, win/win situation, if there is no win/win situation and if the supplier is losing, he will work with us for a year or two but after that he is going to leave us because no supplier or no partner will be able to work with you if they are not benefitting or they are losing. So yes we consider win to win situation and without it there would be no agility because there would be no trust again and no commitment”*.

From a supplier side, it was also suggested that win-win situation is a partnership attribute that can affect FMCGs 'Supply Chain Agility'. This was argued by supplier (E) who said: *"A win-win situation is vital for any long term business deal. No one wants to do long term business with someone who always gets the better of them. The win-win feeling is important to promote trust, target sharing and collaborative efforts. These in turn enhance an agile supply chain"*.

7.3.3.10 The relationship between 'Integration' and 'Supply Chain Agility'

The Procurement Operations Manager (Unilever Mashreq) agreed on the importance of 'Integration' as one derived attribute for 'partnership existence with core suppliers' on achieving higher level of agility within FMCGs supply chain. She suggested: *"Yes and that is why we, as I said we share with them the vision, we share with them the forecast and we have such kind of long term communication and integration on many aspects like the integrations. So yes integration would affect agility and the integration, we have already covered it in many points, for example Vertice plus or supplier development programme is a kind of integration, sharing the long term vision is a kind of integration, sharing the innovations, the investments based on which they set their investments. So all these things are kind of integrations between us and the suppliers and of course without it agility would be affected"*. This also can be shown from the Procurement Operations Projects Manager who also supported the same meaning by saying: *"Integration, We have some module called supplier network collaboration where the supplier already sees on his computer sees our forecast, sees our demand, sees our stock levels. So, that's integration between the suppliers, an automated one. So, it helps moving things fast and seeing what's in the future now. That for sure helps our agility"*.

It was emphasised by the Marketing Manager (Levant countries: Iraq and Sudan) who said *"Integration of systems reduces complexity as it makes the company & the supplier apply the same processes which reduces lead times & increases agility"*.

From a supplier point of view, 'Integration' is an important attribute that can lead to 'Supply Chain Agility'. This can be shown from the answer of the supplier (D) who insisted on the importance of integration when saying *"The grossest implications [for Integration] are that the more agile both of us can be"*.

7.3.3.11 The relationship between 'Mutual benefits' and 'Supply Chain Agility'

To have 'Mutual benefits' between the company and its core suppliers is an attribute derived from the first rounds of data collected and analysed. Its important impact of achieving higher level of 'Supply Chain Agility' within FMCGs business has been supported by most of the participants. For example, the Procurement Operations Projects Manager, who expressed his opinion as follows: *"Yes, this comes back to the win to win situation. If it's a win to win situation and if it's a mutual benefit from my side and the supplier side he will sacrifice even if I give him a forecast with a low accuracy or something. He can sacrifice on that if we have a win to win situation. However, if it's not a mutual beneficial relationship he won't care about giving more commitment if I didn't"*. Similarly, it was recommended by the Procurement Operations Manager (Unilever Mahreq) who explained it as follows: *"mutual benefits can affect supply chain agility, for example again I'll take it from the strategic [core] suppliers. If we are planning certain innovation within the next two or three years, which would help us to increase our sales in the market, by a certain double digit growth for example, so we plan it together and we make the plan with our partner. So in this case both sides will benefit. So this is the kind of, actually I see again that mutual benefits is there as long as we have the partnership. As long as you have a long term commitment, not a contract, with your partner, so we will continue having mutual benefits. {Interviewer: This affects your agility level with your supply chain?} Of course.*

From the supplier's side; it was also argued that 'Mutual benefit' between Unilever (North Africa Middle East) and its core partnership suppliers could improve the level of 'Supply Chain Agility'. This was suggested by supplier (B) who said: *"The mutual benefits between us and Unilever are a lot. We gained experience from*

Unilever which helped us to develop which enabled us to deliver the products quickly with high quality with decreasing our costs. The mutual benefits that both companies share had led to a win-win situation between both companies. The win-win situation is a situation where Unilever try to develop us through the supplier development department which meets with us regularly to update us with the newest techniques to cut our costs and improve our quality; in return we developed and improved to be able to deliver the products to our customer quickly and always provide the customer with higher quality. Thus, the mutual benefits and the win-win situation had encouraged us to be opened to any comment, flexible to change, and quickly respond to the market requirements, and therefore it resulted in having an agile supply chain”.

7.3.3.12 The relationship between ‘Small numbers of suppliers’ and ‘Supply Chain Agility’

Working with small number of suppliers to form better partnerships was derived also from the first rounds of data collection and analysis. It was considered by almost all the participants as one attribute that characterise their supply chain partnerships. Its impact on achieving agility level within the FMCGs supply chain was recommended by the Procurement Operations Manager (Unilever Mashreq) who expressed it as follows: *“this is linked to what I have just mentioned, within Unilever we have a programme started three years ago of reducing complexity and reducing the number of suppliers. By reducing the number of suppliers you still have more than one supplier, but you will have better relationships with your partners because in this case they will become partners and not suppliers. When you reduce the number of your suppliers and you have from eight suppliers for example to three suppliers, so in this case you will have more time to communicate with these partners, for these three partners, you will set with them and you can share with them long term plans. You can set with them a vision and you will be able to give them a bigger volume, relatively or compared to when you are having seven partners. At the end this would affect your level of commitment and integration with the partners and of course would affect your agility level”.* This was also agreed upon by the Procurement Operations Projects Manager who

insisted on the importance of having a small number of suppliers to work with and its essential role in achieving higher level of supply chain agility. He explained this as follows: “Yes, because whenever you have a small number of suppliers you have more focus on developing those suppliers. I admire having a small number of suppliers and focus on those small numbers to develop them and have the full commitment and reliability from their side rather than having scattered suppliers that are not developed, that are not under forecast and have from now and then issues coming from them. {Interviewer: And the small number of the suppliers could affect your agility level within the supply chain?} Yes, if I have a small number of suppliers with commitment and developed this can help my agility. {Interviewer: How?} This is because having a small number of suppliers, having development in their areas, having more commitment, having more reliability, will affect my agility in the supply chain. However, more suppliers but with low development, with more issues, will hurt my agility in the supply chain. {Interviewer: Why, can you please, give me examples? How can a small number of suppliers affect your agility levels?}. A small number of suppliers means suppliers having more forecast, more volume, more shares. So, a supplier having more volume from your side, from Unilever’s side, and more share from Unilever’s side, will focus more on Unilever. So, will give commitment to Unilever, will give reliability to Unilever, and will give flexibility to Unilever. This helps me. In the other side many suppliers, so everyone will take a bit, a small bit from my volume. So, I won’t be his customer of choice or I won’t be number one client at his site. So, I won’t get that commitment or that reliability or that flexibility from his site because I’m not that big. Maybe another customer or another client will be bigger than me in his site. We get all the focus and all reliability and commitment, everything like that”.

From a supplier perspective, it was emphasised also that ‘Small numbers of suppliers’ for a company like Unilever (North Africa Middle East) can lead to agility within their overall supply chain. However, it, at the same time, builds on more and more responsibility towards this brand customer. This can be shown from the words of supplier (D) where he said “We are a core supplier to Unilever. Fortunately for us it is definitely adding to both of our agilities but it adds a lot of

responsibilities on both sides. So the dependency on a single supplier or a small number supplier adds to the responsibilities on both sides”.

7.3.3.13 The relationship between ‘Information flow’ and ‘Supply Chain Agility’

Information flow (information sharing and communication) with core suppliers was considered by Unilever (North Africa Middle East) as an important attribute characterising partnership with its core suppliers. This question was asked in the final data collection round, as it was not saturated in the first two rounds of data collection. Therefore, to complete the picture and to reach the theory saturation, this has been an important question in the final interview protocol. The analysis of the data and the theory saturation reached, showed that information flow (information sharing and communication) is an attribute characterising Unilever’s (North Africa Middle East) partnership with its core suppliers. This was reached by the Procurement Operations Manager (Unilever Mashreq), who suggested the dividing of the ‘information flow technology and information technology as a catalyst’ into two parts. She considered the information flow (information sharing and communication) as an essential attribute for partnership with their main suppliers, which has a great direct impact on their abilities to achieve supply chain agility. On the other hand, she considered information technology as the catalyst and the underlying enabler for successful partnership driving the successful implementation of high level of agility within their supply chain. She recommended this as she said *“Okay, in this case I will separate between information technology and [information flow] communication”.*

She argued that information flow (communication and sharing of information) attribute has an essential impact on ‘Supply Chain Agility’ level. She suggested this by saying: *“Communication [information flow] is a core, it is an attribute, without it that will not happen, there will not be, without communication all what we have been talking about, the other attributes, about integration and about commitment and about trust will be affected and will affect agility because if we don't*

communicate, for example forecast, what comes up in my mind whenever you say about communication is that adding to the long term forecast or plan, which we communicate to our partners, we should have a rolling forecast on a monthly basis for example, what we should do. So based on this rolling forecast, rolling monthly forecast, our partner would be able to update his production plan as per this communication. Without this communication he will not be updated and he will not be able to supply us with the right requirements, the right packaging material or raw material. Because he will not be updated, so he will not plan his raw material, so he will not be able to supply you on time and it will affect your agility 100%”.

It was argued that information flow (communication and sharing of information) can also affect the degree of their ‘Supply Chain Agility’. This can be shown from the words of the Site Quality Manager who stated: *“Yes, it does, because information or communication, the name of it is communication, and that's the most important factor for an industry like ours whereby the more information or communication we have, the better we will be able to react and that makes us more agile, more perfect as a company in the market”*. It was also suggested by the Supply Planning and Logistics Manager as on asking such question, he answered: *“As I told you sharing of information are important and the speed of sharing is very important as well”*. This was also suggested by the Customer Service Manager in the Lipton Tea Factory (previously a planning manager) in Dubai, who answered when asked about the importance of information flow on achieving higher level of agility as follows: *“Yes, that's what I also said before also. So that only trust doesn't solve everything, you have to share information”*.

From the supplier’s perspective, ‘Information flow’ (communication and information sharing) was an essential factor for achieving higher level of agility within their supply chain. This can be shown from the words of supplier (B) who recommended this as follows: *“The relationship between us and our main customer (Unilever) depends on communication. The communication helped us both to respond fast, and to be more flexible if any economic or environmental factor occurred. Thus the communication helped in achieving agility which enhanced us to detect problems quickly and react to them immediately”*.

From the above, the following table (Table 7.1) summarises the relationships derived from the data analysis process.

Table (7.1): Research main findings

Partnership mechanism	Agile supply chain mechanism
Partnership existence with core suppliers	Responsible and Human encouragement thinking, Responsiveness, Customer Service, Flexibility, Innovation, Speed, Quality, and Efficiency.
Trust	Flexibility, Speed, Responsiveness, Responsibility, Innovation
Commitment	Flexibility, Speed, Responsiveness, Responsibility
Collaboration	Flexibility, Speed, Responsiveness, Efficiency, Customer service
Information flow (sharing)	Flexibility, Speed, Responsiveness
Transparency	Flexibility, Speed, Responsiveness
Mutual benefits	Quality
Reliability	Responsibility, Quality

Long term orientation, Trust, Reliability, Commitment, Collaboration, Openness & transparency, Sharing targets/vision, Non-priced basis partnership, Win to win partnership situation, Integration, Mutual benefits, Information flow

Supply Chain Agility

7.4 The generated theory

Figure 7.1 presents the final theory built from the grounded theory analysis. It is the theory generated or developed from the study. It can be seen that the dynamic and complex features or the characteristics of FMCGs industry have led the companies working within such type of business to search for ways to help them face these volatile characteristics. It can be seen that similar to several other types of industries, the supply chain and its management have become an important field of focus that is emphasised by all the companies working in FMCGs business markets. For these reasons, a multinational business like Unilever and its subsidiary in the Middle East and North Africa has concentrated its efforts for developing and maintaining supply chain partnerships with the other supply chain members as a means for improving its supply chain management. Unilever (North Africa Middle East) has recognised the importance of supply chain agility as a weapon for facing and dealing with their complex business environment. Therefore, the FMCGs companies are now considering their supply chain partnerships and especially supplier partnership as the starting point and the most closely related party in the channel, as the important driver for achieving supply chain agility as a ground for improving supply chain management.

It can be seen from the diagram that information technology plays an essential role in such a relationship. It can be considered as the catalyst that facilitates and brings together all the elements to achieve successful implementation for supply chain agility.

