

*Brunel Business School*

**Corporate Impression Formation in Online  
Communities - Determinants and  
Consequences of Online Community  
Corporate Impressions**

A thesis submitted for the degree of Doctor of Philosophy  
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September 2013

## **Abstract**

The purpose of this study is to gain in-depth knowledge of how the members of online communities form impressions of organisations that use online communities in their communication activities. Online impression formation has its peculiarities and in order to succeed companies need to better understand this phenomenon.

In order to appreciate and evaluate an interaction, those involved in it must know their own identity. Hence, individuals as well as companies engage in identity production by trying to project a favourable impression. The process of identity production can take place in both the offline and the online world. This study focuses on the online world, more specifically on online communities, by investigating how online community members form impressions of companies that produce their identities in online communities.

Technology has changed customer behaviours dramatically. People have embraced the Internet to meet and interact with one another. This behaviour is in line with the postmodern assumption that there is a movement towards re-socialisation. Online communication platforms connect people globally and give them the possibility to interact and form online social networks. These platforms are interactive, and thus change the traditional way of communication. Companies therefore have to embrace those interactive ways of communication. In the online world consumers are quick to react to communication weaknesses. Inappropriate corporate communication activities can affect the image they have formed of the company in question.

To Lukas, Anaïs, Solen and my parents

Strength does not come from physical capacity. It comes from an indomitable will.

*Mahatma Gandhi*

## Acknowledgement

I am very grateful and obliged to my first supervisor, Professor TC Melewar, for his encouragement, guidance and support throughout the course of my PhD study. Especially his understanding and flexibility regarding my special situation in terms of being a part time student working and living abroad - and a young mother giving birth to both a baby girl and a baby boy while working on my PhD – was much appreciated. Professor Melewar kindly helped me at every turn and thoughtfully guided me through this journey, motivating me to keep on working, while also allowing me some time off to recover after each of my children was born. In addition I would like to thank him for his kindness and openness in introducing me to so many top-class academics in my field of study and initiating me into the world of writing academic papers and presenting them on international conferences. These were invaluable experiences which will sustain me, personally and academically, for years to come.

Furthermore, I would like to thank my second supervisors: Suraksha Gupta of Brunel University, for all her helpful advice and for her kindness in putting up my whole family and myself while we stayed in London, and Professor Charles Dennis (now at the University of Lincoln) for his constructive advice and support, and especially for encouraging me to embark on this journey towards a PhD at Brunel Business School. A special thank you goes to Lisa Harris (now at the University of Southampton), who was my first supervisor when I started my PhD studies. She introduced me to the world of social media, sharing her experience and letting me participate in seminars she organised. Without her guidance and help I might not have understood the importance of studying online communities.

I would also like to thank all academics with whom I have had the fortune to have stimulating discussions and who have shared their thoughts with me along the way. In particular, I would like to thank Nandish Patel, René Algesheimer, Lynn Lim,

Johan van Rekom, Marko Sarstedt and Jürg Hari. A special thank you also goes to Professor Marianne Müller for sharing her expertise on SEM and Danielle Adams.

In addition, I would like to thank my PhD colleagues at Brunel Business School for their interest and valuable comments, in particular Roland Bartholmé, Ahmed Rageh and Pantea Furudi.

Last, but not least, my warmest thanks go to my husband, my parents and my children. Without their understanding, support and encouragement, this thesis would not have been possible.

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## Definition of terms

ADF	Asymptotic distribution-free
AVE	Average variance extracted
CFA	Confirmatory factor analysis
CFI	Comparative fit index
CI	Corporate identity
CIM	Corporate image
CIP	Corporate impressions
CMC	Computer-mediated communication
COR	Company representative
CR	Composite reliability
CRE	Corporate reputation
EFA	Exploratory factor analysis
ML	Maurice Lacroix
NFI	Normed fit index
OCCIP	Online community corporate impressions
OCM	Online community member
RMSEA	Root mean square error of approximation
SEM	Structure equation modelling
SIDE	Social identity model of de-individuation effect
SIP	Social information processing theory
SMoM	Swissmom
SRMR	Standardized root mean square residual
SRW	Standard regression weights
TLI	Tucker-Lewis index
VIF	Variance inflation factors
WOM	Word-of-mouth
eWOM	Electronic word-of-mouth

# Chapter 1 - Introduction

## 1.1 Introduction

In traditional face-to-face communication, two or more individuals form impressions by focussing on a number of different nonverbal cues. In the interactions that occur through an online community (OC), the type of communication is significantly changed. Instead of developing impressions through nonverbal communication, the people who are interacting need to base personal opinions on verbal (text-based) and/or linguistic cues (Walther, 1992). An interesting phenomenon in OCs is that our identity often changes when we become members of communities. There are numerous studies in social psychology which show that if we become part of a group our personal identity decreases while our social identity increases (e.g. Postmes et al., 1998; Reicher, 1984). Thus, we positively over-attribute everything that comes from this group (Walther, 1996). This is one of the reasons why companies try to target OCs with their communication activities. Unfortunately, they still often use traditional corporate communication activities, such as advertising messages, which are not appreciated by community members. In fact, they feel bothered by these messages, which can have a negative effect on the impression of the company in question. Online community members should be addressed in such a way that acceptance is gained and a favourable impression is created.

There are many concerns about negative consumer behaviour on the Internet which might lead to the question of whether companies should use online platforms for communication purposes and whether investigating into them further is worthwhile. However, there has been this kind of concern with the introduction of all new types of media. This view is supported by Joinson (2003): "Just as writing was bemoaned by Plato as lacking the direct link with consciousness that speech has, so the telephone was initially seen as a poor substitute for face-to-face interaction that could lead to

misunderstandings or worse. The same pattern is repeated for mobile phone text messages and the Internet” (p. 18).

Despite certain concerns about online platforms, the use of new technologies is still steadily rising; therefore scholars should continue their quest to gain more insight into the ever evolving new media and its impact. Since the Internet is changing so rapidly, research is still in its infancy. Many more studies need to be conducted to determine how individuals form their impressions of people they meet through the computer only and not face to face. The present study adds to the knowledge available by investigating into this phenomenon, that is to say by investigating into one specific kind of online platform, namely online communities. It aims to provide a better understanding of how online community members form impressions about a company to create a win-win situation. On the one hand, online community members can gain additional information from companies that share expert knowledge with them and on the other hand companies can create a positive impressions by communicating appropriately in online communities. It would be wrong to imply, however, that companies should try to control the information being shared or the conversations taking place in online communities (Kozinets, 1999; de Chernatony, 2001; Locke et al., 2001; Christodoulides & de Chernatony, 2004). Rather, online community members should be addressed in such a way that acceptance is gained and a favourable impression is created. The aim of this investigation is to understand how this can be achieved, that is to say, how online community members form impressions about a company that uses an online community for its communication activities.

There are a multitude of online community types on which a plethora of topics are discussed. This study focusses on two online communities, in which relationships are developed through social relations in combination with the exchange of consumption knowledge (Walther, 1992). Because the topics discussed are also based on specific brands (i.e. product, services or corporate), the label ‘brand community’ (Muniz & O’Guinn, 2001) is also addressed (see also chapter 2).

Computer-mediated communication (CMC) has abilities that distinguish it from traditional media and face-to-face communication. No longer are the channels of communication distinctly interpersonal or mass-media based. The advent of social online media has brought new communication platforms, e.g. online communities, which unite interpersonal and mass communication. Furthermore, companies are faced with the Web 2.0 paradigm, which entails enabling the user not only to read the Web's content but also to edit and write user-generated content. Individuals communicating via online communication platforms have immediate access to a high amount of information. This information can be discussed and shared; thus individuals have a variety of perspectives on the same topic, without having to change communication channels (Skinner et al., 2003). The privacy and anonymity of individuals allows anybody to participate in a discussion and immediately ask questions. "The immediacy of information access, the accessibility at any time of the day or night, the potential continual updating of information, and the wider range of information available positively distinguish the Internet from other forms of information services (e.g. the newspaper, radio, and television)" (Cotten & Gupta, 2004, p. 1797). This is a further reason for investigating these online communication channels. A thorough discussion about the differences between online and offline communication and how it is linked to the present study is provided in section 1.2 and at in the section 2.3.5.

Because corporate communication can be seen as the interface between corporate identity and corporate image, their conceptualisation is also discussed. The focal construct, online community corporate impression (OCCIP), is based on the concept of corporate image for which a thorough review of the theories of corporate image and the related theories of corporate identity and corporate reputation are provided in chapter 2.

To investigate the antecedents, this study employs media theories addressing mass communication, computer-mediated communication (e.g. social presence theory, social context cues theory, social information processing theory and social identity model of de-individuation effect theory) and a few additional concepts (e.g. affiliation, characteristics, interpersonal communication), which have been described in the significant literature and which are considered to be relevant. In addition it employs two

theories to study the consequences of OCCIP: the two-step-flow theory, which describes the cause and effect of word-of-mouth, and the theory of reasoned action, which explains consequences of corporate impressions. A description of these theories is included in chapter 2.

## **1.2 Relevance of the study**

A considerable amount of research has been conducted in the field of corporate identity and corporate image with regard to corporate communication and its impact (e.g. Cornelissen, 2000; Christensen & Askegaard, 2002; Dacin & Brown, 2002). However, there is a lack of research into the relationship of corporate communication activities in online communities and its impact on corporate impressions. Corporate communication in online communities has unique characteristics and calls for new ways of relating to an audience:

- The clear separation between interpersonal and mass-mediated communication collapses (Melewar & Karaosmanoglu, 2006). In other words, planned and unplanned communication merges on one platform and is visible to anyone.
- Walther (1997) has found that people in computer-mediated situations make more extreme contributions than when they communicate face-to-face. This underlines the importance of understanding the impression formation process in the minds of this particular audience.
- Companies are able to build relationships with stakeholders by creating a community around their brand and/or company-specific interests (Hagel & Armstrong, 1997; Kozinets, 1999). This view is supported by Christodoulides & de Chernatony (2004 p. 174) who state that it is “no longer [...] enough for marketers to create an image for a brand and pass it on to the consumer. The Internet provides an excellent platform for companies to foster genuine relationships with potential and current customers based on a continuous dialogue”. The importance for such a continuous dialogue is also stressed by



Grönroos (2012) stating that marketing communication should be relationship communication, in which the sender and receiver are partners.

- Nowadays, companies have to communicate with a new generation of customers who have grown up with interactive digital technology, and with well-informed individuals who have unlimited access to information. Networked computers enhance the connectivity between people by providing a platform where individuals from around the world can interact, exchange information and meet in online communities. These online communities can be accessed from many different devices, at any time and any place.
- There is a shift from Katz and Lazearfeld's (1955) two-step flow model to a fundamentally new one-step flow model. Information and messages can be directed to a specific audience, thus there is a direct effect on its members (Bennett & Manheim, 2006). One of these direct effects is impression formation.
- Companies lose control over the information flow concerning their company. The message of the company competes with user-generated content (Palmer & Koenig-Lewis, 2009).

A further aspect that needs to be considered is that markets become saturated with information and products, and it is increasingly difficult for customers to know and process all alternatives. Traditional marketing has become an ineffective way to spread marketing messages, since people actively resist it. The numbers back this up:

- “256%: Increase in TV advertising costs in the past decade
- 100%: Increase needed in advertising spending to add 1-2% in sales
- 14%: Proportion of people who trust advertising information
- 3000: Number of advertising messages people are exposed to per day” (Kirby & Marsden, 2006 p. xix).
- Confidence in paid advertising messages found in traditional media declines, while trust in online advertising increases (Nielsen, 2012).

With growing competition and the increasing complexity of commercial information, interpersonal communication continues to be important (Dellarocas, 2003; Helm, 2003).

Today, people are part of global social networks and prefer to rely on each other to gather information and exchange experiences, rather than relying on edicts from advertisers (Kozinets, 1999). This can be underlined with the finding of a study showing that 92% of the respondents completely trust the recommendations from people they know and 70% completely trust customer opinions posted online (Nielsen, 2012). Online communities are platforms where interpersonal communication takes place, which makes them an important type of site to study.

Technologies like radio or television have generated mass means of communication which are affecting the way people communicate and receive information. The many changes the Internet has brought about have also had social effects. Besides easy to use software and accessible bandwidth it is the attitude of customers that has changed (Mühlebeck & Skibicki, 2007). Not only have we moved from push to pull marketing where customers access information according to their needs, but the means of communication has also changed. The information that customers are looking for no longer has to be detailed or comprehensive: it has to be easily accessible and quick to obtain (Mühlebeck & Skibicki, 2007). In particular, the new generation of customers who grew up with digital technology have a very different approach to the use of technological devices and to the whole process of gathering information (Hogenkamp, 2007; Stucker, 2007). They can handle various devices and communicate with more than one person at the same time. While, for instance, speaking via VoIP (voice over internet protocol) with a friend, they are searching for information or posting a comment in a blog (Stucker, 2007). Prensky (2001) calls these people the “digital natives”. Digital natives are multi-taskers. They have the ability to parallel-process information and they are used to receiving information fast (Prensky, 2001). Research in neurobiology has shown that thinking patterns of people confronted with the hyperlinked and fast world of digital media have changed (Prensky, 2001). Digital natives “prefer random access to information (like hypertext)” and “function best when networked” (Prensky, 2001 p.2). The view that the thinking patterns of the “younger generation” (who grew up with digital technology) have changed and that young people engage in parallel-processing tasks, is supported by Stucker (2007) and Landwehr (2007). As mentioned above, digital natives are used to handling various devices, which

they use to access several online platforms including online communities. Therefore, it is necessary to better understand the online communities they interact on.

In summary it can be stated that consumers who are part of an online community are neither isolated nor static. They are interconnected in these social network in which they exchange information in that they influence and are influenced by other online community members (Kozinets, 1999). There has been a shift from a relationship orientation (one-to-one) to a social orientation, and marketing needs to take a network perspective: business-to-consumer-to-consumer (B-(C-C)) (Hermann, 2006). The marketing of the future will be based on building relationships with customers and engaging them in a dialogue, which creates two- or multi-way communication (Scoble & Israel, 2006, Wright, 2006). In the context of the present study, this means that companies have to respond not only to one person, but also to other online community members who are a part of their social network. A conversation in an online community is significantly different from mass media or one-to-one marketing communication. A company can distribute marketing messages via mass media or try to build a relationship by creating a customised message for each single customer. In neither approach has the social network of a customer been taken into account. But it is precisely these social networks that must play an important role in today's marketing. One type of social network can be found in an online community. Messages posted in an online community can initiate whole conversations open to all community members. This means that even if a company initially only addresses one online community member (interpersonal communication), the message can be read by many others (mass communication). In traditional relationship marketing, the communication is personalised and no one else, except the recipient, can read it. In order to illustrate this interaction with a whole social network in an online community, an example is provided below.

A company posts a message about a specific topic on its online community (this can be considered a mass communication activity). An online community member (OCM) responds to this message and in turn the company might respond again to this community member (this can be considered one-to-one marketing with an interaction

loop). A second OCM joins in the discussion and shares their point of view. This new comment can now also be read by the first (and any other) OCM and have an influence on them. The company reacts to this comment and either addresses the second OCM directly or posts a response addressing the whole community. A third person might join the discussion. This third person might create a hyperlink to one of these discussion threads and continue the discussion within their own online community. Thus, the initial discussion which first took place on the company's online community is spread through word of mouth.

This example illustrates the interconnectivity of people posting and reading messages on online communities. Hence, it is essential that the messages a company posts create positive impressions since they are discussed within the online community and might even be shared outside this particular community. A message posted on an online community can also be read, of course, by a multitude of people without them having to join the discussion. These people are influenced by the message or by an OCM commenting on a message, or even, by the whole conversation.

The present study addresses impression formation in online communities, taking into account the influence of messages posted by other community members (see construct: interpersonal communication) and the fact that an OCM might share their impression outside the online community (see construct: word of mouth) under study. However, it does not take into consideration further discussions which take place outside the online community, nor does it account for factors which are not part of the discussion in the online community. The reason for this is that every individual's life is quite complex and different; it would be far beyond the scope of the study to take into consideration all the possible aspects which might influence a person's perception about a company. Furthermore, these overriding aspects which do influence the impressions someone forms about a company, have already been studied thoroughly (please see 2.4.2 corporate image). This study, however, focuses on a single, however, very important element of the whole corporate identity mix, namely corporate communication activities in online communities. Since online communities are increasingly used for communication activities, they have become an important element for companies. It is

therefore vital to better understand this particular phenomenon. Hence, the results of this study apply to online communities.

By studying corporate communication activities in online communities, a new communication element can be integrated into the corporate identity mix (e.g. Balmer & Soenen, 1999) and into established corporate identity models (Melewar & Karaosmanoglu, 2006). All the elements of the corporate identity mix try to convey messages about the company's persona to its constituencies, who receive these messages and form an immediate impression based on this interaction in the online community. The corporate communication activities in online communities are important elements to study since on no other communication channel can we find a direct interplay of controlled and uncontrolled communication, where messages are commented on, passed along, and mixed with other content. All these components play a role in terms of how the company is perceived; it is therefore important to better understand each single element and how it influences the impression formation process.

### **1.3 Research objective**

The purpose of this study is to analyse how online community members form impressions about a company based on the company's use of an online community for communication activities. The specific objectives are:

- To incorporate *a company's use of an online community* into the corporate communication mix of Melewar and Karaosmanoglu's (2006) corporate identity framework.
- To explore how online community members expect companies to communicate with them.
- To empirically examine how impressions are formed in company sponsored online communities.
- To define impression formation in company sponsored online communities.

- To identify and examine the determinants that help form impressions in company sponsored online communities.

In recent years, research has increasingly focused on one of the most crucial aspects of Internet use: how it has been embraced as a community-forming device – an online space to meet and interact with one another. A great number of articles, papers, and conferences have addressed topics related to marketing in the age of Internet. Journals dedicated to marketing and communication in the electronic world have been launched (e.g. Journal of Computer-Mediated Communication, International Journal of Electronic Commerce, Journal of Interactive Marketing) and many other journals (e.g. Journal of Marketing, Journal of Advertising, Journal of Marketing Management, Corporate Reputation Review) have commissioned Internet-related issues. This study will add to this body of knowledge.

Effective communication and information exchange between companies and their customers in the online world seems to play an important role in each competitive strategy. The author could, however, not find any study which investigates the relationship between corporate communication using an online community and the corporate impression formation by online community members. This thesis, therefore, addresses the following research question:

*RQ: How do online community members form impressions about a company, based on the company's communication activities in its online community?*

## 1.4 The context and the respondent base of the study

This study examines corporate impression formation by members of an online community. The rationale behind choosing online communities as the context for this study can be described as follows:

- The fact that more and more well-informed people from around the world meet in online communities in order to share and exchange information and experiences about a company and its products, calls for additional, thorough investigation into this new phenomenon.
- A major advantage of online communication platforms is their ability to build relationships. They allow an organisation to share positive experiences with its customers that change them from regular customers to enthusiastic customers of the company and its products. The easiest way to get customers involved and make them more positive and passionate about an organisation is to talk to them and treat them as equal partners (Christodoulides & Chernatony, 2004). Positive experiences create emotional responses (Kozinets, 1999), which is important, since customers who feel no emotion toward an organisation have no reason to feel loyal and thus no reason to stay.
- Online communities are hyperlinked social networks, which allow random access to information. They provide readers with fast information and the opportunity to interact with other participants. Features such as hyperlinks and comments increase interaction and facilitate conversations (Prensky, 2001). Companies need to understand these tools because they reflect the thinking patterns of the “younger generation” and can thus be used to effectively spread brand messages and build relationships with customers.
- Kirby and Marsden (2006) have shown that traditional marketing techniques are ineffective and that new ways of communicating with a target audience are needed. Marketing is faced with an era characterised by better-informed customers who demand more openness and honesty (Weil, 2006).
- This aspect is missing in many corporate communication models.

## **1.5 Methodology and the methods used**

This study is looking to find relationships or associations between corporate communication using online communities and impression formation. The underlying logic of the study is based on the belief that social phenomena exist regardless of the author's interpretation. Thus, a positivist approach was adopted.

The first study made use of a qualitative research method in order to test face and content validity of the conceptual model and gain additional knowledge that relates to corporate communication using online communities and impression formation. In stage one of the qualitative study seventeen expert interviews were conducted to clarify the concepts and their relationships and gain new insights from practitioners and academics. In stage two, twelve online community members were interviewed to clarify constructs and their relationships and to adjust an existing measurement scale of online impression formation. The qualitative study was conducted using an online community called Swissmom, which was launched in summer 2003.

In the second phase of the study, quantitative methods were used to generalise from the sample to the whole population of the online community. A questionnaire was developed based on the gained knowledge from the literature review and the findings of the qualitative research. A cross-sectional survey was conducted in which online community members filled in a structured, self-administered online questionnaire. Since this study proposes a conceptual framework consisting of complex latent constructs, the data were analysed using structure equation modelling.

The questionnaire was first administered to a sample of the Swissmom community. In order to validate the measurement model and test the relationships of the constructs, the questionnaire was further administered to a sample of a different online community, namely the Maurice Lacroix Facebook Group.



## 1.6 Contributions of the study

Establishing the link between computer-mediated corporate communication targeting online communities and corporate impression constitutes a **value-adding** (what is new) contribution, as this relationship has not been studied before. The study contributes additional knowledge of what elements are important in corporate communication that targets online communities.

With regards to the **theoretical contribution** this study proposes the following:

- this study brings together various strands of theory and combines them;
- the findings of the present study have added to the understanding of the phenomenon of corporate communication in online communities;
- twenty-four items stem from qualitative interviews;
- one construct (characteristics) that is based on the literature but which was significantly changed due to the results of qualitative interviews conducted with online community members;
- two new constructs (affiliation and social context cues) that were developed based on the literature and the qualitative interviews;
- the focal construct (called online community corporate impression), based on impression formation literature.

**Managerial contribution:** the following can be stated: Understanding how corporate impression is formed in online communities can help companies to determine if and how shareholders expect members of companies to participate in online networks and how this affects corporate impression. In addition, this study aims to contribute to the understanding of online communication, i.e. how the targeting of people who meet in online communities can be managed better and how new online communication strategies can be found. This creates a new value dimension with significant differentiation potential. This type of differentiation is neither contained in a product nor in a brand but reflects the fact that a customer feels that he or she belongs to and is taken seriously.

**Contemporary interest:** There continues to be considerable interest in online audiences, their scope and their composition. Looking at figures on the use of social media and online platforms, an increase can still be observed. The target audience for the results of this study are companies already using or intending to use online communities for their communication activities.

## **1.7 Structure of the thesis**

Following this introduction to the study (chapter 1), a thorough literature review addresses the underlying theories and concepts (chapter 2). It is divided into three main sections, beginning with an examination of online environments and online communities.

The second section provides a review of communication theories, addressing mediated communication with a main focus on CMC and explaining the peculiarities of communication in online environments. The different strands of communication theories are described and the strand of communication theory that is most relevant for the present study is highlighted. Based on this, the study turns to media and mass communication, which has laid the groundwork for computer-mediated communication.

The third section explains the concepts of identity production, leading to the concept of corporate identity production and the corporate impression formation. Corporate identity is thoroughly described since one of its characters is corporate communication. As mentioned earlier, the aim of this study is to gain knowledge of how online community members form an image about a company that uses online communities for corporate communication activities.

Chapter 3 presents the conceptual model and research hypothesis. It systematizes the relationship between communication elements relevant in online communities and their influence on corporate impression. As mentioned above, in order to link corporate communication activities to impression formation in online communities, literature in

computer-mediated communication, corporate identity and corporate image was reviewed.

In chapter 4, the research methodology is presented, followed by the delineation of the research design. Subsequently it describes the exploratory studies and finally the quantitative investigation.

Chapter 5 presents the results of the qualitative studies in reflection to the conceptualisations of the constructs defined in the literature. Next, the research findings from the quantitative study are outlined in chapter 6.

The validation of the measurement model and the evaluation of the research hypothesis are discussed in chapter 7. Following, chapter 8 presents the theoretical and managerial implications of the study. Additionally, the limitations of the research as well as some future research avenues are addressed.

## Chapter 2 - Literature review

### 2.1 Introduction

Internet technology connects people globally and gives them the opportunity to interact using online communication platforms, which are able to overcome both space and time. These platforms, initially a mere playground for tech-savvy people, soon transcended their initial function as a new communication channel. As Wellman and Heaythornthweite (2003) pointed out: “we are moving away from a world of Internet wizards to a world of ordinary people routinely using the Internet as an embedded part of their lives” (p. 6). Nowadays, the Internet has become an integral part of our daily lives, a parallel reality, which is here to stay. People have embraced it as a community-forming device providing them with a place where they can socialize with their peers. They use online communication platforms to produce new identities at will (Boyd & Ellison, 2007). More recently, identity production in the online space has also become attractive for companies.

According to Goffman’s (1959) theory of self-presentation, individuals play a variety of roles for different audiences on different social stages. In the case of companies interacting with their “audiences”, these also include online platforms, such as online communities. The way the companies present themselves on those platforms is part of their overall corporate identity.

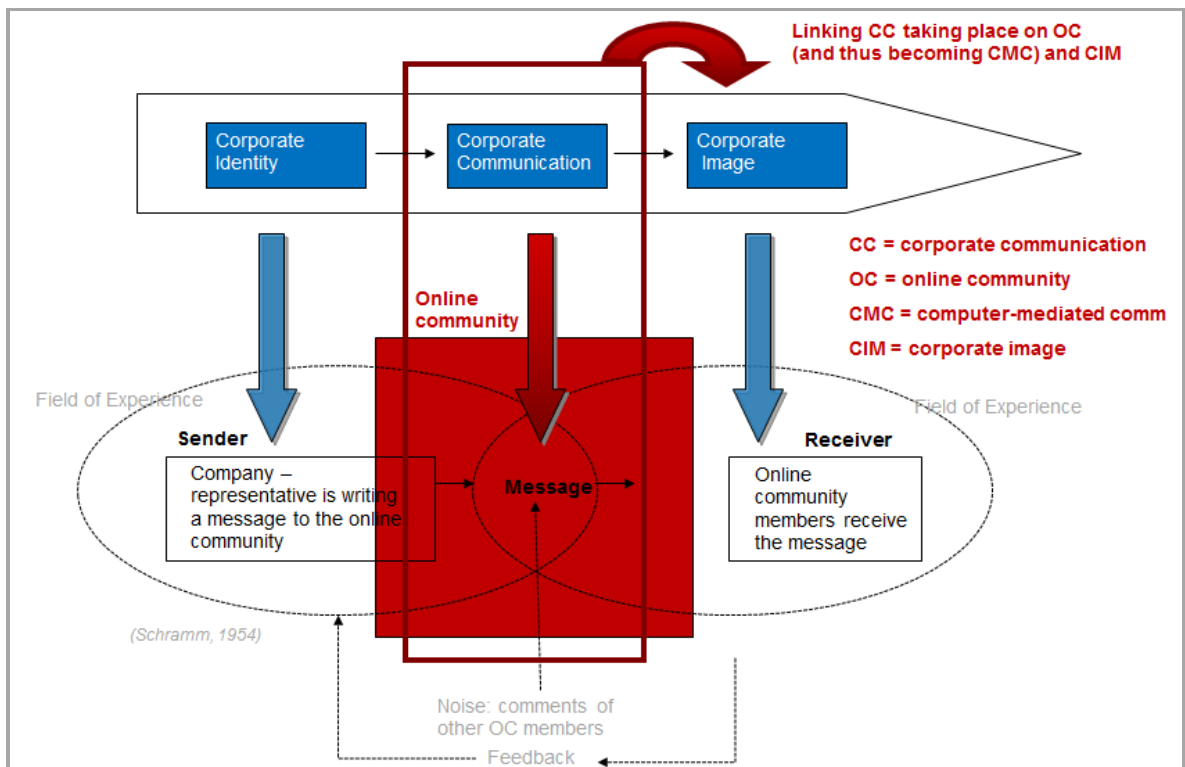
An amplitude of scholars have studied the phenomenon of online communities and have found that the concept of communities has shifted from physical environments to terms of social networks (e.g. Rheingold, 1993; Jones, 1997; Muniz & O’Guinn, 2001) and that the ‘sense of community’ emerges from mutual interest and symbols (von Löwenfeld, 2006). Online communities may change traditional communication processes, and companies need to adapt to these new forms of communication.

In order to develop the proposed conceptual model (chapter 3) and find the answers to the research question (chapter 1), more than one body of literature had to be analysed. Hence, literature on online communities, communication, mass-communication, computer-mediated communication, self-presentation, corporate identity (including corporate communication) and corporate image has been included in this structured literature review.

The following figure illustrates how these different bodies of knowledge are linked together. The fundamental basis of communication is illustrated by Schramm (1954); he proposes that a sender encodes a message and then transmits it to a receiver, who in turn decodes the message and interprets it (this model is described in more detail in 2.3.2). This is also what takes place in an online community when the sender's message is posted on the online community platform.

If a company drafts a message and posts it on the online community platform, this is a corporate communication activity and corporate communication is an element of corporate identity. Hence, these concepts are also described in this chapter. Corporate image is the reflection of corporate identity and thus can be described as the impressions an individual forms about a company's persona.

Figure 1: Linking different bodies of knowledge



Source: Developed for the present study

Because all of these theories and concepts lay the foundation of the present study, the literature review aggregates these different bodies of knowledge. The reasoning behind including these bodies of knowledge is presented below:

- **Online communities** have been studied in order to understand the phenomenon of the research site. The phenomenon goes back to postmodernism, re-socialisation and E-tribalisation (Cova and Cova, 2002; Kozinetz, 1999).
- **Communication** is the process that takes place when people gather in online communities. If they simply took a passive role, interactions would not take place and the online community would not exist.
- Since interaction takes place in a media where groups of people interact, **mass media** theories have their importance. Furthermore, the theories of **computer-mediated communication** need to be considered since the interaction takes place on an online platform.

- Communication (**corporate communication**) is part of the **self-presentation** of a company and a part of its persona. It is the way the company ‘speaks’ to its audiences and links **corporate identity** to **corporate image** (Christensen & Askegaard, 2001). Corporate communication is an element of the whole corporate identity; hence these concepts need to be considered too. Since the reflection of corporate identity is corporate image and the way in which the audience perceives the company, corporate image is also addressed.

The following section further describes the underlying theories of the study and how they are related to it.

The present study is grounded in the social-psychological tradition, which describes how people are influenced by others. Allport (1985) stressed that we can be influenced by each other even if the person is not present. This lays the ground for the present study because in online communities, it is not the company as persona, but rather a company representative who communicates and as a result influences online community members. It is this representative who undertakes the corporate communication activities, communicating via an online community platform and not actually physically present. Messages from other online community members then interplay with those of the company representative.

Since the above-mentioned communication is mediated by an online community, media theories addressing mass communication are the next theories which have to be mentioned. The most relevant theories for this study come from the interactionist and structuration strands of theory that “consider the dynamic relations between producers, texts, technologies and interpretative audience” (Laughey, 2007 p. 78). These theories, including theories such as ‘Symbolic interactionism’ (Blumer, 1967) and ‘Self-presentation’ (Goffman, 1959), help to understand how people gathering in groups react towards others. This is of importance for the present study as it examines online community members who are in groups (as they build an online community) and how they react (form impressions) towards a company.

Some ideas deriving from other strands of media theory were also considered as they added to the understanding of the phenomenon:

- Lasswell's model of mass communication as it describes the process of transmitting a message and its influence. This study focuses on impression formation, which is one of the effects of the communication taking place in online communities.
- Word of mouth communication as it addresses informal communication about products and services among individuals. In online communities this informal communication is the interpersonal communication among online community members.
- Information adoption model as it shows what different influences information can have on consumers.

Since this study looks at online communities, we also have to consider computer-mediated communication. Initial studies in computer-mediated communication describe that many contextual cues are absent or strongly attenuated and thus communication is less effective (Short et al., 1976; Daft and Lengel, 1984). However, contradictory theories and empirical findings later appeared claiming that computer-mediated communication has the ability to carry out the exchange of social cues (Reicher, 1984; Walther, 1992). For the present study, it is important to understand the peculiarities of computer-mediated communications, such as the lack of social context cues, as they might influence the impression formation.

The body of knowledge which addresses corporate identity and corporate image, as well as impression formation literature, have also been studied. These are of importance in gaining an understanding of the impression formation process when it comes to forming impressions about a company and its representatives.

These theories are elaborated on in this chapter, which is divided into three main sections. It begins with examining the concept of online communities, and then considers communication and media theory and the extent to which these can be applied to online communities. Further, the peculiarities of communication and interaction in computer-mediated environments are examined. The concluding section of this chapter



discusses the key concepts of corporate identity and corporate image. Each section leads to specific research propositions and their corresponding hypotheses, outlined in chapter three.

## **2.2 Online environments and online communities**

According to Goffman's (1957) theory of self-presentation, people play a variety of roles on a variety of social stages. As mentioned before, the area of interest in this study is the stage offered by online communities, on which companies can interact with their audiences. Hence, the following section is intended to provide some background regarding the definitions of online environments, with a main focus on online communities.

It has been divided into four parts. First, some peculiarities of the online environment in general are discussed. Next, some background information about communities in general is provided in which the following subjects are addressed: a) evolution of communities, b) theoretical frame of reference, including (i) symbolic interactionism, (ii) social identity theory, (iii) sense of community, and c) brand communities. Finally, a focus on online communities as a specific type of community is given.

Online tools can either be channels or platforms. Channels are those tools which are used to spread information to an audience, while platforms are online places where people can get together for a variety of reasons. Because the tool's characteristics and thus their impact on message transfer and behaviour vary considerably, they need to be defined and categorised before embarking on the main part of the study.

### **2.2.1 Online environments**

Web 2.0 has brought a range of new collaborative tools, such as interactive websites, podcasts, blogs, vlogs, discussion forums, social networking sites, synchronous chat forums, instant messaging, social sharing sites, etc. These tools make it easier for

companies and customers to interact and enable customers to participate in the marketing process. In this context, Kozinets (1999) underlines McLuhan's (1970) prediction that "networked computers and the communications they enable are driving enormous social changes. People are re-tribalizing in cyberspace: they are E-tribalizing" (Kozinets, 1999 p. 252). He adds that "because many of these affiliations are based upon consumption activities, these E-tribalized groups are of substantial import to marketing and business strategists" (Kozinets, 1999 p. 252).

Digital spaces have functions that differentiate them from any possible offline equivalent. According to Boyd and Ellison (2007), they are: (i) persistent, even if contributions are rarely written with long-term archiving needs in mind (People joining a platform at a later point in time read contributions which were written a certain while ago), (ii) searchable by anyone at any time, (iii) replicable and re-mixable with other content on other platforms, and (iv) have an invisible audience. An important implication is that, as in the case of mass communication, companies need to perform for a large and invisible audience. The difference is that people expect both interpersonal, informal communication and some kind of social interactions. Furthermore, while we know how to behave in public, we are unsure how to conduct ourselves before an audience which potentially consists of all people across all spaces and all time (Boyd & Ellison, 2007).

Another important consideration is that people gathering on online platforms are not a passive audience. They engage actively and act as both consumers and producers of information. Futurologist Toffler (1984) coined the term "prosumer" when he predicted that the role of producers and consumers would begin to blur and merge. This point of view is supported by Melewar and Smith (2003), who claim that "everybody who has access to the Internet has the power to become a publisher and the ability to communicate with a vast audience through numerous channels" (p. 367).

Consumers are increasingly keen to online marketing efforts that are based on relationship marketing. However, such one-to-one relationship marketing is beginning to lose impact. The reason for this lies in the erroneous assumption that the online

community is a passive audience composed of isolated individuals. This view is supported by Kozinets (1999), who states that “one-to-one marketing presumes that a customer can be efficaciously isolated into a single grouping, “understood” by marketers through efficacious segmentation, and then marketed an offering that has been customized to his or her individual needs. While one-to-one marketing is an exciting theoretical concept, in social reality the consumers who are a part of online communities of consumption are neither as isolated nor as static in their tastes as the concept presumes them to be [...] Yet the advantages of networked computers and computer-mediated communications derive directly from their ability to provide not only two-way communications, but connections between consumers” (Kozinets, 1999 p. 11). This shift from a relationship perspective to a network perspective: business-to-(consumer-to-consumer) or B-(C-C) needs to be taken into consideration by marketers (Herrmann, 2006).

### **2.2.2 Theoretical background of communities**

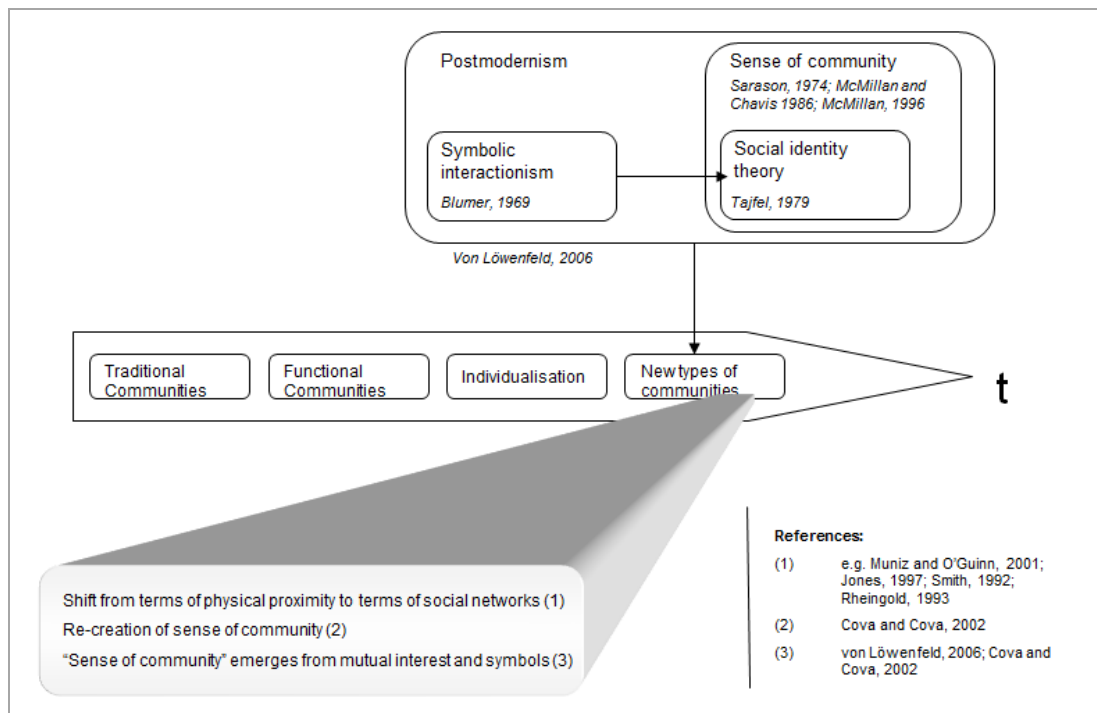
Traditional communities like clans, families, and churches are built on strong bonds and reciprocity. Putman (1995) stated that the numbers of people taking part in traditional social groupings like political parties, churches, and unions are decreasing significantly. He makes the point that “people loosen from traditional social forms” (p. 70) “and engage in other forms of communities” (p. 75). Industrialization and urbanization are causing people to form more and more functional communities focusing on transactions and information exchange and built on loose ties (von Löwenfeld, 2006). Another development that can be observed is the individualisation of society, which manifests itself in concepts such as cocooning, self-expression, a private consumer lifestyle and hedonistic consumption. Social links in this context are sometimes understood as undesirable for individuals (von Löwenfeld, 2006).

Nowadays, however, there is a move back towards re-socialisation, and new types of communities emerge. In these communities, geography no longer plays a strong role. The sense of community emerges from mutual interests and symbols (Kozinets, 1999). This view is supported by Cova and Cova (2002), who speak of a social re-composition,

saying, “people who have finally managed to liberate themselves from social constraints are embarking on a reverse movement to recompose their social universe. This results in an active quest for alternative social arrangements and new communities” (p. 596). They add that “our era does not crown the triumph of individualism but rather may herald the beginning of its end. We can speak of the emergence of a reverse movement: a search for maintaining or (re)-creating the social link” (p. 596).