At the dimensional level, every explored partnership attribute was considered to have an impact on achieving a higher level of supply chain agility. At the same time, every supply chain agility attribute is also affected by supplier partnership existence. The dynamics and the ranking of importance for both sets of attributes was an important question during all the data collection rounds. Different rankings were collected. From the analysis of all the data, the researcher can argue that the most important supplier partnership attributes that can affect greatly the ability to achieve supply chain agility, mentioned by the participants with slightly varying distances are:

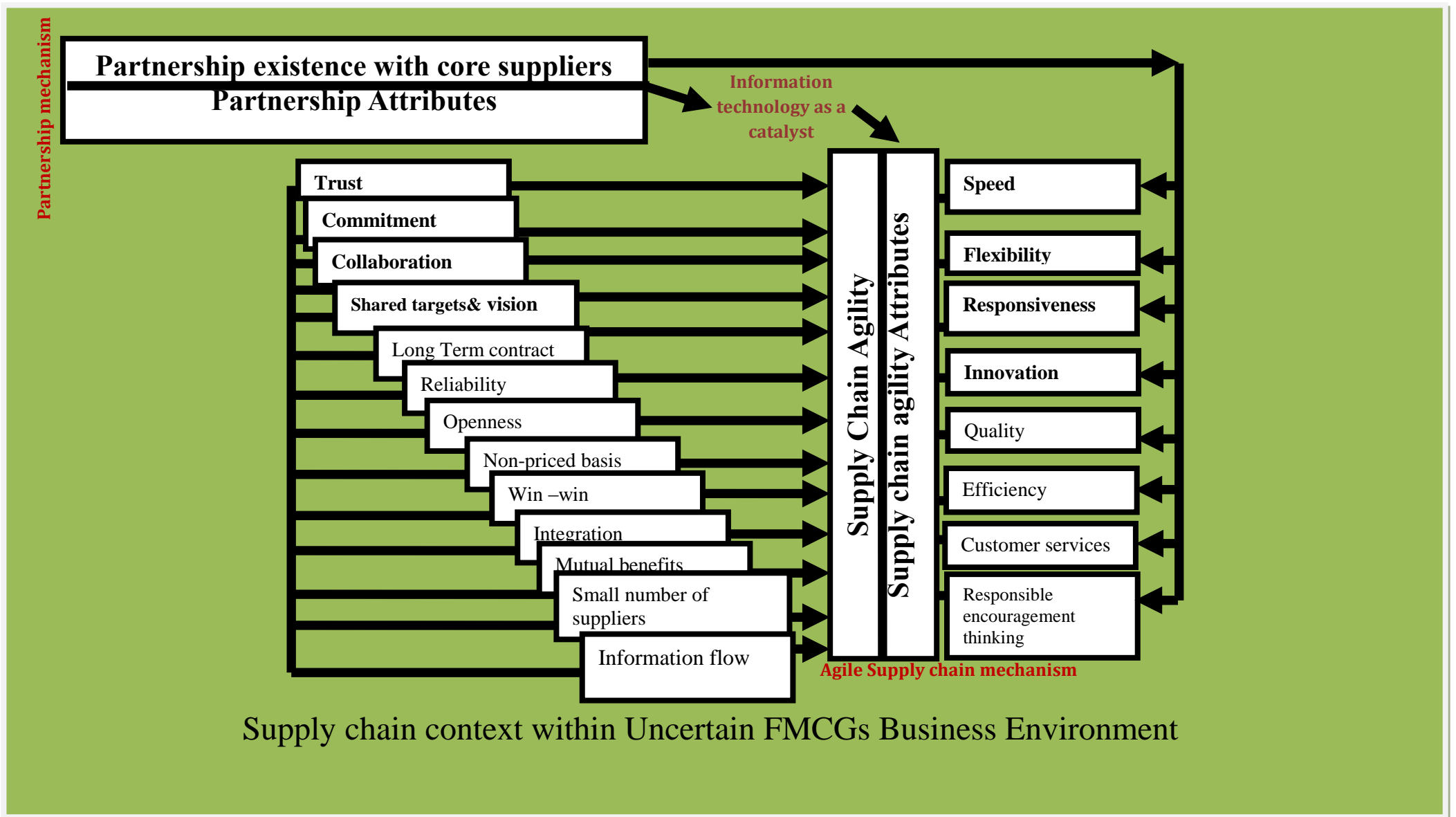
*** Trust,**

*** Commitment,**

*** Long term vision, and**

*** Collaboration.**

Figure 7.1: Generated theory



At the same time the researcher can also argue that the most important supply chain agility attribute mentioned by the participants, although with slightly varying degrees, are:

*** Speed,**

*** Responsiveness,**

*** Flexibility, and**

*** Innovation.**

To complete the picture, the researcher can also argue that the interrelationships between the various supplier partnership attributes and the interrelationships between the supply chain agility attributes can take the form of a circle as they are all related and interrelated to each other. The researcher's arguments are based on some participants' answers that have led to the theory saturation. For example, the Procurement Operations Projects Manager who answered the question of the dynamics of the partnership attributes as follows: *"as I've mentioned it's all like a circular relationship between all these attributes because they are all related"*. In addition to this, the Procurement Operations Manager (Unilever Mashreq) suggested this by saying: *"actually they are all linked together"*. She also added, when asked if she wanted to add any attribute for supply chain agility: *"No because actually you have covered all and I see if I would like to share the most important thing is speed and responsiveness, from my point of view, from achieving the agility in supply chain. Yes because let me tell you that quality and service, it goes without saying, in any supply chain you should care about the quality and service. For supply chain agility I see that high responsiveness and flexibility and speed are very important"*. She also added: *"So actually I would say that from the supplier partnership attributes, which is mainly sharing the long term vision, commitment and trust, actually it would lead to a high level of supply chain agility mainly in high responsiveness, speed, flexibility and*

innovation. So of course other attributes also will be affected but I see that these are the main". An important note that has to be mentioned here is that in addition to the fact that these quotations have led to a high level of theoretical saturation, these quotations were from participants whose positions are very closely related to supplier partnership and supplier development programme, as well as supply chain management. Therefore, their opinions were much more concerned by the researcher as they added to the richness for the theory saturation achievement.

7.5 Summary

In this chapter the final element of data analysis was presented. This has resulted in the generation of the developed theory of the research. The chapter included the data collected during the third and final round of data collection, as well as some data collected during the first and second data collection rounds. This represents the iterative process that characterises the Grounded Theory Approach. The final stage of analysis started with the validation for what has been reached before the final round of data collection. This was with the aim to discover the gaps that needed further data collection. Then the chapter presented the relationship between the core category ('partnership existence with core suppliers') with the consequences ('Supply Chain Agility') at the dimensional level. This led to the emerging theory, reaching its saturation and to be presented as shown above. The next chapter presents the comparison between the generated theory and what is already known in the previous literature as suggested by Grounded Theory.

Chapter Eight: Placing the developed (generated) theory into the existing literature

8.0 Introduction

It is important at this point of the research to place the emerging theory in the existing previous research. It has been suggested by Strauss and Corbin (1990, 1998) to compare the study's generated theory against what is already known in the literature. Comparing the research generated theory to that already suggested by other researchers in the exact literature is an important step in the grounded theory approach. It was suggested by Eisenhardt (1989, p. 545) who argued "*overall, tying the emergent theory to existing literature enhances the internal validity, generalisability, and theoretical level of the theory building form case study research...because the findings often rest on a very limited number of cases*". This step can either take place in a separate chapter or as a part in the final stage discussion and explaining the research generated theory (Lock (2001). This research study used the first option since this helps to ensure the flow and sequence of the presentation of the study. Another important issue concerned in the selection of the first option is the fact that the last chapter was a long chapter and if option two was selected, this would led to a disproportionate increase in the length of that chapter over the rest of the thesis chapters.

The explanations and discussions will constitute the parts in the generated theory that can answer the study's research questions and achieve its aims and objectives. This means that the discussion concentrates on supplier-buyer partnership, including its attributes, as it is considered the research core category and its relationship with supply chain agility as it is considered the research consequence, including its attributes. However, to complete the research aims and objectives, the discussion also involves the role played by information technology, as the research intervening conditions and its impact on the relationship.

8.1 Buyer-supplier partnership attributes

From the generated theory several attributes have been derived as the suitable attributes in a successful supplier-buyer partnership for a FMCGs supply chain. These attributes are generally consistent with those previously in the literature. These attributes are: Reliability, Long term contract, Trust, commitment, collaboration, openness & Transparency, Shared targets & vision; Non-priced basis, Win-win, Integration, Mutual benefit, Small number of suppliers and information sharing (communication). The following sections (8.1.1 to 8.1.13) examine them in the extent literature in support of what has been derived in the study's generated theory.

It is important here to complete the picture by showing the relationships between these partnership attributes where it has been suggested in the academic research. For example, there are some research studies on the link between trust and commitment and how they work together to achieve better partnerships. Chen et al. (2004), from summarising some literature on limited number of suppliers, conclude that it can lead to better level of trust, dependability (mutual benefits), sharing of information, long term orientation and cooperation. In a study by Ryu et al. (2009) it is suggested that trust and commitment can have a positive impact for improving the collaboration level. Cox (1996) and Kraljic (1983) suggest that improving communication can lead to more integration within the same supply chain (Chen et al. 2004). Paulraj and Chen (2007) argue that the three factors included in Chen et al.'s (2004) study to examine the strategic buyer-supplier relationship, namely inter-firm communication, long term relationship orientation, and small number of suppliers, can lead to increasing the level of trust and commitment in any buyer supplier relationship.

This example shows that there are some relationships among partnership attributes all together. However, in the research generated theory, it has been found that the 13 partnership attributes, with the highlighting of trust; commitment; sharing of long term vision; and collaboration as the most important attributes, explored in the study are interrelated to each other for companies working within FMCGs industry and within

the Middle East business environment. Therefore, this can be considered as a contribution to this research study.

8.1.1 Trust

Trust has been derived as an important key attribute for supplier partnership in the research generated theory. This has also been supported in the previous literature. It has been argued that trust is an important characteristic for any successful relationship and especially a partnership between a company and its supplier. In the study by Wilson and Moller (1991), where they review the literature on relationships, they have found that trust can be considered as the core element for relationships (cited in Fynes and Voss, 2002). Several previous research studies have defined trust in relationships. For example, it has been defined by Rousseau et al. (1998) as *“psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another”* (cited in Corsten and Felde, 2005). Trust is also the belief of one partner in the benevolence and credibility of the other partner (Ganesan, 1994; cited in Terawatanavong et al., 2007). It is defined by Morgan and Hunt (1994) as the confidence of one partner in the reliability and integrity of another partner in a business exchange (cited in Ulaga and Eggert, 2006). It is also the belief of a company that it can satisfy its needs for the future through the practices performed by other partner (Anderson and Weitz, 1992; cited in Ulaga and Eggert, 2006). Anderson and Narus (1990,p.45) have defined it as *“the firm’s belief that another company will perform actions that will result in positive actions for the firm as well as not take unexpected actions that would result in negative outcomes for the firm”* (cited in Fynes and Voss,2002, p.592).

Most of the research studies on partnerships show the importance of trust as one key attribute of partnership. For example, Morgan and Hunt (1994) argue that any successful relationship should be based on high levels of trust and commitment, where they consider them as important mediating variables to keep and maintain a relationship (Ryu et al, 2009; Ulaga and Eggert, 2006). Gulati and Sytch (2007) argue in their recent study that supply chain performance is improved by the existence of

trust in the relationship exchange (cited in Ryu et al., 2009). Also, that inter-organisational trust may enable all the partners to share information, either general or sensitive information, explicitly or implicitly. Ryu et al. (2009) have specified some benefits for the existence of trust in a partnership as follow: the inter-organizational trust can enable the organization to achieve higher confidence in and higher level of commitment to the terms that they have agreed upon (Zand, 1972). It can also enable the organization to have an environment that is devoid of any opportunistic behaviour and allows the partnership to be more emphasized on developing committed relationship (Ryu et al., 2009). When trust exists within a buyer-supplier relationship it enables them to form a more stable one with decreased transactional costs, involving interested behaviours, lower the degree of legal contracts and allow them to conflict problem solving (Sahay, 2003). Trust is considered as having a positive impact on commitment and enhances the retailer and suppliers relationships (Ganesan, 1994; Narayandas and Rangan, 2004, cited in Ryu et al., 2009). Narayandas and Rangan (2004 cited in Ryu et al., 2009) argue that trust existence in a buyer-supplier relationship improves inter-organizational commitment development in an industrial market. Gulati and Sytch (2007; cited in Ryu et al., 2009) argue that interpersonal trust has as impact on inter-organisational commitment, as well as performance.

Wathne and Heilde (2000 cited in Tarawatanavong et al., 2007) argue that higher level of trust can reduce the buyer firm's perceived risk, i.e it will always have a high confidence in the partners' behaviour in any future behaviour. Higher level of trust can also promote more coordinated work between both partners to achieve beneficial outcomes at the strategic level (Jap, 1999 cited in Tarawatanavong et al., 2007). Trust can also increase the relationship to be continued; especially in conventional channel ones (Anderson and Weitz, 1989) and the expected increase in future interaction between partners (Morgan and Hunt, 1994). Sullivan and Peterson (1982 cited in Ulaga and Eggert, 2006) suggest that trust in relationship can lead to successful business relationship, where they argue that "*when the parties have trust in one another then there will be ways by which the two parties can work out difficulties such as power conflict, low profitability, and so forth*"(p.315). Trust in buyer-supplier relationship can enable the relationship to be more stable with less transactional expenses, promote desirable behaviours, reduces the degree of legal contracts and

assists to solve problems and conflicts (Sahay, 2003; cited in Ryu et al., 2009). Terawatanavong et al. (2007) argue that trust can also be considered as the governance mechanism (Heide, 1994) that can limit the opportunism level in an exchange that is characterized by uncertainty and high level of dependence (Ganesan, 1994). Corsten and Felde (2005) suggest that trust ensures that every partner will stand to the relationship agreements, will not take negative actions to the other partner (Anderson and Narus, 1990), will perform the roles and responsibilities and will stand to the assumptions of cooperative and integrative behaviour (Cannon and Perreault, 1999). In a more recent study Johnston et al. (2004) have suggested the same argument where they recommend the importance of trust as they suggest that developing and maintaining trust among supply chain members is a key element for any supply chain willing to work in an effective manner.

For the above reasons it was not surprising for trust to be one of the key core emerged attributes for supplier partnership in the theory developed in this research. Therefore, the previous literature supports this core attribute within the generated theory.

8.1.2 Commitment

Commitment has been one supplier partnership attribute in the research generated theory. It is another very commonly accepted partnership attribute and generally in any business relationship. Therefore, it has been not a surprise to appear as one core attribute for the case study partnership form with its core supplier. Commitment is defined by Ryu et al. (2009) as “*the belief of an exchange partner in an on-going relationship*” (p.499). It is also defined by Dwyer et al. (1987) as the implicit and explicit belief of continuous relationship with business exchange partners (cited in Fynes and Voss, 2002).

All types of commitment in all forms of relationships either inter-organizational, intra-organizational and interpersonal relationships forms are valuable since they provide stability, as well as sacrifice to them. Commitment can be considered as the sum of efforts of the partners and their belief that every partner is ready to take some type of

potential risk for the sake of the relationship and that every partner will not be willing to engage in any opportunistic alternatives (Ryu et al., 2009). Ryu et al. (2009) argue that commitment can be considered as the main construct in any inter-organizational relationship as they considered it as a *'precursor of a partner's behaviour'* (p.499), especially when other partners have the same level of loyalty with specific affirmative behaviours. Commitment is a partnership attribute or dimension that ensures stability to the relationship, as well as sacrifice (Anderson and Weitz, 1992; Jap and Ganesan, 2000; cited in Terawatanavong et al., 2007). Ryu et al. (2009) argue that commitment can be considered as a means that collects the partners' efforts and ensures that every partner is willing to have some potential risky actions in the short run for the survival of the relationship, and that no partner will take any opportunistic behaviour. They also argue that supply chain partnership can be well integrated through the key factor 'commitment' and therefore it has been considered as an important mediating variable between important antecedents and outcomes (Morgan and Hunt, 1994; cited in Ryu et al., 2009). Morgan and Hunt (1994, p.23) argue that reviewing commitment literature shows that *"a common theme emerges from the various literature on relationships : parties Identify commitment among exchange partners as key to achieving valuable outcomes for themselves, and they endeavour to develop and maintain this precious attribute in their relationships"* (cited in Ulaga and Eggert, p. 316). Morgan and Hunt (1994) argue that partners within the same supply chain should maintain high level of trust and commitment to collect all the efforts in order to develop a satisfied relationship and achieve high performance level (cited in Ryu et al., 2009). Zand (1972) has stated that trust and commitment relationship is highly correlated and associated for problem solving. Commitment can achieve important results such as decreased turnover, high level of motivation and increased organizational citizenship (Morgan and Hunt, 1994). Therefore, Ryu et al. (2009) argue that a committed business partner will be willing to keep a committed relationship.

8.1.3 Collaboration

Collaboration has taken a great attention from the academic researchers for a long time. It has also been derived in the generated theory as one core attribute for partnership. It can be considered as a *"specific form of relation exchange"* (Cannon

and Perreault, 1999), which involves jointly developing and maintaining value (Kanter, 1994 cited in Corsten and Felde, 2005). Heide and John (1990) define collaboration as the “*joint action*” in the company relationship with its supplier, which emphasizes on integrative product and process development activities (cited in Corsten and Felde, 2005). Ryu et al. (2009) state that (p.499) “*collaboration from the supply context includes the exchange of information associated with materials, products, activities, production processes, problem solving as a team, production planning and the replenishing of scheduling ,goals, and responsibilities*” (Kulp et al., 2004; Vachon and Klassen, 2008).

Corsten and Felde (2005) suggest that collaboration can be considered as a process which needs to be associated with a “*high level of purposeful cooperation*” (Spekman, 1988) and focus on joint processes through the sharing of “co-specialised assets” investments (Dyer, 1996) or as Heide and John (1990) have called it, “*joint action*”.

The benefits of high level of collaboration between the company and its supplier in a partnership have been strongly supported in the literature. Collaboration between companies makes them share their information, knowledge and assets with each other (Ryu et al., 2009). Vachon and Klassen (2008 cited in Ryu et al., 2009) argue that supply chain collaboration can have a positive impact on manufacturing performance. Bailey and Francis (2007) highlight that transparency in information and collaboration enable the firm to provide high level of order replenishment performance (Ryu et al., 2009). Among the benefits of high level of collaboration between the company and its supplier are: the high level of quality and the decreased costs (Larson 1994), high level of delivery (Artz, 1999) as well as high service performance for the logistical issues (Stank et al., 2001), more chance to increase the company’s products and services offerings and the ability to carry on risks together (Parkhe, 1993), as well as it has a positive impact on the performance as a whole (Hewett and Bearden, 2001).

8.1.4 Limited number of suppliers

Having a limited number of suppliers is an arguing issue in the academic field. Some researchers suggest that reducing the number of the suppliers can lead the company to higher level of risk, which may result from the supplier's opportunism and less flexibility level (Chen et al., 2004). On the other side, several researchers argue that when limiting the supply base, this can lead to several benefits for both the company and the supplier. Among them is increasing the trust level, the dependability level and cooperation between all the supply chain partners (cited in Chen et al., 2004). Ring and Van de Ven (1994) argue that limited number of suppliers can increase the trust level where every partner will try not to be opportunistic in order to achieve mutual benefits (Chen et al., 2004). The company that limits its supplier's number can be better working with such small number of suppliers, as this can lead to closing working, which in turn can lead to improvements in trust and cooperation. This has been suggested by Ring and Van de Ven (1994, cited in Chen et al., 2004).

8.1.5 Long term relationship orientation

It has been suggested that long term relationship between the company and its suppliers is an important element in the strategic purchasing field. Chen et al. (2004) suggest that the academic literature is focusing on relationship orientation which is based on long term building and maintenance. This is because partnership includes the sharing of knowledge and know-how which need time to be beneficial. Therefore, they argue that successful strategic supply management depends on long-term relationship orientation. A study by Gunasekaran et al. (2001) has stated that strategic supplier partnership has to insert a long-term relationship and planning sharing. Therefore, it has not been surprising to have long-term orientation as one of the most important partnership attributes in the research generated theory.

8.1.6 Communication

Sharing of information and high communication level between the supply chain partners is an important element for successful supply chains. It was recommended by several researchers that communication and sharing of information has a great impact of effective supply chains. Although the inter-firm relationship role for firms is well recognized, however there is a great failure rate in achieving its benefits (Muckstadt et al., 2001; cited in Hsu et al., 2008). The main reason can lie on the failure on having the sufficient information sharing and flows within their supply chain which may be due to their inability or unwillingness to do this or even the lack of how to do this. The information sharing is defined by Hue et al. (2009) as the coordination of information systems of all supply chain members as well as their decisions systems; all their processes and techniques used to operate or perform any information searches; to manage and monitor their business operations and enable other businesses tasks to take place. Hsu et al. (2008) argue that the firms with inadequate or insufficient information sharing will be limited to achieve the supportive benefits from the relationships with other supply chain partners. With the growing technological advances and the emergence of the global information infra-structure, the companies should possess the suitable competitive inter-organisational informational systems to enable them to achieve the rapid and effective response to the customer's needs and changing expectations (Hsu et al., 2008). Information sharing in a supply chain is to provide important and suitable information to the supply chain partners. The information shared may be either tactical, related to issues such as purchasing, operations schedules, logistics or may be strategic, such as long-term objectives of the company or information related to marketing and customers (Hsu et al., 2008).

Among the benefits of sharing information are that all the supply chain partners can develop more opportunities such as matching the available information to modify their courses of actions and future planning and can also have its positive and direct effect on the company and its supplier relationships (Hsu et al., 2008). The information and communication tools can enable the business activities to be integrated across the whole supply chain through the information flows which is required to coordinate the business process as a whole (Rippa, 2009). This is through the acquiring and sharing

and accessing data through the whole supply chain to develop information useful for the all parties in the same supply chain (Rippa, 2009). Among the information technological services is the “Internet”, which is considered as an opportunity for the firms to share the demand and data across the supply chain. Therefore, the internet availability is considered as an opportunity to enhance and break down the functional and organisational barriers and increase information flows (Rippa, 2009). Ryu et al. (2009) argue that managing information and information flow in an effective manner means not only the availability of information exchanged (Zand, 1972), but also a more accurate and detailed information which will influence the supply chain partners’ performance, as well as leading to successful relationships (Dyer, 1997). Information sharing existence within a supply chain can provide three main benefits, eg.: information is spread all over the supply chain, senders and receivers of information are becoming more closer and supply chain partners can have the ability to operate and benefit from new information at the correct time (Zhau and Benton, 2007; Patnayakuni et al., 2006; cited in Hue et al., 2009). Martin and Grbac (2003) argue that information sharing has a positive impact on supplier flexibility and that supplier flexibility has a positive effect on profit, customer loyalty and responsiveness (cited in Kannan and Tan, 2006).

8.1.7 Mutual benefit

In the literature, researchers consider it as the level of dependency/mutual advantage. This attribute has been suggested to be an important partnership attribute by Goffin et al. (2006) when they summarise the literature on partnership from 1990-2003. They suggest that dependency/mutual advantage, as they called it, has been recommended to be an important element in any successful partnership and is necessary for its effective implementation. This is because they argue that it is considered as the most mentioned attribute for partnership in the literature beside commitment, long term and information sharing (communication). They also suggest the same when they argue that it has been explored during their study (2006) as one of the most important attribute characterising buyer supplier partnership. It has been emphasised by Thatte (2007) in his study as he considered strategic supplier partnership enhancing mutual benefits and collaboration.

8.1.8 Openness& Transparency

Openness and Transparency are considered elements for achieving partnerships between the company and its suppliers in the research generated theory. It has been suggested also in the previous research. For example, it has been argued and recommended by Goffin et al. (2006) in their study for the exploring of the main attributes necessary for effective close relationships (partnership) with suppliers.

8.1.9 Reliability

Reliability has also been recommended by some researchers to be an element required for successful relationship and partnership. Therefore, this argument in the research developed theory can be supported. Goffin et al. (2006) also suggest that reliability is another buyer-supplier partnership attribute.

8.1.10 Integration

Integration is an important element in buyer-supplier relationship in the generated theory and has been supported in the literature. Agarwal & Shankar (2002, cited in Agarwal et al., 2007) argue that the successful integration among the same supply chain has its impact on its partners, such as decreasing of the excess inventory levels, reductions in the lead time, improving in sales level, and enhancing in customer service level. Process integration, as one type of the integration that may exist between the company and its suppliers, has been defined by Christopher (2000) as the collaborative efforts between buyers and sellers including common product developments, shared systems and information communication. However, integration, as a separate attribute characterising buyer supplier partnership, can be considered as a contribution to this research study.