Muniz and O’Guinn (2001), like Putman (1995) and Cova and Cova (2002), share the view that communities evolve: “Buying and consumer communities like brand-communities are the new sources of a new sense of community and new forms of communities” (p. 413). From the following statement by Kozinets (1999) it can further be deduced that customers should no longer be regarded as individuals but rather as people integrated in social networks: “The customer increasingly will need to be envisioned and modelled not only as an individual, but as a complex and interrelated global network. This global network is comprised of a series of communicating consumers who draw on each other’s knowledge and experiences to evaluate the quality and worthiness of product offerings and the honesty and integrity of companies and their marketing communications” (p. 13). The figure below illustrates the evolution of communities. In order to explain the phenomenon of communities, especially brand-communities, scholars have referred to Blumer’s (1969) symbolic interactionism (Cova & Cova, 2002; Muniz & O’Guinn, 2001; McAlexander et al., 2002), Tajfel and Turner’s (1979) social identity theory, and the concept of a ‘sense of community’ (McMillan & Chavis, 1986).

Figure 2: Evolution of communities



Source: Adapted from von Löwenfeld, 2006

The underlying concepts and theories are described in the following sections.

### 2.2.2.1 Symbolic interactionism

Blumer's (1969) theory of symbolic interactionism, assumes that individuals are interconnected, that means, interacting and communicating with one another. It describes social interaction through symbols that allow people to align themselves with an identity. This leads to the growth of groups oriented towards those symbols (Hogg et al. 1995).

Blumer's (1969) theory is formed by three premises, describing how individuals act toward things and interpret them. He states that "Instead of the individual being surrounded by an environment of pre-existing objects which play upon him and call forth his behaviour, the proper picture is that he construct his objects on the basis of his on-going activity [...] the individual is designating different objects to himself, giving them meaning, judging their suitability to his action, and making decisions on the basis

of the judgment. This is what is meant by interpretation or acting on the basis of symbols” (Blumer, 1969 p. 80). Blumer further expresses that “the peculiarity consists in the fact that human beings interpret or ‘define’ each other’s actions instead of merely reacting to each other’s actions. Their ‘response’ is not made directly to the actions of one another but instead is based on the meaning, which they attach to such actions. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another's actions. This mediation is equivalent to inserting a process of interpretation between stimulus and response in the case of human behaviour” (p. 79).

With respects to customers and products Blumer’s (1969) premises have been interpreted as follows.

The first premise says that a consumer is affected by the symbolic meaning of a product and will base his or her purchase decision or referral on this meaning (von Löwenfeld & Hermann, 2004). In the context of branding, product attributes are provided with symbolic denotation, “the consumer’s idea of a product” (Ogilvy cited by von Löwenfeld, 2006 p. 54), which represents the intangible, emotional aspects of a product. Customers act towards a product based on the meanings they assign to it. Provided that the symbolic denotation of a product is reflected in their self-concept, they use this symbolic denotation to classify products into social processes and learn the social meaning of those products. The self-concept has been described as: “the system of concepts available to a person in attempting to define himself” (Gergen cited in von Löwenfeld & Hermann, 2004 p. 655) and as “the totality of self-descriptions and self-evaluations subjectively available to an individual” (Hogg & Abrams cited in von Löwenfeld & Hermann, 2004 p. 655). This self-concept is developed through interaction with others.

The second premise describes one of the main points in symbolic interactionism: an individual perceives his or her identity in the context of social interaction. Individuals see themselves as objects to which certain symbols are assigned. The reference group also assigns a certain meaning to those symbols, which in turn are assigned back to the

individual (von Löwenfeld, 2006). If a large enough group of people accepts those symbolic denotations, a brand image is created. This brand image is the result of this social interaction, as “members of a society or group are likely to think, feel and act in similar, collective, ways” (Petrick & Sheehan, 2007 p. 4). Social interaction is one of the most cited attributes of communities, and as Holt (2002) says, it is vital for shaping one’s identity through symbols. Even those with strong/highly developed identities require the interpretive support of others as reinforcement (Holt, 2002). Thus, the theory of communities is, among others, based on symbolic interactionism.

The third premise is based on the fact that a customer’s thoughts modify his or her interpretation of symbols. Being constantly confronted with interaction and new messages, we undergo an interpretative and self-reflecting process to decode meaning. Thus, the meanings we have learned from others are never fully solidified. Individuals are active thinkers and constantly readjust their understanding of a particular object or concept. The actual process of construction of meaning and the context in which it is done are a vital element. While the same meaning can lead to different points of view, meaning can also change over time (von Löwenfeld, 2006).

#### **2.2.2.2 Social identity theory**

Social identity theory (SIT) developed by Tajfel and Turner (1979) addresses relationships within groups, and between groups and the social self (a person’s social identity). The SIT is composed of three elements: categorisation, identification and comparison. An individual often puts others and him- or herself into categories (groups), identifies him-/herself with a certain group (in-group), compares this group with other groups (out-group), and discriminates against the other groups (Tajfel & Turner, 1986). In his study, Tajfel and Turner (1979) found that randomly classified members of two groups favoured their group by awarding more money to members of their own group because they see the out-group as inferior to the in-group. This in-group favouritism reflected positively on them, enhanced their self-esteem, and created a positively valued social identity, which group members strive to achieve (Tajfel & Turner, 1986).

Social identity theory helps us understand the psychological dynamics within a group, on the one hand, and inter-group discrimination on the other. Tajfel and Turner (1986) suggest that „the mere perception of belonging to two distinct groups – that is, social categorization per se – is sufficient to trigger inter-group discrimination favouring the in-group” (p. 38). To justify the notion that their own group is superior, members identify some common symbols that will make them feel better about themselves. This has been highlighted by Petrick and Sheehan (2007) as follows: “Through either shared consumption of a specific branded product or shared patterns of consumption, the perceived superiority felt by members of an in-group can be communicated to out-group members implicitly” (p. 15).

In their self-categorisation theory, Turner et al. (1987) expanded on social identity theory by differentiating between personal identities and social identities, saying that at different times we perceive ourselves either as personal identities or as social identities (members of a group). When perceiving ourselves as social identities we perceive ourselves to a lesser degree as a unique person. We constantly drift between the two identities (Turner et al., 1987).

### **2.2.2.3 Sense of community**

The concept of sense of community elaborates on the basic principles of SIT with some additional factors which help to build a strong “we-intention”. It thus goes further to explain community building. According to Obst and White (2004), the best and most influential foundation for this construct is proposed by McMillan and Chavis (1986) and comprises: integration and fulfilment of needs, shared emotional connection, membership and influence. These are further described as follows:

*“Membership refers to the feeling of belonging and identification, of being part of a collective from which you derive emotional safety. Influence refers to the bi-directional need for a group to exert influence on its members to promote cohesion, and also for members to feel they have some control and influence within the community. Fulfilment of needs refers to the need for the individual-group association to be rewarding for the*



*individual members, and places importance on common needs, goals, beliefs and values in achieving this. The last dimension is that of shared emotional connection, which is based on a sense of shared history and identification with the community and the bonds developed over time through positive interaction with other community members” (Obst & White, 2005 p. 128).*

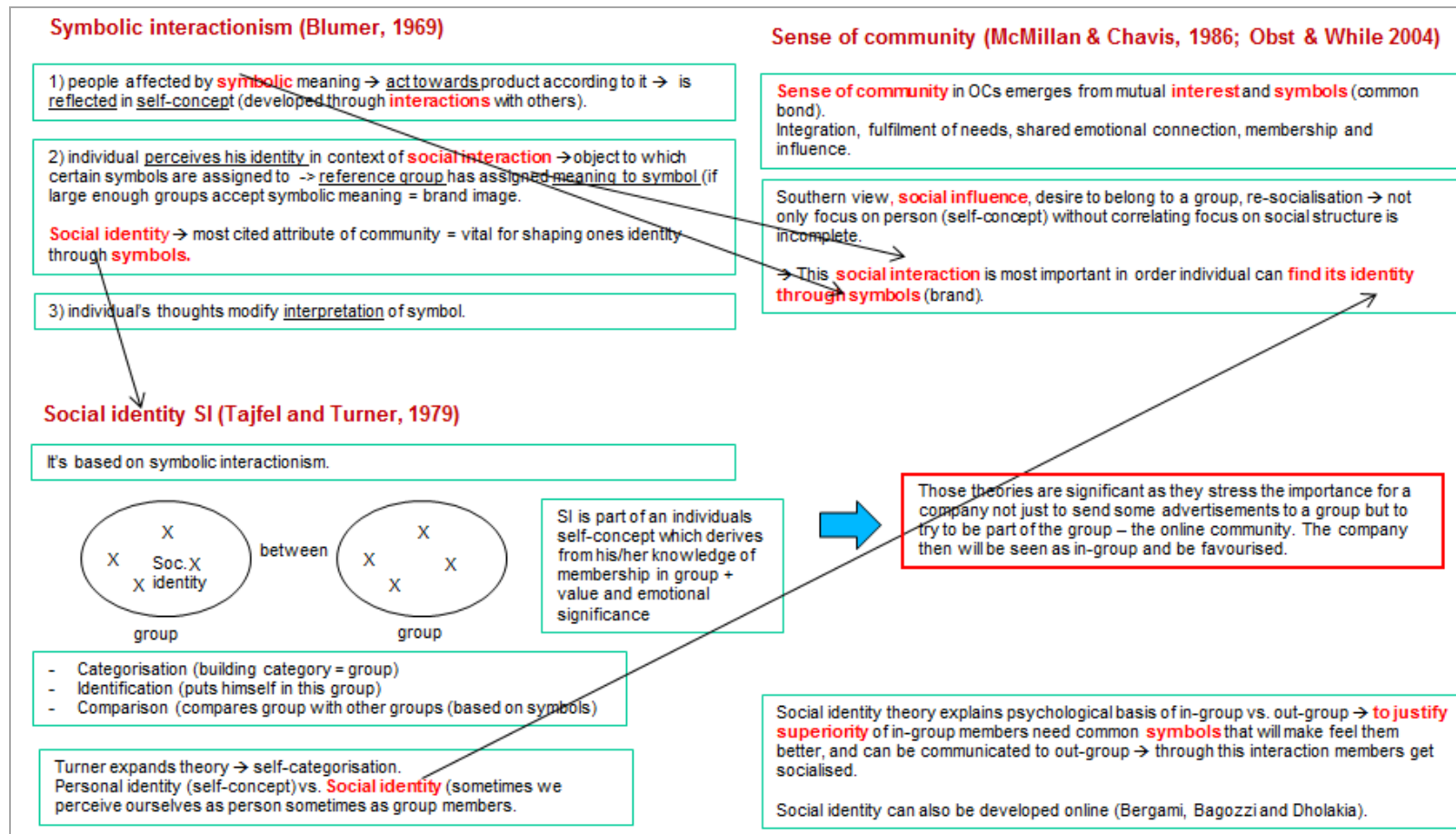
Linking the theoretical frame of reference to the present study, symbolic interactionism shows that exclusive focus on a person (self-concept) without a correlating focus on the social structures, and vice-versa, can only tell half the story (von Löwenfeld, 2006). Further, “the desire to belong to a group, and to think and feel and act collectively, is a very strong human urge. Social and cultural influences on the consumer are stronger, purer and more focused in a group setting” (Petrick & Sheehan, 2007 p. 1). These social interactions are important in that they allow an individual to find his or her identity through symbols (brands). These symbols also help to justify the superiority of a group and communicate it to out-group members (Petrick & Sheehan, 2007).

Because geography no longer plays an important role, mutual interest and symbols are crucial to create a sense of community. As Petrick and Sheehan (2007) suggest: “The group only exists because its members decide that they share a common bond, or alternatively other people categorize a group of individuals as having a common bond and hence assign them to a particular grouping” (p. 14).

In respect to the present study those theories are significant as they stress the importance for a company not just to send some advertisements to a group but to try to be part of the group – the online community. The company then will be seen as in-group and be favoured.

A graphical representation of these theories and how they are interlinked can be found in the following summary.

Figure 3: Announcement of the ML study



Source: Developed for the present study

#### **2.2.2.4 Brand communities**

As mentioned in chapter 1 the present study focuses on online communities linking social relations with the exchange of consumption knowledge (Walther, 1992). In this respect the concept of ‘brand community’ needs to be described briefly before focusing on online communities.

The seminal article by Muniz and O’Guinn (2001) introduced the idea of brand communities. They investigated three communities managed by private individuals. The communities dealt with the following brands: Saab, Macintosh and Ford Bronco. Muniz and O’Guinn (2001) used qualitative data in order to conceptualise brand communities. McAlexander et al. (2002) published an article based on an eight-year longitudinal study (partly quantitative), providing evidence that brand communities could be built with brand events, such as brand fests and increase brand loyalty.

A brand community can be defined as “a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand. It is specialized because at its centre is a branded good or service. Like other communities, its attributes are a shared consciousness, rituals and traditions, and a sense of moral responsibility. Each of these qualities is, however, embedded in a commercial, mass-mediated ethos and has its own particular manifestation. Brand-communities are participants in the brand's larger social construction and play a vital role in the brand's ultimate legacy” (Muniz & O’Guinn, 2001 p. 412). As mentioned earlier, this study is based on the assumption that an individual is not isolated but integrated into many different types of communities. A person is influenced by his or her interpersonal exchanges within these social networks (McAlexander et al., 2002; Ahonen & Moor, 2005). In a brand community, an individual shares knowledge (Brown et al., 2003), receives support from other members, and expresses his or her view about a product (McAlexander et al., 2002).

Muniz and O'Guinn (2001) suggest that a brand community is united by three central relationships: brand to customer, customer to customer, and customer to community. McAlexander et al., (2002) expand on this definition and suggest a shift of perspective. They add other relationships, introducing the customer-centric model of brand community that represents a more complex web of relationships. According to them, "customers also value their relationships with their branded possessions [...] and with marketing agents [...] and institutions [...] that own and manage the brand" (p. 39).

McAlexander et al. (2002) further highlight the dynamic nature of brand communities by proposing several dimensions on which brand communities differ and stating that, typically, those dimensions are treated as static dimensions. The geographic concentration is one dimension that might differ: "They may be either geographically concentrated (Holt, 1995) or scattered (Boorstin, 1974). They may even exist in the entirely non-geographical space of the Internet (Granitz & Ward, 1996; Kozinets, 1997; Tambyah, 1996)" (McAlexander et al., 2002 p. 39). Communities also differ in terms of social context: Some provide a rich social experience where strong relationships can be built, while in others the social context is less obvious. Some communities have more face-to-face interaction while others are based more on mediated communication. A further dimension is the temporality of a community. Some communities become permanent fixtures while others exist only on a temporary basis. Last, McAlexander et al. (2002) mention the dimension of identification. They point out that while some community members identify very strongly with a community, while others do not.

### **2.2.3 Online communities**

The nature of the Internet as a network allows people to form online communities in which large groups of people can gather information, communicate and interact. An amplitude of scholars have studied the phenomenon of online communities, and scholars have found that the concept of communities has shifted from terms of physical proximity to terms of social networks (e.g. Cova & Cova, 2002; Bagozzi & Dholakia, 2002; Hagel, 1999; Hagel & Armstrong, 1997; Henning-Thurau et al., 2004; Jones, 1997; Kozinets, 1999; Muniz & O'Guinn, 2001; Rheingold, 1993; McAlexander et al.,

2002) and that the ‘sense of community’ emerges from mutual interest and symbols (Obst & White, 2005; McMillan & Chavis, 1986; von Löwenfeld, 2006). Studies have proven that online platforms can truly be used as a medium of meaningful social interactions (Rheingold, 1993; Turkle, 1995). Online communities are true parts of our society and as such also part of the on-going change and evolution of society (Schuler, 1996).

Despite certain researchers’ assertions that the Internet causes social impoverishment, Obst et al. (2002) make the point that communities are supported by the new technologies: “Rather than technology breaking down communities, communities themselves are evolving in meaning and spirit, in line with technological and societal trends” (p. 99). It can be added that “the Internet is seen as a great chance to rebuild people’s lost sense of community” (Uslaner, 2000 p. 62). Oldenburg (1989) as well as Jones (1995) support this view, mentioning that computer-mediated communication (CMC) may fill society’s need to recreate the social boundaries of the *Gemeinschaft* (communities), which have been replaced by the emotionally disconnected *Gesellschaft* (rational and functional groupings), two terms introduced in Ferdinand Tönnies’ (1887) seminal book, “*Gemeinschaft und Gesellschaft*”. Jones (1995) argues that “communities formed by CMC have been called ‘online communities’ and defined as incontrovertible social spaces in which people still meet face-to-face, but under new definitions of both ‘meet’ and ‘face’” (p. 19). Maybe we need a new definition of ‘face’ in CMC, as it is much more concerned with symbolism.

Scholars have found that the three main components of traditional communities, namely (i) consciousness of kind, (ii) shared rituals and traditions, and (iii) a sense of moral responsibility, can also be found in online communities (e.g. Kozinets, 1999; Muniz & O’Guinn, 2001; Bagozzi & Dholakia, 2002).

Members of an online community share common interests, goals, or activities and at least visit the same place at times. While online communities are mostly found on the Internet, they can also be found in the cellular phone network (Cyr, 2007). Possibilities

with regard to content and form of the communication are more or less unlimited (Kollmann, 2011).

Before elaborating any further on online communities, a short summary of Web 2.0 and social media is given. The reason for this is that online communities can be classified as belonging to either, and thus the bigger picture needs to be addressed briefly.

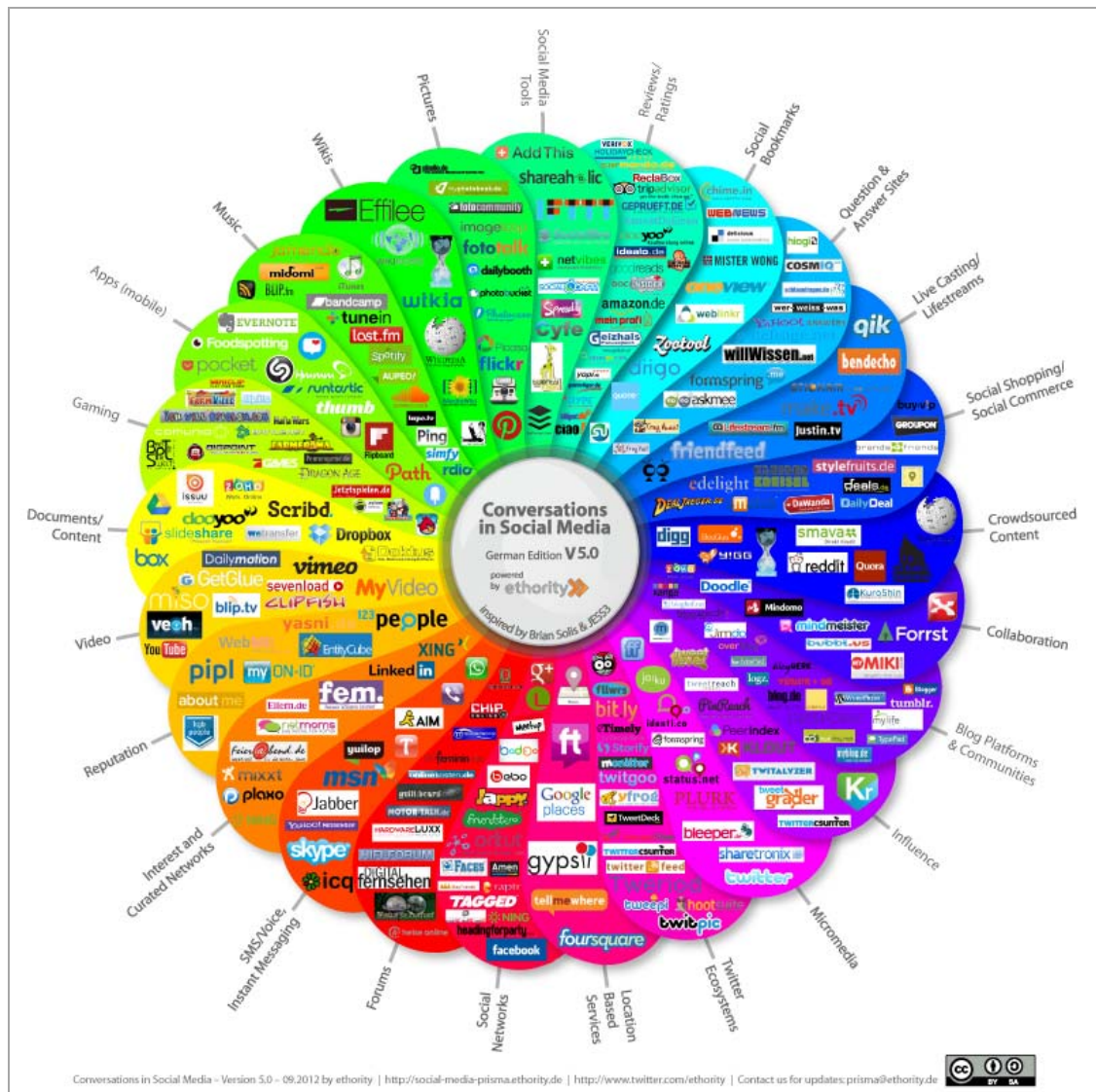
The term Web 2.0 was coined by O'Reilly during a conference in 2004 and can be considered as a shift in the use of the Internet (Qualman, 2009). O'Reilly states that Web 2.0 should not be understood as a number of different websites but rather as a platform (NZZ Online, 2006). Governor et al. (2009) explain the controversy surrounding the term Web 2.0 by stating that "the internet is changing so fast that by the time a definition was documented, it would be out of date" (Governor et al., 2009, p. 1). O'Reilly nevertheless attempts an explanation by suggesting that "Web 2.0 is the business revolution in the computer industry caused by the move to the Internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them" (O'Reilly, 2006).

Martin et al. (2009) offer another perspective of Web 2.0 by describing it as a shift from the one-way publication of web content to content where people are encouraged to share ideas and actively participate by commenting on issues and discussing them. The disputes on the concept and definition of Web 2.0 were certainly one reason why the term 'social media' is now used more frequently than the term 'Web 2.0'. Social media have been defined by Safko & Brake (2009) as follows: "...activities, practices, and behaviours among communities of people who gather online to share information, knowledge, and opinions using conversational media" (p. 6). These are web-based media allowing conversations between individuals in the format of written messages, audio and video files, as well as pictures (Safko & Brake, 2009).

The 'conversation prism' visualises the most important online conversations that shape the social media landscape. The different platforms are grouped into 28 different

categories (Solis & Thomas, 2011). Ethority, a German web monitoring company and social media consulting firm recognised the limitations of Solis & Thomas' visualisation when trying to apply their American model to the German-speaking-countries or even to Europe (Ethority, 2010). As important social networks in German-speaking-markets such as Xing or VZ-networks were missing, Ethority adapted the American model to the European market, as shown in Figure 4 below.

Figure 4: Conversation prism



Source: Ethority, 2010

In line with the ideology and concept of social media, Ethority encourages users to actively participate in discussions, give feedback, and exchange information with others in order to ensure that the prism is kept alive (Ethority, 2010).

According to Ethority's categorisation, the online community platforms considered in this study fall under the section "Forums". A definition of online communities is given in the subsequent section.

### **2.2.3.1 Definition of online community**

Rheingold (1993) was first to coin the term 'online community', and his definition is probably the most frequently quoted. He defines online communities as "social aggregations that emerge from the Net when enough people carry on public discussions long enough, with sufficient human feelings, to form webs of personal relationships in cyberspace" (p. 5). He proposes that computer-mediated communication (CMC) technology has introduced a new social life.

If an online community is seen as a group that gathers in digital space, we first need to take into consideration the traditional definition of a group and then compare it with a group in an online setting. According to McKenna and Green (2002), "all groups serve two main needs for members: to attain the defined goal or central task of the group (i.e., the purpose the group was formed to achieve), and the fulfilment of social needs for the members" (p. 120). These two main criteria will also have to be met by online groups. Without any purpose, an online group would probably not be built, especially as online communities form around common interests. Therefore, it is vital for online groups to meet its members' social needs (McKenna & Green, 2002).

Jones (1997) suggests that in looking for a definition of online community we should also consider the virtual settlement, which is the virtual place in which the interaction takes place. He further states that a minimum number of public interactions with a variety of participants have to take place in order for a group to be considered a community. Further, those interactions have to have a minimum level of sustained



membership over a period of time (Jones, 1997). The authors Blanchard and Markus (2004), however, consider 'sense of community' to be an essential characteristic of an online community. As mentioned earlier, sense of community can be characterised as follows (McMillan & Chavis, 1986):

- Identifying with the community and feelings of belonging to it
- Feelings of having influence on other community members and being influenced by them
- Feelings of being supported by the other community members and vice versa
- Feelings of relationships, shared history and a 'spirit of community'.

Blanchard and Markus' (2004) view that sense of community is essential, is supported by researchers like Preece (1999) and Rheingold (1993).

### **2.2.3.2 Typology of online communities**

There are many varieties of online communities, and there is no agreement among scholars about their typology. Three possible typologies will now be presented. They have been chosen because they describe some assumptions on which this study is based.

Hagel and Armstrong (1997) have distinguished communities on the basis of the purpose for which they are set up: communities of relationships, communities of interest, communities of fantasy, and communities of transaction. Hagel and Armstrong's (1997) typology can be extended to include communities of practice. Thus, the full range of community types, organised around the purpose for which they have been created, is described (De Valck, 2005).

An alternative way to distinguish online communities has been provided by Kozinets (1999). Firstly, he proposes to distinguish communities by purpose: information exchange vs. social interaction. Secondly, he suggests distinguishing communities by their social structure, which can either be loose or tight.

Another typology has been offered by Porter (2004), who proposes two first-level categories by which communities can be distinguished: member-initiated and organisation-sponsored communities. On a second level she adds the relationship orientation of the community: “member-initiated communities foster either social or professional relationships among members (e.g. customers, employees) and between individual members and the sponsoring organisation” (p. 6). Porter (2004) provides a discussion of key attributes that “online communities within a given class are likely to share” (p. 7). The attributes, called the five Ps, are described below (Porter, 2004):

### **Attribute 1 – Purpose**

This attribute describes the interaction content, the topic which is discussed in the online community. The purpose of the online community of the present study is clearly defined and described in the section ‘Research Setting’.

### **Attribute 2 – Place**

This attribute describes the online community’s structural properties. Structural properties can be the physical structure of the platform (Harrison & Dourish, 1996; Mitra & Schwartz, 2001) and its members’ physical awareness of the online community and the co-presence of others (Blanchard, 2004; Mitra & Schwartz, 2001).

As proposed by Blanchard (2004), the “sense of place in virtual behaviour settings comes from the social interactions between participants and their mental maps of the online community” (p. 12). Chapter 5 discusses the sense of place in online communities, based on qualitative interviews conducted with users.

Blanchard’s (2004) definition above leads to the proposition that participants sharing the same place at the same time can still see the virtual place quite differently. This can also be observed on the actual research site.

### **Attribute 3 – Platform**

This attribute refers to the interaction design, which can be synchronous, asynchronous, or hybrid. This distinction is important, as synchronous interaction is perceived as being a highly interactive environment, and “highly interactive environments can enhance a member’s perception of social presence, co-presence and sense of place” (Blanchard, 2004 cited in Porter, 2004 p. 8). Porter (2004) adds that even if the design of an online community platform would allow a high degree of interaction, members do not necessarily use those features. Thus, it is important not only analysing the design, but also the actual patterns of interaction in online communities.

In line with Porter (2004), Bagozzi et al. (2007) also consider the degree of interactivity of the communication medium to be important, as it “significantly and systematically influences both the processes and the outcomes of communication” (p. 90). In highly interactive groups, participants know each other and are more actively involved in communication. This engenders greater spontaneity and diversity of participation (Bagozzi et al., 2007). In interactive discussions it can be observed that participants often change topic during discussions, as people will do when sitting together and having a conversation. Interactivity can be determined by the contingency (how a community member’s response is based on preceding conversation) and mutuality (how community members connect to each other) of the conversation (Bagozzi et al., 2007).

### **Attribute 4 – Population interaction structure**

According to Porter (2004) there are three related research streams: (i) “online communities as computer-supported social networks (CSSNs), (ii) online communities as small-groups or networks and (iii) virtual publics versus online communities” (p. 8).

CSSNs describe the differences between “strong, weak, and stressful social ties. Strong ties emerge as a result of frequent and supportive contact among socially connected members of online communities. Weakly tied members also demonstrate supportive and reciprocal behaviour, despite the fact that they are socially and/or physically distant.

However, when communication among members becomes anti-social (e.g., when flaming, spamming, etc. occurs) these relations are described as stressful ties” (Porter, 2004 p. 8).

Online communities as small groups or networks have been thoroughly researched by Dholakia et al. (2004). They distinguish between a small-world network, which is a “tightly bounded, densely knit group with strong relationships between members” (p. 14) and a social network, which is “a loose bounded, sparsely-knit network of members sharing narrowly defined relationships with one another” (p. 14).

In cohesive networks, participants tend to identify with the group and not only with the focus of the discussion. They share social norms and build a social identity (Dholakia et al., 2004). In contrast, participants in sparse networks join the platform because of the common focus; there is an absence of mutual knowledge. Dholakia et al. (2004) found that online community type moderates both the reason why individuals engage in communities, and the strengths of an individual’s impact on the group. They further argue that “in network-based communities, because members do not know each other at first in most cases, and their motives are self-referent, a member’s reputation is likely to be crucial as a means of establishing trust and status and for fostering social interactions” (Dholakia et al., 2004 p. 31). Additionally, they say that “because small-group-based community members know each other well and participate to achieve group-referent goals, reputation systems may not be required or may be less essential” (Dholakia et al., 2004 p. 31). They found that group-referred values have a stronger importance for small-group communities and that self-referred values have a stronger importance for network-based communities (Dholakia et al., 2004).

As opposed to online communities, where likeminded people tend to meet, ‘virtual publics’ are spaces where all sorts of groups can gather and interact.

The population attribute is summed up by Porter (2004) as follows: It “is conceptualized as having three primary levels: (1) small group (where social ties tend to dominate), (2) network (where weak ties are prominent and stressful ties are likely) and (3) publics

(where interaction is variable and likely to include strong, weak and/or stressful ties). Some online communities will share attributes of both small groups and networks” (p. 12).

As can be deduced from the definition above, another important consideration in the context of online communities are the ties between community participants. In traditional communities such as neighbourhoods, people tend to have a similar socioeconomic status and can thus be considered to be homogeneous. In contrast, online community members come from many different locations and backgrounds and meet because of their shared interest. Thus, they can be considered a heterogeneous population (Wellman & Gulia, 1999). Anonymity, fewer social contact cues, and a lack of geographical or temporal limitations allow a much broader spectrum of people to join an online community than a traditional community. Online community members have a homogeneous interest but come from heterogeneous backgrounds. This heterogeneity allows them to bring in new information and resources. However, weak ties can be transformed into strong ties if there is a high level of interaction and participation (Wellman & Gulia, 1999).

#### **Attribute 5 –Profit model**

This attribute describes different models of return on investment. There is a plethora of possible profit models, such as banner ads in online communities.

#### **2.2.3.3 Community members**

Many studies focused on community member types (e.g. De Valck, 2005; Kozinets, 1999). In his study of online communities of consumption, Kozinets (1999) has defined four types of community members: (i) “the tourists who lack strong social ties to the group, and maintain only a superficial or passing interest in the consumption activity”, (ii) “the minglers who maintain strong social ties, but who are only perfunctorily interested in the central consumption activity”, (iii) “the devotees are opposite to this: they maintain a strong interest in and enthusiasm for the consumption activity, but have

few social attachments to the group” and (iv) the “insiders are those who have strong social ties and strong personal ties to the consumption activity” (p. 5).

## 2.3 Communication

Communication has been studied since ancient times<sup>1</sup>, and much has been written and said about it in the course of time. Communication studies concentrated on interpersonal communication until the first technologies were developed - mass media technologies. The term ‘mass media’ (use of media to reach a large audience) was coined in 1920 when radio and mass-circulation newspapers were introduced (Laughey, 2007). In the early 20th century, the emphasis was on propaganda and media effect, which were examined by scholars like Lasswell (1971), Lewin (1951), and Lazarsfeld et al. (1944). In the 1950s and 1960s, scholars like Innis and McLuhan conducted influential analyses of communication and technology (Innis, 1951; McLuhan, 1964).

Laughey (2007) presents eight distinctive strands in media theory. The present study borrows most from the interactionist and structuration strand of theory (Laughey, 2007), because “interactionist media theory considers the dynamic relations between producers, texts, technologies and the interpretative audience“ (Laughey, 2007, p. 78). The eight strands are discussed in the section 2.3.3.

Computer-mediated communication (CMC) has capabilities and functions that are thoroughly described in computer-mediated theories, such as the social presence theory by Short et al. (1976), the media richness theory by Daft and Lengel (1984), the SIDE theory by Reicher (1984), and the social information processing theory by Walther

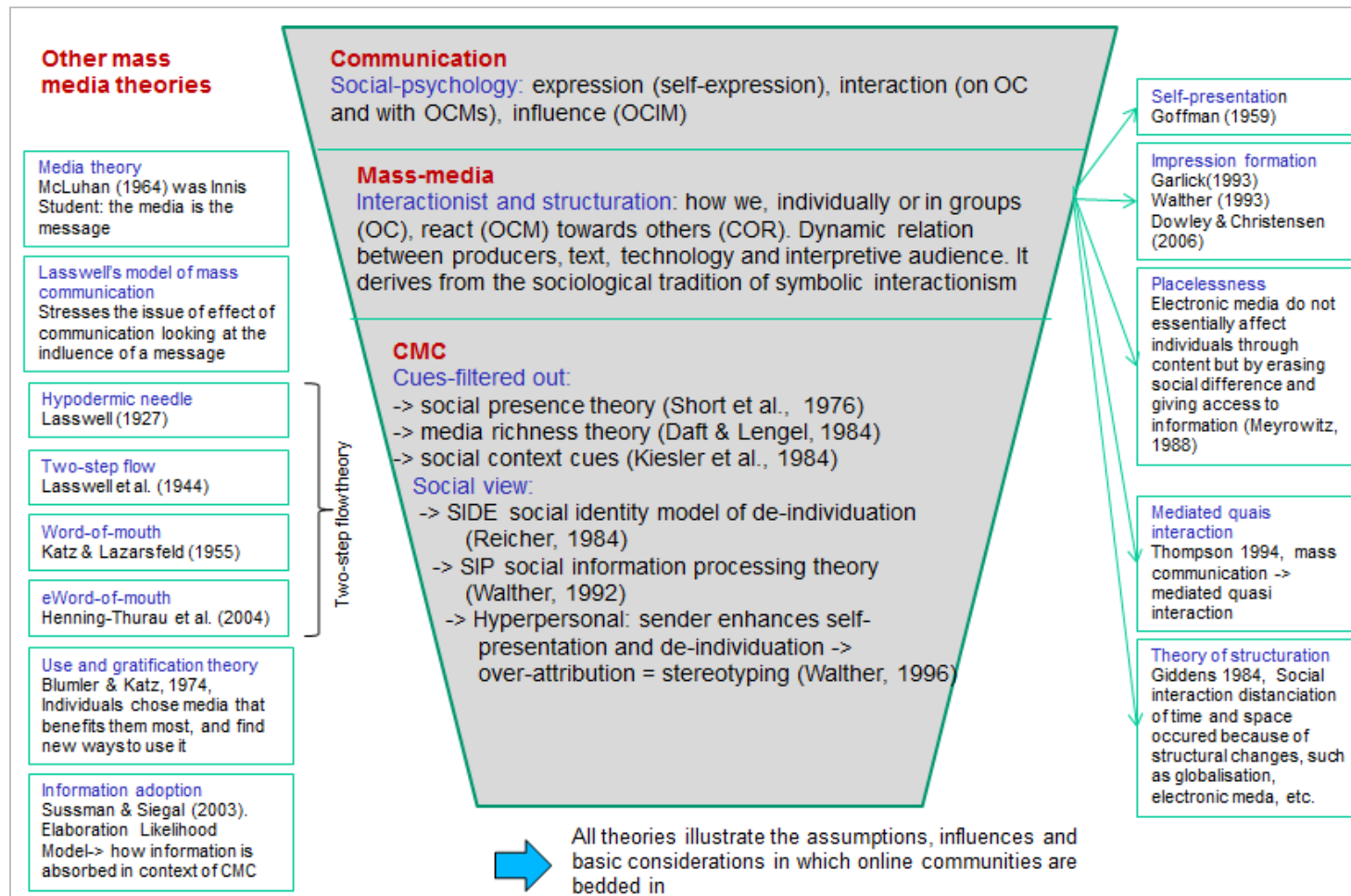
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<sup>1</sup> The greatest minds of ancient Greece were Socrates, Plato and Aristotle, who studied the art of effective speaking and persuading others – i.e. rhetoric.

(1992). No longer are the channels of communication distinctly interpersonal or mass-media based. Technological advances enable computer-mediated communication devices to function as outlets for interpersonal communication, as well. Further, the Internet has caused a certain loss of central control over information and communication (e.g. by the state or corporations); information has thus become more democratised (Watson, 2003).

The following figure presents the above-mentioned theories in more detail since they are important for this study.

Figure 5: Relevant communication theories



Source: Adapted from Laughey, 2007



This study links corporate communication to impression formation in a specific environment, namely in online communities. Before focusing on the peculiarities of CMC, an overview about the discipline of communication is provided, focusing on the strand of theory that is relevant in the context of this study. This study lays the ground to better understanding of the peculiarities of CMC.

### **2.3.1 Definition of communication**

Communication is the process by which people or organisations share information and ideas. Devito (1986) defines communication as “the process involved in the sending and receiving of messages” (p. 61).

Messages are considered as “formally coded symbolic and representational events of some shared significance in a culture, produced for the purpose of evoking significance” (Gerbner, 1967 p. 430). Gerbner (1967) sees communication as a stimulus-response paradigm. In this paradigm a stimulus (messages) only has a meaning when the receiver interprets the message. Also referring to the stimulus-response paradigm, Cronen et al. (1982) define communication as “a process through which persons create, maintain, and alter social order, relationships and identities” (p. 85). In line with Gerbner (1967) and Cronen et al. (1982), that author bases his study on an interactive view of communication.

### **2.3.2 Communication theories**

As stated above, communication as a discipline has fascinated scholars from the earliest days. Initially, they addressed the art of effective speaking and of persuading others, developing the theory of rhetoric (Craig & Muller, 2007). Throughout the history of humankind, a myriad of studies on communication has been conducted. These studies have yielded numerous theories. According to Craig and Muller (2007), there are “hundreds of different theories that approach communication from various, seemingly unrelated points of view” (p. ix). Scholars define communication in different ways that

can be mapped in either ‘contexts’ or ‘assumptions’. Contexts are the fields of communication, such as “cultural studies, economics, ethnography, film studies, linguistics, philosophy, political science, organizational studies, psychology and sociology” in which communication is studied (Watson, 2003 p. 2). The other taxonomy of dividing the field of communication studies emphasises the assumptions on which theories are built. These assumptions have been summarised into seven traditions of thoughts (Craig, 1999), which are illustrated in the table below.

*Table 1: Seven traditions of thought*

<i>Traditions</i>	<i>Description</i>
Rhetorical Tradition	The rhetorical theory was first proposed by the ancient Greek sophists. Based on the rhetorical theory, communication is a practical art of discourse (p. 135).
Semiotic Tradition	The semiotic tradition, such as the rhetorical tradition has a long history. In the semiotic tradition, communication is viewed as intersubjective mediation by signs. It studies how meaning is constructed and understood (p. 136).
Phenomenological Tradition	Theories based on the phenomenological tradition see communication as dialogue or experience of otherness (p. 138).
Cybernetic Tradition	The cybernetic tradition covers areas such as systems and information science, cognitive science and artificial intelligence. Communication is viewed through the cybernetic tradition as information processing (p. 141).
Socio-psychological Tradition	Communication as viewed by socio-psychological theorists is a process of expression, interaction, and influence (p. 143).
Socio-cultural Tradition	The socio-cultural tradition proposes theories that view communication as a symbolic process that produces and reproduces shared socio-cultural patterns (p. 144).
Critical Tradition	The critical tradition theorists think that communication occurs in a process of discursive reflection (p. 147).