8.1.11 Shared targets & vision

Sharing common targets and goals has been suggested in the previous literature. For example Morgan and Hunt model (1994), where they defined the sharing of common values as the degree to which sharing partners commonly beliefs about the behaviours, targets, and policies are the same. However, sharing the same or close vision is a new attribute associated with the successful partnership implementation in the literature. Therefore, this can be considered as a contribution to the study.

8.1.12 Non-priced basis

In the generated theory partnership or supplier relationship that is not based primarily on price only has been considered as an attribute for the case study partnerships with core suppliers. This has been suggested previously in the literature. Goffin et al. (2006) have suggested that non-priced basis is another buyer-supplier partnership attribute mentioned in the literature under the term non-tender price agreement.

8.1.13 Win-win situation

Win-win situation has been considered in the research generated theory as an attribute characterising the partnership that exists between FMCGs Company and its supplier in the Middle East market. This can be considered as a contribution to the research study. Although win-win situation is a previously mentioned characteristic for defining buyer-supplier relationship, however it has been here considered as an attribute and not a feature for defining the relationship. In addition, it has been considered as an attribute for buyer-supplier partnership, not general relationship.

8.2 Supply chain agility attributes

As shown in the previous chapters, supply chain agility is considered as a relatively new business concept. However, from its beginnings it has received important attention from the academic field. There have been several previous research studies trying to define supply chain agility or determining its main attributes, elements, and enablers. Therefore, the following section will discuss these attributes in support to what has been derived in the generated theory, thus completing the gap on the grounded theory development process. In addition, the discussion will also include the new attributes that have been emerged in this study and that therefore can be considered as a contribution of this research study. The generated theory derived eight attributes for FMCG's supply chain agility. They are: responsible & human encouragement thinking, customer service, flexibility, innovation, speed, quality, efficiency and responsiveness.

As was the case mentioned for the partnership attributes (section 8.1), the supply chain agility attributes are also interrelated to each other. Some researchers have implicitly suggested that there are some links between some of these attributes. For example, Agarwal et al. (2007) recommend that effective managing of time concept is '*mirror image*' (p.446) for quality, cost, innovation and productivity management. This highlights the important role of speed and time on such variables. In the same study they also explored 15 variables of supply chain agility and suggested some relationships between them. These variables are as follows: market sensitiveness, delivery speed, data accuracy, new product introduction, centralised and collaborative planning, process integration, use of it tools, lead time reduction, service level improvement, cost minimisation, customer satisfaction, quality improvement, minimising uncertainty, trust development and minimising resistance to change. They conclude that there are relationships between these supply chain agility attributes. For example, they argue that quality can affect the level of customer satisfaction. They also argue that delivery speed can affect directly the level of service level, which leads to better customer service level. This can show that there are some relationships linking speed, customer service and quality levels with each other.

The generated theory in this research suggested that the 8 attributes for supply chain agility are interrelated to each other, with the highlighting of speed, responsiveness, flexibility and innovation as the most important attributes for supply chain agility. Therefore, this can be considered as a contribution to this research study. In general, these attributes are strongly supported by the existing literature. They are considered as the mostly mentioned attributes in the agility literature, with the exception of innovation. For example, a study by Rimiene' (2011) for summarising the agility literature from its beginning in 1991 until 2010, published in parallel with the data collection undertaken in this study, argue that flexibility and speed are the most mentioned attributes in the literature and that agility definitions are also focused on responsiveness and customer needs within changing environments. Although it has been mentioned before in the literature as an agility provider, here with the implementation of the theory for the companies working within FMCGs industry in the Middle East business environment, innovation has been shown to be one of the most important supply chain agility attributes. This is another important contribution from this research study.

8.2.1 Flexibility

Flexibility has been explored in the generated theory as one core element for supply chain agility. Flexibility is considered as a core element of agility also in the literature (Christopher and Towill, 2001). Agility, as a philosophy, includes flexibility as a business concept (Narasimhan et al., 2006; Swafford et al., 2008). Flexibility concept can be considered as a '*prerequisite*' for agility (Jackson and Johansson, 2003).

Prater et al. (2001) define it as the extent to which a company is able to adapt the time needed to ship or receive its products. They suggest that flexibility is a combination of two capabilities: "*promptness with; and the degree to which a firm can adjust its supply chain speed, destinations and volumes*" (p.824). It has been also defined by Vokurka and Fliedner (1998) as the organisation's ability to switch from one activity to another rapidly and as a routine step activity. Zhang et al. (2003) define it as the ability of the company to achieve the customer increasing demand expectations

without extra costs, time, organizational instability or performance reductions (cited in Bernardes and Hanna, 2009). Flexibility, according to Sharifi and Zhang (1999), means the ability to produce different products and achieve different aims by using the same physical tools and facilities, including product volume flexibility, product model flexibility, organizational flexibility and people flexibility. A distinction is always made between agility and the flexibility concept. Several researchers have suggested that flexibility, is focusing on adaptability and versatility abilities of the company (Kidd, 2000), while agility, is focusing more on speed capability (cited in Swafford et al., 2008). However, no one can neglect the importance of flexibility in achieving agility in general and supply chain agility in particular. It has been recommended by almost all the studies on supply chain agility that flexibility, is among the most important, if not the most important element attributes for achieving high level of supply chain agility.

From the research studies that suggested the importance of flexibility as one agility attribute are: Iacocca/ Lehigh (1991), Dove (1995), Fliedner and Vokurka (1997), Yusuf et al. (1999), Christopher (2000), Menor et al. (2001), Christopher and Towill (2002), Sambamurthy et al. (2003) and Raschke and David (2005).

8.2.2 Speed

Quickness (speed, time) is one of the most important elements of agility in the generated theory. This also has been supported in the previous literature. Almost all the research studies on determining agility elements are considering speed as a core agility element. It has been defined by Sharifi and Zhang (1999) to represent the ability of the company to perform all the overall activities, as well as its operational activities in the shortest time possible including rapid introduction of new products into the market' rapid operational time, rapid delivery for all products and services. Prater et al. (2001) define speed as the time measure that a company can spend to ship or receive its products. It has been suggested to be one agility attribute in studies such as Iacocca/Lehigh (1991), Kidd (1995), Kumar and Motwani (1995), Cho et al. (1996), Fliedner and Vokurka (1997), Yusuf et al. (1999), Dove (1999, 2001), Christopher

(2000), Menor et al. (2001), Christopher and Towill (2002) and Sambamurthy et al. (2003).

8.2.3 Responsiveness

Responsiveness has also been developed in the generated research as one important attribute for supply chain agility, fact also supported in the previous research. For example, it has been considered by Van Hoek et al. (2001) as main element for agility, where they argue that agility is defined as customer responsiveness and the managing of market changes. The aim of any company is to meet the customer requirements and therefore it has to be able to respond to any demand changes. Several studies consider responsiveness as an element for agility such as Goldman et al. (1995; cited in Ganguly et al., 2009) and Dove (1999; 2001). It has been defined by Tunc and Gupta (1993) as the organisation's ability to react and deal to meet the customer's demand in an effective time manner (cited in Bernardes and Hanna, 2009). It has also been defined by Shafiri and Zhang (1999) as the ability to determine changes, react to them rapidly and includes estimating, perceiving and identifying market changes, rapidly react to them and trying to recover. From the studies suggesting its importance as a capability or an attribute for agility are: Iacocca/ Lehigh (1991), Kidd (1995), Kumar and Motwani (1995), Cho et al. (1996), Yusuf et al. (1999), Dove (1999, 2001), Sharifi and Zhang (1999), Christopher (2000), Van Hoek et al. (2001), and Raschke and David (2005).

8.2.4 Innovation

It has been generated for the developed theory that innovation is one attribute for supply chain agility for companies working within Middle East FMCGs business industry. Although innovation has been suggested before in the literature to be one provider for supply chain agility (Sharifi and Zhang, 2001), however here in the research generated theory it has been recommended to be one of the most important attribute for FMCGs companies to implement supply chain agility in the Middle East. Zhang and Sharifi (2000) and Sharifi and Zhang (2001) argue that innovation can be

considered as the means or the practices for achieving agility. However, here in the study research the generated theory suggested that innovation could be considered as a capability or an attribute without it FMCGs companies within the Middle East business environment cannot achieve high supply chain agility level.

8.2.5 Responsible & human encouragement thinking

People's way of thinking and their feelings for responsibility have been suggested in the research generated theory. The role of people for agility has been mentioned before in the literature, but in a different way. It has been argued by several researchers that it is important to achieve agility to take into consideration the role of people. For example, this has been recommended by Goldman et al. (1995), where they considered it as one of their four dimensions for agility, which include: "enriching the customer", "cooperating to enhance competitiveness", "organizing to master changes" and finally, "leveraging the impact of people and information". This gave emphasis to the role of people in achieving agility. It has been also recommended by Zhang and Sharifi (2000) and Sharifi and Zhang (2001) as an agility provider for achieving agility. This gave a more focus on it as the means or the practices through which agility can be achieved. However, here in this research people's way of thinking and their feeling of responsibility and encouragement have been recommended as a capability or an attribute that has to be possessed by FMCGs companies in the Middle East, which can enable them to achieve agility within their supply chains.

8.2.6 Customer service

Satisfying the customer is considered as the main aim or target for any business. Therefore, it has not been surprising that customer service, including satisfying their needs and preferences, has been recommended by the research generated theory as one attribute for supply chain agility. It is not also a surprise that it has been suggested previously in other research studies. For example it has been mentioned in studies such as: Iacocca/Lehigh (1991), Goldman et al. (1995), Cho et al. (1996), Fliedner and

Vokurka (1997), Yusuf et al. (1999), Dove (1999, 2001), Naylor et al. (1999), Christopher (2000), Van Hoek et al. (2001), and Raschke and David (2005).

8.2.7 Quality

Quality has been recommended in the research generated theory to be one attribute for supply chain agility. This has been also suggested before in the literature where quality has been mentioned by other researchers as one important capability for agility. For example, it has been argued by several research studies such as Fliedner and Vokurka (1997), Yusuf et al. (1999), Dove (1999, 2001), Christopher (2000) and Menor et al. (2001).

8.2.8 Efficiency

Efficiency has been also derived in the research generated theory as one attribute for FMCGs companies' supply chain agility. Efficiency or cost consideration, as sometimes suggested by researchers, has been also recommended in the previous literature as one agility capability or attribute. For example, this has been suggested by studies such as Fliedner and Vokurka (1997), Yusuf et al. (1999), Dove (1999, 2001), Naylor et al. (1999), Sharifi and Zhang (1999) and Menor et al. (2001).

Therefore, the research can provide a comprehensive definition to supply chain agility within FMCG industry as follows:

Agility in supply chain is characterised by being responsive, flexible, focusing on improving its innovation, speed, efficiency, customer service, quality, and its Responsible and human encouragement thinking attributes, to be able to face the dynamic and complex business environment.

8.3 The buyer-supplier partnership as a starting driver for supply chain agility

As mentioned and discussed in Chapter 2 in reviewing the literature, there are a number of studies linking the maintaining and the importance of building strong buyer supplier-relationships and especially partnerships, to achieving supply chain agility. In general, however, these studies noted that importance but they provided little rational. In very recent years some new studies investigating supply chain agility have been published. Each study has examined agility from a different perspective, however they all agreed on the importance of partnerships with core suppliers and have started to investigate the matter in a more detailed manner. Nevertheless, it is important to emphasise that the significant difference between these recent studies and this research study is that this is more concerned with the relationship between buyer-supplier partnership and supply chain agility at the dimensional level. It has explored the important attributes for each construct and investigated each attributes relationship to the other construct. Therefore, the generated research explored a full picture for the relationship between the two constructs with their important attributes. It has also provided the mediating role played by the intervening conditions that is to say [information technology as a catalyst] that may affect the level of success for the achievement of the relationship.

For example, a study by Kisperska-Moron and Swierczek (2009) for exploring agility capabilities in Polish companies used different types and sizes of manufacturing and service Polish companies. They grouped them depending on similar characteristics into four clusters: service companies, predominantly manufacturing companies, mixed between manufacturing and service companies, and the commercial and retail companies. From their first analysis step for the information, four factors that been extracted. The first one was concerned with the relationship of the Polish company with its core customers, which they argued that it is previously suggested by the literature. They argue that this factor is mostly important to clusters including the service companies, mixed companies, and commercial & retail companies which are more linked to and faced to customers.