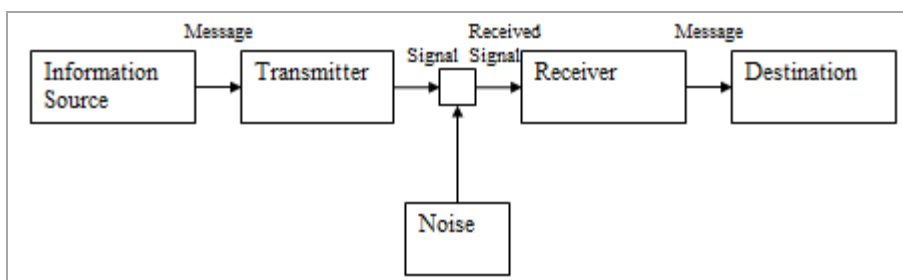
*Source: Craig, 1999 pp. 135-147*

This thesis is grounded in the socio-psychological tradition. Allport (1985) describes socio-psychology as being the scientific study of how people are influenced by others. He adds that we can be influenced by the actual, imagined or implied presence of the other, meaning that we are influenced even when the other is not present. Communication in the socio-psychological tradition is described as “the process by which individuals interact and influence each other [...] it is mediated by psychological predispositions (attitudes, emotional states, personality traits, unconscious conflicts,

social cognitions etc.) as modified by the emergent effects of social interaction (which may include the effects of media technologies and institutions as well as interpersonal influence)” (Craig, 1999 p. 143).

Shannon and Weaver’s (1949) mathematical theory lays the ground to practically all later communication theories. At that time the telephone cable and the radio wave were considered as the main channels (Fiske, 1990). Shannon and Weaver’s (1949) claim that the sender of the message (the source) is the decision maker as he decides on the content of the message. With a transmitter the message is transformed into a signal, which then is sent to the receiver of the message (for illustration see Figure 6). Fisk (1990) provides the following example: “For a telephone the channel is a wire, the signal an electrical current in it, and the transmitter and receiver are the telephone handsets” (p. 7).

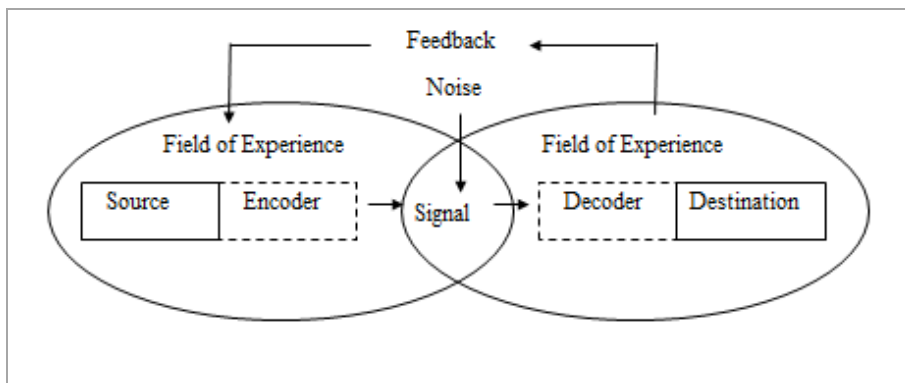
*Figure 6: Shannon and Weaver’s Model (1949)*



*Source: Adapted from Watson, 2003*

Schramm (1954) expands Shannon and Weaver’s (1949) theory by adding the notion of understanding. Both, the senders as well as the receivers have a field of experience that has a certain influence in how they understand the message (see Figure 7).

Figure 7: Schramm's model



Source: Adapted from Watson, 2003

Schramm (1954) also points out the importance of feedback (Watson, 2003) and thus contributes significantly to how we understand the communication process. “In this way, he fostered the trend toward an interaction paradigm for communication. His model could explain that while one person is speaking, the other is listening” (Heath & Bryant, 2000 p. 66).

### 2.3.3 Media and mass communication

In the early days of communication studies scholars concentrated on interpersonal communication. The introduction of mass-media, such as radio and newspapers changed the focus (Laughey, 2007). The main differences between interpersonal and mass communication are that mass communication can reach a large number of people and that the sender and receiver of a message were separated (Wood & Smith, 2005). In interpersonal communication, according to Cassata and Asante (1979), the source is usually concerned with one other person or a small group, whereas in mass communication the message is widely and rapidly distributed. In the broadest sense, mass communication refers to communication activities that involve large numbers of people. Perry (1996) states that much of the studies conducted on mass communication focus on “the scientific and humanistic study of the communication media and their audiences. These media include magazines, motion pictures, newspapers, radio, television, and a variety of new communication technologies” (p. 4).

Laughey (2007) presents eight distinctive strands of media theories addressing mass communication, which are briefly described in Table 2 below:

Table 2: Eight strands in media theories

<i>Strand of theory</i>	<i>Description</i>	<i>Theories and perspectives</i>
Behaviourist media theory	These theories try to evaluate the effect of the media on human behaviour and well-being. Politics and commercials are interested in measuring the power of the media and how they affect human behaviour.	Chain of communication and propaganda technique and direct effect theory (Lasswell, 1948) Seduction of the innocent (Wertham, 1955 cited in Laughey, 2007) Theory of mass panic (Cantril, 1947 cited in Laughey, 2007) Cultivation theory (Gerbner et al., 1986 cited in Laughey, 2007) Agenda-setting approach (McCombs & Shaw, 1972 cited in Laughey, 2007) Two-step flow (Katz & Lazarsfeld, 1955) Use and gratification theory (Katz et al., 1974 cited in Laughey, 2007)
Medium theory (and theories of modernity)	Medium theory is rooted in the understanding of media in modern times. Industrial capitalism and vast expansion are emphasised in modernity. It is said that “individual creativity is threatened by a hostile environment of oppressive politics, advanced economies, technologies and other social forces, including mass media” (Laughey, 2007 p. 31).	Medium theory (Innis, 1986; McLuhan, 1964) Theory of aura (Benjamin, 1973 cited in Laughey, 2007) Modernist theory (Levis, 1930 cited in Laughey, 2007) Theory of mass literacy (Riesman, 1950; Hoggart, 1957 cited in Laughey, 2007) Critiques of medium theory (Williams, 1983 cited in Laughey, 2007) Culture-consuming and mass-mediated public sphere (Habermas, 1962 cited in Laughey, 2007)
Structuralist media theory	Structuralist theory seeks to understand how systems work in order to be able to structure the individual parts. Powerful agents such as governments, which in reciprocity are structured by social systems, structure social lives. Media structure our lives, too.	Theory of language (Saussure, 1916 cited in Laughey, 2007) Theory of myth (Barthes, 1993 cited in Laughey, 2007) Theory of ideology and hegemony (Hall, 1982 cited in Laughey, 2007) Ideology of news and ads (Williamson, 1978 cited in Laughey, 2007) Subcultural theory (Hebdige, 1979 cited in Laughey, 2007) Theory of discourse (Foucault, 1995 cited in Laughey, 2007)
Interactionism and	Interactionism theory describes how we, in groups or	Symbolic interactionism (Blumer, 1967)

structuration media theory	individually, react towards others. “Interactionist media theory considers the dynamic relations between producers, texts, technologies and interpretative audience” (Laughey, 2007 p. 78). Structuration theory claims that social structure and social action interact and overlap.	Self-presentation theory (Goffman, 1959) Theory of placelessness (Meyrowitz, 1985) Concept of personae and para-social interaction (Horton & Wohl, 1956 cited in Laughey, 2007) Theory of mediated quasi-interaction (Thompson, 1994) Labelling and moral panic theory (Becker, 1963; Cohen, 1972 cited in Laughey, 2007) Theory of structuration (Gibbens, 1984)
Feminist media theory	Feminist media theory differs from other media theory in that “its unconditional focus on analysing gender as a mechanism that structures material and symbolic worlds and/or experiences of them” (van Zoon in Laughey, 2007 p. 100). Mass media play an important role in representing feminist interests.	Radical feminism (Dworkin, 1981 cited in Laughey, 2007) Theory of the male gaze (Mulvey, 1975 cited in Laughey, 2007) Mass-produced fantasies in the form of soap operas (Modleski, 1990 cited in Laughey, 2007) Romance fiction (Radway, 1984 cited in Laughey, 2007) Structural feminist analysis (McRobbie, 1977 cited in Laughey, 2007) Ethnographic analysis of the ideology (Ang, 1978 cited in Laughey, 2007) Theory of gender trouble (Butler, 1990 cited in Laughey, 2007)
Political economy (and post-colonial media theory)	These studies investigate media power and ownership. The political economic approaches are concerned with politics and the economics of media institutions and the produced texts. Postcolonial theory addresses the power of media in representing international markets and topics.	Theory of standardization (Adorno & Horkheimer, 1973 cited in Laughey, 2007) Theories of media and cultural imperialism (e.g. Schiller, 1969 cited in Laughey, 2007) Propaganda model (Herman & Chomsky, 1994 cited in Laughey, 2007) Critical political economy theory (e.g. Murdock & Golding, 1977 cited in Laughey, 2007) Orientalism (Said, 1978 cited in Laughey, 2007) Postcolonial theory (e.g. Hall, 1995 cited in Laughey, 2007)
Postmodern media theory	“Two aspects of postmodernist are often marked out: first, the emergence and proliferation of new media, information and communications technologies that trigger social change and are particularly indicative	Theory of simulation (Baudrillars, 1983 cited in Laughey, 2007) Postmodern theory of image (Boorstin, 1967 cited in Laughey, 2007) Pastiche and intertextuality (Jameson, 1991 cited in Laughey, 2007)

	of globalization; and, second, the rise of consumer culture and simultaneous demise of certain forms of production” (Lyon cited in Laughey, 2007 p. 147).	<p>Theory of the decline of metanarratives (Lyotard, 1984 cited in Laughey, 2007)</p> <p>Theories of the post-industrial society (Bell, 1973 cited in Laughey, 2007)</p> <p>Theories of the network society (Castells, 1996 cited in Laughey, 2007)</p> <p>McDonaldization thesis, (Ritzer, 1993 cited in Laughey, 2007)</p>
Consumerist media theory	Consumerist media theory highlights the consumerism behaviour of society today. It comprises a creative and active audience that not only consumes media but are media-literate and produce their own content.	<p>Theory of consumer resistance and consumer power (Fisk, 1989 cited in Laughey, 2007)</p> <p>Theory of everyday consumer tactics (De Certeau, 1984 cited in Laughey, 2007)</p> <p>Theories of fandom as textual poaching and participatory culture (Jenkins, 1992 cited in Laughey, 2007)</p> <p>Theories of the consumption cycle and mediated experience (Silverstone, 1994 cited in Laughey, 2007)</p> <p>Theories of the diffused audience and consumer authority (Abercrombie &amp; Longhurst, 1998 cited in Laughey, 2007)</p> <p>Habitus and field theory (Bourdieu, 1977 cited in Laughey, 2007)</p>

*Source: Adapted from Laughey, 2007*



Having summarized the media theories in general, we will now focus on the most relevant theories for this study. This study relies most on the strand of interactionist and structuration strand theory; the whole strand will be examined in more detail, with the exception of personae and para-social interaction theory, as well as labelling theory and the concept of moral panic. The reason for excluding the two aforementioned theoretical approaches is that they bear no direct relation to the phenomenon examined in this study. Personae and para-social interaction theory discusses the “apparent familiarity between media personalities and audiences that can be established through routine use of radio and television” (Laughey, 2007 p. 86). Labelling theory addresses the act of deviant behaviour (e.g. criminal activity) while moral panic explains how “a condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by the mass media” (Cohen cited in Laughey, 2007 p. 92).

There is some fuzziness and overlapping across the aforementioned strands. Therefore, when defining the conceptual model and hypotheses in chapter 3, some ideas deriving from other strands will be included. Thus, before concentrating on interactionist and structuration theory, the relevant theories of other strands are briefly discussed.

### **2.3.3.1 Relevant theories of other strands**

This section briefly discusses various theories and how they relate to the present study.

#### **2.3.3.1.1 Lasswell’s model of mass communication**

Many scholars consider communication to be a working definition and use Lasswell’s (1948) maxim that reads as follows: Who, says what, in which channel, to whom, with what effect.

Lasswell’s (1948) model stresses the issue of ‘effect’ of communication looking at the influence of a message. Lasswell’s maxim was followed by most scholars (Fiske, 1990).

This study focuses on impression formation, which is one of the effects of the communication taking place in online communities.

#### **2.3.3.1.2 Medium theory**

According to Innis (1951) different type of media using diverse materials had different kind of effects. This 'bias of communication' says that "any medium of communication will be biased towards its utility either across time or space" (Laughey, 2007 p. 31). Innis (1951), drawing on historical examples, showed that "the medium through which knowledge and information is circulated has more impact on societies than the character or content of that knowledge or information. As such, media technologies determine human affairs to the extent that new technologies can create new ways of living" (Laughey, 2007 p. 32). McLuhan (1964), a student of Innis (1951), has built on Innis' theory and has made the difference between 'oral' and 'written' communication. He further developed the ideas by studying the differences between print media and modern media, such as television and radio. McLuhan (1964) introduced medium theory, arguing "that any advanced modern society is shaped by the various media technologies that are available to it. Media have powerful effects on society. Moreover, media become extensions of ourselves; extensions of our human senses" (Laughey, 2007 p. 33). In this sense it can be added that nowadays, social media (including online communities) have also significantly changed the way and understanding of communication.

#### **2.3.3.1.3 Hypodermic needle theory**

In its infancy, mass communication focused on "diffusion of technologies, to over attribute effects of technology and under attribute effects to the individual and social context" (Spitzberg, 2006 p. 630). One important approach was the hypodermic needle theory (Lasswell, 1927), which claims that by injecting appropriate messages mass media can directly influence a very large audience. Since that audience can be said to be passive, the messages thus injected trigger the desired response.

#### **2.3.3.1.4 Two-step flow theory**

The hypodermic needle theory was challenged by the two-step flow theory, introduced by Lazarsfeld et al. (1944). The team studied the American presidential election of 1940, which led them to come up with the theory of a two-step flow and the concept of opinion leadership. Many scholars have built on this work, some focusing on motivation (Dichter, 1966; Robertson, 1970), others on measurement of opinion leadership (Childers, 1986; Flynn et al., 1996; King & Summers, 1970).

The two-step flow can be described as follows: “The opinion leader is a specialist on a product of interest who provides another consumer with product information about that product class. Opinion leaders are more knowledgeable about and involved with their product class of interest and have more extensive contact with relevant mass media than other consumers” (Price et al., 1987, p. 331).

The concept of opinion leadership, initially proposed by Lazarsfeld et al. (1944), has been criticized by several scholars. Robertson (1970) states that the members of an audience have the same exposure to mass media and that the potential to play the role of opinion leader resides in all group members; there is not a ‘one and only’ opinion leader in a group. The model, he says, implies active opinion leaders and a passive audience, but in fact all use mass media. Arndt and Cox cited in Turnbull and Meenaghan (1980) suggest that up to 50% of word of mouth is initiated by the majority. Turnbull and Meenaghan (1980) propose that the opinion leader is not of uniform importance at all stages of the diffusion. Myers and Robertson (1972) hold that opinion leadership is a two-way process, as the opinion leaders are themselves influenced by the people they speak to. This view is supported by Aaker and Meyer (1975), as well as by Reynolds and Darden (1971).

Some consumers can be considered opinion leaders across a wide variety of product categories and consumption activities. These consumers, also known as ‘market mavens’, have more experience regarding the whole market rather than being product class specialists (Feick & Price, 1987).

Bernett and Manheim (2006) challenge the two-step flow theory by suggesting that with today's technology the information can be directed in one-step to a specific audience and thus having a direct effect on its members. This study is based on this proposition.

#### **2.3.3.1.5 Word of mouth**

In the context of opinion leaders, a brief discourse about word of mouth, the process by which opinion leaders spread the word, is warranted. Word of mouth refers to informal communication about products and services among individuals who are independent of the marketer (De Valck, 2005). If word-of-mouth communication spreads from people with perceived credibility and neutrality, it can be a powerful force that motivates others to take action. It diffuses through a network of individuals who communicate with each other (Blackwell et al., 2001).

According to the literature, word of mouth appears to include several aspects:

- Enthusiasm, which includes frequency and the amount of contacts (Reingen & Kernan, 1986; Brown & Reingen, 1987; Anderson, 1998)
- Details of word of mouth, or how much is understood (Bone, 1992)
- Praise or the favourableness of word-of-mouth communications (Arndt 1967; Swan & Oliver, 1989).

Word-of-mouth has long been an essential topic of marketing researchers (Katz & Lazarfeld, 1955; Richins, 1983), and it has been rediscovered as the most important source of brand building and customer acquisition (Tax & Chandrashekar, 1992; Mangold et al., 1999). Marketing, in particular, focusses on word of mouth and its significant role in the communication of online communities (Hagel & Armstrong, 1997). Several studies examine the Internet as a source of electronic word-of-mouth communication (e.g. Henning-Thurau et al., 2004; Bickart & Schindler, 2001). Their findings suggest that the traditional word-of-mouth mechanisms can also be found on the Internet. That means, electronic word-of-mouth effects seem to be very similar to offline word-of-mouth effects.

Kirby and Marsden (2006) have identified four distinct areas of word-of-mouth literature, which are illustrated in Table 3 below:

*Table 3: Four areas of word-of-mouth literature*

	<i>Antecedents to word of mouth (cause)</i>	<i>Consequences of word of mouth (effect)</i>
Receiver of communication	QI: “Why do people listen?” Related variables: external information search, product category (perceived risk), type of relationship with source (tie strength)	QII: “The power of word of mouth”. Related variables: key communication effectiveness variables (awareness, attitude change, behavioural intention, purchase behaviour)
Communicator	QIII: “What makes people talk?” Related variables: opinion-leadership, satisfaction/dissatisfaction, promotional activities/direct influence of advertiser	QIV: “What happens to the communicator after the word-of-mouth event?” Related variables: cognitive dissonance, ego-enhancement

*Source: Kirby & Marsden, 2006 p.168*

Quadrant I (QI) describes which factors influence the use of word of mouth in the information gathering process. An important theory that can be assigned to this quadrant is the strength-of-ties theory developed by Granovetter (1973). He suggests that a strong relationship (strong ties) and a high degree of homophily (similarity) between people increases the likelihood of word of mouth communication (Brown & Reingen, 1987). “Tie strength is defined as the combination of the amount of time devoted to the relationship, and the level of emotional intensity, intimacy and reciprocity reached” (De Valck, 2005 p. 43).

Research that can be categorized as being in Quadrant II (QII) investigates the consequences of word of mouth from the receiver’s perspective. The two-step flow theory (see 2.3.3.1.4) can be assigned both to QII and QIII since it describes the cause and the effect of word of mouth. Kirby and Marsden (2006) posit that “another reason suggested by the two-step flow theorists is that normative influence (conformity to influencers and group norms) is also at play when word of mouth (informational influence) is passed along” (p. 170). The hypothesis that word-of-mouth communication is stronger than other marketing communication activities is supported by many studies

(Kirby & Marsden, 2006). The power of word of mouth can be explained by the attribution theory, which claims that “people tend to try to figure out why others do what they do” (Kirby & Marsden, 2006 p. 171). With regard to word of mouth, the receiver of a message tends to believe that if a message comes from a neutral source it must be trustable, as the sender does not have any commercial interest in spreading the word (Arndt, 1967; De Valck, 2005).

The main focus in Quadrant III is on opinion leaders (see 2.3.3.1.4). It defines the relationship between word of mouth and satisfaction or dissatisfaction. Satisfaction leads to positive word of mouth, dissatisfaction to negative word of mouth. It has also been shown that the easier it is for a person to complain to a company, the less likely it is that he or she will engage in negative word of mouth (Kirby & Marsden, 2006).

Quadrant IV (QIV) deals with the consequences of word of mouth for the communicator. It is suggested that these include “ego-enhancement and the reduction of cognitive dissonance” (Kirby & Marsden, 2006 p.173).

In the context of the present study, we look at the consequences of word of mouth from the perspective of the receiver (see QII), namely when interpersonal communication does influence an online community member’s impressions formed about a COR. This study further investigates the effect of online community corporate impression on word of mouth (see QIII).

#### **2.3.3.1.6 Electronic word of mouth**

The interest in word-of-mouth communication mainly derives from its importance to online communities. Word of mouth taking place on the Internet is referred to as electronic word-of-mouth (Henning-Thurau et al., 2004), which also incorporates a number of other, similar concepts: “Thus, mention is made of viral marketing, email marketing, Internet word-of-mouth, word-of-mouth marketing, and electronic word-of-mouth” (Goyette et al., 2010). It has been studied by many scholars, who mainly focus on i) electronic word-of-mouth’s influence on consumer consumption (e.g. Senecal and

Nantel, 2004), ii) customers' motives for engaging in electronic word-of-mouth (Goldsmith, 2006), iii) for sending electronic word-of-mouth messages, or for speaking about them (Henning-Thurau et al., 2004, Lee et al., 2008). One line of research focusses on measuring electronic word-of-mouth by proposing an electronic word-of-mouth scale (Goyette et al., 2010). Bickart and Schindler (2001) put forward that electronic word-of-mouth, like traditional word-of-mouth, has greater credibility than other types of promotional messages, while Gruen et al. (2006) suggest that "customer-to-customer online know-how exchange affects customers' perception of product value and their likelihood to recommend the product to others, but does not influence customer repurchase intentions" (p. 449).

#### **2.3.3.1.7 Information adoption model**

Even if electronic word-of-mouth can transmit information about products, services, or a company, the way information is understood differs from person to person (Chaiken & Eagly, 1976). Information adoption process studies examine what different influences information can have on consumers. During the information adoption process the transmitted information is converted into knowledge by the recipient (Nonaka, 2004). Sussman and Siegal (2003) cited in Cheung et al. (2008) have created the elaboration likelihood model (ELM), which shows how information is absorbed in the context of computer-mediated communication.

According to Sussman and Siegal (2003) cited in Cheung et al. (2008), "the ELM states that in different situations, different message recipients will vary in the extent to which they cognitively elaborate on a particular message, and these variations in elaboration likelihood affect the success of an influence attempt, along with other factors" (p. 7). As stated by Cheung et al., (2008), the "ELM posits that a message can influence people's attitudes and behaviours in two ways: centrally and peripherally" (p. 231). 'Centrally' refers to the quality of an argument while 'peripherally' refers to subjects that are not directly related to the argument (Petty & Cacioppo, 1986 cited in Cheung et al., 2008). Cheung et al. (2008) state that "when applied in a CMC context, the information adoption model has two key propositions: First, it considers argument quality

(information quality) as the central influence; second, it looks at source credibility as the peripheral influence (Sussman & Siegal, 2003)” (p. 231). In line with Cheung et al. (2008), Zhang & Watts (2008) also examine factors that are not directly related to the message. Instead of using the ELM, they used the similar Heuristic-Systematic Model (HSM) for their investigations. The HSM considers two information processing modes: systematic and heuristic processing. Zhang & Watts (2008) state that “during systematic processing, a message recipient carefully scrutinizes the presented information and works to incorporate it into what he or she already knows. During heuristic processing, a message recipient makes use of heuristics and simple decision rules embedded in the message context to do this” (p. 75). Heuristics that may be available in online communities are social context cues, source credibility, time stamping, user names, etc. (Zhang & Watts, 2008).

#### **2.3.3.1.8 Use and gratification theory**

The use and gratification theory (Blumler & Katz, 1974) starts from the premise that individuals chose the media that will benefit them the most. According to Blumler and Katz (1974), individuals know how they would like to use media and how media should be used. Media influence users’ daily lives and, in turn, users influence the way media is used by finding new ways to use it. Media differ in the way they satisfy certain needs. According to Flanagin and Metzger (2001), face-to-face communication is always rated first in terms of satisfying users’ communication needs, whereas the ability of computer-mediated communication to satisfy its users’ needs is rated in first to fourth place. Haythornthwaite et al. (1998) argue that users who frequently exchange information are likely to combine different types of media.

#### **2.3.3.2 Interactionist and structuration strands of theory**

Having outlined some of the most relevant theories of the other strands, the following will expand on the strand of interactionist and structuration theory. It derives from the sociological tradition of symbolic interactionism (see Blumer’s (1969) theory of symbolic interactionism 2.2.2.1) (Laughey, 2007). The interactionism theory describes



how individuals or groups act in relation to others in particular social environments. In this context the media are seen to convey meaning that need to be learned and understood. Thus, the individual has to interpret the media and hence is both an actor and acted upon (Blumer, 1969).

#### **2.3.3.2.1 Theory of structuration**

Giddens's (1984) theory of structuration claims that social structures are both produced (rules that compose social structure) and reproduced (structural rules that exist as consequences of the interaction) by everyday life. Giddens (1984) has identified two types of interaction – social integration and system integration. The former refers to face-to-face interaction while the latter refers to the mediated interaction between individuals or groups across time and space. The distancing of time and space occurred because of structural changes, such as globalisation, the emergence of electronic communication technologies and monetary exchanges. Electronic media allow the transmission of information over time and space. According to Giddens (1984), “media forms extend presence availability beyond contexts of physical proximity and the immediate physical limits of the body” (p. 122). Giddens (1984) adds that nowadays we can live and work in distant time and space dimensions.

#### **2.3.3.2.2 Theory of self-presentation**

Goffman (1959) developed the theory of self-presentation, which describes how individuals or groups “perform an expression of themselves to others. This expression is usually intended to form a favourable and amicable impression” (Laughey, 2007 p.79). Goffman (1959) states that “when an individual plays a part he implicitly requests his observers to take seriously the impression that is fostered before them. They are asked to believe that the character they see actually possesses the attributes he appears to possess, that the task he performs will have the consequences that are implicitly claimed for it, and that, in general, matter are what they appear to be” (p. 17).

Goffman (1959) compares our social life with a drama. According to him, individuals play a variety of roles on different social stages. On each social stage, an individual offers a somewhat different version of his or her self, which must to some extent, both intentionally or unintentionally, be planned. Performers do not always act individually but may gather in teams: “If performers are concerned with maintaining a line they will select as teammates those who can be trusted to perform properly” (Goffman cited in Laughey, 2007 p. 80). Nowadays, a team could, for example, be a promotion team dealing with impression management (Laughey, 2007). Goffman (1959) goes on to explore the two sides of an individual’s behaviour: backstage and onstage behaviour. On stage, the actors play a specific role (e.g. appearance, manner), and backstage they relax, study, develop new strategies for future presentations (Meyrowitz, 1985).

In contrast to the concept of self-presentation, the concept of self-disclosure deals not with a performance but with the “real” picture of an individual, i.e. the actor reveals his or her own personal identity (Johnson, 1981).

These two concepts are not mutually exclusive; it is possible, even likely, that self-presentation of any kind will include a certain amount of true information about the performer, i.e. self-presentation includes self-disclosure, and goes beyond it (Johnson, 1981).

#### **2.3.3.2.3 Impression formation**

Since one aspect of self-presentation is the actor’s goal to influence the impression others may form of him or her, the literature on impression formation also needs to be considered.

By interacting with others, we form impressions about them (Downey & Christensen, 2006). The information thus gained potentially has a significant effect on the success of the interaction (Garlick, 1993). In order to be persuasive, an interaction must generate a strong impression of the other party (Walther, 1993).

Burgoon and Le Poire (1993) illustrate that initial information accounts for 34% of the variance of later evaluations. Garlick (1993) mentions that “research has suggested that nonverbal cues are typically more important than verbal cues for relational, attributional and affective/attitudinal judgments such as those made in characteristic impression judgments” (p. 59). In computer-mediated environments, however, nonverbal cues are absent (Walther, 1996). Many scholars have investigated this phenomenon and found that other types of “nonverbal” cues might have an impact in computer-mediated environments (see Section 2.3.4.).

#### **2.3.3.2.4 Placelessness**

Meyrowitz (1985) has adapted Goffman’s idea of drama, combining it with McLuhan’s (1964) medium theory. He claims that the media create a ‘middle region’ blurring the line between backstage and front stage behaviours. The new media have torn down the traditional places that contained particular behaviours. “Media create the basis for new group identities” (Meyrowitz, 1985 p. 157). Electronic media do not essentially affect individuals through content, but affect them by erasing social differences and by giving access to information to a wide audience. Thus, Meyrowitz argues that electronically mediated communication changes the social roles and hierarchies that dictate an individual’s ‘place’ in society.

#### **2.3.3.2.5 Mediated quasi-interaction**

Thompson (1994) makes the distinction between three types of interaction. The first one is face-to-face communication that when two or more individuals are co-present. In face-to-face communication individuals speak with each other in alternate roles and also use symbolic cues.

The second type of interaction is called mediated interaction. Here, a technical device such as a telephone is used. The individuals are separated by space, time, or both.

The last type of communication uses mass communication media and is called mediated quasi-interaction. It addresses an indefinite range of potential recipients. The communication flow is unidirectional, individuals still are linked together and there is a symbolic exchange. “Once symbolic forms gain extended availability across time and space the traditional boundary between public and private may be transformed; hence the private domestic setting has become a principal site of mediated publicness” (Thompson, 1994 p. 243).

Thompson (1994) states that the media allows a kind of de-sequestration of experience, revealing representations of experience to which individuals would not otherwise have access in their daily lives. He furthered that “the media produce a continuous intermingling of different forms of experience, an intermingling that makes the day-to-day lives of most individuals today quite different from the lives of previous generations” (Thompson, 1994 p. 227).

All theories described in this section (2.3.3) illustrate the assumptions, influences and basic considerations in which online communities are bedded in and this study is based on. After describing mediated mass communication in general, a focus on a specific type, namely computer-mediated communication (CMC) is given.

#### **2.3.4 Computer-mediated communication**

Different technological devices such as radio or television have spawned mass means of communication that have helped change the way people communicate, i.e. send and receive information. The introduction of computers and the Internet have paved the way for a new communication era by offering diverse features that are different from the traditional media and face-to-face interactions.

There are many acceptable definitions of the term computer-mediated communication (CMC), but the present study restricts itself to two of them. The definition proposed by December (1996) incorporates the classical communication theory established by Schramm (1954) and the concept of social exchange of information. He describes CMC

as “the process by which people create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages ” (p. 14). Culnan and Markus (1987), on the other hand, define computer-mediated communication as the “interactive, computer-mediated technologies that facilitate interpersonal communication among several individuals or groups” (p. 422).

CMC is used for meeting and retrieving information, communicating and staying with distant individuals, leisure and entertainment and for maintaining relationships (Lea & Spears, 1995; McKenna et al., 2002).

The properties of CMC differ from other mediated or interpersonal communication. Joinson (2003) proposes five elements that help us understand the relation between the technology and the social behaviour:

- “Synchronicity
- The cues transmitted
- Bandwidth and cost constraints
- The level and type of anonymity
- Exclusivity” (p. 21).

**Synchronicity:** Individuals can communicate asynchronously or synchronously. By using asynchronous communication an individual has more time to respond and can plan, revise and reflect on his or her responses (Joinson, 2003). According to Walther (1992) in computer-mediated communication time and geographical space are becoming irrelevant.

**The cues transmitted:** In comparison to face-to-face interaction, a vital constraint of computer-mediated communication is the lack of social context cues (Short et al., 1976; Joinson, 2003). The resulting impact of this shortcoming will be discussed in more detail below.

Bandwidth and cost constraints: High cost (e.g. money, time) result in the fact that individuals tend to write short messages. This has an impact on how the messages are perceived (Joinson, 2003).

Anonymity: Due to missing nonverbal cues, the identity of other individuals is not immediately apparent (Joinson, 2003). Less social context cues or low social presence can balance out differences in status. In addition, individuals will have more control over the content of their self-disclosures (Wellman, 2001).

Exclusivity: This factor refers to the ability of the sender and the recipients to exchange messages privately (Joinson, 2003).

Herring (1999) underlines two additional properties of the medium which “are often cited specifically as obstacles to interaction management:

- lack of simultaneous feedback, caused by reduced audio-visual cues and the fact that messages cannot overlap
- disrupted turn adjacency, caused by the fact that messages are posted in the order received by the system, without regard for what they are responding to” (p. 3).

Reduced message feedback can lead to more uncertainty and misunderstanding. Users try to adapt to this shortcoming by finding alternatives (such as adding symbols e.g. “%”) to indicate that the messages is not yet finished. Moreover, computer-mediated communication can leave a written record. This leads to a “persistent conversation” that “aids the user’s cognitive processing” (Herring, 1999 p. 17).

Another feature of CMC arises from the fact that users can save their exchange and can hold simultaneous discussions that they or others can refer back to later (Herring, 1999).

Jones (1998) proposes yet another important consideration by stating that “CMC not only structures social relations, it is the space within which the relations occur and the

tool individuals use to enter that space [...] CMC, of course, is not just a tool; it is at once technology, medium, and engine of social relations” (pp. 11-12).

Computer-mediated communication has been researched from different perspectives, which are outlined in the table below.

*Table 4: Research perspectives of computer-mediated communication studies*

<i>Perspectives</i>	<i>Description</i>
Personal and technical characteristics	Characteristics of media compared with characteristics of individuals using those media (Hitz & Turoff, 1978).
Socio-psychological cues	Few social context cues -> anti-normative behaviour -> deregulated, extreme behaviour (Kiesler et al., 1984; DeSanctis & Gallupe, 1987; Kiesler, 1986; McGuire et al., 1987; Sproull & Kiesler, 1986; Lea & Spears, 1991b; Spears et al., 1990). Few social context cues -> more equal participation; takes longer to find consensus; time is a critical factor in CMC (Walther, 1992; Walther et al., 1994).
Social context	Media perceptions are subjective and are social constructs (Fulk et al., 1990). SIDE Model (Social Identity Theory and De-individuation Processes Model) (Reicher, 1984; Postmes et al., 1998; Lea & Spears, 1991b; Spears & Lea, 1994; Spears et al., 1990). Adaptive structuration theory (Poole & DeSanctis, 1990) describes structural changes in a broader sense and can be applied to explain the media chosen by an individual and the social context he or she is in. It suggests that media can be used in a different way than the technology it was originally designed for.
Media	Evolution and impact of media. Roles of media and its use (Innis, 1972). Media's characteristics create and operate in a social context, with a strong focus on medium characteristics, rather than on what it conveys or how information is received (McLuhan, 1964). Media "are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequence that they leave no part of us untouched, unaffected, unaltered. The medium is the message. Any understanding of social and cultural change is impossible without an understanding of the way media work as environments" (McLuhan & Fiore, 1967 p. 26). Social presence theory, suggesting that CMC users are deprived of a social presence – a 'we are together' feeling (Short et al., 1976). Media richness theory (Daft & Lengel, 1984) describes which media are defined as rich and which as lean media. Social interactionism theory (Trevino et al., 1987) supports McLuhan's view of "the medium is the message", since for them the medium itself has a symbolic meaning. Diffusion of innovation, explaining how media (or innovation) use develops in a community (Rogers, 2003). Critical mass theory that has been used to describe that a critical mass is needed for a media to be successful (Markus, 1987).



Language and rhetoric in CMC

Simultaneous interactive written discours in CMC dialogues (Ferrara et al., 1991).

Technology changed culture and thought and brought about a shift from orality to literacy (Ong, 1982).

Uniqueness of WWW text and its decentrality (Mitra, 1999).

*Source: Adapted from Laughey, 2007*

The most important constrain of CMC is that “you cannot see or hear the person you are communicating with” (Joinson, 2003 p. 25). Thus, many important studies focus on task-oriented communication (e.g. Short et al., 1976; Kiesler et al., 1984; Daft & Lengel, 1984; Sproull & Kiesler, 1986), concentrating on social context cues, while more recent studies investigate the social aspects of CMC (e.g. Rice, 1987b; Fulk et al., 1990; Lea & Spears, 1991b; Walther, 1992, 1995, 1996; Walther et al., 1994). A detailed description of those approaches can be found below.

#### **2.3.4.1 Cues-filtered-out approach**

The ‘Communication Research Group’, based at the University College London, conducted one of the first research projects on computer-mediated communication. They identified different attributes of computer-mediated communication and studied how these are related to the perceived presence of the user (Joinson, 2003). Initially, scholars were arguing that due to missing social context cues (e.g. physical attributes, gestures, dress, social status, tone, and grammar) less social information can be conveyed in CMC. This was called the ‘cues-filtered-out’ approach (Joinson, 2003).

Many scholars studied the effect of lacking or strongly reduced contextual cues on impressions formation in CMC (Short et al. 1976; Sproull & Kiesler, 1986). With respect to the ‘cues-filtered-out’ approach three well-established theories need to be mentioned: i) the social presence theory, ii) the media richness theory and iii) the social context cues theory. They are described in more detail below. Rice (1993) underlines the importance of these theories by proposing that “the essential underlying principle in both theoretical tradition is that a good match between the characteristics of a medium (such as high in social presence or media richness) and one’s communication activities (such as social-emotional activities such as getting to know someone, or equivocal tasks such as strategic decision making) will lead to ‘better’ (more effective, satisfying, etc.) performance” (p. 453).

#### **2.3.4.1.1 The social presence theory**

Short et al. (1976) developed the social presence theory that focused on the idea that if there is little social presence, the communication is more impersonal. Short et al. (1976) explain social presence as follows: “Although we would expect it to affect the way individuals perceive their discussions, and their relationships to the person with whom they are communicating, it is important to emphasize that we are defining Social Presence as a quality of the medium itself. We hypothesize that communications media vary in their degree of Social Presence and that these variations are important in determining the way individuals interact” (p. 65).

The theory further describes that media vary in their “capacity to transmit information about facial expression, direction of looking, posture, dress and nonverbal, vocal cues” (Short et al., 1976 p. 65). In addition to that, Fulk et al. (1987) describe ‘social presence’ as individuals who interact and are friends with each other, perceive each other to be psychologically present and show their emotions.

Face-to-face communication was compared to telephone communication in the first study of Short et al. (1976). They were investigating “what people lost” (p. 26) when communicating over the telephone (Joinson, 2003). They maintained that social information is lost if it is only transmitted via telephone, as opposed to face-to-face. Short et al. (1976) claim that in order for the communication to be effective, ‘intimacy and immediacy’ or the ‘sense of being with one another’ is required. Mehrabian (1969) describes ‘immediacy’ as “those communication behaviours that enhance closeness to and nonverbal interaction with another” (p. 203). According to Mehrabian, social context cues can lead to a deeper, more affective, and immediate interactions.

Intimacy is another key concept to which social presence is related to. This idea is grounded on Argye and Dean’s (1965) intimacy-equilibrium theory. It claims that there is constantly an equilibrium in any intimacy between communicators (Joinson, 2003). If one communicator enhances or reduces his or her intimate behaviour, the other party will compensate for it (Tidewell & Walther, 2002). If Short et al. (1976) are correct in

believing that intimacy is mainly conveyed through social context cues (e.g. gestures), this only means that mediated interactions are less intimate. Though, Short et al. (1976) also claim that verbal cues can be a substitute for the absent social context cues: “Thus head-nods indicating agreement be replaced by verbal phrases such as ‘I quite agree’ ” (p. 64). In summary it can be said that the more cues can be transmitted by a medium the higher the social presence is perceived. Thus, face-to-face interactions are claimed to have the highest level of social presence while mediated interactions have a rather low social presence (Short et al., 1976).

#### **2.3.4.1.2 Media richness theory**

Along the same lines as the social presence theory, media richness theory (Daft & Lengel, 1984) deals with the amount of social context cues that can be conveyed through a medium. Daft & Lengel (1984) categorise the media by classifying face-to-face communication as being the ‘richest’ because of its multiplicity of channels (visual, verbal, etc.) and its immediacy of response. Next, ‘moderate’ media such as telephone and videoconferencing are mentioned. CMC is categorised as a ‘lean’ media because it does not have the ability to transmit social context cues and it has less immediate response capabilities. According to Daft and Lengel (1984) individuals select a medium according to their needs of conveying a specific type of messages. If an individual for instance wants to transmit emotional or complex information he or she will select a ‘rich’ media to do so. There are situations, however, in which a lean media is more appropriate: “When messages are very simple or unequivocal, a lean medium such as CMC is sufficient for effective communication. Moreover, a lean medium is more efficient, because shadow functions and coordinated interaction efforts are unnecessary” (Walther, 1992 p. 57).