The second factor was concerned with the relationship of the Polish company with its core suppliers and service providers, which had also been suggested in the literature. They show the important role of relationships with suppliers and considered it as an important element in achieving supply chain agility. They argue that eliminating the barriers, sharing goals, developing and maintaining long-term partnerships and the interchange of human resources among the company and its supplier can enhance the integration and the shared beneficial mutual benefits (Meredith and Francis, 2000; Aithen et al., 2002). The authors suggest that a great dependence on suppliers and other partners becomes necessary, and therefore, a suitable type of relationship is needed. They argue that there should be no boundaries between the company and its suppliers and that attributes such as trust and commitment should be maintained in this relationship.

The third factor is concerned with the relationship of the company with its competitors. They suggest that this factor is more important for achieving agility to manufacturing companies and service providers rather than to commercial and mixed companies due to the type of competition. The fourth factor was concerned with the use of information technology, which they argue it appeared as the third important factor for all the clusters. They suggest that information technology may not be an important contributor to agility in all cases and that its contribution level differs from one type of industry to another. They suggest that information technology is more important to agility in clusters 2 (manufacturing companies) and 4 (commercial and retail companies). They recommend at the end that the first three factors are considered as important contributors to agility as they recommend the importance of the relationships between the company and its supply chain partners on their ability to achieve higher level of agility.

In addition to this, they argue the importance of information technology is diversely shown depending on the type of the industry. When comparing such study with this research results it can be shown that the general argument that the relationships between the company and its supply chain partners are contributors to agility is common between the two studies. Although in Kisperska-Moron and Swierczek' (2009) study, they considered the relationships with customers for cluster 4 (including

food products and beverages which can be similar to some extent to this research's case study type of industry) is more important than the relationship with supply chain suppliers. However, fast moving consumer goods Research Company can also be considered a manufacturing company where there are several products manufactured as it is not depending on producing food products and beverages only, but it is a multinational company working with a great portfolio of products. Therefore, based on Kisperska-Moron and Swierczek (2009) argument, the most important factor for achieving agility is the relationship with suppliers. On this research study there is no ranking for the weighed importance of the relationships between the company and its supply chain partners, however the generated theory can show that the partnership with supply chain core suppliers is a starting and a driver contributor to supply chain agility. Another common suggestion by both Kisperska-Moron and Swierczek (2009) and this research is the importance of the use of information technological advances and means in such type of industry to achieve agility.

In 2011 Chakraborty and Mandal examine the agile attributes dimensions from the information technology perspective. The result is the argument that there are seven factors that can be considered as important factors for agility from the information technology perspective. They were, in a ranking order: technology, partnership, quality, education, market, competence and team building. In their study research, they grouped the attributes suggested into seven sets of dimensions. These components are: dimensions related to technology, dimensions related to partnerships, dimensions related to education, dimensions related to market, dimensions related to 'firm competency', dimensions related to 'team building'. The results of the analysis show that the first important component for agility from the IT's perspective was that which included the dimensions related technology. These dimensions included items such as parallel activity processing, awareness of technology importance, production technology flexibility, technology relevance for the upgrading worker skills, and Electronic Data Exchange (EDI). The second important component is that which includes item related to partnerships dimensions. These dimensions include items such as: the quick formation of partnerships, strategic customer relationships and the close supplier's relationships. They suggest that, based on the Yusuf et al.' (1999) study,

organisational relationships with other supply chain members, such as the suppliers and customers, are important for achieving agility.

The most recent study published less than a year ago by Sukati et al. (2012), show that organisational practices have positive impact on the supply chain agility within the manufacturing firms in Malaysia. Their research study included two main sets of hypotheses: the first set was concerned with the impact of the organisational practices such as the internal integration, the supplier integration and the customer integration on supply chain agility components. The second set of hypotheses was concerned with the mediating role of information technology in such relationships. Their empirical data analysis supports their first set of hypotheses which were concerned the impact of the organisation's internal integration on supply chain agility, the impact on the organisation's integration with suppliers on supply chain agility, and the impact of the organisation's integration with customers on supply chain agility. This first set of the three hypotheses had been supported. This can support this study's results which are common with Sukati et al.' (2012) study resulting with the argument that integration or partnership as relationship means with suppliers have a great impact on leading to supply chain agility. The second set of hypotheses concerned with the role of the information technology is discussed in the following section (8.4), to support the research results in this argument.

In addition to this, there is some literature showing the impact of buyer- supplier relationship and partnership on supply chain agility at the component and dimensional level. For example, in a study by Ryu et al. (2009) to investigate the antecedents of buyer-supplier partnership and to determine its effect on supply chain performance, they used for supply chain performance measures such as the product life cycle time, productivity, efficiency, and revenues. They also used for buyer-supplier partnership measures such as commitment, trust and collaboration. They conclude that partnership that included trust, commitment and collaboration attributes had an impact on supply chain performance measures, including product cycle time and efficiency. This can show the impact of the relationship that can be found between trust, commitment and collaboration on speed and efficiency attributes.

Ismail and Sharifi (2006) suggest that from their review of the supply chain literature, they can define supply chain as structures developed due to interactive “collaboration” of some organizations, with the purpose of achieving a common goal to deliver high customer value. This can show the important role played by collaboration in helping the company to respond to its customer within supply chain context. This can show the relationship that may exist between collaboration on responsiveness and customer service attributes. Chen et al. (2004) suggest that the proper and close relationship with a limited number of suppliers (Bensaou, 1999) can be directly related to the company’s ability to achieve customer responsiveness (Stanley and Wisner, 2001) and financial performance (Car and Pearson, 1999). This can show the relationship that can exist between having limited number of suppliers and responsiveness level. Effective implementation for supply chain integration can lead to several benefits for the whole supply chain partners. Among these benefits is the improvement in customer service (Agarwal & Shankar, 2002, cited in Agarwal et al., 2007). This can show the impact of supply chain integration on customer service.

In a study by Chen and Paulraj (2004) the effect of the strategic purchasing on three relationship dimensions, including: communication, limited number of suppliers, and long-term orientation is presented. They conclude that these three relationship attributes have a positive impact on customer responsiveness. O’Toole and Donaldson, (2000; cited in Kannan and Tan, 2006) argue that mutual cooperation and collaboration has a great performance impact for some non-financial performance measures, such as lead time, flexibility, responsiveness, and quality. Finally, Handfield and Bechtel (2002) suggest that building enough level of trust in a company’s relationship with its supplier can enhance the supplier’s responsiveness level.

These research studies can show the importance of some relationship and partnership attributes on some agility attributes, such as customer service, speed, flexibility, efficiency and quality and responsiveness.

8.4 The moderating impact of information technology on agile supply chains

The importance of informational technologies to achieve agility has been noted in the previous literature. Therefore, it was not a surprise that it plays an enabler role and serves as a catalyst in the generated theory. This result can add to previous research studies that support the important role played by the information technology in achieving agility. Information technology tools have been considered in the developed theory as the (catalyst) intervening conditions without which the whole partnership-agility link process cannot be achieved. Therefore, the research has addressed a contradiction in the prior research about the role of the information technology in achieving agility and results confirmed that in the FMCG context it is most definitely an enabling.

Among the very important studies that explain the role of information technology as the means for sharing the necessary information is the study by Christopher and Towill (2000). In their study they show the four important characteristics for agile supply chain suggested by Harrison et al. (1999). They emphasise on the important role played by information sharing and information technology. These four characteristics are: market sensitive, virtual supply chain, process integration and network. They argue that for a supply chain to be agile, it should be “*market sensitive*”, which means its ability to estimate, determine and react to real market demand. The use of information technology to collect data on demand from the point of sale to the point of use can enable the organisation to be able to hear the customer, as well as its market voice and to react to them directly (Christopher, 1998).

This sharing of information between the company and its supplier can create what is called as “*virtual supply chain*”, which had been suggested by Christopher and Towill (2000, p.208- 9) as “information-based” rather than “inventory-based”. This “information- based” approach has been suggested by Harrison (1999) as an important characteristic for agile supply chain. Hewitt (1999; cited in Christopher and Towill, 2000) suggests that the use of Electronic Data Interchange (EDI) and the use of the internet can enable the supply chain partners to take actions on real demand data rather

that depending on estimated and forecasted data generated from the order movement from one step to another through the whole chain. Mason-Jones and Towill (1997) suggest that “information enrichment” means that information sharing across all the organisational boundaries within the same supply chain is not a beneficial optional outcome for any organisation, however they suggest that information sharing becomes an obligatory process for all the organisations within the same supply chain. This is to ensure improving the seamless supply chain through which the organisations are acting and thinking as one player (Towill, 1997).

Christopher and Towill (2000) argue that information sharing can be beneficial through “*process integration*”, which means that the collaborative and integrative working between the companies and their suppliers, common product development process, shared systems and information flows are important elements between the companies and their suppliers. They also argue that for all these benefits to occur in a real business environment there must be what is called “extended enterprise”, which is based on relational partnerships. This can also give more support for the research generated theory argument about the impact of strong supplier partnership with achievement of supply chain agility. “Extended enterprise” had been considered by Gris and Kasarda (1997, cited in Vokurka and Fliedner, 1998) as a set of strategically cooperative companies that are emphasising on particular business market opportunities as a means of developing several competitive alternatives in a simultaneous manner. They suggest that extended enterprise can provide the advantage of combining rapidly the collective resources of all the network members, such as that of the suppliers and buyers, as well as those of the company’s internal resources. Every member in this enterprise is responsible to contribute in the overall welfare of the enterprise by sharing physical facilities, any type of resources, technological and knowledge capabilities. Such partnerships are based on increase in trust and commitment behaviours. Such relational partnerships include common strategy determination, buyer supplier cooperative teams, information transparency and open book accounting systems (Christopher and Towill, 2000). This can support the research generated theory. Completing Harrison et al.’ (1999) model, most supply chain researchers are now arguing that companies alone cannot compete inside their

market place, therefore it has been recognised that now the competition is placed in the supply chains' hands.

The “*network*” structures are becoming the source of success inside business environments. This requires the proper structure, manage and support for the relationship between the different partners within the same supply chain. Christopher (1998) argue that the path for competitive and sustainable advantage is to support the strengths and capabilities of the network partners in order to gain more ability to be more responsible to market requirements (Christopher and Towill, 2000).

Inda Sukati et al.'s (2012) research is another recent study that can be used to support this research's results on the mediating role of information technology between supplier partnership and supply chain agility. They suggest that information technology moderated the relationship between organisational practices and supply chain agility components. The organisational practices include internal organisational integration, integration with suppliers and integration with customer. They conclude that information technology moderate the relationship between the internal organisational integration and supply chain agility components. The authors also suggest that information technology moderate the relationship between integration with suppliers and supply chain agility components. Finally, information technology was suggested to be a moderator between integration with customers and supply chain agility components.

To examine the impact or the value added by the use of information technology systems on agility at the process level Raschke (2010) suggests that information technology is considered as the platform for achieving agility. This can also support the argument suggested by Sambamurthy et al. (2003), when arguing that information technology is considered as a platform for agility due to its strategic value contribution.

From the above review for the literature it can be clearly shown that information technologies play important enabling role in achieving supply chain agility, which is

derived from the strong partnership with core suppliers. This can support the research generated theory argument in that IT tools and techniques play the intermediary players in the game. They are the catalyst that does not appear in the chemical equation; however the existence is so important to the degree that that result will not be achieved without its catalyst support.

8.5 Summary

This chapter has provided a comparison between the generated theory derived from this research and the existing literature as required for completeness in a grounded theory based study. This comparison has shown that there are studies supporting attributes that have been derived in the theory concerning the main two concepts: supplier partnership and supply chain agility. At the same time, the comparison has shown that there are some attributes for both concepts: supplier partnership and supply chain agility that can be considered as new, especially for applying these two business strategies in FMCGs type of industry working within the Middle East region. In addition to this contribution, the relationship between buyer supplier partnership and supply chain agility has been supported in the literature. However, it has not been empirically tested or even examined from a detailed dimensional perspective, as has been done in this study. The link between supplier partnership and supply chain agility can be considered as an attractive point of research in the agility literature. Finally, the research theory argument for the moderating effect of information technology on supply chain agility has been also supported. However, the main new finding in this research is the catalyst role between supply partnership and supply chain agility and especially for companies working within Middle East FMCGs business environment. The following chapter provides the final piece of work of this research. It gives the broad conclusion, contributions, implications, limitations and future research suggestions.