#### **2.3.4.1.3 Social context cues theory**

The social context cues theory proposes that social context cues are provided by the medium itself (Kiesler et al, 1984; Dubrovsky et. al., 1991). Kiesler et al. (1984) argues that CMC has “(a) a paucity of social context information, and (b) few widely shared

norms governing its use” (p. 1126). Kiesler et al. (1984) describe the impact of the deficiencies of social context cues as follows: “Social standards will be less important and communication will be more impersonal and more free because the rapid exchange of text, the lack of social feedback, and the absence of norms governing the social interaction redirect attention away from others and toward the message itself“ (p. 1126). Dubrovsky et al. (1991) concede that communication is influenced by status hierarchy, which, however, plays a smaller role in CMC. Kiesler et al. (1984) studied computer-mediated communication by focusing on group decision-making as well as uninhibited communication. They argue that the absence of contextual cues could lead to flaming as the social statuses of the individuals are not apparent anymore. The lack of social context cues gives rise to de-individuation and stronger group norms (Kiesler et al., 1984).

One of the most important investigations in the 1980s was Sproull and Kiesler’s (1986) study of the behaviour of Electronic Mail Systems (EMS). They found that “all communications media attenuate to at least some degree the social context cues available in face-to-face conversation. The telephone reduces dynamic and static cues by eliminating visual information about communicators. Letters and memos reduce static cues by imposing standardized format conventions: they eliminate dynamic cues altogether” (Sproull & Kiesler, 1986 p. 1496). Sproull and Kiesler (1986) state that the absence of social context cues results in greater anonymity and thus gives rise to self-centred comporment and status equalisation. This again fosters extreme communication with intense language (i.e. flaming). The scholars also found that individuals using CMC tend to overemphasize the importance of their own messages in contrast to the value of a contribution of the other individuals (Sproull & Kiesler, 1986). Furthermore, they state that status equalisation might provide individuals with information they did not have access to before. Additionally, they hold that uninhibited communication gives rise to improved sharing of information and generating of ideas (Sproull & Kiesler, 1986).

In summary, it can be stated that “CMC, because of its lack of audio or video cues, will be perceived as impersonal and lacking in normative reinforcement, so there will be less socioemotional (SE) content exchanged” (Rice & Love, 1987 p. 88).

#### **2.3.4.2 Social aspects of CMC**

After early research focussed on the impact of technology on individuals’ behaviour, scholars focused more on the social aspects of computer-mediated communication.

Fulk et al. (1990) introduced the social influence theory, which looks on a different way at the media richness theory. They take the social context and the use of media into consideration.

The findings of the aforementioned studies were criticised by scholars highlighting the fact that most studies were based on experiments conducted in laboratory settings and do not reflect the real-world situations. Different aspects of group structures and the variety of the participants were not taken into consideration. In addition, “the social presence and lack of social context cues work has focused largely on the structural characteristics of communication via the computer channel, without as much consideration of contextual and functional processes” (Walther, 1992 p. 56). Time allocation is a further aspect that has been criticised, since experiments often lasted for less than one hour (Walther, 1992, 1995, 1996; Walther et al., 1994). Further, Walther (1992) claims, “It is not clear from the original theory whether the actual characteristics of the media are the causal determinants of communication differences or whether users’ perceptions of media alter their behaviour” (p. 55). Walther (1992) also questions whether group CMC really does equalise differences in status.

##### **2.3.4.2.1 Social information processing theory**

Walther (1992) introduced the social information processing theory (SIP), which claims that CMC users have the same interpersonal needs as individuals who interact using traditional face-to-face communication (Walther, 1992). He also states that “humans are

driven to interact with one another” (p. 68) and that they seek social rewards, both, in face-to-face or computer-mediated communication.

Walther (1992) goes on to say that even if social context cues are filtered out, CMC still has the ability to continue the exchange of nonverbal cues. Their absence can be overcome through “various linguistic and typographic manipulation, which may reveal social and relational information in CMC” (Walther, 1995 p. 190). In order to do so, a “paralanguage” (Carey, 1980 cited in Walther, 1992), using signs such as emoticons, has been created to express nonverbal cues (Walther, 1992). Walther (1992, 1995) argues that in CMC communication it takes more time to interpret verbal cues and thus it is a crucial aspect. He found that it takes four times longer to transfer messages via CMC compared to face-to-face as the amount of information conveyed is lower. Therefore, users who do not know each other need to send more messages to receive social context cues and might form an impression about each other based on that information.

A further important temporal aspect is that “longitudinal groups have something that one-shot groups do not have: the anticipation of future interaction” (Walther, 1996 p. 12). This leads individuals to be friendlier and to seek additional information about each other (Walther, 1996). Walther et al. (1994) found in their meta-analysis of 21 experiments that there is a more social involvement in longer than in brief interactions. These findings are also taken up by Utz (2000), who supports the social information processing theory. She proposes that emotions and friendships can be developed when individuals hold longer conversations. Walther (1995) elaborates on these findings by arguing that CMC rates higher in terms of social behaviour than face-to-face communication does, regardless of the temporal aspect.

#### **2.3.4.2.2 Social identity model of de-individuation effect (SIDE) theory**

The social identity model of de-individuation effect (SIDE) theory was developed by Reicher (1984). It accepts the idea that because CMC is anonymous, individuals’ personal identity awareness is affected. Reicher (1984) argues it does not “destroy identity but rather increases the salience of social identity” (p. 342). SIDE theory has

been used in creating studies that argue that a change is taking place from individual to social identity (group identity). SIDE theory claims that the visual anonymity of CMC will enhance people's sensitivity to group norms (Spears et al., 1990). In other words, "the cognitive aspect of the SIDE model proposes that contexts in which individuating information is relatively scarce (i.e., a situation where individualization of other and oneself is hindered) will heighten people's sensitivity to salient social norms. The fundamental processes assumed by SIDE to account for the effects of anonymity on normative behaviour in CMC are depersonalizes perceptions of self and others" (Postmes et al., 1998 p. 698). Individuals communicating in computer-mediated environments tend to over-attribute social identity because of de-individuation. This leads to stereotypical impressions and in-group favourism (Spears & Lea, 1994). According to Postmes et al. (1998), "factors that are traditionally heralded as liberators from social boundaries (such as anonymity, isolation, and the ability to assume a new or false identity) may ironically have the opposite effect of reinforcing a number of social boundaries: attraction and commitment to the group, conformity to group norms, stereotyping, and ethnocentrism" (p. 708). Computer-mediated environments do not de-socialise individuals, rather they help develop social identities and use them to interpret the environment and direct individuals behaviours (Postmes et al., 1998).

#### **2.3.4.2.3 Hyperpersonal communication**

Based on the SIDE theory, Walther (1996) has advanced a justification for the phenomenon of "hyperpersonal" communication. Compared to face-to-face communication, the hyperpersonal communication can form a greater sense of intimacy (Walther, 1996). It proposes a fully integrated view of computer-mediated communication taking the sender and receiver of a message as well as the channel and feedback into account (Walther, 1996), Hyperpersonal communication suggests that a sender enhances his or her self-presentation, while the receiver overemphasizes the perceived impression of a sender. In other words, de-individuation leads to the "over-attribution" of any personal cue sent in a message (Walther, 1996). Since a receiver of a message is likely to stereotyping impressions and attribution of similarity he or her create an idealised impression of the sender of the message (Walther, 1996).



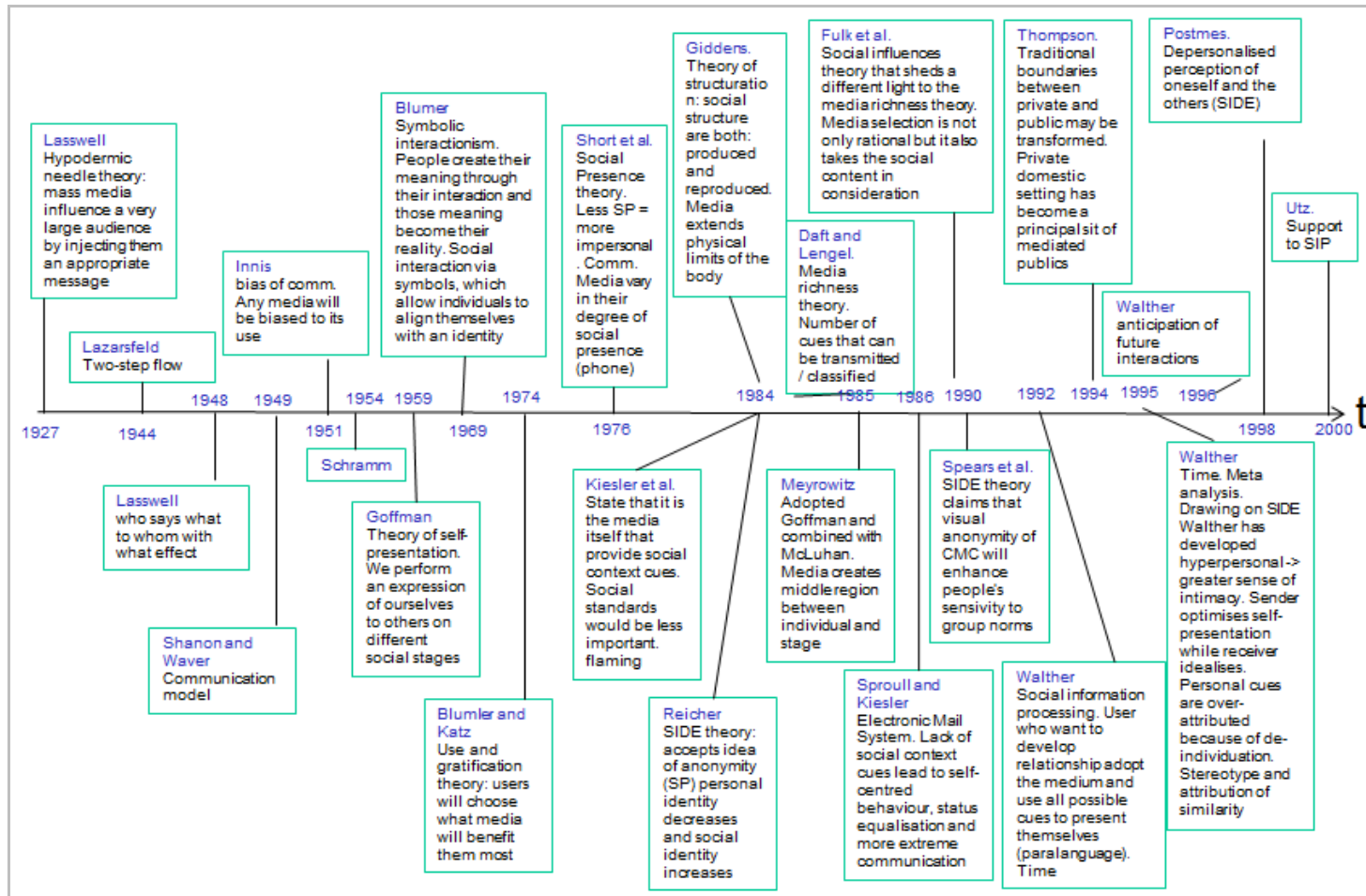
The SIDE theory solely takes the receiver's view into account, while the SIP theory also incorporates the view of the sender. A sender can create a positive impression by carefully construing his or her messages. This is called the selective self-presentation (Walther, 1996). A sender can edit his or her self-disclosure without the need to deal with any "noise" (social context cues) that could disrupt that person's self-presentation. This can be described as follows: "They were better able to plan, and had increased opportunity to self-censor. With more time for message construction and less stress of on-going interaction, users may have taken the opportunity for objective self-awareness, reflection, selection and transmission of preferable cues" (Walther, 1992 cited in Walther, 1996 p. 19).

Jacobson's (1999) study on impression formation in cyberspace investigates text-based online communities using prototype theory and related models. He found that when participating in text-based online communities, people form impressions about the other participants. These impressions are not only based on "cues provided, but also on the conceptual categories and cognitive models people use in interpreting those cues" (p. 24). Stereotypes, as noted in earlier research (Lea & Spears, 1992; Walther, 1996), have an influence on the discrepancies people experience between online and offline impression. These findings expand on Walther's (1996) findings of hyperpersonality by taking into consideration the fact that different meanings can be attributed to a message depending on the different contexts in which the impressions are formed.

Users of asynchronous media do not face any time and space constraints. Hence, "they can concentrate on both the task and the social dimensions of communication because the time spent on one function need not reduce time for the other. As a result, CMC should allow more intended and desirable message construction" (Walther et al., 2001, p. 110). Further, a user's perception of his or her communication partner evokes an appropriate response and leads him or her to act according to what was expected. This is called self-fulfilling prophecy; it increases the hyperpositive impression that is then returned to the other individual (Walther et al., 2001).

To sum up, the theories of computer-mediated communication were studied thoroughly as they lay the ground for the formulation of some antecedents of online community corporate impression. All the above-mentioned theories are presented on the following time-line (Figure 8).

Figure 8: Timeline of CMC theories



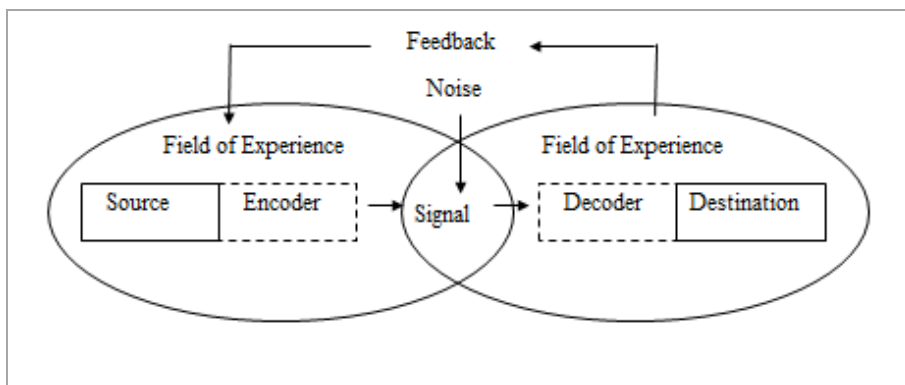
Source: Developed for the present study

### 2.3.5 Differences between offline and online communication

In the following section, the main differences between online and offline communication are illustrated.

With regard to Schramm's (1954) communication model (for illustration, see graphical representation below), differences between offline and online (CMC) communication are exemplified and discussed in the context of the present study.

*Figure 9: Schramm's model*



*Source: Adapted from Watson, 2003*

Each point of Schramm's model is briefly addressed as follows:

- The source of a message might be the same offline and online; it is the person who drafts a marketing message. Waller and Polonsky (1998) propose an extended model of the traditional communication model focussing on business communication. They stated that there are often multiple senders/encoders of a message. For instance, the management of a company might want to see the message that the communication department has drafted. In an online community, the COR can instantly speak to other OCMs and thus there is much less corporate control over the message. Source credibility is also an important aspect when speaking about the source of the message.

- The information that needs to be encoded might be similar offline and online. However, the way in which a message needs to be formulated is supposed to be quite different in online and offline communication. As has been mentioned before, digital natives are used to short, hyperlinked messages, which they can quickly read, share and/or discuss. Furthermore, on online communication platforms, individuals often use informal communication styles.
- The way in which the message is transmitted differs. However, the transmission of a message differs for every kind of communication channel and thus online media is just another form of communication.
- In terms of the receiver, it could either be the same target groups online and offline, or a specific online audience might be targeted. With respect to information processing (see 2.3.3.1.7), the quality of the message is associated with favourable message assessment (Zhang & Watts, 2008) in offline as well as online communication. Factors that are not directly related to the quality of a message, however, do differ in offline and online communities. For instance, CMC conveys different kinds of social context cues (a thorough discussion of these theories is provided below).
- In order to be able to provide some feedback, the recipient of a message needs different kinds of channels in offline communication (Gay et al, 2007). It is often related to additional effort and feedback can only be read by the sender of the message. In contrast, if an online community member provides feedback to a message, it is visible to all online community members. The feedback is provided on the same medium as the message has been posted. This makes the one-to-one communication much more transparent. Furthermore, other community members can join in the communication and suddenly a message exchange that was intended to be one-to-one becomes of public interest. This can also generate some noise, as other community members might disturb a message exchange and lead a discussion into another direction. Other OCMs can be seen as influencers. In offline communication, a receiver of a message can also be influenced by others (Aaller & Polonsky, 1998), however, this most often does not take place at the same time as the message is received. In an

online community, the interaction of other OCMs with the message posted by a COR takes place on the same platform, can be read by anyone, and can take place either immediately or after a certain time.

In addition to Schramm's communication model, the most important differences between online and offline communication with respect to the present study are presented in the following table.

*Table 5: Differences between offline and online communication*

Topic	Offline communication	Online communication	Link to present study
Message history	Messages transmitted with offline media are more difficult to trace back.	Online messages can be retrieved very easily, by anyone at any time and thus they can be considered persistent.	People joining the OC at a later point of time read contributions which were written a certain time prior. These messages are also supposed to influence the impression formation.
Replicability	In order to replicate an offline message, one most probably has to change media. The replication of a marketing message is aligned with a rather high amount of effort.	Online content can be easily replicated and re-mixed with other content on the same and / or on other online platforms.	This phenomenon is addressed by investigating if an OCM engages in word of mouth activities.
Target audience	Due to the fact that different offline communication channels are used for different purposes, it is easier to draft appropriate messages (e.g. in the event that mass communication companies need to perform for a large and invisible audience, while in one-to-one communication they would address individuals personally).	Often online community members are also a large and invisible audience, however, they do expect both interpersonal, informal communication and some kind of social interaction.	How online community members expect a company to communicate with them.
Interaction with message	Offline messages are assumed to not be interacted upon, at least not in a form which is	OCMs engage actively in discussions and are both consumers and producers of	What elements of a message are important in order for OCMs to be

	visible to a wide audience.	information.	able to actively engage.
Communication process	<p>Marketing messages can be conveyed face-to-face, for example by sales persons. Thus, impressions are formed based on the face-to-face interaction.</p> <p>The marketing messages can also be conveyed through either a mass media such as TV or radio, or a media addressing an individual person, such as mail or email. In either case, the messages are carefully drafted by the company.</p>	<p>Jones (1995) states that in OCs “people still meet face-to-face, but under new definitions of both ‘meet’ and ‘face’ ” (p.19).</p> <p>In the description of the hyperpersonal communication, Walther (1996) stresses that a sender enhances their self-presentation by carefully construing their messages while also, for example, including social context cues. As a consequence, the impressions on OCM forms are based on these construed messages.</p> <p>In an online community, company-controlled and -uncontrolled communication (interpersonal communication between OCMs) takes place on the same platform, at more or less the same time, and is visible for all OCMs.</p>	<p>This study investigates the impressions formed when people meet ‘face-to-face’ in online communities.</p>
Communication channel	<p>Offline, there are a multitude of offline channels, which are mostly not directly connected and are also used for different purposes. Television ads, for instance, are often aimed at reaching a large audience, while a direct marketing campaign using mails tries to reach a very specific group of people.</p>	<p>Online platforms are a different social stage (see 2.3.3.2.2) and not merely another communication channel. In OCs, people have social relationships, meet and interact. Thus, by placing a marketing message in an OC, the information is not only placed on an online channel, it is placed in a social setting in which it is ‘publicly’ interacted upon.</p>	<p>This social setting needs to be considered when investigating into online communities. This means that the interpersonal communication taking place on the platform needs to be taken into consideration as well. For instance, an author can be addressing individual people personally while a whole invisible audience is reading the message too.</p>
Anticipation of future	<p>In mass media, marketing, a future</p>	<p>Anticipation of future interaction (Walther,</p>	<p>Whether or not companies are welcome</p>

interactions	interaction is not directly anticipated. A marketer might try to spread a brand message to a large audience through a TV ad, however, he does not expect people to respond directly to this ad. However, he hopes that the potential customer will remember the brand when purchasing such a product in the future.	1996).	or well looked upon in online communities is important for the present study. If they are welcome, they can get the legitimisation to participate in future discussions and thus, further represent the company's interest in the online community.
De-individuation effect	Mostly offline marketing campaigns target individuals hoping they can convince them to buy their products. Thus, the individual reads the message or sees the ad, in the mindset of their full personal identity.	Because CMC is anonymous, an individual's awareness of their personal identity decreases while that of their social identity increases; their sensitivity to group norms and in-group favouritism will therefore be enhanced.  Walther (1996) claims that de-individuation leads to the fact that the receiver of a message overemphasizes the perceived impression of a sender.	In line with the anticipation of future interactions, this aspect is important for the present study as it underlines the importance for a company to put effort into becoming part of the online community.  Furthermore, it can be said that marketing messages collide with interpersonal communication that takes place in OCs, which might be driven by group norms.

*Source: Developed for the present study*

As corporate communication can be seen as the interface between corporate identity and corporate image, the theoretical background of those concepts is provided in the following section.

## **2.4 Corporate identity and corporate image**

After having concentrated on the research area, namely online communities, and the peculiarities of communicating in these environments, the next section will discuss the relevant literature in the field of corporate identity and corporate image. The main focus in respect of corporate identity and corporate image will be on corporate image because,



along with the research area of online communities and CMC, corporate image is the third concept relevant to this study.

Both individuals and companies deal with impression management in order to create a favourable image. This study investigates the challenges a company faces when communicating with members of online communities and how these might influence the members' impression of that company.

Impression management has been studied by many researchers (e.g. Goffman, 1959; Tedeschi & Riess, 1981). Impression management theory describes how individuals or groups perform an expression of themselves to others. This expression is usually intended to create a favourable, amicable impression (Goffman, 1959). Companies are also concerned with impression management in order to project a favourable corporate image. However, a company's social encounters are not directly observable and more complex as the ones that take place on an individual level. A wide range of activities and actors represent a company's self-presentation. A company's persona is known as its corporate identity, and like its related concepts, namely corporate image and corporate reputation, it has been studied by a multitude of scholars:

- *Corporate identity* (e.g. van Riel & Balmer, 1997; Balmer & Wilson, 1998; Balmer & Gray, 2000; Melewar & Saunders, 2000; van Rekom & van Riel, 2000; Melewar & Navalekar, 2002; Melewar & Jenkins, 2002; Melewar & Smith, 2003; Ravasi & van Rekom, 2003; Melewar & Akel, 2005; Balmer & Greyser, 2006; Melewar & Karaosmanoglu, 2006)
- *Corporate image* (e.g. Bristol, 1960; Spector, 1961; Cohen, 1967; Reynolds, 1965; Easton, 1966; Enis, 1967; Hardy, 1970; Britt, 1971; Margulis, 1977; Pharoah, 1982; Gronroos, 1984; Dichter, 1985; Dowling, 1986; Johnson & Zinkhan, 1990; Barich & Kotler, 1991; Brown, 1998; Brown & Dacin, 1997; van Riel et al., 1998; Christensen & Askegaard, 2001; Balmer & Greyser, 2006)
- *Corporate Reputation* (e.g. Fombrun & van Riel, 1997; Fombrun & Rindova, 1998; Brown, 1998; Bickerton, 2000; Caruana & Chircop, 2000; Fombrun,

1996; Gotsi & Wilson, 2001; Bromley, 2001; Dolphin, 2004; Tucker & Melewar, 2005; Balmer & Greyser, 2006).

The terms ‘image’, ‘identity’ and ‘reputation’ are often used interchangeably (Kennedy, 1977), and there is also some overlapping of the terms ‘corporate image’, ‘corporate identity’, ‘organisational image’ and ‘organisational identity’ (Bick et al., 2003; Brown, 1998; Simoes et al., 2005). Due to the number of different definitions, and because some scholars use the terms interchangeably, the taxonomy of Brown et al. (2006) and Balmer & Greyser’s (2003) key concepts are briefly described below. This should help to categorize the above-mentioned constructs.

Brown et al. (2006) propose four central viewpoints of an organisation:

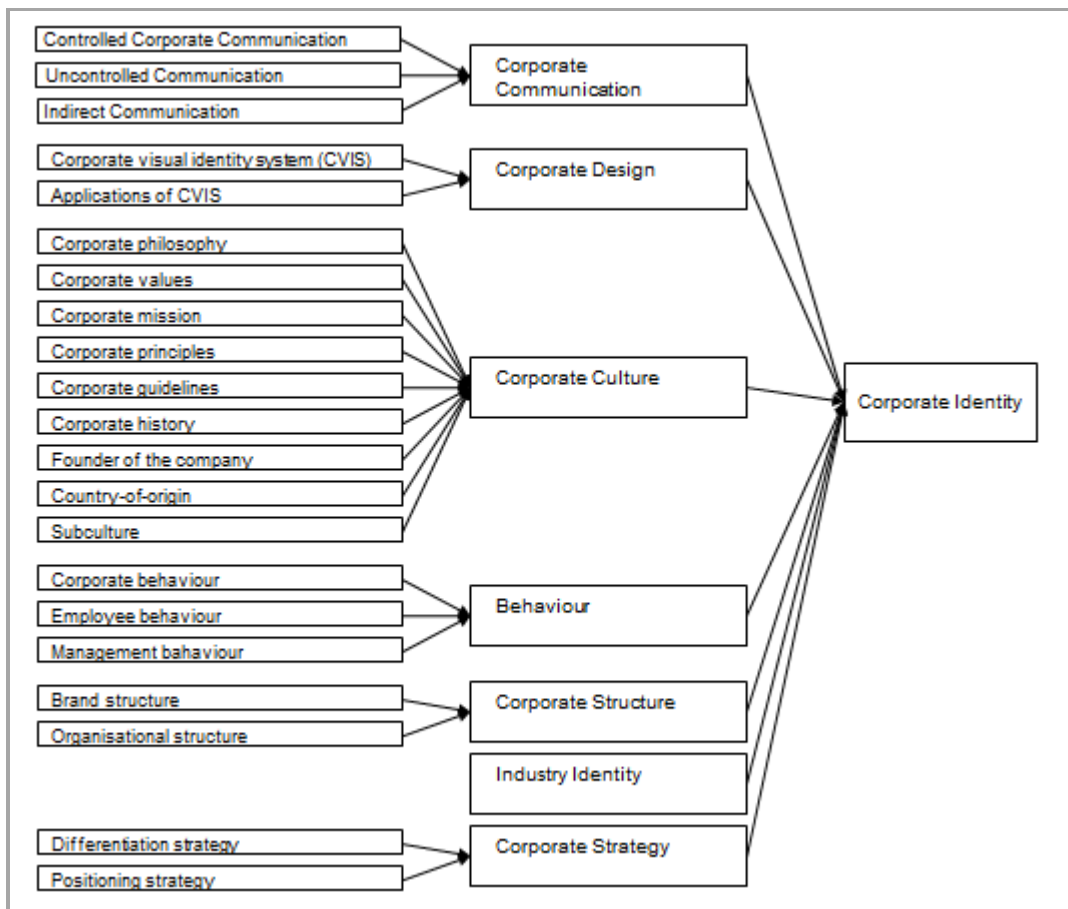
- *The first viewpoint* takes the internal perspective of an organisation into consideration, asking the question, “Who are we as an organisation?” (p. 100). It describes how the members of an organisation view the company and what kind of associations they form about it. This viewpoint has been labelled “Identity” (p. 102).
- *The second viewpoint* describes what the organisation’s leaders want their important constituencies to think about the company. These are the intended associations the company wants its external audiences to hold. This viewpoint has been labelled “Intended image” (p. 102).
- *The third viewpoint* deals with the question “What does the organisation believe others think of the organisation?” (p. 100). In other words, what do the organisation’s members believe are the external constituencies’ associations about the organisation? This viewpoint has been labelled “Construed image” (p. 102).
- *The fourth level* investigates the external constituencies’ actual views on the organisation. This viewpoint has been labelled “Reputation” (p. 102).

This study can be said to reflect the fourth viewpoint in that it investigates constituencies’ viewpoints concerning the organisation’s communication activities in

online communities and how this affects the impression they have formed of the organisation.

In the following, the constructs of corporate identity and corporate image are described. The section will end with a brief description of corporate reputation as the terms corporate image and corporate reputation are often used interchangeably. The figure below shows the different elements of corporate identity which are described further in the next sections.

Figure 10: Theoretical background



Source: Melewar & Karaosmanoglu, 2006 p. 849

## 2.4.1 Corporate identity

A product or a service is only one of many means employed to deliver the company's signals to its various environments. As has been stated above, corporate identity is a multidisciplinary construct with several elements. Prior to briefly describe each of these elements a definition of corporate identity is provided.

### 2.4.1.1 Definition of corporate identity

Corporate identity is a broad term which has been defined as “a key element, which gives a business identity its distinctiveness and relates to the attitudes and beliefs of

those within the organisation” (Balmer, 2001 p. 254). According to Topalian (2003), there are two important characteristics which should be taken into consideration when speaking about corporate identity: “First, a successful corporate identity is a “living” identity: a tangible reality that is a true representation of an organisation and its aspiration which “breathes” and changes with that organisation over time” (p. 1120). Secondly, Topalian (2003) states that a corporate identity has to be lived. Those statements are of importance in the context of this study. Companies have to adapt to the changes (such as the rise of online communication platforms) and need to gain a better understanding of them.

Melewar and Karaosmanoglu (2006) have defined the following characteristics of corporate identity: corporate communication (controlled, uncontrolled and indirect communication), corporate design (corporate visual identity system (CVIS) and applications of CVIS), corporate culture (philosophy, values, mission, principles, guidelines, history, founder of the company, country of origin and subculture), behaviour (corporate behaviour, employee behaviour and management behaviour), corporate structure (brand structure and organisational structure), industry identity and corporate strategy (differentiation and positioning strategy).

#### **2.4.1.2 Corporate identity mix**

The construct of corporate identity originates from visual systems such as flags, ensigns or emblems. Olins (1989) calls these visual systems the “traditions”. One example of how corporate identity develops over time is the company AEG. In the early twentieth century, the German company hired the architect Peter Behrens to align the design of their turbine manufacturing shop in Berlin with other design elements, such as a letter head, exhibits, equipment and the like (Argenti & Forman, 2002).

Even if the roots of corporate identity can be found in corporate design, the definition of corporate identity today incorporates many other elements (Melewar & Karaosmanoglu, 2006). In the following, we will briefly describe each set of elements.

#### **2.4.1.2.1 Corporate communication**

Corporate communication can be described as the communication activities of a company to facilitate the information exchanges with key constituencies that have a connection with a company. Further, it is concerned with sharing knowledge within the organisation and with helping to make decisions on various issues. “Corporate communication is the aggregate of messages from both official and informal sources, through a variety of media, by which the company conveys its identity to its multiple audiences or stakeholders” (Gray & Balmer, 1998 p. 696).

Despite all the divergent views as to what constitutes corporate identity or corporate image, it is commonly agreed that “identity and image are typically seen as opposite ends of the communication process” (Christensen & Askegaard, 2001 p. 296). These opposite ends are connected through corporate communications, which can be divided into planned and unplanned communication (Melewar & Karaosmanoglu, 2006). According to Melewar and Karaosmanoglu (2006), van Riel (1995) suggests that planned communication “includes strategic planning of a company’s symbolism, communication and behaviour” (p. 197), while unplanned communication is defined as “interpersonal (word of mouth from close environment), intrapersonal (company-customer identification, emotional attachment, company knowledge) and intermediary (word-of-mouth via mass media, nongovernmental organisations, governmental institutions)” (p. 197). In the proposed study it is assumed that planned and unplanned communication interact in an uncontrollable manner in online communities. This is due to the fact that messages posted by a company can be shared and discussed with the company and with all the other online community members.

Just as there is a marketing mix or a promotional mix (communication mix), a number of authors have attempted to articulate a corporate communication mix. Two well-established corporate communication mixes are described below.

Van Riel’s (1995) corporate communication mix:

- *Management Communication:* Managers need to establish a shared vision and trust within the organization. They ought to communicate the vision, mission and strategy to internal and external audiences.
- *Marketing Communication:* The term marketing communication refers to the traditional marketing communication mix with regards to the 4Ps of marketing.
- *Organizational Communication:* Communicating to the various external groups (encompassing a plethora of corporate-level communications functions). Investor relations, public relations, media relations, community relations and government relations.

Balmer and Gray's (2003) total corporate communication mix:

- *Primary Communications:* The communications effects of products, services, management, staff and corporate behaviour.
- *Secondary Communications:* Controlled forms of communication. Van Riel's (1995) definition of the corporate communication mix fits into this section.
- *Tertiary Communications:* This refers to interpersonal communication, composed of word of mouth and/or spin. People applying spin "attempt to alter the facts through a deliberate and reckless disregard for the truth" (Dilenschneider, 1998 p. A18).

#### **2.4.1.2.2 Corporate visual identity**

The symbolic elements that are used to express a company's identity have been found to be an important concept. Domains such as graphic, environmental, product and packaging design add to visual identification of a company and its products (Karaosmanoglu & Melewar, 2006).

The visual expressions of a company comprise the "Corporate Visual Identity Systems (CVIS) (logo, name, slogan, colour and typography), company aesthetics (e.g. architecture, interior design, stationery, retail stores, etc.) and staff apparel (the application of company visuals on the clothing of the employees)" (Karaosmanoglu & Melewar, 2006 p. 200).

#### **2.4.1.2.3 Corporate philosophy and culture**

Corporate philosophy is the business values and beliefs of a company's senior management (Gray & Balmer, 1998). The organisation's members' values, beliefs, shared experiences and learning are referred to as corporate culture. Ideally, the organisational philosophy being created at top-management level infiltrates the whole organisation (Gray & Balmer, 1998). The corporate culture helps the organisation to achieve better impression in the eyes of its constituencies (Melewar & Karaosmanoglu, 2006).

#### **2.4.1.2.4 Corporate behaviour**

Corporate behaviour provides traditions and cultures that set it apart from other organisations, which helps to reinforce a company's identity. It presents the internal values and norms of the company. In addition, corporate behaviour determines how a company treats its customers and its personnel. It can be broken down into corporate, employee and management behaviour (Melewar & Karaosmanoglu, 2006).

#### **2.4.1.2.5 Corporate structure**

Corporate structure refers to how a company is organised in terms of departments, hierarchical levels, number of employees (organisational structure) and brand structure (Melewar & Karaosmanoglu, 2006). A company can have three different brand strategies which can be defined as follows: "First, the monolithic structure is one where the organisation uses a consistent name and visual style and in consequence the corporate identity of the company is the brand to the consumer [...] Second, there is the endorsed structure, in which the corporate identity of the parent company is associated with the name of the subsidiaries. Finally, the branded structure is one where products are differentiated through different brand names" (Melewar & Karaosmanoglu, 2006).



#### **2.4.1.2.6 Industry identity**

The nature of a particular industry and its characteristics, such as competitiveness can also have an influence on corporate identity (Melewar & Karaosmanoglu, 2006).

#### **2.4.1.2.7 Corporate strategy**

The corporate strategy referred to in this context deals with the positioning and differentiation of the organisation. It is the manifestation of the organisation's overall venture, positioning the organization in terms of its various stakeholders (Aaltio & Mills, 2002).

As mentioned earlier, this study concentrates on one of the described corporate identity elements, namely corporate communication.

### **2.4.2 Corporate image**

Corporate image is certainly not a new concept. Research on corporate image can be traced back to Gardner and Levy (1955), who introduced the concept of image. This was followed by Boulding's (1956) seminal work, in which he conceptualised corporate image. Boulding (1956) suggests that people rely on their perceived images rather than on reality (De Chernatony, 1999). According to Cornelissen (2000), early studies in corporate communication have, however, been "biased towards an organisational perspective" (p. 119), not taking into consideration the receiver's perspective.

A corporate image has several implications. It shapes customer behaviour (Boulding, 1956; Barich & Kotler, 1991; Cohen, 1967), has an influence on buyer attitude towards a company's sales staff and products (Brown, 1998) and on new product evaluation (Aaker & Keller, 1993). Furthermore, it provides a competitive advantage that cannot easily be imitated (Brown, 1998; Stern et al., 2001) and leads individuals to buy a company's product, invest in the company or apply to work there (Balmer, 1995; van

Riel, 1995). In addition, corporate image increases security and helps maintain the public's trust (Gray, 1986).

Corporate images are not solely created by the company but also by sources such as media, labour unions, environmental organizations and more (Cornelissen, 2000; Dacin & Brown, 2002). This view is supported by Williams and Moffitt (1997) maintaining that "image is also determined by both environmental and personal factors of the audience member" (p. 237). This view is important in this context, as the exchange of messages in online communities is significantly different from other types of communication which are not conducted through online communities. It is assumed that "planned and unplanned communication" (Melewar & Karaosmanoglu, 2006 p. 197) interacts in an uncontrollable manner in online communities. This is due to the fact that messages posted by a company can be shared and discussed with the company and all the other online community members. Within an online community, corporate communication and interaction with other members happens at practically the same time. An individual's impression formation might be affected by the interaction with this other source of influence.

Van Rekom (1997) suggests, "the purpose of corporate communication efforts is to achieve a certain desired corporate image among target groups" (p. 411). In order to achieve a desired corporate image, researchers and companies need to understand how communication in online communities influence image. Social media such as online communities have their own rules and therefore ask for specific kinds of communication. The peculiarities of impression formation in online communities are the main focus of this study. For this reason the literature review regarding corporate image focusses on the audience, exploring the factors that might influence community members' image formation.

#### **2.4.2.1 Definition of corporate image**

Companies have carried out communication activities for many years with the aim of building a goodwill for the company (Balmer & Greyser, 2003). The concept of

corporate image has given much more importance to these efforts. In contrast to the traditional thinking about brand and product-area images, corporate image offers something different and valuable. The goals of corporate communication and marketing have been expanded beyond the functional stages (Balmer & Greyser, 2003).

Subsequently, four definitions of corporate image which are based on the assumptions taken in the context of this study are provided.

Reynolds (1965) defines image as “the mental construct developed by the consumer on the basis of a few selected impressions among the flood of total impressions; it comes into being through a creative process in which these selected impressions are elaborated, embellished and ordered” (p. 70). According to another definition, suggested by Spector (1961), “people develop attitudes towards a manufacturer and perceive him to have certain characteristics, some of which they admire and appreciate. The sum total of their perceptions of the corporation’s personality characteristics in what we refer to as the corporate image” (p. 47).

Two further definitions must be provided as they highlight additional key points in the context of this study. Cornelissen (2000) suggests that “an image is a perception of a receiver of his or her received projection of the corporate identity and own reflections of interpretations of various attributes from various sources” (p. 120). Christensen and Askegaard (2001) state that “identity and images, however, are volatile social constructions that, although seemingly “objective”, base their existence and significance largely on the interpretive capabilities and preferences of their audience” (p. 293). The behaviour, interpretive capabilities and preferences in online environments are assumed to have their peculiarities. Further, people gathering in online communities are influenced by other sources, which might have an effect on their perception.

Corporate image is built on an individual level (Brown, 1998). Hence, a company has multiple images held by various groups of stakeholders. Each group has different types of contacts, beliefs, feelings, knowledge, experiences and impressions about a company and thus forms different images about it (Abratt, 1989; Bernstein, 1984; Brown, 1998;

Dowling, 1988; Gray, 1986; Spector, 1961; Topalian, 1984). A company needs to elaborate the image held by their various groups of stakeholders. This view is supported by Barich & Kotler (1991) claiming that a company “needs to identify their image strengths and weaknesses and take action to improve their images” (p. 95). Current literature, however, provides little insight into the image formation process of a growing and important group of stakeholders, namely, online community members.

Corporate image is mainly composed of two characteristics, a functional and an emotional one (Kennedy, 1977; Martineau, 1958). Functional characteristics are tangible and can be easily measured, while emotional characteristics are based on psychological dimensions such as attitude or feelings toward a company. Therefore, corporate image can be said to be an aggregation of attributes, which have been evaluated by customers (Kennedy, 1977; Martineau, 1958).

Table 6 below shows that corporate image can be treated in different ways. Some researchers treat it for instance as impressions (Easton, 1966; Selame & Selame, 1975; Bernstein, 1984; Topalian, 1984; Dichter, 1985; Dowling, 1986; Abratt, 1989; Johnson & Zinkhan, 1990; Barich & Kotler, 1991; Williams & Moffitt, 1997), others as perceptions (Spector, 1961; Margulis, 1977; Gronroos, 1984; Brown, 1998; Cornelissen, 2000; Williams & Moffitt, 1997; Karaosmanoglu & Melewar, 2006). Many researchers name more than one component of corporate image.