Chapter nine: Conclusions

9.0 Introduction

This chapter presents the summary for this research study. It begins with the summary of the research chapters and main findings. The chapter then discusses the novel contributions of the research study in the form of its theoretical academic contributions, its methodological contributions to the Operations and Production Management field and finally, its managerial contributions for the manufacturing companies and supply chain management practitioners and managers. The recommendations and suggestions for future research are also explained after the discussion of the research limitations.

9.1 The research chapters' summary and main research findings

This thesis has presented a research study within the supply chain management area. Its main aim was to identify the relationship between buyer-supplier partnerships, as a unique non-contractual relationship form on achieving agility within the FMCGs manufacturing companies' supply chains. It is divided into nine chapters. Each chapter was designed to achieve part of the aim of the research. This section presents the summary for each chapter, the main findings of the study and the contribution of each chapter to achieve the overall aim and objectives of the research.

In chapter one the focus on the importance of supply chain and its management was explained and the rationale of the research study was provided. The focus on supply chain management literature showed that although there are several frameworks and empirical studies for achieving high level of supply chain performance, however due to these several overlapping definitions, models and practices had led to more ambiguity and a non-unified understanding of the concept. Therefore, more research was needed to satisfy this point to give more richness and coherence to practitioner managers' efforts to effectively administer their supply chains. This provided the basis

for the research aim and objectives. The research aim and objectives were generated from identifying a gap in the previous literature. The research problem was therefore concerned with determining the gap in the literature on the extent of having a partnership form of buyer-supplier relationship and its impact on achieving agile supply chains within the FMCGs business environment. As discussed in chapter one, there are several conceptual models and frameworks in the literature for implementing agile supply chains, including reference to the relationship with suppliers as an important factor. However, investigation of to what extent and what type of relationship form can enable both the supplier and the manufacturing company to achieve better level of supply chain agility is absent from the prior literature. An important objective was determining the role played by information sharing using information technology in such relationship between the buyer-supplier partnership and supply chain agility.

In chapter two the literature review on the research area and research constructs was presented. The supply chain and its management including its definitions, origin and importance of the concept, supply chain practices mentioned previously in the literature, and the comparison between the traditional approach of material flow and supply chain management were discussed. The partnership form of buyer-supplier relationships was also explained giving definitions and attributes, its origin and importance, as well as the benefits of partnerships. The literature on agility concept was also deeply explained. Its origin and history, definitions given to agile manufacturing, agile organizations and agile supply chain were discussed. This was with the aim to determine, from the related research concepts, the gap in order to support the research problem identified in chapter one. The chapter included reviews of the limited literature available that had examined the impact of buyer-supplier relationship and partnership on achieving agility within the supply chain. Also, the role of information sharing, through information technology, impact on supply chain agility and whether it can enable or whether it actually hampers a higher level of agile supply chain from the literature was reviewed.

Chapter three presented the methodological path of the research. The chapter began with the discussion of the social science research paradigms based on the work of

Crotty (1998). It also showed the importance of qualitative research in Operations and Production management studies and the fact the most research in the field has concentrating more on the quantitative methods of research. Opposite to most of the researchers in such field, the research here used the qualitative approach. This was because of the required nature of the study, which obliged the researcher to use Grounded Theory approach as a methodological path for the research. The research used Strauss and Corbin's (1990, 1998) version of Grounded Theory as the research was based on some previous literature showing the importance of buyer-supplier relationship on supply chain agility. Chapter three also discussed the means of data collections used by the researcher within the selected case study chosen for the research. These were: semi-structure interviews with the manager in the selected case study, as well as within five core suppliers. The latter was with the aim of enriching the collected data with the other partnership member perspective, the core supplier, in order to have the full picture about this partnership form. Other documentary materials and informal observations were also used to enrich the primary data collected. The reliability and validity (quality) of the research were also provided in the chapter.

Chapter four was concerned with providing the context of the research. The nature of the business environment within the Middle East region was explained. The main features of Fast Moving Consumer Goods industry were explained, in order to provide the argument for selecting it for the study. The difference in the Middle East consumer behaviour and the different and new aspects of economic and cultural trends within the Middle East had led this region to be an attractive region for several multinational companies to serve such emerging and developing markets. In addition, the Fast Moving Consumer Goods industry is facing several trends and challenges in today's environment (mentioned in chapter 4), which led the manufacturing companies working within such type of industry to search from new means for facing these dynamic and complex business industry environment. Supply chain agility was considered the most important means to solve such problem and was selected by the research case study company, Unilever (North Africa Middle East). Another important factor leading the researcher to focus on determining the impact of partnership on supply chain agility within the FMCGs industry working in the Middle East region is the fact the in the literature there is only one article focusing on examining supply

chain agility within such type of industry (as mentioned in chapter four) and only one examining supply chain agility within such type of geographical area (as mentioned in chapter four). Therefore, there was a need for in depth research studies on such concepts in such regional area and in this type of industry. Therefore, Unilever (North Africa Middle East) was selected for this study as it is considered one of the most branded names in such type of industry and it is also considered as having the biggest market share of FMCGs companies working within the Middle East. The details of the case study, including the companies' sites visited by the researcher and the details of the other five core suppliers companies for Unilever (North Africa Middle East) were also provided in the chapter.

The beginning of the analysis commenced in chapter five. The analysis (including open, axial, and selective analysis processes) chapters were discussed in chapters five, six and seven respectively. In chapter five, the first analysis coding process resulted in 43 open codes from the first and second rounds of data collection being identified to match the research's main four pre-determined themes (Table 5.1). From the open coding analysis process, six open codes were identified to be related to Fast Moving Consumer Goods (FMCG) industry-based features: diverse markets, diverse products, nature of business environment, importance of supply chains, socially responsible and technology. Twenty three open codes were related to buyer-supplier relationship, namely: relationship evidence, partnership evidence, relationship benefits, partnership benefits, improving supply chain partnership, supplier development, SCC4, vertice plus, compliance to work, reliability, mutual benefits, commitment, trust, openness, shared targets/vision, believe in each other, win-win , non-priced basis, integration, small number of suppliers, long term contract, collaboration, and transparency. Three open codes were identified to be associated for information sharing: information sharing, information technology, and communication. Eleven codes were related to agility: need for agility, responsiveness, responsibility, innovation, speed, managing by objectives, people way of thinking, quality, efficiency, customer service and flexibility. These 43 open codes were used as the grounding for the second and third coding process.

The second analysis chapter, chapter six, presented the axial coding process. In this chapter the grouping of the open codes was explained and the axial paradigm model was discussed. The open codes were grouped to provide the axial sub categories deductively (Table 6.1): 'Partnership existence with core suppliers', 'Partner development', 'Partnership attributes', 'Information flow and Information technology', 'Supply Chain Agility', 'Supply Chain Agility attributes', 'Dynamic & Complex FMCGs business environment' and 'Supply Chain Importance'. These axial sub-categories were grouped into axial categories inductively (Table 6.1): 'Partnership mechanism', 'Information flow & information technology as a catalyst', 'Agile Supply chain mechanism', 'Uncertain FMCG supply chain business environment'.

Then, in the second part of chapter six, based on Strauss and Corbin (1998), the axial paradigm model (Figure 6.10) was explained showing that the research casual conditions were 'dynamic and complex conditions', characterising the FMCG business environment. The Core Category for the research was 'Partnership existence with core suppliers', including its properties or attributes: Reliability; Long term contract, Trust, Commitment, Collaboration, Openness, Transparency, Shared targets, vision, Non-priced basis, Win- win, Integration, Mutual benefit, and Small number of suppliers. The research Context was 'Supply Chain Importance'. The research intervening conditions were considered as the 'information flow (sharing and communication) and Information technology'. The action/interactional strategies were the 'Partner development' used by the case study to help and assist their core suppliers. Finally, the research consequences were the 'Supply Chain Agility', including its properties or attributes: responsible and human encouragement thinking, customer service, flexibility, innovation, speed, quality, efficiency and responsiveness.

In chapter seven, the final analysis stage was conducted using the third and final data collection round from both perspectives: the Unilever (North Africa Middle East) and the five companies core suppliers. The aim of this chapter was to relate the core category of the research to the other paradigm model categories. It began with the story line and the development of the core category's relationships. It included the development of the relationships between the core category which is 'Partnership existence with core suppliers' and the causes ('dynamic and complex FMCG business

environment’) for this partnership between Unilever North Africa Middle East (NAME) and its core suppliers. The chapter also presented the supply chain context through which Unilever North Africa Middle East (NAME) is developing its strategies for ‘Partnership existence with core suppliers’. The relationship between the ‘Partnership existence with core suppliers’ and ‘Information technology’ as the intervening conditions was also presented. Finally, the relationship between ‘Partnership existence with main suppliers’ as a driver, and the consequence, ‘Supply Chain Agility’, was explained in depth. This relationship was analysed from three sides: the relationships between ‘Partnership existence with core suppliers’ and every ‘Supply Chain Agility’ attribute, the interrelationships between both sets of attributes and finally, the relationships between every ‘Partnership existence with core suppliers’ attribute and ‘Supply Chain Agility’. Finally, the chapter ended with the explanation for the research generated and developed theory (Figure 7.1).

Chapter eight presented the comparison between the previous literature and the generated theory. The discussion concentrated on supplier-buyer partnership, including its attributes, which considered the research core category and its relationship with supply chain agility, which considered the research consequence, including its attributes. The explanation for the impact of buyer-supplier partnership on supply chain agility was also presented. The discussion also involved the role played by information technology, as the research intervening conditions, and its impact on such relationship.

From the above, it can be seen that the study has met its main aim and research objectives as presented in chapter one. Every chapter contributed to achieve the overall aim and objectives of the research. The primary analysis in chapter 5, the research objectives number 1 and 2 were achieved, where the type of the relationship between the case study company has been determined. In addition, the importance of the role played by the existence of supplier partnership on the effective management of Unilever North Africa Middle East was shown in the analysis and the importance of agility and supply chain agility within FMCG industry was also determined. Research objective number 3 was addressed in chapter eight, where a more comprehensive definition for supply chain agility in FMCG industry was identified using the explored

attributes. The remaining research objectives were achieved after the final data coding process. Research objective number 5 was achieved, since the relationship between 'Partnership existence with main suppliers' as a driver, and the consequence, 'Supply Chain Agility'. Research objective number 4 was addressed, where the attributes of supplier partnership that are required to achieve higher level of supply chain agility were determined. Finally, the underlying role played by information technology in the relationship between supply chain partnership and supply chain agility in the FMCG supply chains was identified (as presented in section 7.2.3); therefore fulfilling research objective number 6.

9.2 The research limitations

- 1- This study took place within one case study working within FMCG industry. Although this gave the researcher the opportunity to research in depth and understand the phenomenon deeply, it raised the issue for generalizability of the generated theory. The generated grounded theory can be applied with in any FMCG company, not any Unilever (North Africa Middle East), working within the Middle East region.
- 2- The large amount of attributes derived and explored from the different rounds of data collection made it difficult to examine the interrelationships between all these attributes. Nevertheless, what is important, was that (a) the interrelationships between the core category (partnership existence with core suppliers) and each of the attributes of supply chain agility; and (b) the consequence (Supply Chain Agility) and each of the core category (Partnership existence with core suppliers) attributes were examined. Having addressed this within this research, it is therefore recommended that in the future the interrelationships between the different attributes can be researched.
- 3- Although substantial data was collected from Unilever's main clusters in the Middle East, the findings may have be extended if data had been collected from

all the Unilever Middle East North Africa clusters within the Middle East region, however this was not practical or feasible in the permitted time scales.

- 4- The research study was concentrated on partnership between the manufacturing company and its suppliers. However, to improve the whole supply chain agility level, it requires also taking into consideration the other supply chain members such as the relationship between the manufacturing company and its distributors. This therefore would be an important extension for the future research.

9.3 The research contributions

In this section the novelty of the research is discussed. This novelty is expressed in terms of theoretical contributions and methodological contributions.