Table 6: Multiple components of corporate image

	<i>Attitudes</i>	<i>Beliefs</i>	<i>Expectations</i>	<i>Experiences</i>	<i>Feelings</i>	<i>Impressions</i>	<i>Knowledge</i>	<i>Perceptions</i>	<i>Picture</i>	<i>Stereotype</i>
Martineau, 1958										X
Spector, 1961								X		
Tucker, 1961										X
Cohen, 1967	X	X			X					
Easton, 1966						X				
Hardy, 1970									X	
Britt, 1971									X	X
Selame & Selame, 1975						X				
Kennedy, 1977				X						
Margulis, 1977								X		
Pharoah, 1982	X		X		X					
Bernstein, 1984		X		X	X	X	X			
Gronroos, 1984								X		
Topalian, 1984			X			X				
Dichter, 1985						X				
Dowling, 1986		X			X	X				
Abratt, 1989				X		X				
Johnson & Zinkhan, 1990						X				
Barich & Kotler, 1991	X	X				X				
Brown, 1998								X		

Williams & Moffitt, 1997						X		X		
Cornelissen, 2000								X		
Karaosmanoglu & Melewar, 2006								X		

*Source: Developed for the present study*

Barich and Kotler (1991) suggest that a company image consists of the following image factors, while each image factor is composed of a number of attributes: corporate social conduct, corporate contributions conduct, corporate employees conduct, product, communication, price, support, service, distribution channels, sales force and company business conduct. Within the context of this study, which investigates corporate communication, the attributes of the image factor 'communication' are central. "The image of a company's communications is made up of the public's perception of its advertising, publicity, promotions direct mail, and telemarketing. By measuring these attributes separately, we might detect a particularly weak attribute within the communication mix" (Barich & Kotler, 1991 p. 97). The communication activities in online communities need to be added, as they are one part of the communication mix which might have a positive or a negative effect on image formation.

#### **2.4.2.2 Corporate image models**

Theorists used different points of view in defining corporate image and created several image formation models. Subsequently, some important corporate image models are briefly described.

In her model, Kennedy (1977) used the term "company personnel perception of company", which stresses the value of the employee's image. She claims that the internally formed image reflects to the outside and shapes the corporate image of the external stakeholders. Kennedy (1977) highlighted the importance to base a company's policy on reality. Dowling (1986) extends Kennedy's model by adding internal communication, interpersonal communication (internal as well as external) and marketing media communication. Moreover, he proposes that corporate image might be influenced by super- (such as country of origin) or subordinate (such as industry) images. Dowling (1988) suggests that brand image is at the bottom of the hierarchy while other types of images could be placed in between. Furthermore, he discusses ways to determine image attributes (Dowling, 1988).

According to Abratt (1989), corporate identity and corporate image were often used interchangeably, and he created a corporate image management process which addresses the interface between corporate identity and corporate image. He introduced the concept of ‘corporate personality’. Corporate personality feeds corporate identity, which then leads to corporate image. He maintains that senior management should develop a corporate philosophy which connects to the core values and corporate culture. This, in turn, drives strategic management, leading to the corporate mission and objectives, and ending with the strategic formulation and implementation (Abratt 1989). Abratt’s (1989) model has been revised by Stuart (1998a), who has added corporate culture and corporate symbols to his model. Stuart further distinguished between internal and external communication, referring to Kennedy’s (1977) suggestions. Based on a thorough literature review, Stuart (1999) proposes a new corporate identity management model. The model consists of: corporate personality, corporate strategy, management and organisational communication, marketing management and interpersonal communications, the corporate identity/corporate image interface, the corporate images and reputation, environmental influences and organisational culture.

Markwick and Fill (1997) claim that it is important to consider the impact that corporate identity can have on strategic management. They maintain that much of corporate image literature concentrates on the image formation process, concluding that the image and communication can play a central role in strategic developments.

According to Williams and Moffitt (1997) the image is composed of multiple organisational, personal and environmental factors. While organisational factors can be controlled, personal or environmental factors are less controllable, or even uncontrollable. They point out, however, that even if personal and environmental factors are not easily controllable, they must not be ignored.

#### **2.4.2.3 Organisational versus audience-centred model**

Some of the early studies take the view that image formation is managed and produced by an organisation (Dowling, 1986; Williams & Moffitt, 1997). Later theorists have



suggested that image formation is a process taking into consideration multiple factors, such as company messages, the influence of other audiences and an individual's emotions and previous experiences (Fombrun & Shanley, 1990; Gruning, 1993; Williams & Moffitt, 1997). Thus, it can be said that an image is "something projected by a company and something perceived or interpreted by others" (Cheney & Vibbert, 1987 p. 176).

Based on the above-mentioned suggestion, it can be said that corporate image is not solely created from one-way communication initiated by a company. Cornelissen (2000) criticises the "inside-out" view of communication that has been presented by authors such as Abratt (1989), van Riel (1995), Markwisch and Fill (1997) and Balmer and Soenen (1999). He claims that it is a discourse between a company and its audiences and that corporate image is not solely formed out of controlled corporate activities. Cornelissen (2000) proposes a structural model depicting various sources of communication which contribute to the image formation. The traditional model, taking corporate communication as the powerful influence of image formation, is complemented by three communication sources: interpersonal (word of mouth), intrapersonal and others. This view is supported by other researchers, highlighting the importance of uncontrolled communication (Melewar & Karaosmanoglu, 2006) and tertiary communication (Balmer & Gray, 2003).

This research takes the aforementioned view into consideration, as uncontrolled communication in online communities might disturb or enrich corporate communication activities targeting those online communities.

The concepts of corporate image and corporate reputation are closely tied, but still different. In order to clarify how they differ, a short account on corporate reputation is provided below. Before we can talk about the concept of corporate reputation, however, we need to mention a third concept: corporate associations. The terms corporate image and corporate associations have often been used interchangeably (Brown, 1998; Dowling, 1986; Martineau, 1958). Brown (1998) criticises the multiple meaning of these terms and introduces the concept of corporate associations. He claims that those

concepts are not the same and provides the following definition of corporate association. It is a “categorical term that encompasses all of the concepts traditionally referred to as ‘corporate image’ or ‘corporate reputation’. Corporate associations are defined as “a generic label for all the information about a company that a person holds. For example, corporate associations might include perceptions, inferences and beliefs about a company; a person’s knowledge of his or her prior behaviours with respect to the company [...]” (Brown, 1998 p. 217). The concept of corporate associations can be seen as a summary of the multiple meanings of corporate image and corporate reputation (Brown, 1998).

### **2.4.3 Corporate reputation**

Corporate reputation can be described as the audience’s overall evaluation of a company over time.

The following definition of reputation is proposed by Fombrun and van Riel (1997 p. 10): “A corporate reputation is a collective representation of a firm’s past actions and results that describes the firm’s ability to deliver valued outcomes to multiple stakeholders”.

There are two main schools of thought about the concept of corporate reputation: the analogous school of thought and the differentiated school of thought. The analogous school of thought sees corporate reputation as a synonym to corporate image, while the differentiated school of thought distinguishes between those concepts (Gotsi & Wilson, 2001). According to Gotsi and Wilson (2001), there are three distinct views in the differentiation school of thought:

- 1<sup>st</sup> view: corporate reputation and image are considered as two very different concepts which are not interrelated.
- 2<sup>nd</sup> view: corporate reputation is just one aspect in the construction of a company’s corporate image.

- 3<sup>rd</sup> view: corporate reputation is mostly influenced by the numerous corporate images held by its publics.

The author sides with the 3<sup>rd</sup> view in the differentiated school of thought, which can be summarised as follows: While the corporate image is the immediate impression people form about a company, the “corporate reputation, typically, evolves over time as a result of consistent performance, reinforced by effective communication [...]” (Gray & Balmer, 1998 p. 697). This view is supported by Melewar and Karaosmanoglu (2006) proposing that “if organisations can constantly perform well in sustaining a consistent image over the years, they can achieve a favourable reputation and, hence, gain strategic and competitive advantages [...]” (p. 1997).

## **2.5 Summary**

The increasing interest in online communities has heightened the need for a better understanding of people gathering in those communities. Research, to date, has tended to focus on subjects such as (i) motivation to participate in communities, (ii) types of communities, (iii) communities’ influence on customers’ behaviours and perceptions, etc.

So far, however, there has been little discussion of the effects of corporate communication targeting online communities. No evidence of research was found addressing the question of how corporate communication influences image formation in online communities.

This literature review has revealed various streams of research related to communication theories, mediated communication and computer-mediated communication. The electronic media have abilities that distinguish them from traditional media and face-to-face communication. Computer-mediated communication has changed the conditions of communication, a phenomenon which is thoroughly described in computer-mediated theories such as the social presence theory by Short et al. (1976), the media richness theory by Daft and Lengel (1984), the SIDE theory by

Reicher (1984) and the social information processing theory by Walther (1992). Studies investigating in CMC have rapidly grown in the last few years. Even if the present literature review cannot address all the research conducted it covers a wide range of the most important studies, which form the foundations of this field of study. The author thought it essential to delineate the different streams of research, as they provide the assumptions on which this study is based. Further, the author wanted to address the peculiarities of computer-mediated communication in order to understand the research area or, to use the terminology provided by Goffman (1959), the ‘stage’ on which this study takes place.

A company has multiple audiences, each of which perceives a company in its own way. Companies try to generate a positive corporate image for each of these stakeholder groups. An image is composed of a number of elements and scholars use different approaches in defining the concept of corporate image. This study investigates the most essential elements in the environment of online communities: the company’s communication activities.

A main focus has been the corporate identity mix presented by Melewar and Karaosmanoglu (2006), as it clearly depicts the components of corporate identity. This enables the study to demonstrate how the different concepts of corporate identity, corporate communication and corporate image relate to each other.

## **2.6 Key authors and concepts**

This section summarises the key authors and key theoretical concepts in the various fields of the study.

### **2.6.1 Key authors and concepts of online environments and online communities**

Table 7 presents a selection of key authors and concepts in the area of brand and online communities.

*Table 7: Key authors and concepts - online environments and online communities*

<i>Key authors</i>	<i>Concepts</i>
Algesheimer et al., 2005	<p>Investigated customer identification with the brand community, taking the moderating effect of customers' brand knowledge and community size into consideration</p> <p>Studied the social influence of brand communities on customers</p> <p>Found that brand communities can influence customers in positive (e.g. membership continuance, recommendation, etc.) and negative (normative pressure, extrinsic obligations) ways</p>
Bagozzi & Dholakia, 2002	<p>Study social action in online communities focussing on the intention of participation</p> <p>By using the model of goal-directed behaviour, they explain the 'we-intention' found in online communities</p>
Bagozzi & Dholakia, 2006	<p>Provide antecedents and consequences for purchase when customers participate in small-group brand communities</p>
Bagozzi et al., 2007	<p>Study the antecedents and consequences of online social interactions by considering individual-level and social-level antecedents</p> <p>They provide a set of variables that determine participation in online communities</p>
Blanchard, 2004	<p>Introduces the concept of virtual behaviour settings arguing that a new sense of place is emerging in online communities</p>
Blumer, 1969	<p>Developed the theory of symbolic interactionism that refers to social interaction via symbols. Those interactions allow individuals to align themselves with an identity</p> <p>Provides three premises, which form the theory of symbolic interactionism</p>
Burnett, 2000	<p>Suggests a model for information exchange and information behaviours in online communities</p>
Cova & Cova, 2002	<p>Present an alternative view of our society, namely, the "Latin view"</p> <p>Argue that we are re-socialising and re-establishing communal ties</p> <p>The "Northern" approach, which deals with segmentation and one-to-one marketing, is challenged</p> <p>Claim that the future of marketing will be to support a new sense of community and take the social networks of people into consideration</p>
Dholakia et al., 2004	<p>Study the social influence of customer involvement in network- and small-group-based online communities</p> <p>In cohesive networks, participants tend to identify with the group and not only with the focus of the discussion. They share social norms and build a social network</p> <p>In contrast, in sparse networks participants join the platform because of the common focus, and there is an absence of mutual knowledge</p>
Hagel & Armstrong, 1997	<p>In their book "Net Gain", they suggest how markets can be expanded through online communities</p> <p>Discuss the real values of online communities</p> <p>Provide insights on how to build an online community</p>

	Distinguish communities on the basis of the purpose for which they are organised: communities of relationships, communities of interest, communities of fantasy and communities of transaction
Jones, 1995	<p>Claims that computer-mediated communication connects us and recreates the sense of community</p> <p>Computer-mediated communication is socially produced space</p> <p>In this new environment, community is built on common beliefs, knowledge, information and interests</p>
Jones, 1997	<p>Argues that it is not possible to study online communities without taking into consideration the cultural artefact, thus CMC researchers should pursue cyber-archaeology</p> <p>Suggests distinguishing between online communities and their cyber-place, which he calls the virtual settlement</p>
Kozinets, 1999	<p>Critique of database-drive relationship marketing, which considers the audience to be passive</p> <p>Proposes an alternative marketing strategy: online community marketing</p> <p>Provides a definition of community members</p>
McAlexander et al., 2002	<p>Conducted a longitudinal (eight-year) study of a company-led DaimlerChrysler-Jeep brand community</p> <p>Their study provided evidence of increased brand loyalty</p> <p>Using partly quantitative analysis, they found that brand communities could be built with brand events, such as brand fests, and increase brand loyalty</p> <p>Highlight the dynamic nature of brand communities proposing several dimensions on which brand communities differ</p> <p>Propose a new model called the customer-centric model of brand communities</p>
McMillan & Chavis, 1986	Propose the concept of sense of community, which is composed of: membership; influence, fulfilment of needs, trade and shared emotions
McKenna & Green, 2002	<p>Comparing traditional definitions of groups with online groups</p> <p>Discusses individual motivation and consequences of joining online groups</p>
Muniz & O'Guinn, 2001	<p>Seminal article introducing the idea of brand communities in face-to-face and virtual environments</p> <p>Investigate three communities managed by private people dealing with the brands Saab, Macintosh and Ford Bronco</p> <p>Based on their qualitative study, they conceptualise brand communities</p> <p>State that brand communities are largely imagined communities and are also based on the main characteristics of traditional communities. Those characteristics are: shared consciousness, rituals and traditions and a sense of moral responsibility</p> <p>Suggest that a brand community has three central relationships: brand to customer, customer to customer and customer to community</p>
Obst & White, 2004	Revise the scale of the sense of community index. It is a measure of the psychological sense of community
Porter, 2004	Provides a typology of online communities adding some attributes which

	can be found in those types of communities
Rheingold, 1993	Rheingold was one of the first to study online communities Investigated an online community called “the Well” and claims that community members have a strong “sense of place” Provides the most cited definition of online communities. Claims that computer-mediated communication has brought about a new form of social life: the online communities
Rosen et al., 2003	Propose a set of procedures for research in online communities
Tajfel and Turner, 1979	Developed social identity theory, which addresses relationships within groups and between groups
Toffler, 1984	Introduces the concept of the “prosumer”, which predicts that the role of producers and consumers will blur and merge
Turner et al., 1987	Extend Tajfel’s (1979) social identity theory by differentiating between personal and social identities
Upshaw & Taylor, 2000	Suggest that brand communities increase positive brand attitude as well as brand loyalty
Von Löwenfeld, 2006	Based on a thorough analysis of classifications of brand communities, he provides a new holistic classification Based on various definitions of brand communities, he suggests a new definition of brand communities taking into consideration the following aspects: brand orientation, commercial orientation, geographic vs. non-geographic orientation, offline vs. online, potential for identification, strengths of commitment to a brand (admirer, customer, etc.), interaction, SIC and we-intention and caring and/or sharing Developed a brand community quality index
Wellman, 1993	People’s network goes beyond neighbourhood and physical places People’s social networks consist of friends, workmates and family
Wellman, 1994	Communities should be defined using a social network approach and focusing on relationships between community members and on group interactions
Wellman & Gulia, 1998	Claim that online communities are as real as offline communities Discuss questions such as: can relationships between people who have never seen each other be true relationships? Reciprocity and attachment in online communities? How do online communities affect offline communities?
Wellman, 1999	Communities’ boundaries have extended through transportation and technology

*Source: Developed for the present study*

## 2.6.2 Key authors and concepts of communication theories

Table 8 below presents key authors and concepts of computer-mediated communication. The concepts are listed in chronological order because many of the below mentioned authors have built on each other's work.

*Table 8: Key authors and concepts of communication theories*

<i>Key author</i>	<i>Concepts</i>
Lasswell, 1927	Hypodermic needle theory: mass media can directly influence a very large audience
Lazarsfeld et al, 1944	Two-step flow theory contradicts the hypodermic needle theory by arguing that a message is first grasped by an opinion leader. In a second step, the opinion leader spreads the message to a wider audience
Lasswell, 1948	Proposes a model of communication: who says what, in which channel, to whom and with what effect
Shannon & Weaver, 1949	Developed the first graphical model of communication, including a source of message, the transformation of the message in order it can be sent through a channel, and a receiver of that message
Schramm, 1954	Schramm offered a variant of Shannon and Weaver adding the field of experience of the sender and receiver and a feedback loop
Goffman, 1959	Theory of self-presentation: individuals play a variety of roles on several social stages
McLuhan, 1964	The medium is the message
Blumer, 1969	Theory of symbolic interactionism which assumes "that our society is a system of interpersonal communication and interaction. The theory describes social interaction via symbols, which allows individuals to align themselves with an identity" (Hallier, 2012)
Short et al., 1976	Social presence theory: suggests that CMC lacks of social context cues and thus users are deprived of the sense of actual physical presence of the communicating individuals  Communication is not only an exchange of words but also of social context cues, which are lacking in CMC
Giddens, 1984	Theory of structuration: our social structures are both produced and reproduced by everyday life
Kiesler et al., 1984; Dubrovsky, 1991	Social context cues theory: concentrates on the lack of social context cues in CMC  Kiesler et al. found that uninhibited communication in terms of flaming and self-disclosure is encouraged and has become more prevalent due to reduced role of status group decisions  Anonymity on CMC results in a state close to deindividuation  Dubrovsky suggests that status equalisation can regulate group behaviour
Reicher, 1984; Spears et al., 1990; Lea &	Based on social identity theory (Tajfel & Turner, 1979): proposes that anonymity leads to a shift from personal to social identity



Spears, 1992; Postmes et al., 1998	<p>As a member of a group, an individual does not lose his/her personal identity but identifies with that group</p> <p>Social identity of deindividuation effect (SIDE) theory: claims that visual anonymity of CMC will enhance people's sensitivity to group norms</p>
Daft & Langel, 1984	<p>Media richness theory: classifies communication media according to the richness of message the media can handle</p> <p>A media is perceived as rich or lean, face-to-face being perceived as the richest form of communication</p> <p>The communication influence is affected by the richness of message that the medium can convey</p>
Meyrowitz, 1985	<p>Media blur the line between front of stage and backstage</p> <p>Electronic media have decreased the boundaries of physical settings and decreased social roles and hierarchy</p>
Sproull & Kiesler, 1986	<p>Overestimation of people's personal contribution</p> <p>Social statuses are barely recognisable, which leads to status equalisation</p> <p>Missing social context cues can also lead to a deregulated effect and uninhibited behaviour. Electronic mail provides new information which might not be exchanged otherwise</p>
Lea & Spears, 1992	<p>State that in the absence of social context cues CMC users tend to over-attribute others' messages, building stereotypical impressions.</p>
Walther, 1992	<p>Walther assumes that people need a minimum of information about each other in order to form relationships. People will process the received information and form an image about each other. Based on this assumption, he formulates the social information processing (SIP) theory</p> <p>Although Walther acknowledges that social context cues are lost in CMC, he suggests that it does not have a negative influence to relationship formation</p> <p>Time plays an important role: If CMC users spend enough time exchanging a series of messages, they can gather enough information about each other to form interpersonal relationship</p> <p>It is not the amount of information exchanged in one message but how much information is exchanged in a series of exchanges</p>
Walther et al., 1994	<p>Meta-analysis tests based on their SIP theory support their hypothesis on social communication</p> <p>Walther found evidence that if people have an extended interaction they can also develop interpersonal relationships. Thus, extended time is the crucial variable in CMC</p>
Turkle, 1995	<p>People perform multiple roles in computer-mediated worlds. The self is viewed as multiple and fluid</p> <p>Stresses that people do not suffer from those multiple roles but can control their multiple identities</p>
Walther, 1996	<p>CMC conversations may result in hyperpersonal communication</p> <p>Reduced social cues in CMC allow users to present themselves very selectively</p> <p>A receiver, in turn, tends to over-attribute perceived similarities and create</p>

	an idealised image about the sender of the message
Herring, 1999	<p>Investigates text-only CMC analysing turn-taking, simultaneous feedback, overlapping exchanges and order of messages</p> <p>Suggests that users have found strategies to limit the confusions created by the above-mentioned features of CMC conversation. Further, users seem to exploit the potential for play and enjoy the intensified interactivity of those types of conversation; especially in synchronous exchanges</p> <p>This type of exchange is possible due to textual records and extends the limits of spoken conversations</p>
Jacobson, 1999	<p>Uses prototype theory to study impression formation in online communities</p> <p>Images formed are not only based on “cues provided, but also on the conceptual categories and cognitive models people use in interpreting those cues” (p. 24)</p> <p>Stereotypes have an influence on the discrepancies people face between online and offline image</p>
Tidwell & Walther, 2002	<p>Extended SIDE theory by showing that not only text and typing is evaluated. Time stamps are also considered, while a late CMC message was considered more positively than a message sent during working hours</p> <p>Anticipate future interaction has a stronger effect online as it has offline. It promotes more self-disclosure and participants ask more questions</p>
Walther et al., 2001	<p>Found that text-based exchange over a certain period of time can attain more interpersonal outcomes</p> <p>This finding helps to understand the hyperpersonal perspective’s condition regarding selective self-presentation. Without photograph or other physical cues the perceptions for one another depend on one’s self-presentation</p>
Bargh et al., 2002	Found that people are better able to express themselves online than offline
Nastri et al, 2006	<p>In text-based environments, it is difficult for a sender to know if a non-response means that the other participants is away or if there is any other reason why he/she does not respond to a message</p> <p>Away messages are primarily of informative nature indicating that a participant is unavailable or busy. Their prediction that higher group involvement will lead to more group-based orthography was not supported. CMC based orthography was more often found in away messages</p>

*Source: Developed for the present study*

### **2.6.3 Key authors and concepts of corporate identity and corporate image**

Table 9 presents a choice of key authors and concepts in the area of corporate identity and corporate image.

*Table 9: Key authors and concepts – corporate identity and corporate image*

<i>Key author</i>	<i>Concepts</i>
Abratt, 1989	<p>Analyses the development of the concept of corporate image and stresses the differences between corporate identity, corporate image and corporate philosophy</p> <p>According to him, corporate identity and corporate image were often used interchangeably and he created a corporate image management process which addresses the interface between corporate identity and corporate image.</p> <p>His model adopts an outside-in focus</p> <p>He added the concept of corporate personality to his model</p> <p>Makes an attempt to integrate corporate personality, identity and image</p>
Abratt & Mofokeng, 2001	<p>Based on the Shee and Abratt's (1989) model of the corporate image management process, they have conducted empirical tests.</p> <p>The results confirm that the model is applicable</p>
Balmer, 1998	<p>Defines five problems of corporate image: (i) multiplicity of interpretations, (ii) negative associations, (iii) pretended exclusive role of image communication, (iv) multiple images and (v) different importance of stakeholder groups</p> <p>Proposes a concept of corporate image management</p> <p>Proposes a marketing mix with 10P's: philosophy and ethos, personality, people, product, price, place, promotion, performance, perception, positioning</p>
Balmer & Soenen, 1999	<p>Many corporate identity models are based on visual systems</p> <p>In order to identify gaps between various types of identities the ACID test distinguishes four distinct types of identity: (i) actual identity, (ii) communicated identity, (iii) ideal identity and (iv) desired identity</p>
Barich & Kotler, 1991	<p>Provide an image tracking and managing system</p> <p>They introduce the concept of marketing image. A marketing image is the image people form about the marketing activities of a company</p>
Bernstein, 1984	<p>Image is an expression of corporate personality, while it is the perception of the audience and not what the company believes it to be. Consistent communication is important for image management. Image is built of an amplitude of impressions formed by the audience. Those impressions are formed by a variety of formal and informal indications stemming from the company</p>
Bolger, 1959	<p>Methodology to profile corporate image with a card-sorting system</p> <p>Companies are searching for the "ideal" image</p>
Boorstein, 1963	<p>Criticism that image is built on the expense of reality</p>
Boulding, 1956	<p>What we believe to be true actually is true. Relationship between image and behaviour</p> <p>Individuals behave towards a company according to their subjective knowledge</p>
Bristol, 1960	<p>Provides different tools to address several audiences</p>

Brown, 1998	Provides antecedents and consequences of corporate associations
Brown et al., 2006	<p>Introduces four viewpoints of an organisation: (i) “who are we as an organization”, (ii) “what does the organization want others to think about the organization” (iii) “what does the organisation believe others think of the organization” and (iv) “what do stakeholders actually think of the organization” (p. 100)</p> <p>Provides a classification scheme in order to map various concepts into their viewpoints, the level of analysis (individual or organisational) and scope (all aspects vs. central, enduring and distinctive aspects)</p>
Christensen & Askegaard, 2001	<p>Semiotic exercise discussing and evaluating much of the corporate identity and corporate image literature</p> <p>Propose that there is a constant interplay between corporate identity and corporate image</p> <p>In a semiotic perspective, they consider corporate image formation as being derived from signs</p>
Cohen, 1967	<p>Showed difficulties in image research and suggests that different ratios could help solve these difficulties</p> <p>Measurement development in order to measure the “ideal” image</p>
Dacin & Brown, 2002	In collaboration with an international consortium of researchers, they proposed a framework for research and a list of potential research propositions
Dowling, 1986	<p>Extends Kennedy’s model by adding internal communication, interpersonal communication (internal as well as external) and marketing media communication.</p> <p>Corporate advertising can influence corporate culture</p>
Dowling, 1988	<p>Provides types of attributes of corporate image that can be measured</p> <p>Presents measurement techniques that have been used to assess corporate image</p>
Dutton et al., 1994	<p>Developed a model that shows an employee’s identification with the organisation, according to the image he/she holds about the organisation</p> <p>Provide two types of organisational images: “perceived organisational identity” (individual-level; individual’s perception of what is important, enduring and distinctive of the organisation) and “construed external image” (the organisation member’s belief about what outsiders believe about the organisation)</p> <p>The more attractive those two types of organisational images are, the more organisational members identify with the organisation</p>
Gray, 1986	Image important as it helps to manage the audience’s perception of security and trust
Greenberg, 1961	<p>Addressed questions of image stability</p> <p>The less recent a customer has been in a retail shop of a company, the less the customer bases his/her image formation with his/her shop experience</p>
Harris, 1958	Seven types of images: corporate image, the institutional image, the product image, the brand image, a diffused image and the consumer demand image

Hatch & Schultz, 1997	<p>Corporate identity and corporate image are multidisciplinary concepts</p> <p>Internal and external stakeholders of a company interact with each other and belong to several stakeholder groups. Thus, the boundaries between internal and external stakeholders are blurred</p> <p>Stress the link between corporate identity and corporate culture</p>
Karaosmanoglu & Melewar, 2006	<p>Highlight the importance of the corporate identity mix in image formation</p> <p>A specific focus is given to uncontrolled communication and the definition of the scope of communicators of corporate identity</p>
Kennedy, 1977	<p>Focuses on employees who act as sales staff and thus transport the image to the outside. If internal image is consistent, the projected image to the audiences is consistent, too</p> <p>Takes into consideration both sides: how companies try to influence image formation and how images are really formed by the audiences</p> <p>All groups of audiences are affected by what companies communicate</p> <p>Image should be based on reality</p> <p>Measurement development</p>
Martineau, 1958	<p>A company faces several audiences to whom they have to present themselves and which all “see the image differently because their perceptions, their expectations, and their wishes differ” (p. 53)</p> <p>Divided image into functional (quality, price, and the like) and subject image (emotions), adding that “modern communication theory recognises that our feelings steer our senses” (p. 56)</p> <p>The mind can only handle a certain amount of complexity and thus oversimplifies impressions by forming stereotype notions. Those images are more important than facts and figures and serve as emotional filters. People holding a negative image do not acknowledge positive information and reject what they believe not to like. In contrast, if the audience holds a positive image, the halo effect of it provides the company with a positive image</p> <p>All symbols of a company should be expressive, distinctive and congruent</p>
Markwick & Fill, 1997	<p>Claim that strategic management should take the impact of corporate identity into account</p>
Melewar & Karaosmanoglu, 2006	<p>Based on empirical research, they provide a model with the seven dimensions of corporate identity: (i) corporate communication, (ii) corporate design, (iii) corporate culture, (iv) behaviour, (v) corporate structure, (vi) industry identity, and (vii) corporate strategy</p>
Newman, 1953	<p>Compares corporate image with human personality</p>
Olins, 1978	<p>Identity is essential to every social group. Every group develops a certain personality, which is then perceived as identity</p> <p>Concentrates on visual identity, which is an important part of the identity</p> <p>Image is an expression of corporate personality. Consistent communication is important for image management</p>
Pilditch, 1970	<p>Distinction between corporate image and corporate identity</p>

Spector, 1961	Ranking of six image personalities Measurement development
Stuart, 1998a, 1999	Revised Abratt's (1989) corporate image model and added corporate culture and corporate symbols. She further distinguished between internal and external communication  Based on a thorough literature review, he proposes a new corporate identity management model
Tucker, 1961	Many large organisations have stereotypical images  Measurement development
Van Rekom, 1997	Highlights the role corporate identity plays in corporate communication  His analysis is based on Albert and Whetten's criteria: central, enduring and distinctive
Van Riel & Balmer, 1997	Desired corporate identity is related to positioning and branding  Provide measures of corporate identity (laddering technique, affinity audit, ROIT)  Present three paradigms for the classification of corporate identity: graphic design, integrated communication and the interdisciplinary paradigm
Van Riel et al., 1997	Analysed six methods that can be used to measure corporate image  Provide the strengths and weaknesses of each method
Williams & Moffitt, 1997	Suggest that the image is composed of multiple organisational, personal and environmental factors. While the organisational factors can be controlled, the personal as well as the environmental factors are less controllable, or uncontrollable

*Source: Developed for the present study*

## **Chapter 3 - Conceptual model and research hypotheses**

### **3.1 Introduction**

As the literature review in chapter 2 indicates, it is essential for those participating in acts of communication to know their identity in order to appreciate and evaluate an interaction. Hence, individuals as well as companies are concerned with identity production in trying to create a favourable impression.

The author acknowledges that the concepts of corporate identity and corporate image are complex constructs with as many sets of causes and consequences as there are research contexts. This study focuses only on a single dimension of corporate identity: corporate communication by examining how corporate communication targeting online communities can influence impression formation.

This particular environment has been chosen because online communities are a means for companies to connect with their audiences in ways that have not hitherto been possible. Companies are able to build relationships with existing and potential customers by creating a community around their brand (Hagel & Armstrong, 1997; Shaw, 1996; Kozinets, 1999). It would be wrong to suggest, however, that companies should try to control the information available or the communication in online communities (Kozinets, 1999; Locke et al., 2001; de Chernatony, 2001; Christodoulides & de Chernatony, 2004). Rather, they should communicate with the community “in such a way that acceptance is gained and a favourable impression created” (Hallier, 2010). To understand how this can be achieved is the aim of the proposed conceptual model.

Considerable research has gone into planned and unplanned communication processes in the field of corporate identity and corporate image (e.g. Cornelissen, 2000;

Christensen & Askegaard, 2001; Dacin & Brown, 2002). “However, there is a lack of research into the management of communication in online communities and its impact on corporate impression” (Hallier, 2010). As outlined in chapter 2, online communities and other means of computer-mediated communication (CMC) have their peculiarities. “It has even been found that people in computer-mediated situations make more extreme attributions than those communicating face-to-face (Walther, 1996). This underlines the importance of understanding” (Hallier, 2010) how different aspects of communication influence the company’s impression in the minds of this particular audience.

The chapter starts with a discussion about how the conceptual model has been conceived. Next, it illustrates the relationships between the constructs and the related hypotheses. Subsequently, each construct is presented in detail and at the end of the chapter the hypotheses are summarised in a table.

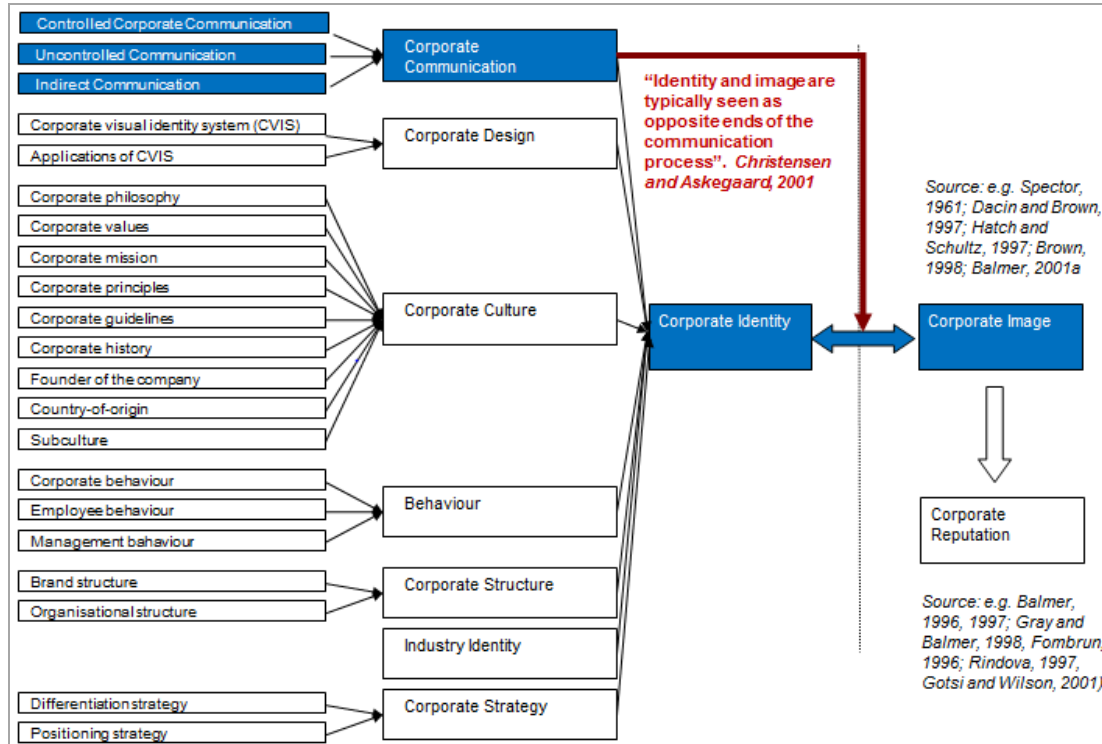
### **3.2 Development of the conceptual model**

The following presents the deduction of the conceptual model. It is based on Melewar and Karaosmanoglu’s (2006) corporate identity framework and also incorporates Christensen and Askegaard’s (2001) idea that “identity and image are typically seen as opposite ends of the communication process” (p. 296). Thus, the author has added the construct of corporate image, as well as corporate reputation, to the above mentioned framework. The concept of corporate reputation has been added to illustrate the difference of the two constructs, namely “time” (see also 2.4.3). These relationships are illustrated in the figure below: the elements which are taken into consideration are highlighted in blue, while the red arrow represents Christensen and Askegaard’s (2001) definition above. The red arrow indicates that corporate communication is part of the corporate identity mix, while it is also emphasised as the interface between corporate identity and corporate image, trying to convey messages about the company’s persona (corporate identity) to its constituencies. In turn, the constituencies will receive those



messages, which will influence the associations they have about a company (corporate image).

Figure 11: Derivation of the conceptual model

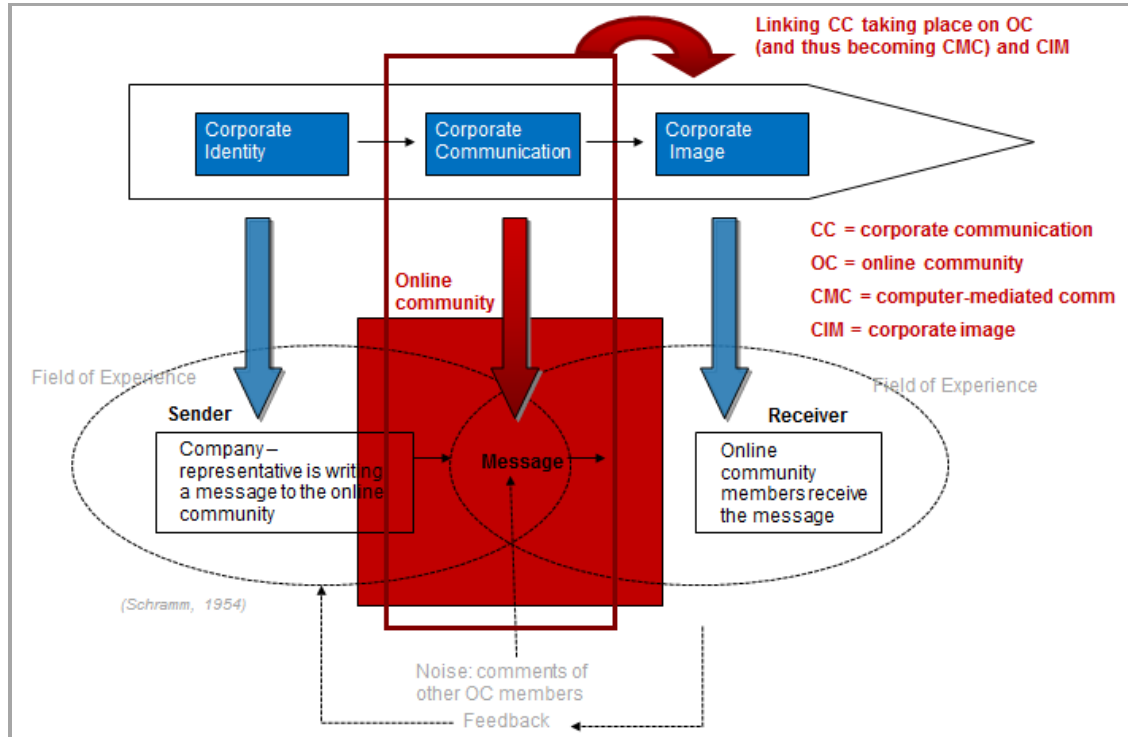


Source: Adapted from Melewar & Karaosmanoglu, 2006

The figure below illustrates further how the conceptual model was derived at. It is based on Schramm's (1954) communication. The sender, in our case a company-representative (COR), writes a message to an online community. In doing so, he or she engages in a corporate communication activity, which is an element of corporate identity. The message (communication activity) reaches the online community at the intersection of the sender and receiver or, in other words, it is placed on the platform on which the two interact. The receiver of the message is the online community member (OCM), who automatically forms an impression about the interaction. Because the interaction takes place on an online platform, we have to refine the term communication, which we can do by looking at computer-mediated communication. What Schramm (1954) defines as "noise" disturbing a communication can here be

interpreted as comments from other OCMs “disturbing” the communication between the COR and the OCM.

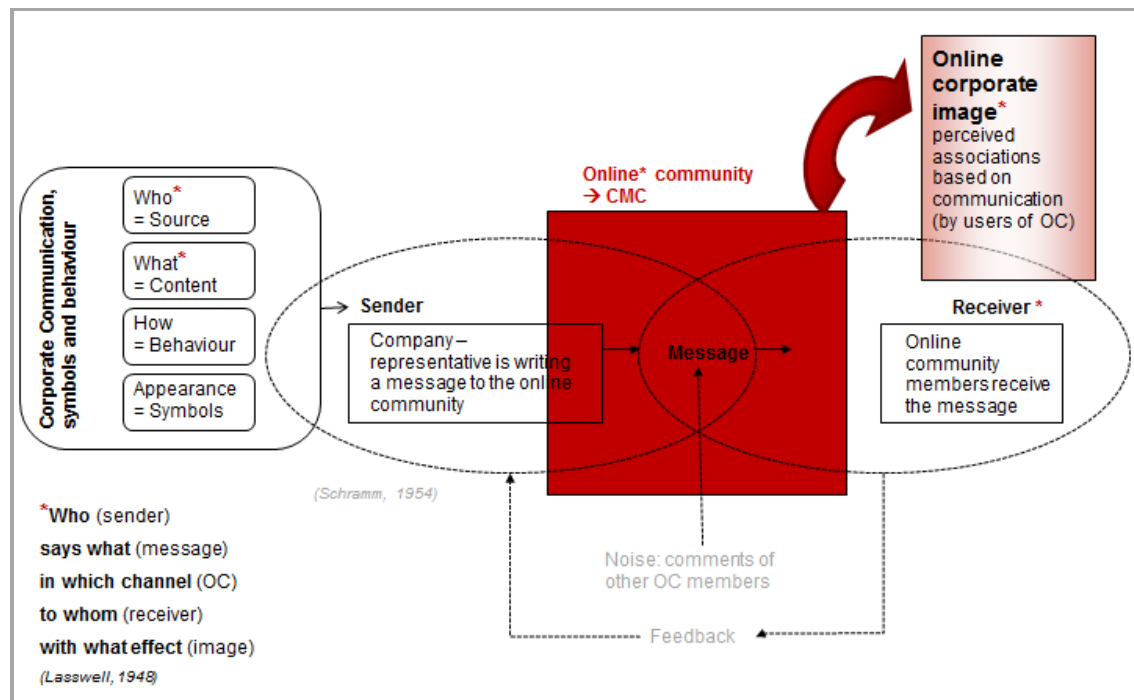
Figure 12: Derivation of the conceptual model – first part



Source: Developed for the present study

Considering Lasswell’s (1948) definition of a communication process can be used to emphasise the focal construct of this study. Lasswell (1948) suggests that when we speak about communication we need to think about who says what, in which channel, to whom, and with what effect. If we take the figure above and transfer it to Lasswell’s (1948) model, the following can be inferred: who = sender, says what = message, in which channel = online community, to whom = receiver, with what effect = online community corporate impression, as shown below.