9.3.1 Theoretical contributions

The study has several theoretical contributions, as follows:-

- 1- The main contribution of the study is the research generated and the developed theory. This is because it is the first research that links the importance of partnership as a unique form of buyer-supplier relationship on the achievement of supply chain agility. The previous literature was focusing on the broader importance of the more generic buyer-supplier relationship on supply chain agility (as explained in chapter 8). Furthermore, the generated theory includes the relationship between both concepts: 'Partnership mechanism' and 'Supply Chain Agility mechanism' in a more deeply concentrated (where this is the main aim of the research and not just part of the research as in some very recent previous studies) empirical manner, which was missing in prior research. In addition, this generated theory also shows the relationship between the 'Partnership mechanism' and 'Supply Chain Agility mechanism' at their

dimensional levels. The generated theory showed the relationship between partnership attributes on achieving higher levels of supply chain attributes individually. It also showed the impact of individual partnership attribute on achieving supply chain agility. The generated theory also showed the highly salient partnership attributes on some supply chain agility attributes. Therefore, this research can be considered novel in its explanation for such relationship between such two main concepts: 'Partnership mechanism' and 'Supply Chain Agility mechanism'.

- 2- Another contribution to this study is that the relationship between 'Partnership mechanism' and 'Supply Chain Agility mechanism' is based on dimensional levels. It is concerned with the relationships between their attributes that were derived during the different rounds of data collection. This means that from the interviewees' perspectives, the derived and explored attributes for 'Partnership mechanism' are characterising the partnership with their core suppliers and are those that can highly affect their supply chain agility level. At the same time, the 'Supply Chain Agility mechanism' explored and derived attributes are characterising their supply chain agility and are those that can be highly affected by the existence of supplier partnership.
- 3- The study provides a model, which gives guidance to both academics and practitioners on the important attributes for partnerships and supply chain agility, and therefore provides a good foundation for future researchers wishing to conduct research in these areas. It, therefore, provides managers in the FMCG context with guidance on which are the important attributes to ensure that their firms focus on implementing and fine-tuning if they have partnerships and aspire to leverage the degree of supply chain agility through those partnerships.
- 4- Another contribution of the study is related to the attributes explored. There are some attributes for 'Partnership mechanism' that can be considered as new for characterising buyer-supplier partnerships because they were not evident in

empirically-based prior literature. These are: Integration, Win-win situation and Shared targets/vision. At the same time, there are some attributes identified that can be considered as novel for characterising Supply chain agility such as: Innovation and Responsible & human encouragement thinking.

- 5- Investigating supply chain agility in the Middle East region is considered another important contribution for this study. As mentioned before, there is only one study in the Middle East examining supply chain agility, and in this case it was examining the impact of supply chain agility on the organisational performance in Jordanian companies. However, in this study supply chain agility and its importance within the North Africa and Middle East region and its required attributes were explored for the first time across this region.
- 6- In this study the important role played by information technology for achieving supply chain agility was investigated, and it was found that it was supported. The novelty in this study is the consideration of information technology as a catalyst, channelling the driving role of 'Partnership mechanism' in achieving higher level of 'Supply Chain Agility mechanism'. Prior studies had only largely considered the role of information technology in supporting agility, not as a mechanism between partnership and agility.
- 7- Investigating supply chain agility within Fast Moving Consumer Goods can be considered also as a key contribution. In the prior literature, there is one research article differentiating between leanness and agility in India. This may have cover the argument relating to the need of supply chain agility within this type of industry; however, exploring the attributes required for achieving supply chain agility within such type of industry is a novel contribution for this study.

9.3.2 Methodological contributions

The study has several methodological contributions, as follows:

- 1- An important contribution for this study is the use of Grounded Theory approach. It was explained in chapter three that in Operations and Production management studies, the use of qualitative means is not well used. This is important especially with the case of Grounded Theory where there is little in the previous literature on the main concepts of the research; therefore, the exploration and discovery of these new concepts obliged the researcher to focus more on qualitative and especially Grounded Theory approach. So, the selection of this study to use the Grounded Theory approach is considered as a methodological contribution adding to and supporting other qualitative approaches in such social science area.
- 2- The grounded theory researcher was advised by Strauss and Corbin (1998, p.129) to “let it happen”. This was to make the researcher not obliged very tightly to all the grounded theory procedure and rules suggested by them, and so that the research can move away from some of these procedures depending on the nature of his/her study. However, the researcher here was cautious to make the required balance between sticking to the procedures and rules suggested by Strauss and Corbin (1990, 1998) to generate a good theory, and at the same time to leave the data to move and manage the generation and development of the theory.
- 3- Another methodological contribution is also related to grounded theory. This study uses the axial paradigm model for structuring the axial coding analysis process. The exploitation of this axial paradigm model is not well used in the previous grounded theory studies. This is due to its complex and interrelated

nature; however, the researcher used it as a means to manage the axial coding analysis process, as suggested and recommended by Strauss and Corbin (1990, 1998) despite the option of using simpler, but less rigorous alternatives. This gives for quality level to the study' generated theory as it is based on deeply applying all the procedures and tools of Grounded Theory recommended by Strauss and Corbin (1990, 1998).

Therefore this Grounded Theory research can be considered as a good example and illustration for future Grounded theory researchers.

9.3.3 Managerial contributions

In Operations and Production research studies, it is important to make recommendations and contributions for the practitioners and managers in the real business field. Therefore, this study generated theory has several managerial contributions as follows:

- 1- It is important for managers nowadays working within uncertain business environment and industries to focus their efforts and concentrate on achieving higher level of partnerships among their supply chain members. This is especially important, as shown and derived from the research generated theory, with their core suppliers. This is because the core supplier is considered as the key supporter to the manufacturing company. As shown from the generated theory, there are some attributes that can help the companies and their managers to improve their overall supply chain performance such as: reliability, long term contract, trust, commitment, collaboration, openness & transparency, Shared targets & vision, non- priced basis, win-win, Integration, Mutual benefit, small number of suppliers, and information sharing (communication). They have to focus more to improve their trust, commitment, collaboration, Shared targets and vision as the main core attributes required to enhance their relationships and partnerships with their core suppliers.

- 2- It is important that in today's business environment with diverse customer needs and preferences to focus on agility and especially supply chain agility as means for improving the company's' supply chain. The managers should give great attention to such new concept, as it is the way for surviving in their markets. They should emphasise on improving their responsible & human encouragement thinking, customer service, flexibility, innovation, speed, quality, efficiency and responsiveness. This is with the great focus on flexibility, innovation, speed and responsiveness abilities as these are the most important capabilities derived from the research generated theory to achieve higher level of supply chain agility.
- 3- Another recommendation to the practitioners, derived from the research generated theory, is the conclusion that strong partnership with their companies' core suppliers is the starting point that can help them achieve higher level of supply chain agility. This put pressure on the manufacturing companies' managers to focus more on forming and enhancing partnerships with their core suppliers as a unique form of buyer-supplier relationship.
- 4- The role of information technology as the catalyst channelling the partnerships with core suppliers and the achievement of higher level of supply chain agility was supported and derived from the research generated theory. This can put pressure on the manufacturing companies' managers to give attention to this important key contributor in the business world. The information technology is considered as the means that can help managers not only improving from partnership or supply chain agility, but the means that will make them achieve them with great effects. It was derived from the generated theory that without this catalyst the whole equation can't take place in real business life; therefore, the managers should be always working to improve their information technology infrastructure and networks.

9.4 The future recommendations

- 1- Any study is concentrated on a specific type or limited range of industry and raises its generalisability issue (referring to limitation number 1). For this study, to solve this issue, the research's generated theory has to be investigated in more than one company, and in also small and medium-sized enterprises, and in manufacturing and service organisations.

- 2- Referring also to the research limitation number 1, the study's generated theory has to be examined also in another context. The research took place within the Middle East region, which is characterised by several features (discussed in chapter four) and which may be different from other contexts. Therefore, it is also recommended that the generated theory should be applied and investigated in other different cultural and geographical areas.

- 3- Referring to the research limitation number 2, which is related to the large amount of attributes derived and explored from the different rounds of data collection, it is recommended that in future research the interrelationships between the different types of attributes can be studied in greater depth. This can be done either between the different attributes of supplier partnership or between the different attributes of supply chain agility or between the supplier partnership attributes and the supply chain agility attributes collectively with each other.

- 4- More research is needed to investigate the effects of other buyer-supplier relationships on achieving supply chain agility. The research generated theory showed the important role played by the partnership form of relationship that exists between the manufacturing company and its core suppliers. However, more research can investigate the different types of buyer-supplier relationships such as joint ventures, strategic alliances and others on achieving higher level of agility within the manufacturing companies' supply chains.

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Appendix (A)

First Round of Data Collection

Interview Protocol

The interview aims to gain the perceptions of the interviewees in order to explore the main attributes of supply chain agility as well as the main attributes of buyer- supplier partnership and the interrelationship between them.

For the purposes of this research the following **definitions** are used:

Supply chain management has been defined by ‘The Council Of Logistics Management’ (2000) as *“the systematic, strategic coordination of the traditional business functions and tactics across these businesses’ functions within a particular organisation and across businesses within the supply chain, for the purpose of improving the long term performance of the individual organisations and the supply chain as a whole”*.

Supply chain partnership has been defined as *“a strategic coalition of two or more firms in a supply chain to facilitate joint effort and collaboration in one or more core value creating activities such as research, product development, manufacturing, marketing, sales and distribution, with the objective of increasing benefits to all partners by reducing total cost acquisition, possession and disposal of goods and services¹”*.

Supply chain agility has been defined as the whole supply chain ability and its member’s ability to adjust their network rapidly and their operational activities to be able to face the dynamic and changing needs of their demand².

Unilever Cluster:

Interviewee’s Position:

¹ Maheswari et al.,2006, p.280

² Ismail and Sharifi, 2006

History, background and the culture of the company

- 1- What is the core expertise of your company?
- 2- What type of industry you work in? What are the main characteristics of the business environment in which your company operates?
- 3a- What are the main goals of your company?
- 3b-how does your company compete in its chosen markets?

Empirical evidence of the partnership

- 4- It has been suggested that companies alone can no longer compete in their chosen markets on their own, rather that nowadays the competition is between supply chains and not between individual companies. What is your opinion about the above statement?
- 5a- describe the relationship your company has with its with its main suppliers? What is the form of such relationship?
- 5b- to what extent does your company use supply chain partnerships?
- 6-what, for your company, are the main benefits of building and maintaining strong partnerships with your suppliers?
- 7- How does your company improve the supply chain partnerships it has with suppliers?
- 8- What are the main attributes that can characterise the supply chain partnerships your company has with suppliers?
- 9- To what extent does your company trust in its suppliers? How is this trust demonstrated?
- 10- How does your company commit to its supply chain partners (suppliers)?
- 11- What are the main practices that demonstrate the degree of collaboration between your company and its supply chain partner (suppliers)?
- 12- What is the extent and the nature of information flow(s) between your company and its supplier chain partners?
- 13- How does information technology play a role in such partnership?

Empirical evidence of agility

- 14-to what extent, do you think that your company is working in an industry that needs to be agile? Please explain why this is the case?
- 15- In what ways can your supply chain be considered to be a flexible supply chain? What are the main practices and outcomes that can demonstrate that flexibility?
- 16- How would you characterise your supply chain speed ability? Please give examples. What are the practices and outcomes that enable and/or demonstrate the achievement of that ability?
- 18- How would you characterise responsiveness in your company's supply chain? Please give examples. What are the practices and outcomes that enable and/or demonstrate the achievement of that responsiveness?
- 19- What are the main attributes, practices or outcomes that characterise and demonstrate your company's contribution to supply chain agility?

The impact of buyer – supplier partnership and information role on supply chain agility

19- Do you think that your supply chain partnerships are an important enabler for your company's supply chain agility? Please explain in detail, why?

20- What are the impacts of sharing information with your supply chain partners especially your suppliers on achieving agility within your supply chain? What are the information sharing practices and processes that underpin these impacts?

21- To what extent is using information technology an important supportive factor for achieving supply chain agility? Please explain in detail, why?

Second Round of Data

Interview Protocol

The interview aims to gain the perceptions of the interviewees in order to explore the main attributes of supply chain agility as well as the main attributes of buyer- supplier partnership and the interrelationship between them.

For the purposes of this research the following **definitions** are used:

Supply chain management has been defined by ‘The Council Of Logistics Management’ (2000) as *“the systematic, strategic coordination of the traditional business functions and tactics across these businesses’ functions within a particular organisation and across businesses within the supply chain, for the purpose of improving the long term performance of the individual organisations and the supply chain as a whole”*.

Supply chain partnership has been defined as *“a strategic coalition of two or more firms in a supply chain to facilitate joint effort and collaboration in one or more core value creating activities such as research, product development, manufacturing, marketing, sales and distribution, with the objective of increasing benefits to all partners by reducing total cost acquisition, possession and disposal of goods and services³”*.

Supply chain agility has been defined as the whole supply chain ability and its member’s ability to adjust their network rapidly and their operational activities to be able to face the dynamic and changing needs of their demand⁴.

Unilever Cluster:

Interviewee’s Position:

³ Maheswari et al.,2006, p.280

⁴ Ismail and Sharifi, 2006

History, background and the culture of the company

- 1- What is the core expertise of your company?
- 2- What type of industry you work in? What are the main characteristics of the business environment in which your company operates?
- 3a- What are the main goals of your company?
- 3b-how does your company compete in its chosen markets?

Empirical evidence of the partnership

- 4- It has been suggested that companies alone can no longer compete in their chosen markets on their own, rather that nowadays the competition is between supply chains and not between individual companies. What is your opinion about the above statement?
- 5a- describe the relationship your company has with it's with its main suppliers? What is the form of such relationship?
- 5b- to what extent does your company use supply chain partnerships?
- 6-what, for your company, are the main benefits of building and maintaining strong partnerships with your suppliers?
- 7- How does your company improve the supply chain partnerships it has with suppliers?
- 8- What are the main attributes that can characterise the supply chain partnerships your company has with suppliers?
- 9- To what extent does your company trust in its suppliers? How is this trust demonstrated?
- 10- How does your company commit to its supply chain partners (suppliers)?
- 11- What are the main practices that demonstrate the degree of collaboration between your company and its supply chain partner (suppliers)?
- 12- What is the extent and the nature of information flow(s) between your company and its supplier chain partners?
- 13- How does information technology play a role in such partnership?

Empirical evidence of agility

- 14-to what extent, do you think that your company is working in an industry that needs to be agile? Please explain why this is the case?
- 15- In what ways can your supply chain be considered to be a flexible supply chain? What are the main practices and outcomes that can demonstrate that flexibility?
- 16- How would you characterise your supply chain speed ability? Please give examples. What are the practices and outcomes that enable and/or demonstrate the achievement of that ability?
- 18- How would you characterise responsiveness in your company's supply chain? Please give examples. What are the practices and outcomes that enable and/or demonstrate the achievement of that responsiveness?
- 19- What are the main attributes, practices or outcomes that characterise and demonstrate your company's contribution to supply chain agility?

The impact of buyer – supplier partnership and information role on supply chain agility

19- Do you think that your supply chain partnerships are an important enabler for your company's supply chain agility? Please explain in detail, why?

20- What are the impacts of sharing information with your supply chain partners especially your suppliers on achieving agility within your supply chain? What are the information sharing practices and processes that underpin these impacts?

21- To what extent is using information technology an important supportive factor for achieving supply chain agility? Please explain in detail, why?

22- Do you think that trust between your company and its main supplier can have effect on your supply chain ability to achieve flexibility? How and what are the examples that can show this?

23- What is the effect of having high degree of commitment between your company and its core supplier on your supply chain ability to achieve high level of flexibility? How and give examples?

24- What is the effect of collaborative practices with your core supplier on your supply chain ability to achieve flexibility degree? How and give examples?

25- Do you think that having high level of trust between your company and its main supplier can affect your company supply chain to achieve high speed degree? What are the practices and outcomes that can show this effect?

26- To what degree that having high level of commitment between your company and its main supplier can affect the degree of speed of your supply chain?

27- What are the practices and/ or outcomes the can enable your company's supply chain to achieve high level of speed from having high level of collaboration with your main supplier?

28- To what extent do you think that having high level of trust with your supplier can affect your supply chain ability to achieve high level of responsiveness? What are the practices and outcomes that show this effect?

29- What is the effect of having high degree of commitment between your company and its core supplier on your supply chain ability to achieve high level of responsiveness? How and give examples?

30- What is the effect of collaborative practices with your core supplier on your supply chain ability to achieve responsiveness degree? How and give examples?

Third Round of Data

Unilever Interview Protocol

From the first rounds of interviews, the following set of attributes have been derived as main attributes for achieving partnership between Unilever and its suppliers: Long term contract; trust; communication; Reliability; Commitment; Collaboration; Openness; Shared targets, vision;; Non- priced basis; Win/win; Integration; Mutual benefit; and Small number of suppliers. Do you think there are any additional attributes of supply chain partnership?

1- To what extent can long term orientation between Unilever and its core suppliers help in achieving agility within FMCGs supply chain? and Why and how ?

2- One of the most important attribute for partnership derived from the first round of interviews is '*trust*'. Do you think that trust has an effect on achieving agility within FMCGs supply chain? And Why and How does it ?

3- Do you think that reliability between Unilever and its core suppliers can enable FMCGs supply chain to become more agile? Why and How ?

4- What about having high level of commitment on achieving agile supply chain? can you give me some examples on how having a high level of commitment can help in achieving agile supply chain?

5- Can you give me examples on how having a high level of collaboration can help in achieving high agility level?

6- To be transparent with your supply chain partners, do you think transparency is important for achieving agile supply chain? Why and how ?

7- Do you think shared targets and same vision between Unilever and its main supplier can affect the ability to achieve agile supply chain? Can you give me examples?

8- To what extent non priced basis for supplier partnership can affect FMCGs supply chain agility level? Why and how?

9- Do you think win/win situation for partnership is essential for agile supply chain? Why and how?

10- How can integration between Unilever and its core suppliers affect FMCGs supply chain agility level? Why and how?

11- Do you think that mutual benefits with Unilever core suppliers can affect supply chain agility level? Why and How?

12- Can you give me examples for the effect of having small number of suppliers on achieving agile supply chain? Why and how?

13- Information technology and communication can play an important role in partnership process. Do you think that information technology and communication can be considered as an attribute for achieving partnership or it is an important catalyst between achieving high level of partnership and high level of supply chain agility? If it can be considered as an attribute for achieving partnership, can you please describe its role for achieving supply chain agility?

14- Can you describe from the dynamics between all these attributes that can enable both your company as well as your core suppliers to achieve agility within your supply chain?

15- From the first rounds of interviews, the following attributes are derived as important characteristics for achieving supply chain agility: responsible and management encouragement thinking; responsiveness; Customer service; flexibility; innovation; speed; quality, efficiency, so can you please give me your opinion about the following statements:

a- Having a strong partnership between your company and its main suppliers can help both of you achieve high level of responsibility within your supply chain, why and how ?

b- Having a partnership between your company and its main suppliers can help both of you achieve high level of responsiveness within your supply chain, why and how ?

c- Having a partnership between your company and its main suppliers can help both of you achieve high level of Customer service within your supply chain, why and how ?

d- Having a partnership between your company and its main suppliers can help both of you achieve high level of flexibility within your supply chain, why and how ?

e- Having a partnership between your company and its main suppliers can help both of you achieve high level of innovation within your supply chain, why and how ?

- f- Having a partnership between your company and its main suppliers can help both of you achieve high level of speed within your supply chain, why and how
 - g- Having a partnership between your company and its main suppliers can help both of you achieve high level of quality within your supply chain, why and how ?
 - h- Having a partnership between your company and its main suppliers can help both of you achieve high level of encouragement thinking for management within your supply chain, why and how ?
 - i- Having a partnership between your company and its main suppliers can help both of you achieve high level of efficiency within your supply chain, why and how ?
- 16- Can you describe for me how can supplier partnership affect the dynamics of all these supply chain agility characteristics that have been derived from the first round?

Suppliers' Interview Protocol

From the first rounds of interviews with Unilever, the following set of attributes have been derived as main attributes for achieving partnership between Unilever and its suppliers: Long term contract; trust; communication; Reliability; Commitment; Collaboration; Openness; Shared targets, vision;; Non- priced basis; Win/win; Integration; Mutual benefit; and Small number of suppliers. Do you think there are any additional attributes of supply chain partnership?

- 1- To what extent can long term orientation between you as a supplier and Unilever help in achieving agility within FMCGs supply chain? Why and how?
- 2- One of the most important attribute for partnership derived from the first round of interviews is '*trust*'. Do you think that trust has an effect on achieving agility within FMCGs supply chain? Why and how does it?
- 3- Do you think that reliability between you as a core supplier and Unilever can enable FMCGs supply chain to become more agile? Why and How?
- 4- What about having high level of commitment on achieving agile supply chain? can you give me some examples on how having a high level of commitment can help in achieving agile supply chain?
- 5- Can you give me examples on how having a high level of collaboration can help in achieving high agility level?
- 6- To be transparent with your supply chain partners, do you think transparency is important for achieving agile supply chain? Why and how?
- 7- Do you think shared targets and same vision between you as a core supplier and Unilever can affect the ability to achieve agile supply chain? Can you give me examples?
- 8- To what extent non priced basis for supplier partnership can affect FMCGs supply chain agility level? Why and how?
- 9- Do you think win/win situation for partnership is essential for agile supply chain? Why and how?
- 10- How can integration between Unilever and its core suppliers affect FMCGs supply chain agility level? Why and how?
- 11- Do you think that mutual benefits with Unilever core suppliers can affect supply chain agility level? Why and How?

12- Can you give me examples for the effect of having small number of suppliers on achieving agile supply chain? Why and how?

13- Information technology and communication can play an important role in partnership process. Do you think that information technology and communication can be considered as an attribute for achieving partnership or it is an important catalyst between achieving high level of partnership and high level of supply chain agility? If it can be considered as an attribute for achieving partnership, can you please describe its role for achieving supply chain agility?

14- Can you describe from the dynamics between all these attributes that can enable both your company as well as your core suppliers to achieve agility within your supply chain?

15- From the first rounds of interviews, the following attributes are derived as important characteristics for achieving supply chain agility: responsible and management encouragement thinking; responsiveness; Customer service; flexibility; innovation; speed; quality, efficiency, do you want to add any more attributes that can be considered for achieving agile supply chains? And please can you give me your opinion about the following statements:

- a- Having a partnership between your company and Unilever can help both of you achieve high level of responsibility within your supply chain, why and how?
- b- Having a partnership between your company and Unilever can help both of you achieve high level of responsiveness within your supply chain, why and how?
- c- Having a partnership between your company and Unilever can help both of you achieve high level of Customer service within your supply chain, why and how?
- d- Having a partnership between your company and Unilever can help both of you achieve high level of flexibility within your supply chain, why and how?
- e- Having a partnership between your company and Unilever can help both of you achieve high level of innovation within your supply chain, why and how?
- f- Having a partnership between your company and Unilever can help both of you achieve high level of speed within your supply chain, why and how?

- g- Having a partnership between your company and Unilever can help both of you achieve high level of quality within your supply chain, why and how?
- h- Having a partnership between your company and Unilever can help both of you achieve high level of encouragement thinking for management within your supply chain, why and how?
- i- Having a partnership between your company and Unilever can help both of you achieve high level of efficiency within your supply chain, why and how?

16- Can you describe for me how can supplier-buyer partnership affect the dynamics of all these supply chain agility characteristics that have been derived from the first round?

Appendix (B)

Table 2.1: Traditional approach versus supply chain management*

Comparison criteria	Traditional approach	Supply chain management
Definition	A network of different organisations for the flow of the materials from the supplier firm to the end customer	A network of different organisations including several parallel flows of physical goods, information and financial flows
Main aim	To decrease costs of transportation, costs associated with warehousing inventory, processing of orders, and information systems.	To ensure that products/ services are provided in the correct quantities with the correct quality at the correct place with the effective cost manner at the correct time.
Inventory management	Independent efforts	Reduction in the channel inventories commonly
Total costs	The aim is to decrease the company's costs	The aim is to achieve cost efficiencies for the whole channel members
Time horizon	Short term periods	Long term period
Information sharing required	To the extent of satisfying the current transactions	Needed for planning and monitoring processes
Amount of coordination	Only limited to the contact required to processing the transactions.	There are several contacts between all members of supply chain

Common or shared planning	Only based on processing the transactions	An on-going and continual shared planning
Corporate philosophies	Are not compatible	Compatible for the important relationships between supply chain members
Number of suppliers	Is large in order to increase the level of competition and decrease the level of risks.	Is small to enhance the coordination level
Channel leadership	Is not required	It is required under the supply chain management to enhance the coordination focus
Sharing of risks and rewards	Is alone for each member	Is jointed for the whole supply chain for long period time.
The speed of operations, inventory flow and information	Are warehouse oriented- based	Are “DC” oriented – based

*Adopted from: Cooper and Ellram (1993) and Jain and Benyoucef (2008).