Figure 13: Derivation of the conceptual model – second part

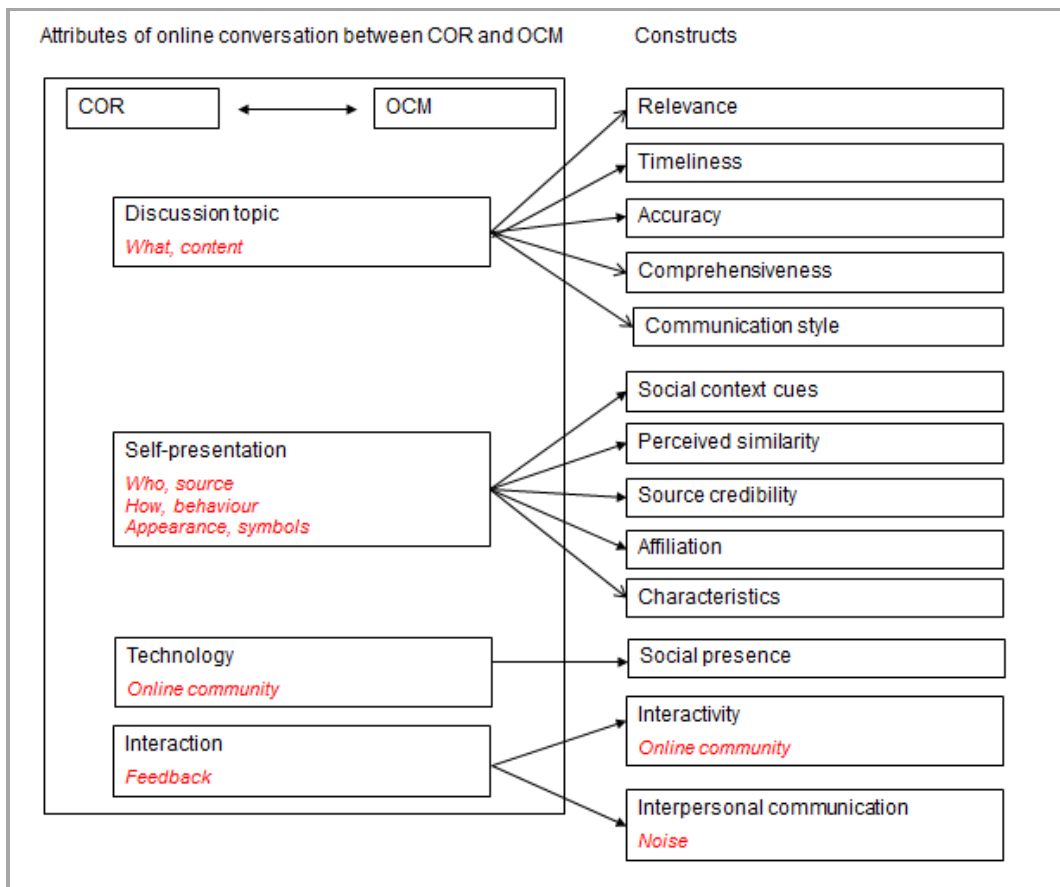


Source: Developed for the present study

As previously discussed in detail, an image is composed of a number of attributes. The proposed conceptual model addresses the most important attributes in the environment of online communities. These can be seen as comprising both company-controlled and uncontrolled communication. It is clear that uncontrolled communication (interpersonal communication between online community members) plays no less crucial a role than company-controlled, as both types take place on the same platform and at more or less the same time.

Figure 14 shows the attributes of an online conversation between a company representative (spokesperson), labelled *company representative (COR)*, and an *online community member (OCM)*. It further presents the related constructs. In order to illustrate the link from Figure 13 to Figure 14 elements stemming from Figure 13 are highlighted in red.

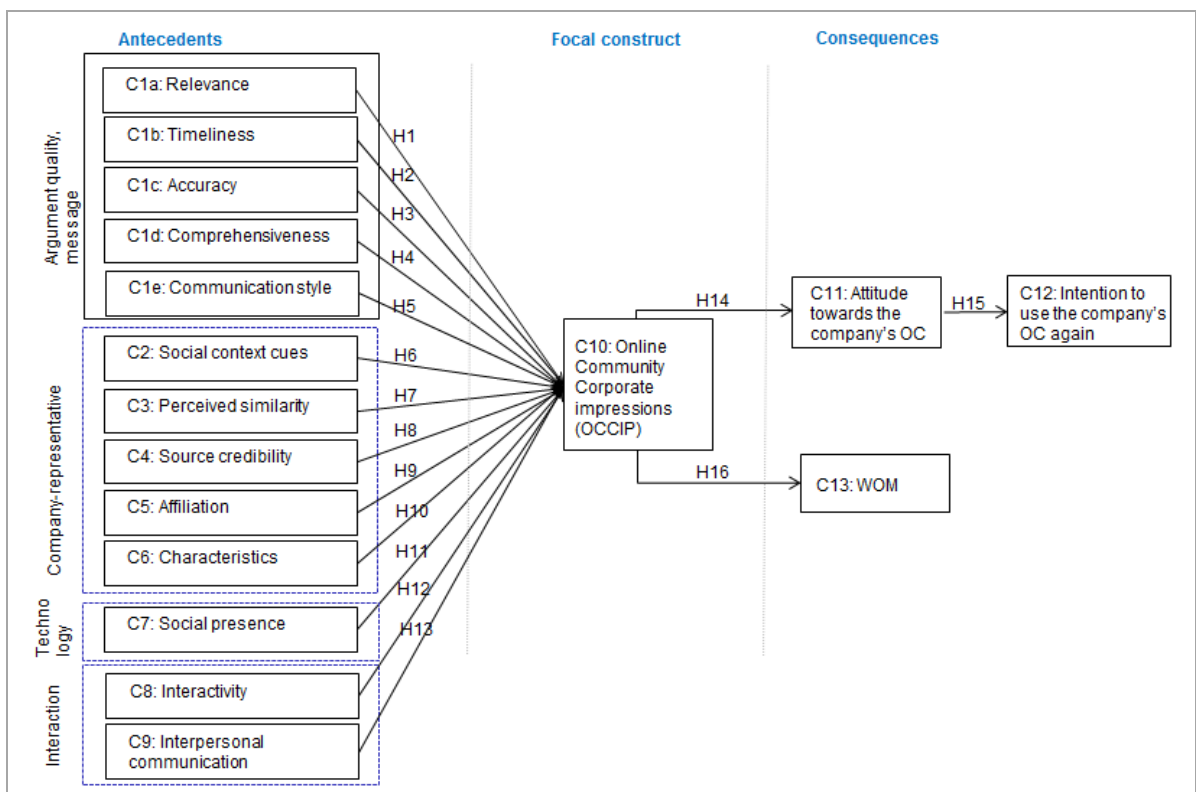
Figure 14: Attributes of online conversations



Source: Developed for the present study

The constructs are the nodal points of the proposed conceptual model. The conceptual model systematises the relationship between communication elements relevant in online communities and their influence on corporate impression. It is presented below.

Figure 15: Conceptual model



Source: Developed for the present study

In the following, each construct of the conceptual model is discussed in detail and the hypothesised relationships are presented.

### 3.3 Antecedents of online community corporate impression (OCCIP)

As mentioned above, this study links corporate communication activities to impression formation in a specific environment, namely online communities. Relevant communication elements as defined by the conceptual model are presented below.

#### 3.3.1 Argument quality

As discussed in the information adoption model (see chapter 2), argument quality (information quality) has been considered to have a great influence on how information

is adopted. The quality of an argument (information) becomes even more important when considering the fact that with today's information systems everybody can easily publish content (Bhattacharjee & Sanford, 2006). The following table presents constructs that have been discussed and proposed by scholars in relation to argument quality.

Table 10: Proposed dimensions of argument quality

	<i>Accu- racy</i>	<i>Time- lines</i>	<i>Rele- vance</i>	<i>Com- prehen- sive- ness</i>	<i>Up-to- dated- ness</i>	<i>Understan- dability</i>	<i>Com- plete- ness</i>	<i>Relia- bility</i>	<i>Curren- cy</i>	<i>Pre- cise- ness</i>	<i>Infor- mation content</i>	<i>For- mat</i>	<i>Dyn- amism</i>
Molla & Liker, 2001	X	X	X	X	X	X	X	X	X	X			
Doll & Torkzadeh, 1988	X	X									X	X	
DeLone & McLean, 2003	X		X			X	X		X				X
McKinney et al., 2002						X		X					
Zwass, 1996							X						
Palmer, 2002							X						
Citrin, 2001			X										
Wixom & Todd, 2005	X	X		X									

Source: Developed for the present stud, based on Cheung et al., 2008

Based on the literature, some of the above-mentioned constructs can be grouped together:

- Reliability and correctness are parts of accuracy of a message
- Up-to-datedness and currentness are parts of the timeliness of messages
- Completeness and understandability are parts of the comprehensiveness of the message.

Table 11 below shows the new constructs after some of them were grouped together.

*Table 11: Dimensions of argument quality*

	<i>Accuracy (reliability , correct- ness)</i>	<i>Timeliness (current, up-to-date)</i>	<i>Rele- vance</i>	<i>Compre- hensive- ness (complete, under- standabili- ty)</i>	<i>Precise- ness</i>	<i>Infor- mation content</i>	<i>Format</i>	<i>Dyna- mism</i>
Molla & Liker, 2001	X	X	X	X	X			
Doll & Torkzadeh, 1988	X	X				X	X	
DeLone & McLean, 2003	X	X	X	X				X
McKinney et al., 2002	X			X				
Zwass, 1996				X				
Palmer, 2002				X				
Citrin, 2001			X					
Wixom & Todd, 2005	X	X		X				

*Source: Developed for the present study, based on Cheung et al., 2008*

As can be seen in the table above, four constructs have only been mentioned by one study and thus were not further investigated. This is in line with Cheung et al. (2008) proposing that to assess argument quality the four commonly used elements of argument quality, namely relevance, timeliness, accuracy and comprehensiveness are used. Next, each construct that has been considered is discussed in more detail.



### **3.3.1.1 Relevance of COR's contribution**

As mentioned in chapter 2, conversations in computer-mediated environments are assumed to convey fewer social context cues than face-to-face conversations. The impact of this is described as follows: “Social standards will be less important and communication will be more impersonal and freer because of the rapid exchange of text, the lack of social feedback, and the absence of norms governing the social interaction redirect attention away from others and toward the message itself“ (Kiesler et al., 1984 p. 1126). This view is supported by Burgoon et al. (2002), who suggest that the introduction of mediation (in our case electronic mediation) per se does not decrease the interaction processes and may even present an advantage by supplementing face-to-face interaction with a more persistent verbal record. The removal of nonverbal cues may actually increase attention to the message.

In line with Burgoon et al. (2002), Boyd and Ellison (2007) claim that contributions in digital spaces are persistent and searchable, this further underlines the importance of providing relevant contributions. What is more, individuals today are faced with information overload and have become very selective about what kind of information they read. This is supported by Christodoulides and de Chernatony (2004) who emphasize the importance of relevance in an “over-communicated virtual world” (p. 173).

Customers can chose what they read and thus, a company has to provide new and exciting enough information in order a customer perceives and reads it (Godin, 2001) claims that customers have a choice these days, and that they can also choose to ignore you. Thus, companies have to give their customers something that is real, new and exciting enough to discuss in an online community (Scoble & Israel, 2006; Gladwell, 2002).

If all these points are taken into consideration, it can be hypothesised that,

*H1: Relevant contributions of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.1.2 Timeliness**

In the fast-paced environment of online communities, it is important for messages to be current and up to date. Readers of a website expect that its content is updated consistently in order to continuously deliver up-to-date information. If this is not the case, the website does not deliver any added value to the reader (Madu & Madu, 2002) Thus, Cheung et al., 2008 stress that “the more timely the messages are, the higher the perceived information usefulness of the message” (p. 234), which again reflects the impression a OCM has about the sender of a message. Enhancing the timeliness of sent messages can be an important step in better online communication (Adjei et al., 2010).

Feelings of uncertainty can be minimised and the confidence in a company increased when OCMs receive messages that are relevant, frequent, long and timely (Adjei et al., 2010). Hence it is posited that,

*H2: Timely messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.1.3 Accuracy**

By accuracy it is meant that the message is perceived to be correct. In other words, it refers to the reliability of the message (Wixom & Todd, 2005). Daft and Lengel (1984) argued that reliability, accuracy and quality of a message are essential if sent via a mediating tool. Therefore, it is proposed that,

*H3: Accurate messages of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.1.4 Comprehensiveness**

Sullivan (1999) suggests that the more complete and detailed a message is “the wider the breadth of user categories and user-orientation of that web site, and thus resulting in a greater likelihood of further acquisition and retention. The more comprehensive the messages are, the higher the perceived information usefulness of the message” (Cheung et al, 2008, p. 234). Thus, it can also be assumed that,

*H4: Comprehensive messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.1.5 Communication style**

Some researchers tentatively array the communication style measures along two continua (Norton, 1983; Hansford & Hattie, 1987). At the first end a non-directive communication style (attentive and friendly) and at the second one a directive communication style (dominant and argumentative) can be anchored (Rice et al., 1992). Rice et al., (1992) found that communication style plays only a small role in explaining acceptance, usage and assessment of computer-mediated communication systems.

Several factors indicate that online community members expect a nondirective writing style. According to Roed (2003), online community users tend to share their viewpoints more openly and are more honest. This tendency might be due to the greater anonymity of computer-mediated communication. Thus, it could be said that companies should change their controlled communication and listen to what people say (Scobel & Israel, 2006; Weil, 2006). Blog readers, for instance, expect a blog to tell the “real” story and would not accept any corporate speech. They have to be interactive, “written in a conversational voice” (Weil, 2006 p. 7) and passionate (Wright, 2006). According to Weil (2006) a writing style has to be simple, clear and conversational or, in Wright’s (2006) words, you need to have a “genuine voice” (p. 77). Therefore it is hypothesised that,

*H5: Informal communication style used by a COR is positively related to the online community corporate impressions (OCCIP).*

### **3.3.2 Self-presentation**

Self-presentations consist of many elements, not all of which are relevant in online communities. Subsequently, only the constructs relevant to the research context of the current study are presented.

#### **3.3.2.1 COR's transmitted social context cues**

Mehrabian (1969) suggests that nonverbal cues can lead to a more passionate, affective and direct interaction. In mediated communication, however, as suggested by the theories investigating in social context cues (see chapter 2), nonverbal cues are absent or strongly attenuated (Sproull & Kiesler, 1986; Dubrovsky et al., 1991).

Later authors such as Walther (1992) and Walther et al. (1994) assume that some social context cues are lost in computer-mediated communication and acknowledge that people need some amount of information about each other. They will then process the information they have received and form an impression about each other. However, Walther (1992), and Walther et al. (1994) found that if users spend enough time exchanging a series of messages they could gather enough information about each other to form interpersonal relationships.

Short et al. (1976) speculate that missing nonverbal cues can be substituted by verbal cues: “thus head-nods indicating agreement be replaced by verbal phrases such as ‘I quite agree’” (p. 64). Consequently, missing social cues do not necessarily have a negative impact on impression in this context. Walther (1995) agrees, stating that the absence of social cues can be overcome through “various linguistic and typographic manipulation, which may reveal social and relational information in CMC” (p. 190). Thus, people have created a “paralanguage” (Carey, 1980 cited in Walther, 1992) such as the use of emoticons, in order to verbalise nonverbal cues (Lea & Spears,

1992; Walter, 1992). Jacobson (1999) states that “in addition to the words people choose, paralinguistic cues also influence the ways in which participants see each other” (p. 7). Therefore, it is believed that inter alia the use of paralanguage can make up for the lack of social context cues and has a positive impact on impression formation.

Walther (1996) notes that the low level of social cues in CMC allows senders to present themselves very selectively by carefully constructing their messages. Receivers in turn tend to over-attribute perceived similarities and create an idealised impression of the sender (Walther, 1996). This is due to de-individuation in environments where individuals interact in visual anonymity (see SIDE theory described in chapter 2). Any social context cue that is conveyed is likely to be “over-attributed” by the receiver of a message (Spears et al., 1990; Walther, 1996).

Based on the above-mentioned discussion, personal descriptions and the use of paralanguage are considered to be important because they make up for the lack of social context cues. Therefore, the concept leads to the following proposition,

*H6: Social context cues that OCMs receive about the COR have a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.2.2 Perceived similarity of COR**

Numerous studies in the field of marketing and social psychology suggest that representatives of a company who are similar to the customer are more influential than representatives who are dissimilar (DeShields & Kara, 2000). According to Brown and Reingen (1987), similarity between individuals is perceived to be a key factor in the persuasiveness of word-of-mouth information. Based on Lazarsfeld and Merton’s (1954) theory of homophily, it is suggested that it is easier to communicate with individuals that are perceived to be similar (Dellande & Gilly, 1998) or, in Brown and Reingen’s (1987) words, “a fundamental principle of human interaction

is that people tend to interact with others who are like themselves” (p. 354). The theory of homophily has received support from numerous studies on consumer behaviour highlighting the cooperative behaviour of a sales person and a customer with perceived similarity during a sales talk (e.g. Evans, 1963; Brown & Reingen, 1987). Similarity consists of congruency regarding demographic variables, beliefs, values, preferences and lifestyle (Gilly et al., 1998). In the context of online communities, assuming that there are fewer contextual cues available than in face-to-face communication, perceived similarity consists mainly of congruency regarding beliefs, values and preferences, such as shared interest in a specific brand.

Based on the discussion above it is posited that,

*H7: Perceived similarity of the COR is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.2.3 Source credibility**

Source credibility is an important concept that has been studied by numerous scholars (e.g. McGuire, 1969; Ohanian, 1990; Belch & Belch, 1994; Goldsmith et al., 2000; Lafferty et al., 2002; Massey, 2003). It has been conceptualised in two ways: corporate credibility and endorser credibility (Goldsmith et al., 2000). For the purposes of this study, source credibility refers to the credibility of the endorser, namely the COR.

According to Massey (2003) and in line with Goldsmith et al. (2000), there are two important dimensions of source credibility: “(i) whether the source is believable (expertise), and (ii) whether the source has the public’s best interests at heart (trustworthiness)” (Massey, 2003 p. 5). Attractiveness is also cited as a factor (Ohanian, 1990; Lafferty et al., 2002), as is likeability (Clow & Baack, 2004). Attractiveness and likeability, however, seem not to be appropriate for the context of the present study.

Massey (2003) states that not only individuals but also organisations are gauged in terms of these dimensions. Massey defines them as “the perceived expertise and trustworthiness of the firm, which is the extent to which consumers feel that the firm has the knowledge or ability to fulfil its claims and whether the firm can be trusted to tell the truth or not” (Nowell & Goldsmith in Massey, 2003 p. 6). Fombrun (1996), cited in Lafferty et al. (2002), posits that “corporate credibility, or the extent to which consumers, investors, and other constituents believe in a company’s trustworthiness and expertise, makes up a portion of a corporation’s image” (p. 2). Numerous other scholars, stating that corporate credibility also plays an important role in influencing attitudes and purchase intention, support these statements (e.g. Lafferty & Goldsmith, 1999; Goldsmith et al., 2000).

Most of the above-mentioned studies investigate source credibility and its relationship to the *attitude-towards-an-ad* and subsequently the *attitude-towards-a-brand* and its consequences on purchase intention (e.g. Goldsmith et al, 2000; Lafferty et al., 2002). However, it seems logical to draw a parallel and presume that when communicating with a COR in an online community, an OCM’s evaluation of the credibility of the company representative would impact his or her impression and attitude towards the company. Therefore, it can be expected that,

*H8: Perceived credibility of the COR is positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.*

#### **3.3.2.4 COR’s affiliation**

According to Warnick (2004), the Princeton Survey Research Associates have found that respondents want a website to present transparent information on “who runs the site, how to reach those people, the site’s privacy policy, and other factors related to site authorship and sponsorship” (p. 259). This leads to the assumption that for receivers of information it is important to know the source of an online contribution. In our context it is not the site itself, but the COR who is the source and needs to be recognisable.

Online community members do not always appreciate when companies participate in their community (Hogenkamp, 2007). This is why it could be even more important for CORs to disclose their affiliation to the company they work for.

The discussion under point 3.3.2.3 shows that expertise is an important part of credibility. There may be cases where the participation of CORs is in fact appreciated, since his or her affiliation to a company can provide the COR with insider knowledge about a subject the online community members are interested in.

Taking these points into consideration, it is hypothesised that,

*H9: The COR's disclosed affiliation to the company has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.2.5 Characteristics**

This construct describes the perceived characteristics and communication behaviour of the COR. People who interact form impressions of one another, even if they do not meet directly. These impressions are based on the others' behaviour and characteristics (Downey & Christensen, 2006).

The self-presentation of a person consists of various elements, some of which are discussed above. The perceived characteristics and communication behaviour of a person, however, have not yet been addressed; these are believed to be of great relevance in impression formation. Thus, it is hypothesised that,

*H10: The positive perception of a COR's characteristics has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.*



### **3.3.3 Technology**

Due to the fact that online communities are platforms based on Internet technology, the ideas of mediated communication and the concept of social presence also need to be taken into account. A detailed discussion about computer-mediated communication and its related theories is provided in chapter 2.

#### **3.3.3.1 COR's social presence**

The social presence theory (Short et al., 1976) claims that if there is little social presence, communication between individuals is less personal. It is argued that the fewer social context cues are transmitted by a medium, the lower the degree of social presence experienced by its users. In other words, the lack of social context cues deprives the communicators of the sense of actual physical presence and negatively influences a communication. Short et al. (1976) stress that they “regard Social Presence as being a quality of the communication medium” (p. 65) and thus social presence is the extent to which a medium is perceived to be able to convey psychological presence felt by individuals who communicate with each other. The media richness theory (for more details, see chapter 2) by Daft and Lengel (1984) predicts that because media vary in their ability to convey social context cues, the choice of a medium has an effect on information transmission.

It is proposed that in order for communication to be successful and effective, “intimacy and immediacy” or the “sense of being with one another” is needed (Short et al., 1976). The concept of intimacy is based on the intimacy-equilibrium theory (Argyle & Dean, 1965) that proposes that when two individuals communicate with each other both are at the same time attracted and repelled by the other. Both will try to adjust their behaviour as long as equilibrium of intimacy has been reached (Short et al., 1976). The notion of immediacy has been introduced by Wiener and Mehrabian (1968) and “is a measure of the psychological distance which a communicator puts between himself and the object of his communication” (Short et al., 1976 p. 72).

The perceived social presence of an individual communicating in online communities is assumed to be important as today's users expect more personal communication (Zerfass, 2005; Weil, 2006; Wright, 2006). Thus, it seems legitimate to assume that a high degree of perceived social presence will allow positive impressions to be formed. Therefore it is proposed that,

*H11: Perceived social presence of the COR is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.3.2 Interactivity**

Hoffman and Novak (1996) state that the Internet allows interactive many-to-many communication between companies and customers, as well as among customers themselves. Furthermore, consumers have become more emancipated (Dellaert, 2000), they have become producers and want to participate actively in the conversation. These active consumers have been named 'prosumers' (Toffler, 1984; Tapscott, 1995). Wright (2006) claims that "people don't want to be talked at, they want to be talked with" (p. 30). Therefore, it is assumed that when consumers are able to participate in communication this will increase their enthusiasm and it will build trust among the entire customer base and allow an organization to share and gain feedback. Furthermore, if the COR gives sensible feedback on other people's contributions this will surely have a positive influence on their perception of the company. The reason for this assumption is rooted in Sproull and Kiesler's (1986) finding that individuals overvalue the importance of their own messages relative to the importance of messages from other individuals in their group. This tally with Wright (2006), who suggests that effective communication on blogs, is based on listening, understanding, and valuing everyone's contributions.

To define the concept of interactivity, Blattberg and Deighton (2000) cited in Christodoulides & de Chernatony (2004) describe it as "the facility for individuals and organisations to communicate directly with one another regardless of time and space" (Christodoulides & de Chernatony, 2004 p. 172). Interactivity can also be

described as the ability to address someone and to receive and recall the answers of that person (Deighton, 1996) or, in other words, it is some form of interdependent message exchange (Rafaeli, 1988). Steuer (1992 p. 84) proposes that interactivity is “the extent to which users can participate in modifying the format and content of a mediated environment in real time”. Another important definition is provided by Bagozzi (2007), who stated that interactivity can be determined by contingency, that is the extent to which a community member’s response is based on preceding conversation and mutuality, and the extent to which community members connect to each other.

Interactivity can be further classified according to whether it comprises user-machine, user-user, or user-message interaction (Cho & Leckenby, 1997). Early research focussed on user-machine interaction; with the advent of new, more interactive technologies, research has turned to user-user and user-message. It has been found that “the more that communication in a computer-mediated environment resembles interpersonal communication, the more interactive the communication is” (Liu & Shrum, 2002 p. 54). Research into user-message interaction investigates how users can manipulate messages (Steuer, 1992).

This study focusses on user-user and user-message interaction. The reason for excluding user-machine interaction is that online communities, like all the most characteristic web 2.0 phenomena, are mere platforms for communication, rather than communicators themselves.

A further aspect to be considered is that interactive systems can help users to process information. Users can eliminate, edit or prioritise information to suit their needs (Sicilia et al., 2005). According to Sicilia et al. (2005), “this activity requires extensive cognitive effort, which implies that the level of information processing will be high” (p. 33).

This leads one to expect that high information processing through a high degree of interactivity in an online community might result in a better evaluation of the conversation and ultimately of the company.

Interactivity is furthermore characterised by increased involvement (Shih, 1998), control over the information exchange (Ariely, 2000) and the sense of presence. These lead to openness (Lombard & Snyder-Duch, 2001) and increased enjoyment of the communication event (Ariely, 2000).

Another important reason for studying interactivity is that users perceive interactive messages as more attractive (Sicilia et al., 2005). Studies have shown that interactive websites are perceived as being more attractive than their non-interactive relations (Wo, 1999 cited in Sicilia et al., 2005).

The above discussion of interactivity leads to the formulation of the following hypothesis,

*H12: Interactive communication is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.*

### **3.3.4 Interpersonal communication**

In a traditional business relationship, communication is what happens between company and customer. Customers who are part of an online community, however, are not isolated but also communicate among themselves (Kozinets, 1999). As a result, relationships with and attitudes toward a company or brand depend fundamentally on the social interactions between the members of the group (Baumgarth, 2004). Numerous studies have shown that customers support and influence each other while exchanging information about a product (e.g. McAlexander et al., 2002; Ahonen & Moore, 2005). For instance, they check out comments posted by other online community members before making a buying

decision (Pitta & Fowler, 2005), or they post a question to a forum hoping to get some support from other online community members (Sussman & Siegal, 2003).

Word of mouth is a well-established concept and has been defined in many ways. In summary it can be described as face-to-face communication between “sources who are assumed by receivers to be independent of corporate influence” (Buttle, 1998 p. 243) about products and services (Arndt, 1967; Bone, 1992). This definition has been criticised by Buttle (1998), who calls it incomplete. In addition to conversations about products and services, discussions about companies need to be included, he says, adding that a conversation does not need to take place face to face but can be mediated electronically. Word of mouth on the Internet has been examined by many scholars in more recent studies (e.g. Bickart & Schindler, 2001; Godes & Mayzlin, 2004; Henning-Thurau et al., 2004; Gruen et al., 2006; Sun et al., 2006; Dwyer, 2007). Gruen et al. (2006) mention that Bickart and Schindler’s (2001) findings “suggest that product information on online forums has greater credibility, relevance and [is] more likely to evoke empathy with consumers than information on market-designed websites” (p. 450). Gruen et al. (2006) studied the online user forum of a software product and proved that customer-to-customer (C2C) knowledge exchange has significant effects on the perceived overall value of the company’s offerings.

It can be assumed that communication among online community members will influence the impression formation process. This is supported by Stammerjohan et al. (2005), who suggest that, in the short term, image can be influenced by word of mouth. Further, Melewar and Karaosmanoglu (2006) propose that corporate image can be positively influenced by positive information received from intermediary sources. This is in line with Bickart and Schindler’s (2001) finding that word of mouth is considered to be more persuasive because it is believed that the source is more credible than information from mass media.

Thus, the next hypothesis addresses the influence of interpersonal communication within online communities,

*H13: Communication between OCMs on the online community platform has a positive effect on online community corporate impression (OCCIP).*

### **3.4 The focal construct – online community corporate impression (OCCIP)**

This section describes how OCCIP was derived from the construct corporate image.

Owing to the fact that this study is conducted on an online community, the construct of corporate image needs to be seen in this context and needs to be adapted in order to suit the research site. As discussed in chapter 2 (2.4.2.1), corporate image is a phenomenon that has been studied extensively and has been defined in many ways.

Reynolds (1965) defines it as “the mental construct developed by the consumer on the basis of a few selected impressions among the flood of total impressions” (p. 70). Each group has different contacts and therefore forms other impressions about a company (e.g. Abratt, 1989; Bernstein, 1984; Brown, 1998; Dowling, 1988; Gray, 1986; Spector, 1961; Topalian, 1984). This study investigates the impressions of a company that OCMs form (a specific group) when interacting with a company-representative (COR) on an online community.

In online communities, it is not the company as persona, but a COR, who communicates and has an influence on online community members. It is the COR who undertakes the corporate communication activities. In traditional marketing the person who undertakes the corporate communication activity (e.g. drafts a message, selects a channel, etc.) is not visible and thus has no effect on the impression one forms. This is different in online communities, where the COR is visible and does directly influence the impression on forms.

Barich and Kotler (1991) suggest that corporate image consists of many factors, such as products, product quality, communication, sales staff, points of sales and after-

sales services. Within the context of this study, the image factor “communication” is central and the communication activities in online communities need to be added (see derivation of the model in 3.2). This means that the impression formed by OCM’s during interactions (communication) in an online community is the main focus. With respect to the corporate image literature, communication on OCs is one part of the whole corporate image construct. However, it is a very significant part with a growing importance as more and more people are using online communication platforms. Because only communication activities on OCs are addressed, the focal construct is not called corporate image but rather online community corporate impression (OCCIP). It is not called online community impression either as the study investigates into online communities of companies. Thus, the term ‘corporate’ needs to be included in the construct’s name.

As defined by Brown (1998), corporate images are *immediate* impressions about a company built on an individual level. Along the same lines, it seems legitimate to describe OCCIP as the immediate impression an OCM forms of a company during the interaction in an online community. All the other factors that might also create impressions, however, are not part of the interaction taking place on the OC and thus do not *immediately* influence this impression. As described by the SIDE theory, personal identity decreases while social identity increases when a person is part of a community. Therefore, during interaction with a COR, an OCM can be considered to be more in the state of mind of their social identity (a member of this community) than of their personal identity. Hence, all other factors outside of the community are less important at this moment. Since an image is defined to be an immediate impression about a company (Brown, 1998) and this immediate impression occurs during interaction in the OC, it is legitimate to say that all other factors are not part of this investigation.

### 3.5 Consequences

Based on the theory of reasoned action (TRA), which describes a cognitive-affective-conative sequence, Pina et al. (2008) delineate the consequences of corporate image as follows: “As a bundle of beliefs, corporate image will give rise to a service brand attitude, which means the global affective response toward the brand. This attitude will be followed by conative responses such as the intention to use the brand” (p. 4). Within that meaning it seems reasonable to assume that if corporate image gives rise to a service brand attitude, OCCIP will also cause a specific attitude towards a company respectively a company’s services.

The theory of reasoned action (Ajzen & Fishbein, 1980) proposes that an individual’s behaviour is guided by intention and attitude, which in turn is formed by an individual’s beliefs. Behavioural intention is described as the strength of a person’s conscious plan to perform the target behaviour (Mykytyn et al., 2005). In brief, the model can be described as follows: an individual’s behaviour is determined by their behavioural intention to carry out this behaviour. An individual’s attitude can lead to the intention to perform a given behaviour. Thus, the intention of behaviour is determined by two things: i) the attitude and ii) the subjective norms. Ajzen (1991) has extended the theory of reasoned action by adding a predictor to the model: perceived behavioural control.

Not all constructs mentioned above are relevant for the present study. In the following, the reasoning behind the exclusion of three constructs is provided.

**Subjective norms** can be described as the individual’s perception of social pressure to perform or to refrain from a specific behaviour (Ajzen & Fishbein, 1980). This construct has not been included in the model as it is assumed that individuals make their own decisions as to what kind of online platform they use for seeking and exchanging information. This is the case especially since most of the time individuals access online platforms in a private setting, e.g. at home, where they have no social pressure regarding what kind of information they read. No other person



other than themselves can see what they are reading and they do not have to tell anybody. Thus, it is assumed that individuals face no social pressure in this situation.

**Perceived behavioural control:** This factor represents assumptions about conditions that permit or inhibit the actual execution of the behaviour (Ajzen, 1991). This construct has been excluded because of the following argument. In the present study, the behavioural intention is defined as the intention to use the company's online community again. If an individual communicates in an online community, they assume that they will be able to do so at a later time as well. It is very unlikely that they will be inhibited to do so.

**Behaviour** has not been included in the model since behavioural intention and behaviour need to be measured at the same level. This means that behavioural intention and behaviour must be measured at the same time to expect that they will relate. Since this study investigates impression formation in online communities, this impression may well cause an attitude that leads to a behavioural intention, as these are all affective and cognitive processes. However, the behaviour, which in the present study would be that the individual uses the company's online community again, takes place at a later time. Thus, the behavioural intention and the behaviour cannot be measured at the same time.

Compatible literature on corporate image and impression formation has also excluded the above mentioned constructs (e.g. Pina et al., 2008; Brown, 1998, Barich and Kotler, 1991).

To ensure the validity of TRA, there are two premises: i) TAR assumes that human beings are rational thinking and acting individuals and ii) the behaviour that needs to be predicted can be controlled by the individuals (Ajzen & Fishbein, 1980). These two premises are given in the context of this study.

Hence, it is hypothesised that,

*H14: OCCIP has a positive effect on attitudes towards a company's online community (OC).*

Because attitude influences behavioural intention (see above), the next hypotheses focus on the intention to use a company's products/services,

*H15: Attitude towards a company's OC has a positive effect on intention to use the company's OC again.*

According to Mayzlin and Godes (2002), who investigated how to measure word of mouth, "part of the difficulty in measuring word-of-mouth is the fact that it is both a precursor to, and an outcome of, sales" (p. 8). Until now, when speaking about word of mouth (interpersonal communication) we were concentrating on the influence it might have on OCMs' impression formation. Now, we are focussing on word of mouth as a consequence of impressions formed by OCMs. In other words, it is believed that OCMs engage in word-of-mouth communication as an outcome of their impression formation about a company. Thus, this study advances the following hypothesis,

*H16: OCCIP has a positive effect on word-of-mouth activities by OCMs.*

### **3.6 Summary**

The literature on impression management, computer-mediated communication and corporate image was reviewed in order to link corporate communication to corporate impression formation in online communities. Based on these insights, the conceptual model illustrated in Figure 15 is presented.

Subsequently, the relationship between the communication elements and online community corporate impression is explained, and relevant hypotheses are formed. These hypotheses are summarised in the following table.

*Table 12: Summary of hypotheses*

<i>No.</i>	<i>Hypothesis</i>
H1	Relevant contributions of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H2	Timely messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
H3	Accurate messages of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H4	Comprehensive messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
H5	Informal communication style used by a COR is positively related to OCCIP.
H6	Social context cues that OCMs receive about the COR have a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
H7	Perceived similarity of the COR is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H8	Perceived credibility of the COR is positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
H9	The COR's disclosed affiliation to the company has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
H10	The positive perception of a COR's characteristics has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
H11	Perceived social presence of the COR is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H12	Interactive communication is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H13	Communication between OCMs on the online community platform has a positive effect on online community corporate impression (OCCIP).
H14	OCCIP has a positive effect on attitudes towards a company's OC.
H15	Attitude towards a company's OC has a positive effect on intention to use the company's OC again.
H16	OCCIP has a positive effect on word-of-mouth activities by OCMs.

*Source: Developed for the present study*

## **Chapter 4 - Research methodology and methods**

### **4.1 Introduction**

As outlined in chapter 1, the objective of this study is to investigate how corporate communication taking place in online communities influences impression formation. This chapter discusses research methodology and methods employed for this study and describe the lines of reasoning in support of philosophical assumptions, research strategy, and research design. Philosophical assumptions are important as they build ground, justify particular use of methodology and methods and support assumptions about reality.

Research in social cyberspace is growing rapidly and it has been conducted from a wide range of perspectives applying numerous methods, including research about intraorganisational networks (Rice, 1982; Sproull & Kiesler, 1986), comparisons between face-to-face and computer-mediated communication (Kiesler et al., 1984; Dubrovsky et al., 1991), social aggregates (Smith, 1992), hermeneutic interpretations (Lee, 1994), ethnographic accounts of online communities studying group communication (Reid, 1995), electronic surveys (Park & Floyd, 1996; De Valck, 2005; Langenberg, 2007) and networked interactivity (Rafaeli & Sudweeks, 1997) and online identity (Boyd & Elliot, 2007).

The chapter is organised as follows: First, it reviews the research methodology before delineating the research design. Next, it describes the exploratory fieldwork and finally the quantitative study itself.

## 4.2 Research methodology and method selection

This section first addresses the philosophical foundation, followed by the research approach of the present study.

### 4.2.1 Philosophical foundation of the study

As mentioned earlier, the aim of the present study is to gain knowledge of how online community members (OCMs) form impressions about a company that uses online communities for their corporate communication. In the context of gaining knowledge, four notions called the ‘ologies’ help us to define how we think about reality (Lee & Lings, 2008). Those four concepts are briefly described below:

*Ontology*: Ontology describes how reality is perceived. Is reality perceived in an objective view that means does reality exists apart from or is it constructed through our experiences (Lee & Lings, 2008)? It embraces the realist and constructivist perspectives. The former assumes that a reality exists apart from our experiences, thus, that reality is objective (May, 1997). The latter is based on the assumption that reality is created through our experiences (Corbetta, 2003).

*Epistemology*: Epistemology follows ontology and describes how knowledge of reality is created (Bernard, 2000) and how much of the reality we can know (Lee & Lings, 2008). Two core epistemological assumptions are used in social research: positivism and interpretivism (e.g. Bernard, 2000; Corbetta, 2003). Positivism is based on the realist perspective and claims that a specific phenomenon can be observed (Corbetta, 2003). Interpretivism, on the other hand, is about interpreting what we experience, and thus theories can be built based on the observed phenomena (Payne & Payne, 2004).

*Axiology*: This concept also is based on ontology and focusses on the purpose of a research. According to Lee and Lings (2008) axiology describes what we are trying

to do: “For example, do you try to explain and predict the world, or are you only seeking to understand it? Can you even do one without the other?” (p. 11).

*Methodology:* Methodology defines how a research is conducted. This includes qualitative or quantitative methods. Thus, methodology and methods are two separate terms. The former describes the philosophical assumptions taken that justify why a specific method has been chosen. The latter are the practices used to collect and analyse data (Payne & Payne, 2004).

In this particular case, the author’s stance is that of a positivist. Hence, the underlying logic of the present study is based on the realist perspective, assuming that reality exists in an objective truth. The author not only investigated the causal association between corporate communication in online communities and the online community corporate impression, but also tried to make sense of it all.

The main study, which tests these causal links, was preceded by exploratory fieldwork adopting an inductive approach. Thus, a pragmatic view has been taken (Robey, 1996), which does not determine that the “truth is absolute and objective; but that it is co-created by us and the reality we are working within. In other words, only when a theory proves useful does it become true. So, theory and practice are not independent, they are inextricably interlinked” (Lee & Lings 2008, p. 33). The construct online community corporate impression has not been measured before in this context and is assumed to be co-created by individuals. Thus, the pragmatic view is important for the present study.

The present study also employs Churchill’s (1979) paradigm by adapting a quantitative method with the use of multi-methods in the first stage of the study. This is based on the reasoning that even if online community members influence each other and thus the online community corporate impression might be constructed socially, the fact that individuals for impressions about a company is seen to be an external reality. Through exploratory fieldwork, the author has strived to understand

the underlying structures of online community corporate impression and its determinants (Burrell & Morgan, 1979).

#### **4.2.2 Three approaches to research**

Following the discussion of the research philosophies the research approach is discussed in this section. Often a clear differentiation between qualitative and quantitative methods is made (Bernard, 2000; Payne & Payne, 2004). Qualitative methods are often used when the study is based on interpretivist assumptions, while quantitative methods are used when the study is based on positivist assumptions (Creswell, 2003). However, both do not have to be opposing and can be used complementarily. This is called triangulation of methods (Denzin, 1978).

Neuman (2003) distinguishes four types of triangulations: (i) triangulation of measures (more than one measure is used), (ii) triangulation of observer (several researchers collect the data), (iii) triangulation of theory (multiple theoretical standpoints are used) and (iv) triangulation of methods (mixing quantitative and qualitative methods). This study used the triangulation of methods approach, according to which data is collected, employing qualitative and quantitative methods, while the results from the qualitative method informs and develops the quantitative method (Creswell, 2003).

Creswell (2003) states that “the researcher tends to base knowledge claims on pragmatic grounds [...] it employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems” (Creswell, 2003 p. 18).

Creswell (2003) proposes three general strategies to develop procedures for mixed methods. The three strategies are summarised in the table below.

*Table 13: Procedures for mixed methods*

<i>Procedure</i>	<i>Description</i>
Sequential procedures	Findings of one method are used to elaborate on or expand findings of the other method.  Qualitative methods can be used for exploratory investigations, followed up with quantitative methods.  Quantitative methods can be followed up using qualitative methods for explanation and/or detailed exploration.
Concurrent procedures	Qualitative and quantitative data are collected at simultaneously and the results are integrated.
Transformative procedures	The researcher “uses a theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data” (Creswell, 2003 p. 16).

*Source: Creswell, 2003 p. 16*

This study applied a course of sequential procedures. Firstly, qualitative methods, namely netnography methods and expert interviews, were used for exploratory purposes and secondly quantitative methods were applied. Qualitative methods were used for expert interviews, to gain additional knowledge about the phenomena and refine the conceptual model. Additionally, qualitative methods were used to explore OCMs’ views about how they form impressions in an online community. These findings were used to develop and test an instrument with a sample from a population.

The aim of the quantitative investigation is to generalise from the sample to the whole population (Babbie, 1990).

### **4.3 Research design**

As mentioned before, this study is a two-phase sequential mixed-method study. It draws on the literature mainly in the areas of corporate identity, corporate image, mediated communication, computer-mediated communication and impression formation in order to identify the domains and build the conceptual model. The



various measurement instruments are based on literature in addition to items derived from the qualitative study. Churchill's (1979) paradigm for developing better measures has been applied for the operationalization of the present study.

The study started with qualitative explorations in order to (i) gain knowledge about the online community that is the research site, (ii) refine the conceptual model and hypotheses, (iii) develop additional measurements and (vi) purify measurements for the main study (Churchill, 1979). Depending on which context a construct is placed in, measures found in literature may or may not be good measures of it. Thus, it is essential to refine measures based on qualitative data. The qualitative exploration has been conducted by using netnography methods for studying the online community and its members. Additionally, expert interviews with academics and practitioners were carried out in order to refine the conceptual model and hypothesis. The online community members were also involved in the design and testing of a measurement instrument to ensure having captured all aspects.

In a second part, quantitative methods were applied by using an online survey. The survey method was used because positivism requires the testing of hypotheses on large samples (Carson et al., 2001). The questionnaire was developed based on the literature review as well as both expert and online community member interviews. The use of online research methods was a logical choice for this particular research area (i.e. an online community).

The mixed method approach, using the same methods as were used in the present study, was previously applied in a number of corporate image studies (e.g. Kennedy, 1977; LeBlanc & Nguyen, 1998; Simoes et al., 2005, Stuart, 1995 and Williams & Moffit, 1997).

The results of both phases are mixed and discussed at the end of the study. Table 14 illustrates the several steps leading to the operationalization of the study.

*Table 14: Operationalization of the study*

<i>Steps</i>	<i>Description</i>	<i>Literature</i>
Selection of online community	<p>Search for appropriate online communities via search engines, experts and other academics.</p> <p>Two online communities were selected according to criteria characterising an online community: “(i) abundance of member-generated contributions; (ii) lively participation and high traffic; (iii) large number of members; (iv) enough variation among them (participation and characteristics)” (De Valck, 2005 p. 51).</p>	Kozinets, 2002; De Valck, 2005
Access to and familiarisation with the online communities	<p>Non-participatory and participatory observation: gaining online community insights.</p> <p>Identification of relevant and key online community members for interviews (see Exploratory study II).</p>	Abdelnour, 2002; Paccagnella, 1997; Kozinets, 1999, 2002; Bernard, 2004
Exploratory study I	Expert interviews with academics and practitioners were conducted in order to gain additional knowledge and verify the proposed conceptual model, hypothesis and constructs.	Langenberg, 2007; Lee & Lings, 2008
Exploratory study II	<p>Interviews with members of an online community were conducted in order to:</p> <p>i) test existing impression formation items to generate measurement scales for the construct characteristics, online community impression formation, social context cues and affiliation. The aim was to identify the underlying components relevant to characteristics and most important attributes for OCMs when it comes to build an impression of a COR.</p> <p>ii) test the proposed conceptual model.</p>	Churchill et al., 1974; Churchill, 1979; Langenberg, 2007
Quantitative study I	<p>Swissmom online community members were interviewed using an online structured questionnaire.</p> <p>As suggested by Churchill (1979), the literature review (providing testable items) and exploratory studies led to the development of a questionnaire and subsequently to the main survey.</p> <p>Two pre-tests and one pilot test using online community members were conducted. Those members were excluded from the main survey.</p> <p>The main survey was announced on the Swissmom forum and sent by newsletter; it contained a direct link to the online survey site.</p>	Churchill, 1974, 1979; Nardi, 2003; de Valck, 2005; Gruen et al. 2006; Langenberg, 2007; Popp et al., 2008
Quantitative study II	Maurice Lacroix online community members were interviewed using an online structured questionnaire.	Churchill, 1974, 1979; Nardi, 2003; de Valck, 2005; Gruen et al. 2006;

	<p>One pre-test with online community members was conducted. Those members were excluded from the main survey.</p> <p>The main survey was announced on the Maurice Lacroix Facebook Group and contained a direct link to the online survey site.</p>	<p>Langenberg, 2007; Popp et al., 2008</p>
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*Source: Developed for the present study*

## **4.4 Research setting**

It is of great importance to properly define where the study is to take place (Baker, 1999). According to Whetten (1989, p. 492), boundaries of generalizability are set by the research setting “and as such constitute the range of the theory”. This study has two research settings: one set of data was generated for the explorative investigation and for assessing the measurement model, and the second set of data was generated for validating the measurement model and testing the hypothesised relationships. The first set of data was collected from the Swissmom forum and the second one from the Maurice Lacroix Facebook Group.

### **4.4.1 Description of research sites**

The following two research sites are described in more detail.

#### **4.4.1.1 Swissmom online community**

Swissmom (SMoM), a Swiss online community, served as the research site for the exploratory study II and for the data collection for assessing the measurement model. SMoM serves as a source of information on topics such as fertility, pregnancy, childbirth and infant care. It provides advice on issues of law, money, work and shopping. The platform offers over 3,500 pages of medical knowledge and answers to practical questions, as well as a vibrant forum for its members (Swissmom, 2011). Because the Swissmom Forum addresses a broad range of topics, including consumption-related discussions regarding products for children, this online

community seems to be ideal to gain some additional knowledge about online communities by using a qualitative approach and for testing the measurement model of the qualitative study.

According to Porter (2004), there are two first-level categories by which communities can be distinguished: member-initiated and organisation-sponsored communities (for review see chapter 29). The SMoM community is an organisation-sponsored community.

The forum is monitored by moderators, which contribute to the fact that no abuse occurs and the tone remains friendly among the members (Swissmom, 2011). A small team of dedicated women founded the website [swissmom.ch](http://swissmom.ch) with the idea of providing information to others on pregnancy and parenting issues. Today, the SMoM team consists of an editor-in-chief who is a doctor, a pharmacist, an educator, a mother's advisor, a lawyer, a nutritionist, a lactation consultant, a journalist and, to keep the [swissmom.ch](http://swissmom.ch) project successful, a marketing manager (Swissmom, 2011).

Since its launch in summer 2003, [swissmom.ch](http://swissmom.ch) has become Switzerland's largest Internet portal on pregnancy, birth, babies and children. Until then, nothing was available on such topics in the Swiss online world, certainly nothing that was free, comprehensive, of high quality, medically reliable and practically relevant. Thus, the [swissmom.ch](http://swissmom.ch) concept was immediately welcomed and was recommended by gynaecologists, paediatricians, midwives and other experts on these topics (Swissmom, 2011).

The Swissmom Baby Gallery and its week-by-week pregnancy calendar (with relevant topics and a pregnancy 'countdown') are very popular. Its forum, [swissmomforum.ch](http://swissmomforum.ch), allows (expecting) parents to share and exchange information with their peers. Members ask and answer questions and provide help in numerous areas (Swissmom, 2011).

Visitors to the website can access and read all the information free of charge. Most of the forum entries can be read without the need to register. To participate actively in the forum, users need to register their user name and e-mail address (Swissmom, 2011). Every two weeks, a newsletter with the latest scientific reports and other topics of interest is sent out by e-mail. The subscription for the newsletter is free of charge. Swissmom.ch also sponsors competitions with nice prizes, which are advertised on the website as well as in the newsletter.

#### **4.4.1.2 Maurice Lacroix online community**

For the second study, an online community of a luxury brand was chosen based on the following rationale. The exploratory investigation as well as the first test of the measurement instrument were conducted in a community on which members share more general and broad consumption knowledge, as it was believed that this broad view would lay a solid ground for further investigations on online communities.

The validation of the measurement instrument and the test of the relationships between the constructs were conducted on a luxury brand online community which represents a rather specific type of community. Luxury goods sales, however, reached €212 billion in 2012, with 10 percent growth compared to 2011 (Bain & Company, 2012). Hence, the luxury goods market can be considered an important market with a remarkable growth potential and therefore worth investigating.

A further consideration is the fact that online communities offer the opportunity to increase customer value through the direct interaction with constituencies. On the other hand, it is precisely this form of online participation that creates a paradox to the luxury brands' objective of evoking uniqueness and assuming an educator and advisor role (Lim et al., 2010). Luxury brands act differently in comparison to consumer goods. For instance, they try to provoke by not democratising luxury and not following traditional marketing rules. Kapferer and Bastien (2009) proposed 24 management principles, also called the anti-laws of marketing, describing the differences in marketing. Despite the fact that many scholars point out the

inadequacy of online platforms for luxury brands with regard to one of the main characteristics of the luxury products which is preserving their exclusivity, online platforms offer a wide range of opportunities for the luxury segment (Wiedman et al., 2009). In fact both consumer goods purchasers as well as luxury brand consumers ascribe high value to the Internet (Bosch & Kahlfuss, 2009). McKinsey (2012) postulates that even if the number of online purchases is still rather small, the purchasing choice is often influenced by the customer's online experience. About 15 percent of total luxury goods sales are directly influenced by online channels, which are of significant value and which confirm the importance of the Web 2.0 for the luxury segment (McKinsey, 2012).

The discussion above highlights the importance of the luxury good markets and the increasing importance of online platforms within this industry. Therefore, using a luxury brand online community as a second study site is legitimate.

Maurice Lacroix (ML) is a Swiss manufacturer of luxury watches, launching its first watch model in 1975. Since then Maurice Lacroix has become a well-known Luxury Brand.

Maurice Lacroix has registered several patents and trademarks, creating complex components for mechanical calibres and continually developing them in terms of technology and design. The steadily increasing success of their watches enabled them to enter the exclusive league of Swiss watchmakers at the end of 2006.

With their watches all produced in their own factories, Maurice Lacroix is one of the few independent watchmakers in Switzerland. There are five collections: Masterpiece, Pontos, Les Classiques, Fiaba, Miros. The company counts more than 200 employees worldwide with the majority of staff based at the international headquarters in Biel and the production facilities in Saignelégier and Montfaucon in Switzerland.

In 2008 Maurice Lacroix launched an online community by creating a Facebook group. This site is used to share knowledge about the watches, to inspire people to share their passion for watches, and to respond to any (potential) customer requests posted on the site. This year they won the Swiss Marketing Trophy with one of their advertising campaigns on their Facebook site. The Swiss Marketing Trophy is considered the *Oscar in Marketing* in Switzerland. This underlines the fact that Maurice Lacroix's Facebook Group is a good online community to study as it is well established and a main focus of the company.

#### **4.4.2 Rational for the selection of the online communities**

De Valck (2005) proposes four important criteria for selecting an online community: “(i) abundance of member-generated contributions; (ii) lively participation and high traffic; (iii) large number of members; (iv) enough variation among them (participation and characteristics)” (p. 51).

In order to determine if SMoM and Maurice Lacroix can be considered appropriate research sites the platforms were subjected to these criteria. The results are presented below:

##### **4.4.2.1 Abundance of member-generated contributions**

The introduction of Web 2.0 was not a mere introduction of some new technologies but much more the adoption of usage and awareness of the Internet. Users generate, share and interact with content on the Web and are thereby linked to each other with the help of social software. The innovation of Web 2.0 was the ability to interact and influence the Web's content. This evolution therefore enables the user not only to read the Web's text but also to edit and write their own user-generated content. This section discusses the member-generated contributions in the Swissmom Forum as well as in the Maurice Lacroix Facebook Group.

#### 4.4.2.1.1 Swissmom Forum

Table 15 lists the different ranks that members can obtain based on the number of messages posted in the forum. The author calculated the number of members in each rank and the percentage compared with the overall number of registered members.

The SMoM forum has a total of 7,322 members (as per 11 October 2012). However, not all of them can be considered to be active members who contribute to the discussions taking place on the forum.

*Table 15: Membership structure*

<i>Types of members (rank)</i>	<i>Number of messages posted on the forum</i>	<i>Number of members</i>	<i>Percentage of registered members</i>
No	0	2281	31
Newbie	≥ 1	1898	26
Junior member	≥ 10	2454	34
Member	≥ 100	471	6
Posting freak	≥ 250	218	3
<b>Total</b>		<b>7322</b>	<b>100</b>

*Source: Developed for the present study; calculated from the member list retrieved from <http://swissmomforum.ch/forum/memberlist.php> on 11 October 2012*

According to Nonnecke & Preece (2001), the average percentage of ‘lurkers’ (non-active members) in communities is said to be around 55%. The table above shows that 31% of registered members do not contribute to discussions at all, while 26% have only posted once. These two groups can be said to be lurkers, which is in line with Nonnecke and Preece’s (2001) findings. In addition, most of the forums can be read by everyone. Thus, it can be assumed that the amount of lurkers is even higher.

Nevertheless, there are approximately 6,000 new entries per day in the forum (Swissmom, 2011). Therefore it is fair to say that sufficient novel content is generated every day to attract OCM’s to the forum, so that the effect of a high number of lurkers goes unnoticed.



The fact that Swissmom provides good opportunities for sociability is also supported by the qualitative results of the community interviews in which all participants stated that the SMoM forum serves as a facilitator for meaningful relationships, even though the reasons for this differ.

#### **4.4.2.1.2 Maurice Lacroix Facebook Group**

As per 23 June 2013, the Maurice Lacroix Facebook site had 113, 266 likes and 3,984 community members talking about it. Nearly all posts have around 10 to 20 comments, some of them even more and Maurice Lacroix posts a new message at least once a day.

The number of new entries per day as well as the amount of on-topic conversations show good sociability and are indicators of how well both online communities maintains their focus (Preece, 2001).

#### **4.4.2.2 Lively participation and high traffic**

Online communities are supposed to be interactive platforms where members interact with each other. This section investigates the participation and traffic of the two online communities under study.

##### **4.4.2.2.1 Swissmom Forum**

In order to comply with its members' different needs for information, the forum provides eight forums, each with a different topic, including Swissmom itself, pregnancy, regional forums, the kids club, the baby club, the market place, etc. Each forum contains numerous sub-forums, such as money-, insurance- and work-related issues, or health and expert advice (see Figure 16). Each month a Swissmom moderator opens a new discussion thread with current topics, linking them to other sites within the Swissmom website. On-topic discussions can thus be generated and expanded on in other sub-forums.

Figure 16: Illustration of a forum - market place

Märtplatz			
 <b>Shoppingtips</b> Eure Empfehlungen... Moderatoren: <b>woodstock10, Jazzmin</b>	182	3303	Do 11. Okt 2012, 22:31 <b>non-swiss dad</b> →
 <b>Boutique</b> Selbstgemachtes von Forum-Mitgliedern und spezielle Angebote Moderatoren: <b>swiss_scouser, woodstock10</b>	123	6132	Do 11. Okt 2012, 21:03 <b>tamara78</b> →
 <b>Flohmarkt - Schwangerschaft und Kindersachen</b> Zum Tauschen, Kaufen und Verkaufen - aber nur für regelmässige User! Moderator: <b>Jazzmin</b> Unterforen: <b>Suche - Schwangerschaft und Kindersachen, Verkaufe - Schwangerschaft und Kindersachen</b>	308	2567	Do 11. Okt 2012, 23:53 <b>Evolet2011</b> →
 <b>Flohmarkt - alles andere</b> Zum Tauschen, Kaufen und Verkaufen - aber nur für regelmässige User! Moderator: <b>woodstock10</b> Unterforen: <b>Suche - alles andere, Verkaufe - alles andere</b>	93	1076	Do 11. Okt 2012, 23:31 <b>Sandra C.</b> →

Source: *Swissmom*, 2012, retrieved at <http://swissmomforum.ch/forum.php> on 11 October 2012

#### 4.4.2.2 Maurice Lacroix Facebook Group

Many people comment on the messages posted by Maurice Lacroix and they also comment on other people's messages. As shown in the following picture, even if people do not post directly they either share the pictures posted (see no. 1 in the figure) or click the like button in order to express their enthusiasm for this post (see no. 2 in the figure).

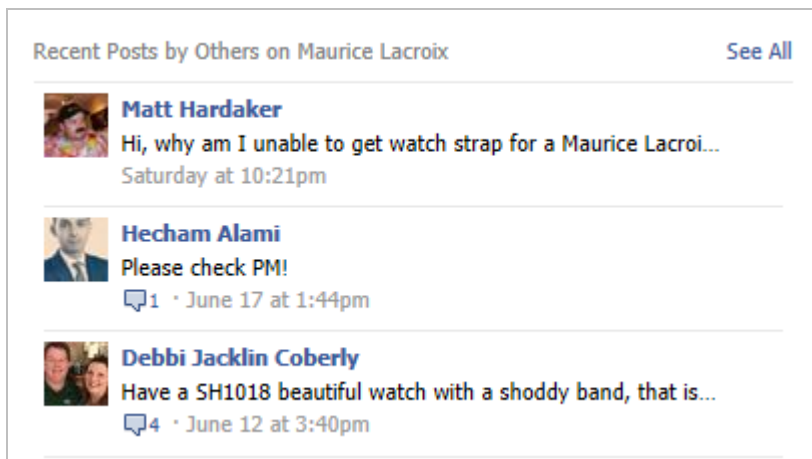
Figure 17: Participation on Maurice Lacroix forum



Source: <https://www.facebook.com/mauricelacroixwatches>, Retrieved, 22.6.13

Furthermore, Maurice Lacroix also displays recent posts by others on Maurice Lacroix, which adds to lively participation on their site as well as increases the daily traffic (for illustration see picture below).

Figure 18: Recent posts on Maurice Lacroix



Source: <https://www.facebook.com/mauricelacroixwatches>, Retrieved, 22.6.13

According to Preece (2001), the “number of messages or messages per member relates activity to membership and indicates how engaged people are with the community, which is in turn indicative of how well the community serves its purpose and how much interactivity is occurring” (p. 7).

With its over 6,000 entries a day, the SMoM community generates an abundance of member-generated contributions as well as lively participation in on-going discussions, and thus there is a lot of traffic with as many as 300 members simultaneously online on peak days (Swissmom, 2011). The high traffic on the Maurice Lacroix Facebook Group as well as the many messages by community members can be considered to be a lively participation on this community site as well.

#### 4.4.2.3 Large number of members

In order to get enough user-generated content it is important to have a large number of members in an online community. In this section, the number of members is analysed for the Swissmom Forum as well as for the Maurice Lacroix Facebook Group.

#### **4.4.2.3.1 Swissmom Forum**

As discussed above, the number of members is rather low compared with other online communities. Nevertheless, SMoM can be considered to be suitable for the present study, as it still reaches a large number of the Swiss population (< 8 million). Considering the fact that not all of the about 8 million people in Switzerland are at an age or in a situation to be interested in the subject of babies and children, the ratio of people that SMoM reaches is even higher. Previous studies have shown that in order for online surveys to be successful, a community needs a large membership since the participation rate in online surveys is not very high (e.g. de Valck, 2005). The SMoM online community has 7,322 members (as per 9 July 2012), which can be said to be rather small compared with other online communities. However, the SMoM website has recorded an enormous increase over the last few years and these days has an average frequency of about 900,000 visitors a month, with up to 40,000 visitors on peak days. A large part of them are recorded in the forum, where over 6,000 entries are made per day. At peak times, over 300 visitors are online simultaneously. A similar site that reaches such a large proportion of the population cannot be found in any other country in the world (Swissmom, 2011).

#### **4.4.2.3.2 Maurice Lacroix Facebook Group**

With 113,266 likes and 3,984 community members talking about it and its products (as per 23. June 2013), Maurice Lacroix has a large number of community members engaging in discussions on their online community.

#### **4.4.2.4 Enough variation among the participants and characteristics**

SMoM members are parents or potential parents from a variety of different private and professional backgrounds, all sharing one common interest: children. In addition, there is a vast amount of topics related to children that is discussed on the platform. Hence, it can be said that there is enough variation among the participation and characteristics of the members of SMoM.

Maurice Lacroix members are people from many different private and professional backgrounds who all share the same passion for watches. Thus, while their characteristics and demographics are heterogeneous, their interest is homogeneous.

#### 4.4.2.5 Further considerations about online communities

DeValck (2005) states that it is preferable for a community to exist over a certain period of time. SMOm was launched in July 2003 and has thus reached a certain level of sustainability. The first entry on Maurice Lacroix’s Facebook site is dated 19 November 2008, making this community approx. 4.5 years old.

It is also important to clearly define the online community’s purpose in order to enable potential community members to immediately recognise its goal and what it stands for (Preece & Maloney-Krichmar, 2003). Members need a reason to belong to a community, and thus “a community’s shared focus on an interest, need, information, service, or support” (Preece, 2001, p. 4), needs to be recognised at first sight. By choosing the name ‘Swissmom’, the community already states what it stands for and what its purpose is. The website’s homepage has a short but clear introduction of the community’s purpose (see Figure 19).

Figure 19: Illustration of the homepage



Source: Swissmom, 2012, retrieved at <http://www.swissmom.ch> on 11 October 2012

It clearly states Swissmom's aim as: "Switzerland's largest Internet portal on pregnancy, birth, baby and child".

Preece (2001) also proposes that "the language and protocols that guide people's interactions and contribute to the development of folklore and rituals that bring a sense of history and accepted social norms. More formal policies may also be needed, such as registration policies, and codes of behaviour for moderators. Informal and formal policies provide community governance" (p. 5). People who want to become members of the SMoM community have to agree to the swissmom.ch's terms of service such as acceptance of terms, property rights, user obligations, general public license, disclaimer of warrants, and modifications of service. If the applicant does not agree to the terms of service, he or she cannot complete the registration. A link to the terms of service on the main site of the SMoM community enables members to access the terms (see CD in Appendix for terms of service) at any time. The forum provides a post with the community's guidelines which is available to all members. They include the community's "do's and don'ts" and code of behaviour as well as a procedure for reporting abuse (see CD in Appendix for the community guidelines).

The purpose of the Maurice Lacroix Facebook community can be found by clicking on the "about" section of their Facebook site. Furthermore, they display many pictures of watches, thus a participant can quickly see the purpose of the community.

A few words about how revenue is generated. SMoM displays banners ads and commercials on its website, Facebook site and electronic newsletter. Companies such as Bayer, Schering, Andreabal, Medinova, Johnson&Johnson, Nestlé, Weleda, Iromedica, Baby Butt, Hologic, Dr. Dünner and Coop use the community for advertising purposes. Maurice Lacroix does not directly generate revenue on their Facebook site, since they do not sell watches directly through this channel. Their online community is a typical communication channel.

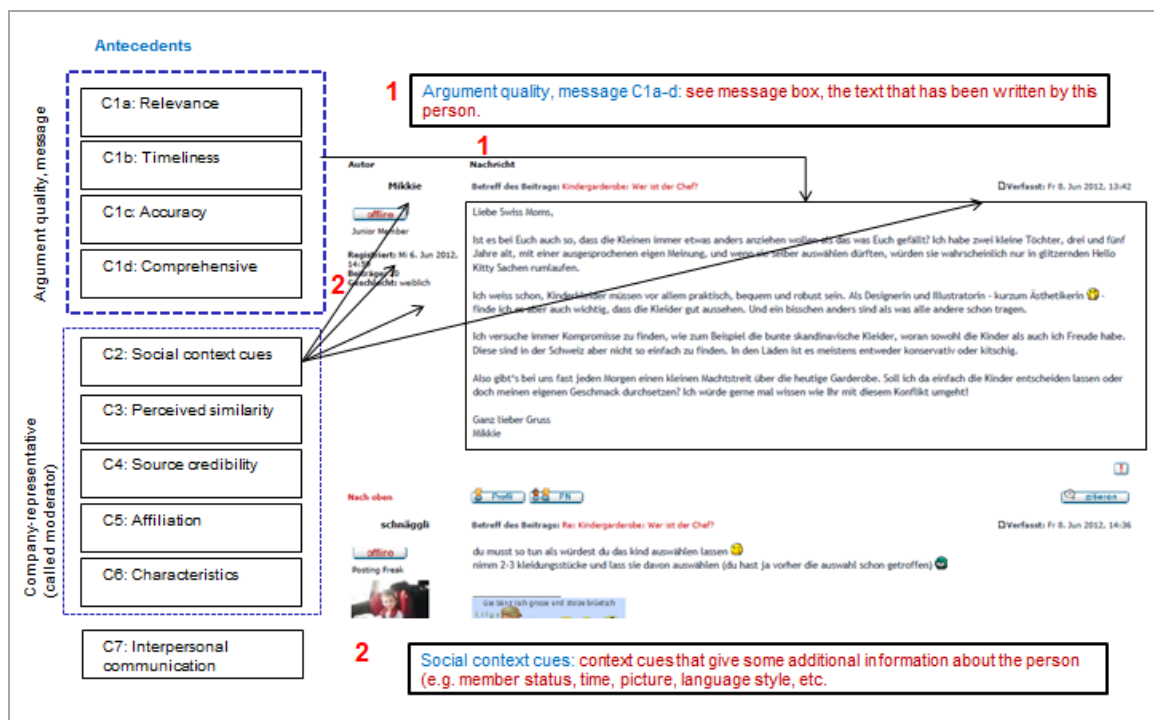
As a result, the SMOm as well as the Maurice Lacroix communities can be considered appropriate study sites for the purposes of this study.

#### 4.4.3 Linking the conceptual model to the research sites

The following illustrates where the antecedents (previously only discussed based on the literature) can be found on the SMOm forum as well as on the Maurice Lacroix group (for illustration see Figure 20 to Figure 24. A larger format of the figures can be found in Appendix).

The four constructs relating to argument quality can be found in the part of the written text of the posts (marked ‘no. 1’ in the figures below). ‘No. 2’ refers to social context cues that give some additional information about the author of the post and can be found in several places of the posts (see arrows).

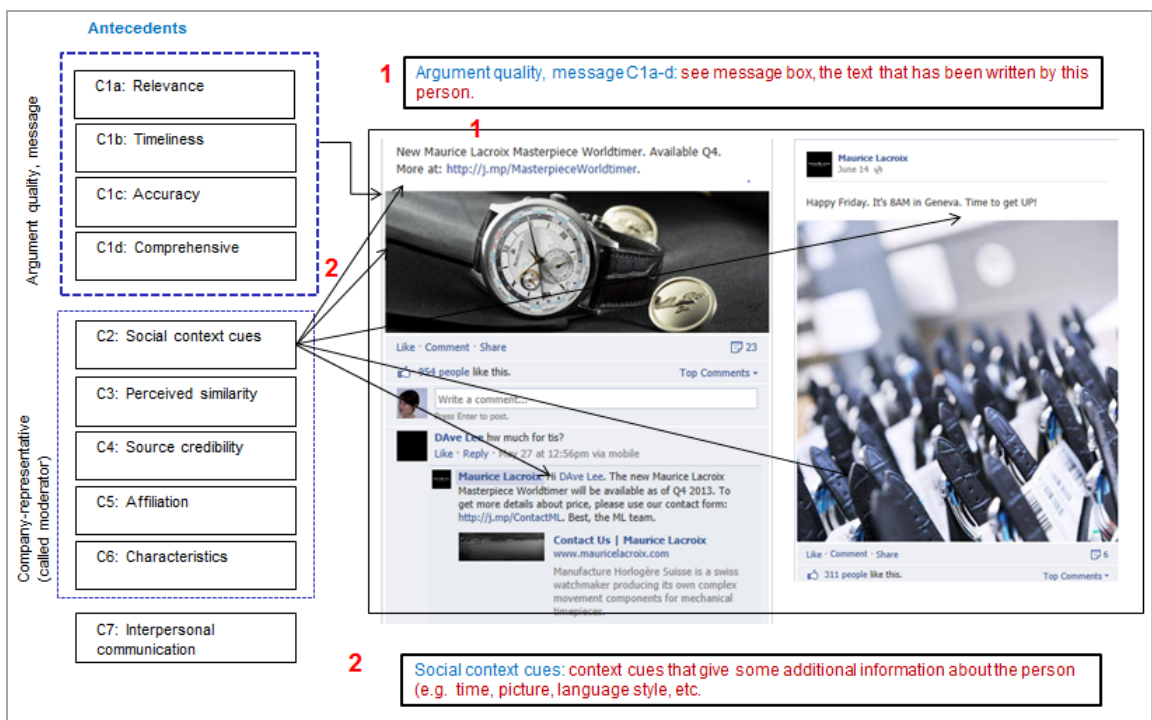
Figure 20: Linking the conceptual model to the SMOm forum I



Source: Developed for the present study



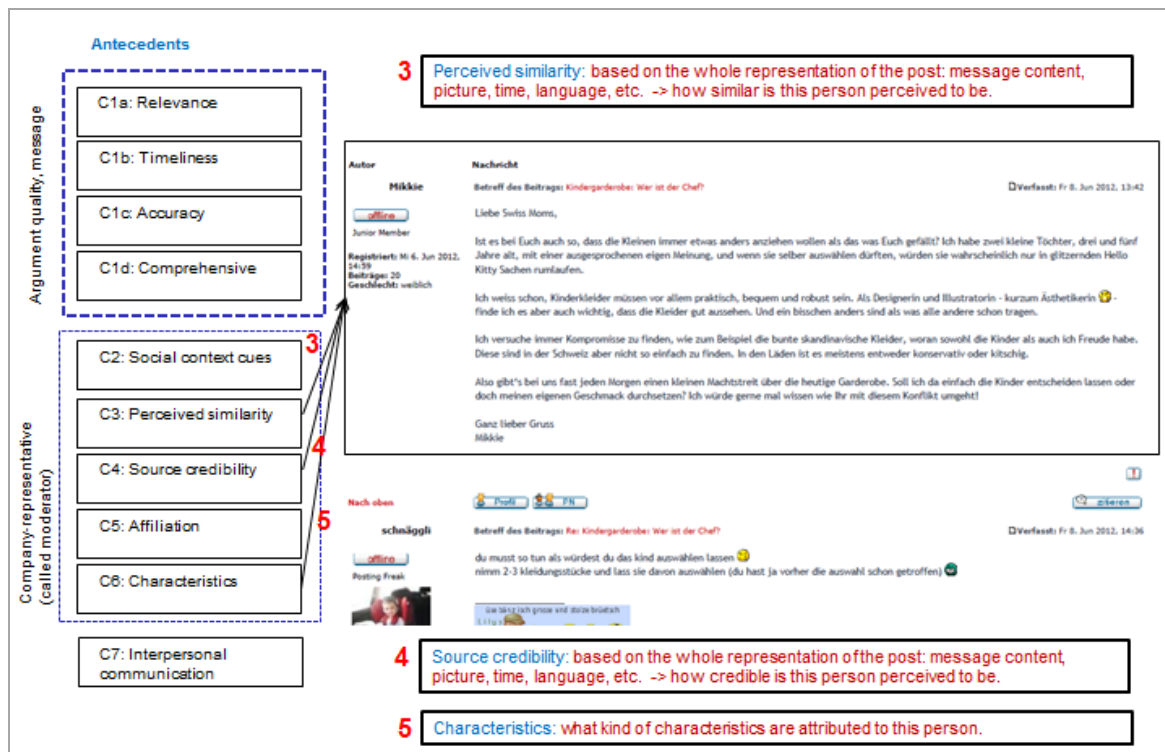
Figure 21: Linking the conceptual model to ML group I



Source: Developed for the present study

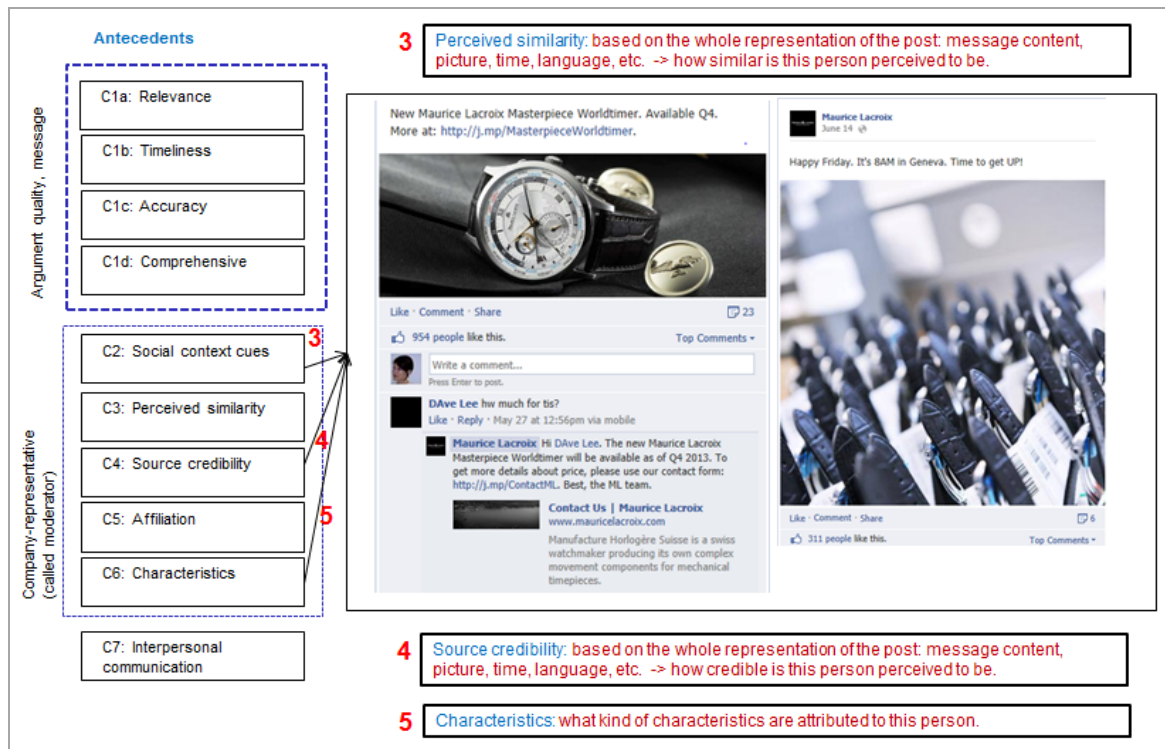
Perceived similarity (no. 3), source credibility (no. 4) and characteristics (no.5) are based on the impression a reader gets of the author of a post based on how the post is constructed.

Figure 22: Linking the conceptual model to the SMOm forum II



Source: Developed for the present study

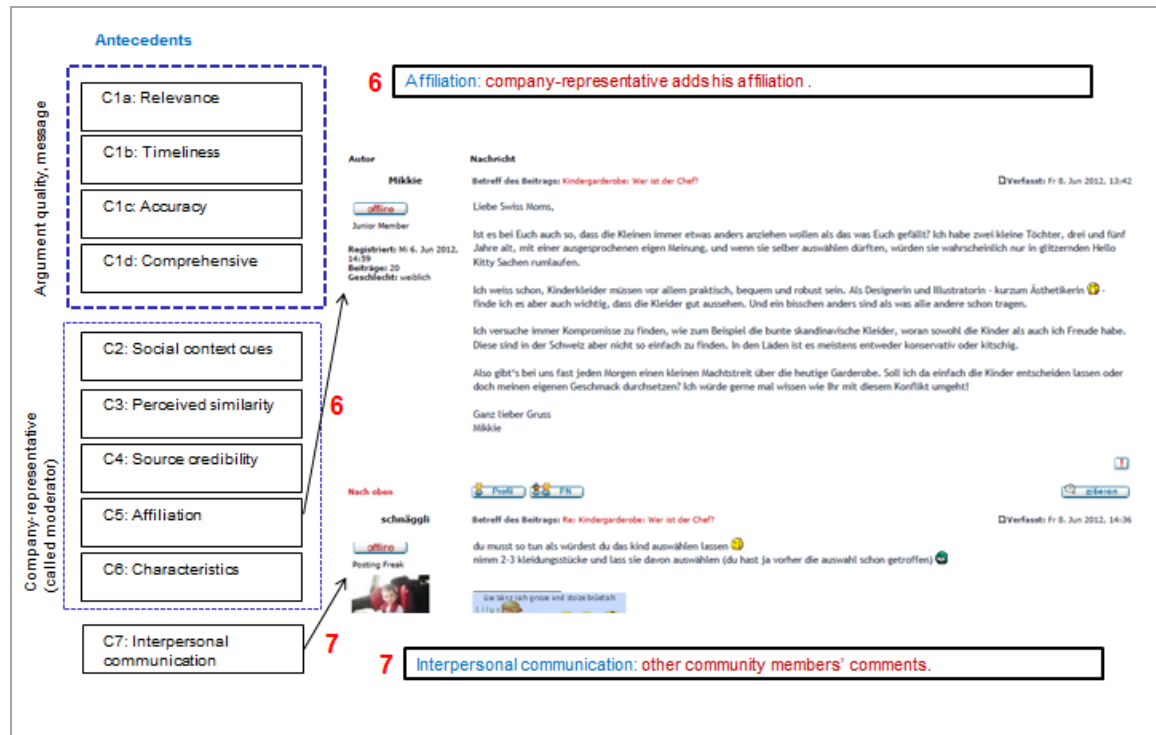
Figure 23: Linking the conceptual model to ML group II



Source: Developed for the present study

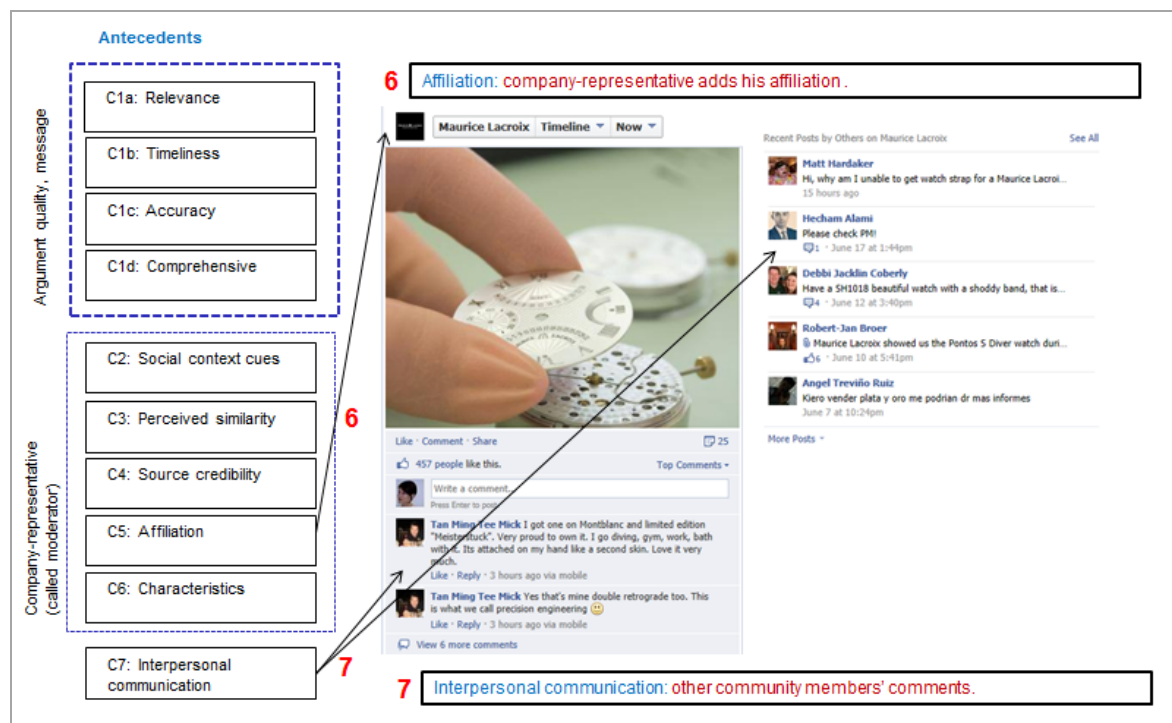
In the SMOm forum, the affiliation (no. 6) of an author can be added in the section where the username is displayed and in the ML community, it is displayed on the top left corner of a post. Underneath the initial post the comments of other community members (no. 7) are displayed.

Figure 24: Linking the conceptual model to the SMOm forum III



Source: Developed for the present study

Figure 25: Linking the conceptual model to ML group III



Source: Developed for the present study

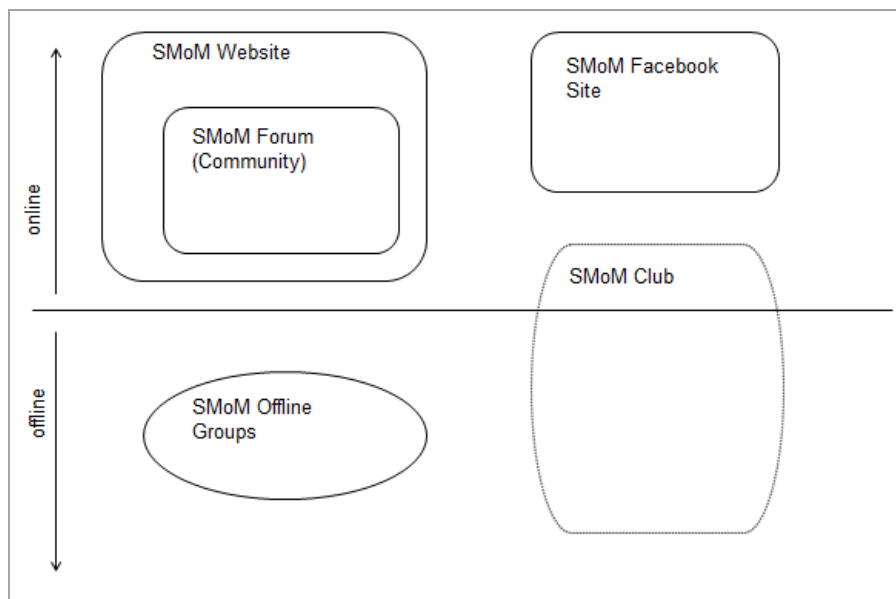
The prospective research population is comprised of participants in online communities in general. Within the context of this study, however, focus is limited to two online communities that served as a research site (De Valck, 2005). Since only two online communities are studied, the question arises if the author has to select a single case research strategy with two single cases.

As described by Yin (2003), “A case study examines a phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities” (p. 5). Three types of case studies were defined by Yin (2003 p. 1): “exploratory, explanatory and descriptive”. An exploratory case study aims to formulate the research question and form hypotheses. The data are collected before a research question and hypotheses are formulated. The explanatory case study can be used to explain things that have been observed. Descriptive research describes different characteristics of an occurrence. A theory is required to guide the collection of data. According to Yin (2003), this study could be classified as descriptive

because there is literature available about online communities, computer-mediated communication and impression formation as well as corporate image.

It is further important to precisely define the case, and where the case leaves off (Yin, 2003). SMoM consists of a website, a forum that is part of the website, a Facebook site, a club and several offline groups (see figure below).

*Figure 26: Context of research site*



*Source: Developed for the present study*

The figure above illustrates the context of the study. The SMoM offline groups are used by parents that, in addition to their online discussions, also meet in different kinds of offline settings. These offline gatherings are self-organised by the forum members, while they still meet in sub-forums of the SMoM forum and discuss all kind of topics. The Facebook site has 1785 friends and shares news that can mostly also be found on the website. SMoM Club provides an own electronic newsletter and has a website (online part). However, they organise official gatherings and offer many promotions for their members. This study focusses solely on the SMoM forum, as only this one can be considered to be a true online community fulfilling all criteria an online community should fulfil (see discussion above).

Besides the Facebook Group, Maurice Lacroix has a Club, whose members are entitled to some customised offers and invited to events.

According to Yin (2003), there exist either single or multiple case studies. A multiple case study must follow a reproduction rather than a sampling logic. When no other cases are available for reproduction, the investigator is limited to single-case design. External validity can be increased by using multiple case studies as they can be more robust than a single case study. A single case study is justified if a clear set of testable propositions has been specified, which is the case here. Single cases such as the present study can be studied using qualitative as well as with quantitative methods (Yin, 1994; Lee & Lings, 2008). They “can be conducted and written for many different motives, including the simple presentation of individual cases or the desire to arrive at broad generalizations based on case study evidence” (Yin, 1994 p. 15).

Yin (1994) states that the preferred strategy to study a case is “when, ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context” (p. 1). The latter is the case for the present study, as studying online communities is a contemporary phenomenon in a real-life context.

In the context of defining a piece of research to be categorised as case study, Lee and Lings (2008) argue that “the problem arises when one considers where to draw the line between a case study design, and a cross-sectional or longitudinal design based in a single context. For example, if you collect data in a single organisation, does this mean you are automatically doing case-study research? I, and other far more eminent scholars (e.g. Bryman, 2004) would argue not [...], for example, much organisational research is conducted within a single firm. In most of these projects, the single firm is used in order to increase the likelihood of high-quality data, not as an object of interest in its own right” (p. 200).

Based on the discussion above, the author classifies the present study as a cross-sectional design based on two single contexts. In order to increase external validity the study has been conducted in two contexts.

#### **4.4.4 Unit of analysis**

The unit of analysis needs to be defined properly. It has been described as “the entity that forms the basis of any sample” (Easterby-Smith et al, 2002, p. 44) and thus is the level of aggregation of data for the analysis (Sekaran, 2000). The definition of the unit of analysis is based on the research question (Bryman & Bell, 2007), and thus it is vital to recall the aim of this study. The purpose of this study is to analyse how online community (OC) members form impressions about a company that uses OCs for corporate communication activities. Therefore, it is evident that the unit of analysis is the online community member.

#### **4.4.5 Time horizon**

The researcher can choose between a cross-sectional and a longitudinal study. In a longitudinal study, data are collected at more than one point in time to be able to compare results over time. Cross-sectional studies are one-shot studies collecting data just once (Sekaran, 2000). For the present study, a cross-sectional study has been selected, as image studies are ‘snap-shots’ of the actual situation (immediate impression formation). In the literature an image is defined to be an immediate impression about a company (e.g. Brown, 1998). OCCIP is the immediate impression an OCM forms of a company during the interaction on an online community. Because this study does measure an immediate impression it is appropriate to collect data just once. Future studies might investigate how the impressions formed change over time when online community members interact during a certain amount of time. However, one of the issues that might be considered by conducting a long-term study is that technology evolves rapidly and the online community being studied might change its structure before the end of the long-term

study. The evolution of the platform could have implications on how people communicate and thus might also impact the impression formation.

A further consideration of undertaking a cross-sectional study is that it generates a larger sample which is needed for multivariate studies using structural equation modelling techniques (Hair et al., 2006).



## **4.5 The first part – exploratory fieldwork**

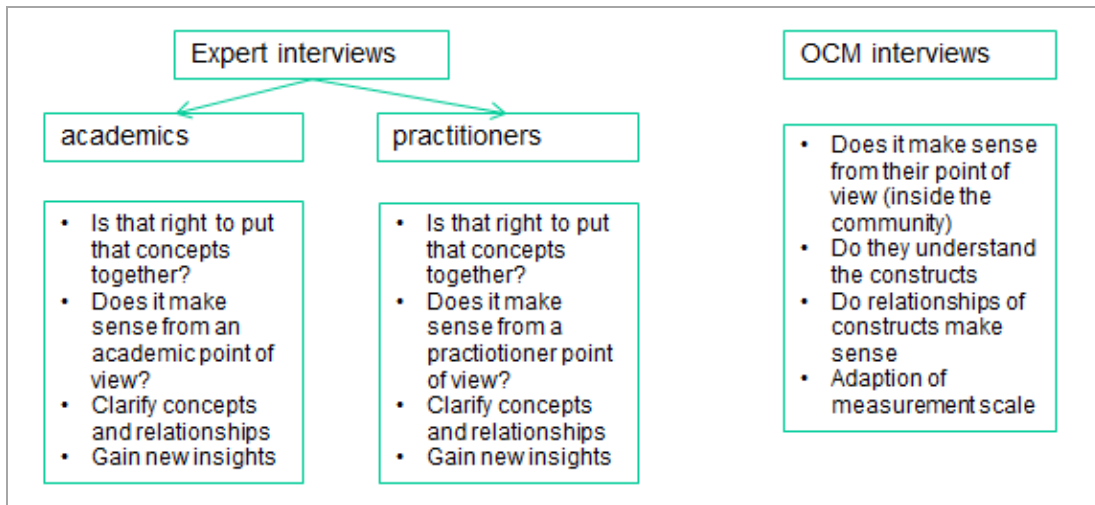
In a first step, exploratory fieldwork was conducted on the SMOm community. This allowed the author to gain insights into the SMOm online community and understand the communication context. Furthermore, it allowed her to test the face validity of the proposed conceptual model, to clarify constructs and to purify measures.

### **4.5.1 Rationale for the context**

Netnography methods and expert interviews were used for the exploratory fieldwork. In stage one the SMOm community was continuously observed to gain a better understanding of the community. The author used netnography from the moment she selected Swissmom as site of research. She registered as online community member and participated in online discussions. The second stage used expert interviews with academics and industry experts in order to gain new insights into the phenomenon of online communities and to validate the conceptual model, hypothesis and constructs. Industry experts were included as the field of study is moving very fast and it is assumed that industry experts' knowledge is at least as advanced as the one of academics. The view of experts was very important as it provided a broader view on online communities unrelated to the research context. In stage three, measurements were presented to the interviewees and assessed by them. Additionally, they also verified the conceptual model. These views were SMOm-specific and thus also very important. In other words, the experts provided an outside view while an inside view was provided by the community members.

The following figure presents the different groups of interviewees and the tasks that were carried out with them.

Figure 27: Different groups of interviewees



Source: Developed for the present study

Because netnography methods were used, a brief introduction to netnography is given below.

#### 4.5.2 Netnography

Netnography is a qualitative method that adapts the methods of ethnography to study online behaviour and cultures (Kozinets, 1998). Methodologically, netnography's fieldwork and textual account is based on the "traditions and techniques of cultural anthropology" (Kozinets, 1998 p. 369). Kozinets (1998) states that "observing the general guidelines and traditions of ethnography while adapting them to the unique circumstances of cyber cultures, netnography may be empowered and legitimated through building on anthropological tradition, adapting and drawing on its consensually-derived standards of evaluation where necessary" (p. 369).

Kozinets (1997, 1998, 1999, and 2002) was the first who has used netnography for online research. Many scholars have followed him studying online communities such as: the Citroën brand community (Cova & Carrère, 2002) or Napster (Giesler & Pohlmann, 2003).

The present study focusses on the behaviour and communication in online communities. Because netnography methods are used in online environments and allow studying online communities and the behaviours taking place in them, it seemed appropriate to use them for the exploratory fieldwork.

Netnography is “based primarily on the observation of textual discourse” (Kozinets, 2002 p. 64). As has been thoroughly discussed in chapter 2, CMC has its peculiarities, which explains the differences between netnography and ethnography. In the text-based environments, nonverbal cues cannot easily be conveyed and thus not observed and might need to be deduced by the researcher.

With regard to conducting netnography, Kozinets (1997, 1998, 1999, and 2002) states that “although netnography, like ethnography, is inherently flexible and adaptable to the interests and skill set of the individual marketing researcher, these steps may act as a guide to researchers who are interested in rigorously applying the method to their own research” (Kozinets, 2002 p. 63). He proposes the following methodological approaches:

- 1) *Cultural entrée*: First, a research question has to be formulated and an appropriate online community selected. A researcher has not to undertake long distance journeys as he can access the online community from everywhere (Kozinets, 1998).
- 2) *Data collection and analysis*: Netnographers usually generate two types of data: (i) they copy data directly from the online community and add their observations (Kozinets, 1998) and (ii) researcher’s inscription of his observations. According to Kozinets (2002), “the netnographer’s choices of which data to save and which to pursue are important and should be guided by the research question and available resources (e.g. the number of online members willing to be interviewed, the ability of online members to express themselves, time, researcher skill)” (Kozinets, 2002 p. 64). According to

Kozinets (1999) all important and relevant information is likely to be captured following the Pareto principle (80-20 rule).

- 3) *Ensuring trustworthiness*: As stated by Kozinets (2002), the concept of trustworthiness is used by scholars (Lincoln & Guba, 1985; Wallendorf & Belk, 1989) rather than the concept of validity in most qualitative consumer research. In contrast to ethnography, where the researcher balances observations and discourse, the analysis in netnography is primarily based on text messages (Arnould & Wallendorf, 1994). As is thoroughly discussed in chapters 2 and 3, text-only computer-mediated messages have their particularities, such as overestimation of messages and idealised self-presentation. Therefore, “every aspect of the ‘game’ (type and content of the posting, the medium, etc.) is relevant observational data in itself, capable of being trustworthy” (Kozinets, 2002 p. 65). Thus, the crucial difference between ethnography and netnography is that the researcher does not analyse the “complete set of observed acts of consumers in a particular community” (p. 65) but the “content of an online community’s communicative acts” (Kozinets, 2002 p. 65). Therefore, to be trustworthy this limitation must be clearly stated.
  
- 4) *Research ethics*: It is not clear if online communities are private, public or in fact hybrid spaces. In other words, in contrast to other methods such as interviews, focus groups or surveys, the researcher is not explicitly given the information for research. According to Langer and Beckmann (2005), “it has to be decided from case to case [...] whether we deal with (semi-) private communication or public communication. The key to this decision is the access criteria for observation of and/or participation in such communication: if access is restricted (e.g. by use of passwords) and thus reserved for members only, we can talk about a (semi-) private communication within the community and should apply the guidelines and procedures, Kozinets (2002) recommends” (p. 194).

For the present study, the author registered for the forum in order to be visible and able to participate lively in the forum. The reason for doing so is that the author strongly believed that by participating in those groups, she would be able to gain additional insights and knowledge of the context of the study. However, although the author had to register to gain access to the forum, it is not a private forum, as everyone (without registration) can read the content (messages). Thus, the SMO forum can be considered to be semi-private. Nevertheless, the research followed the four recommended procedures for observation of and participation in (semi-) private communities, which are: (i) fully disclosure of the researcher's presence, (ii) ensurance of confidentiality and anonymity, (iii) OCM's feedback and comments should be sought and included, and (iv) approval to quote postings should be gained (Kozinets, 2002).

- 5) *Member check*: To make sure the meanings were understood correctly OCMs were allowed to check the data and give feedback (Arnauld & Wallendorf, 1994).

The author adopted those steps for the study. Table 16 shows the individual steps and the proposed adoption for this research.

*Table 16: Netnography steps and adoption to research*

<i>Steps</i>	<i>Description</i>	<i>Adoption to research</i>
Cultural entrée	<ul style="list-style-type: none"> <li>a) Develop specific research question</li> <li>b) Search for appropriate online forum</li> <li>c) Observe the forum to obtain additional knowledge about the forum and its members.</li> </ul>	<ul style="list-style-type: none"> <li>a) The research question has been outlined in chapter 1.</li> <li>b) An appropriate community was selected by entering key words to search engines such as google.com, Google groups, Yahoo!, egroups.com, lizst.com, and Technorati. Additionally, social networks such as Facebook, ecademy, Xing and LinkedIn were consulted. Further, scholars and experts were asked for their advice (Kozinets, 2002). This research resulted in the selection of the SMoM community.</li> <li>c) Non-participatory and participatory observation: gaining online community insights. Identification of relevant and key online community members for interviews (Paccagnella, 1997; Kozinets, 1999, 2002; Bernard, 2004). There might be an overwhelming wealth of data. In order to be able to filter out the relevant data, prolonged research is required to learn about the community and its members (Sherry &amp; Kozinets, 2000). The author has been an OCM of SMoM since the community was selected.</li> </ul>
Data collection and analysis	For data collection the individual interview has been chosen	All interviews were conducted on an individual basis by interviewing SMoM online community members.
Providing trustworthy interpretation	<ul style="list-style-type: none"> <li>a) Triangulation</li> <li>b) Long-term immersion in community</li> </ul>	<ul style="list-style-type: none"> <li>a) Triangulation is guaranteed by the subsequent quantitative study.</li> <li>b) The author has been following SMoM since it was selected.</li> </ul>

Research ethics	<ul style="list-style-type: none"> <li>a) Research presence has to be fully disclosed</li> <li>b) Confidentiality and anonymity has to be ensured</li> <li>c) OCMs feedback have to be included</li> <li>d) Permission to quote postings has to be obtained</li> </ul>	<ul style="list-style-type: none"> <li>a) The author disclosed herself fully to the community. There was no problem of acceptance, as she was considered as one of them, being a mother of two small children herself.</li> <li>b) Further, the author guaranteed confidentiality and anonymity to all participants.</li> <li>c) When community members added some comments or gave feedback to statements, that feedback was included.</li> <li>d) The author got permission by the community members in question for publishing any messages that were quoted in the thesis.</li> </ul>
Member checks	Some or all of the results are shared with the members for additional insights, feedback and information exchange	<p>The following process for member-check is recommended: (i) Contact 10 OCMs who post most frequently on the forum for feedback, (ii) contact 2-3 posters of each member category, (iii) contact 10 randomly selected posters. (Kozinets, 1997, 1998, 2002; Giesler &amp; Pohlmann, 2003).</p> <p>The member-check was conducted, however, only three SMoM members could be found to comment on the findings.</p>

*Source: Adapted from Kozinets, 2002*

The data collection process in netnography significantly differs from the data collection process in ethnography. Table 17 illustrates the different data collection methods and highlights the differences of both approaches.

*Table 17: Illustration of data collection process*

<i>Data collection process</i>		<i>Ethnography</i>	<i>Netnography</i>
Field conversations	Observation non-participatory	On-going, common conversation without any intervention by the researcher	Reading of community members' contributions (forum, chat, distribution lists)
	Observation participatory	Intervention of researcher as "normal" community member	Researcher participates in online discussion
Analysis of official material		Community members' diaries, letters, autobiographies, narratives, etc.	Websites, books, brochures and the like about the topic or brand discussed in the community (members' or companies' materials).
Individual interviews		Interview with community member.	Interview with community member (via chat, e-mail, online focus groups, etc.).
Researcher's field notes		Researcher's field notes: thoughts, observations, feelings, ideas, hypothesis, and the like.	Researcher's field notes: thoughts, observations, feelings, ideas, hypothesis, and the like.

*Source: Bernard, 2004, p. 56*

In the first stage of the exploratory fieldwork, the author used the non-participatory method of netnography for gaining insights into communication activities on the forum and the participatory method by actively participating in the form. In stage two a method outside of the pool of methods of netnography was used, namely expert interviews. The expert interviews helped to "better understand how these experts perceive and describe the constructs" (Algesheimer et al., 2005 p. 25). In the third stage, the author again used a method listed in the pool of netnography method: individual interviews with OCMs.



Like every other research method, netnography has its advantages and limitations. Based on Kozinets (2002) and Bernard (2004) the following table highlights the most important ones.

*Table 18: Advantages and limitations of netnography*

<i>Advantages</i>	<i>Limitations</i>
Less time consuming, less costly, potentially less obtrusive.	In virtual space, body language has been replaced by paralanguages such as emoticons that allow more pre-editing and positive self-expression.
Observations in a context that is natural and not constructed by the researcher.	Researcher needs specific skills and talents such as empathy, good sense of observation, etc.
Textual data are “already transcribed and thus may be less subject to the vagaries of memory” (Kozinets 2002, p. 370).	Difficult for generalisation.
No limitation of time and space and continuous access to community members.	Less exhaustive as ethnographic studies as only the act of communication is studied and not the complete behaviour of the subject.

*Source: Adapted from Kozinets, 2002 and Bernard, 2004*

By following the guidelines proposed by Kozinets (2002) netnography can be considered to be a rigorous research method for investigating in online communities. The proposed guidelines by Kozinets (2002) should be followed: “Prolonged engagement and persistent observation, triangulation of sources, recording of field notes, and member checks” (p. 370). The author considers this to be an appropriate method for understanding the communication behaviours in the online community, as well as for finding key members with whom to conduct individual interviews.

After the description of netnography method, the sampling procedure for the exploratory research is presented in the following sections.

### **4.5.3 Sampling**

In many qualitative studies, a purposive sampling, with interviewees sampled around a specific concept (Burnes & Grove, 2001; Corbin & Strauss, 1990), has been used as it is less important to reach a group of subjects who are representative (Miles & Huberman, 1994). This study also uses a purposive sample, consisting of i) experts from different fields and industries with a strong connection to online communities (exploratory study

I) and ii) OCMs (exploratory study II). In the remainder of this study, experts are called ‘expert interviewees’ and online OCMs ‘community interviewees’.

#### **4.5.3.1 Expert interviewees**

According to Morse and Field (2002) a qualitative sample has to be appropriate, which means that those participants should be selected who are best able to respond to the research questions. The experts were recruited on a social network website and selected according to criteria such as interest, job title and business category. The social network chosen was Xing, an established business network site. “Over 10 million members use XING to manage their business contacts” (Xing, 2011). Xing offers a wide range of services, including appointments and events management, job market place, company and individual profiles, applications, groups, etc. (Xing, 2011). It was decided to use a business network site because experts in online communities are mostly business-related people who are either responsible for an online community or consultants advising companies about online communities. The experts were sampled from an online social network site, i.e. the same type of media as the study site. Thus, people can be found who are familiar and comfortable with that kind of media. This allowed the author to generate an appropriate sample of online community experts.

In line with van der Heijden and Verhagen (2004), scholars were selected in addition to experts; these scholars have either published academic papers or books about online communities or are involved in online community projects.

Initially, 32 participants were involved in the interviews. Eight of them were sent the questionnaire with the interview guidelines and further information but never responded. Another seven interviewees did not fully complete the interview and could therefore not be included in this study. The interviewees can be summarised as follows. (A table with more information on the interviewees can be found in Appendix I).

*Table 19: Nature of business of interviews*

<i>Nature of business</i>	<i>Number of participants</i>
Academia	5
Consultancy on online media, social media and online communities	3
Public relations	2
Web agencies	3
Companies using online communities	4

*Source: Developed for the present study*

*Table 20: Job title of interviewees*

<i>Job title</i>	<i>Number of participants</i>
Research Associate / Research Assistant / Lecturer	2
Senior Lecturer / Professor	3
Online marketing and/or community manager/ consultant	4
CEO and/or Partner	4
Senior Manager / Director	4

*Source: Developed for the present study*

#### **4.5.3.2 Community interviewees**

The qualitative study features the online community Swissmom. The aims of the study and a call for interviewees were posted in the forum. Relevant key users were contacted directly via ‘personal note’ (a kind of internal personal mailing function). These key users (see netnography) were selected during the part of the study when the author was observing the forum. Within three days, 16 interviewees could be found. Two of them never responded; another two did not fill in the questionnaire properly and did not respond to the follow-up e-mail and were thus not considered for the study.

#### **4.5.4 Method**

Meho (2006, p. 1284) states that “three main types of Internet-based qualitative research methods have been used by scholars, namely: i) online synchronous interviews, ii) online asynchronous interviews and iii) virtual focus groups”. The use of e-mail (online asynchronous interviews) for conducting qualitative research has been applied by many

scholars (e.g. Murray, 1995, 1996; Murray & Sixsmith, 1998; Kennedy, 2000; Meho & Tibbo, 2003 and Lehu, 2004). It has several advantages: it allows the researcher to reach geographically dispersed people, and data are generated in an electronic format, which prevents transcription errors (Meho, 2005). As described by Meho (2006 p. 1289), the “anonymity afforded by online communication can be an important factor in increasing self-disclosure (Herring, 1996; Mann & Stewart, 2000; Tidewell & Walther, 2002) and facilitating a closer connection with interviewees’ personal feelings, beliefs and values (Matheson, 1992)”.

Asynchronous communication further allows for thorough reflection and editing of the messages (Levinson, 1990). Conversely, there are also limitations to e-mail interviewing, such as the fact that many people delete the invitation for participation before they have even read it (Meho & Tibbo, 2003), responses can be delayed (Meho, 2006) and the facial expressions and body language cannot be taken into consideration (Selwyn & Robson, 1998). This last point, however, can be challenged, as there are studies claiming that even if the social context cues are filtered out, the exchange of social cues is still possible in computer-mediated communication (Walther, 1992, 1995, 1996). The absence of nonverbal cues can be overcome through “various linguistic and typographic manipulation, which may reveal social and relational information in CMC” (Walther, 1995 p. 190). Further, it is assumed that participants have not deleted the email before they have read it as they have all agreed to participate in the interview.

This study has used asynchronous online interviews. The reason for doing so is that experts of online communities, as well as online OCMs, feel comfortable being interviewed online, as the web is their business tool, or rather the place where they meet and interact. Further, the sites of online communities are on the web, and community users as well as experts can be geographically dispersed. Moreover, the study investigates online impression formation in online communities. Thus, it makes sense to ask the questions in an environment that is similar to the research site.

#### 4.5.4.1 Expert interviews

The expert interviews helped the author to “better understand how these experts perceive and describe the constructs” (Algesheimer et al., 2005 p. 25). The study was set up as presented in the following table.

*Table 21: Research set-up - Expert interviews*

<i>Time</i>	<i>Topic</i>	<i>Description</i>	<i>Involved persons</i>	<i>Result</i>
01.06.10-31.8.10	Literature review and development of interview outline	Based on existing impression formation, media theories and CMC literature, interview questions were generated.	The author	Draft interview outline
01.09.10-30.09.10	Validation of interview outline	Interview outline was sent to PHD supervisor for validation, pre-test was conducted.	PHD Supervisor, experts and academics, The author	Finalised interview outline
01.10.10-11.10.10	Search for interviewees	Aim of study and request for interviewees were posted in XING (a social network site).	The author	Interviewees were found
09.10.10-21.11.10	Interviews	Experts were interviewed.	Experts, the author	Interviews were conducted
21.11.10-31.1.11	Data analysis	Data analysis with NVivo.	The author	Data were analysed

*Source: Developed for the present study*

Because questions sent by e-mail must be much more self-explanatory (Meho, 2006), individuals were sent an interview guide and a description of the constructs found in the literature. A pre-test with two academics and two experts was conducted.

In order to gain new information, the interviews started with general questions which were both unstructured and open-ended, “Could you please describe what is important to ensure successful communication in an online community: (i) in general, (ii) if a company would like to be accepted as an OCM?” Next, the survey asked semi-structured questions. These questions were based on constructs found in literature,

where they were claimed to be relevant in the context of computer-mediated communication (interview questions can be found in Appendix).

To clarify responses, follow-up questions were sent by e-mail. According to participants' feedback, it took about half an hour to properly fill in the questionnaire and, depending on the number of follow-up questions which were asked, additional time was spent on the interviews.

#### 4.5.4.2 Community interviews

The aim of the interviews with OCMs was to refine existing measurements of impression formation in computer-mediated communication and adopt the measurement to this specific context. Further, face validity of constructs was tested. The study was structured as presented in the following table.

*Table 22: Research set-up – online community member interviews*

<i>Time</i>	<i>Topic</i>	<i>Description</i>	<i>Involved persons</i>	<i>Result</i>
January – 9.2.11	Literature review and development of interview outline	Based on existing impression formation, media theories and CMC literature, interview questions were generated.	The author	Draft interview outline
09.2.11-17.2.11	Validation of interview outline	Interview outline was sent to PhD supervisor and Swissmom Team for validation.	PHD Supervisor, Swissmom, The author	Finalised interview outline
01.2.11-17.2.11	Search for interviewees	Aim of study and request for interviewees were posted to the forum. Key users that have been identified during netnography were addressed directly	Swissmom, The author	Interviewees were found
17.2.11-28.2.11	Interviews	OCMs were interviewed.	OCMs, the author	Interviews were conducted
01.3.11-31.3.11	Data analysis	Data analysis with NVivo.	The author	Data were analysed

*Source: Developed for the present study*

Based on existing impression formation media theories and CMC literature, interview questions were generated. The interviews started with general semi-structured questions about impression formation. Next, three structured questions were asked, each followed by an open-ended question about the appropriateness of three different measurement instruments found in literature. The reasoning behind choosing these measurement instruments is that they were employed to measure impression formation and were either used in an online environment or were generic enough to adapt to an online community. Next, open-ended questions were used about the criteria influencing impression formations and, finally, questions relating to the conceptual model were asked (interview questions can be found in Appendix). A pre-test was conducted, using two academics and three OCMs. According to the interviewees, it took them in average 25 minutes to fill in the questionnaire and, depending on the number of follow-up questions, additional time was spent on the interviews.

## **4.6 The second part – Main study**

In the second part of the study, quantitative methods were used to help the author to test and establish the reliability and validity of previous theories and hypotheses (Patton, 1990; Blumberg et al, 2005). The author used existing theories and put them together to create a new model and environment.

### **4.6.1 Research instrument development**

This section illustrates how the research instrument was developed and provides a rationale for the process that followed.

The development of measurement scales and issues of validity and reliability need to be carefully addressed. Thus, the well-known process of instrument development suggested by Churchill (1979) was adopted for this study. The author carried out the following key steps that are presented in detail below:

- Specification of construct domain (literature and qualitative data)
- Item generation (literature and qualitative data)

- Questionnaire design
- Scale purification through expert judgment
- Pre-testing with online community members
- Pilot-testing with online community members.

#### **4.6.1.1 Specification of construct domain**

The present study focuses on the construct of OCCIP. Based on a thorough literature review (see chapter 2), which covers areas such as online communities, computer-mediated communication, impression formation, corporate identity, corporate image, the conceptual model (see Figure 15) as well as the according hypotheses were put forward.

As mentioned above, providing a precise definition of the constructs that have to be measured is crucial in order to facilitate the subsequent development of measurement scales (Churchill, 1979). These definitions are created based on the literature review and findings of the qualitative studies. The definitions of the constructs are presented in the following table.



Table 23: Definition of the constructs

Construct	Definition	Reasoning behind why this construct has been included in the study?	What is its relationship with OCCIP
Relevance of message	<p>The fact that fewer social context cues can be conveyed through CMC, redirects the intention towards the message itself, and the importance of providing relevant contributions.</p> <p>In an over-communicated world, messages need to be relevant in order to be read.</p> <p>A relevant message can be described as a message that has important content.</p>	<p>Importance of relevance in an over-communicated world (Christodoulides and de Chernatony (2004).</p> <p>Digital natives process information via discussions, (not mainly via opinion leader) (Prensky, 2001) → content needs to be relevant in order for it to be discussed. Discussion is important to increase interaction → interaction between OCMs increases their social identity and thus their in-group favouritism.</p> <p>CMC theories such as: cues filtered out , SIP, SIDE → Lack of social context cues → attention towards message increases (Kiesler et al, 1984; Burgoon et al., 2002).</p> <p>The importance of the relevance of a message is also supported by the qualitative results, where interviewees provide statements such as:</p> <ul style="list-style-type: none"> <li>- <i>“If not relevant than not a good impression” (Community Interviewee 1).</i></li> <li>- <i>“Extremely important due to the openness and the mechanisms for sharing in OCs. Yes, because the COR is regarded as a representative for the Company and the OCM would then assume the COR acts on behalf of the company. It not only has an impact on the perception of the COR, but on the perception of the company as a whole” (Expert Interviewee 6).</i></li> </ul>	Relevant contributions of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
Timeliness of message	In fast-paced environments, such as computer-mediated environments, information needs to be current and up-to-date.	The timelier the information is, the higher the perceived information usefulness. The more useful information is perceived, the more the information is adopted (processed). (Cheung et al, 2008) → it is important if information is to be processed that it is also understood and the receiver can identify himself with it =	Timely messages of a COR are positively associated with the online community corporate impressions

		<p>better impression.</p> <p>The information that customers are looking for no longer has to be detailed. However, it has to be current and up to date. Enhancing timeliness of sent messages can be an important step in better online communication (Adjei et al, 2010). A community interviewee stated that “I only read very current messages, I am not interested in old stuff. Life is far too fast” (Community Interviewee 11).</p> <p>Feelings of uncertainty can be minimised and confidence in a company increased when OCMs receive messages that are relevant, frequent, lengthy and timely (Adjei et al, 2010).</p>	(OCCIP) OCMs form of the company.
Accuracy of message	Accuracy refers to whether the message is perceived to be correct.	<p>A message can be accurate, however, not relevant. Thus, this construct seems to be an important distinction to the construct relevance and needs to be added.</p> <p>Due to the fact that OCMs interact and can comment on the messages of a company, these messages need to be correct. If this is not the case, “I will challenge the message and this might have an impact on how the original message is perceived” (Community Interviewee 7).</p> <p>This is underlined by another interviewee mentioning that “if a message is wrong, I will for sure comment on it if others have not done this already” (Community Interviewee 9). Another stated that “I get upset if a company publishes erroneous messages and I want share my thoughts with others. And this will definitively not be good for the company” (Community Interviewee 5).</p>	Accurate messages of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
Comprehensiveness of message	Comprehensiveness refers to whether the message is complete, detailed and easily understandable.	<p>A typical attribute of Web 2.0 is that people want to share and discuss, thus a message needs to be comprehended at first glance.</p> <p>Statement of an interviewee in the qualitative interviews: “Look at a situation when I speak with someone. If I don’t get the point, I won’t really like the situation → I’ll have a negative impression of the conversation and also of the communicator” (Community Interviewee 7)</p>	Comprehensive messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.

Social context cues	Various linguistic and typographic manipulations (such as paralanguage), as well as additional information about an author which reveal social and relational information.	<p>Despite many discussions regarding the importance of social context cues and many studies which address this issue, social context cues have not been measured in a quantitative study and have not been tested in this relationship.</p> <p>Qualitative interviews underline the importance of social context cues. Four items were added based on qualitative interviews. Items that were added are based on specific additional information about the author provided in the message such as username or more personal information. Interviewees stated:</p> <ul style="list-style-type: none"> <li>- <i>“If a moderator tells a lot about himself, he gives the impression of being open-minded and communicative. He creates an environment in which one likes to speak” (Community Interviewee 1).</i></li> <li>- <i>“As mentioned above, some additional information about the moderator makes it more personal and nicer. It has a very positive influence” (Community Interviewee 4).</i></li> <li>- <i>“...influences (especially username can be neg or pos)” (Community Interviewee 7).</i></li> <li>- <i>“It is important in the sense that it replaces the social context cues the receiver would normally miss, this can be both utilised or abused. Both are connected to the sender’s ability to control which social context cues to convey... Humans rely 80% on sight, so yes, a photo along with a description of the sender has a huge impact on how the sender is perceived” (Expert Interviewee 6).</i></li> </ul>	Social context cues that OCMs receive about the COR have a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
Perceived similarity	Similarity consists of congruency regarding demographic variables, beliefs, values, preferences and lifestyle (Gilly et al., 1998). In the context of online communities, assuming that there are fewer contextual cues available, people are rather heterogeneous, but meet online because they share the same interest; perceived similarity consists mainly of congruency regarding beliefs, values, interests and preferences.	<p>If a COR is perceived to be similar, he or she will be perceived as in the in-group. Thus, the COR and the company will be favoured.</p> <p>Qualitative interviews underline the importance of perceived similarity. Three items were added based on qualitative interviews. Items that were added are based on congruency regarding interests and preferences.</p> <p>Despite agreeing to the fact that similarity is important, one</p>	Perceived similarity of the COR is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.

		interviewee also critically challenges this view by stating: “yes, but also more boring. Weak ties are more attractive and often more helpful” (Expert Interviewee 10). Statements like this make it even more interesting to test if perceived similarity really has a relationship to OCCIP.	
Source credibility	Source credibility refers to the credibility of the endorser of a company, namely the COR. It is the perceived expertise and trustworthiness of the COR, which is the extent to which OCMs feel that the COR has the knowledge or ability to fulfil their claims and whether the COR can be trusted to tell the truth or not.	<p>Fombrun (1996) posits that corporate credibility or the extent to which consumers, investors, and other constituents believe in a company’s trustworthiness and expertise, makes up a portion of a corporation's image.</p> <p>Source credibility is also considered to be very important by the interviewees. Statements such as the following were provided:</p> <ul style="list-style-type: none"> <li>- <i>“There will always be liars that deceive in forums (have experienced this myself) but if the moderator is lying, I would question the whole company and would feel bad. I would not trust it anymore” (Community Interviewee 4).</i></li> <li>- <i>“Credibility is very important to me and represents almost 100% of my impression of the moderator” (Community Interviewee 8).</i></li> </ul>	Perceived credibility of the COR is positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
Affiliation	This is the declared affiliation of a COR to his company.	<p>According to Warnick (2004), it is important to know the source of the content of a website, and thus it is assumed that it is important to know with whom we are speaking and what company they work for.</p> <p>Affiliation as such has not yet been evaluated, however, it has been discussed in qualitative interviews.</p> <p>Company members are not always appreciated when participating in online communities. Thus it seems to be important to indicate a COR’s affiliation. This is supported by the qualitative interviews. One interviewee stressed the importance of disclosing the affiliation by stating that “if he or she does not do so and later on someone finds out, this will have a negative impact on the impressions formed about the company” (Community Interviewee 2). Furthermore, interviewees assess the importance of affiliation as</p>	The COR’s disclosed affiliation to the company has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.

		<p>follows:</p> <ul style="list-style-type: none"> <li>- <i>“Yes, I would like to know to whom I am speaking” (Expert Interviewee 1).</i></li> <li>- <i>“I think honesty is crucial on an OC platform. User's might find out if it is not disclosed and the platform could lose all credibility very quickly” (Expert Interviewee 4).</i></li> <li>- <i>“Yes, I think so. I would love to get the insights of a CEO and I suppose that online community members feel flattered or taken more seriously if a CEO answers” (Expert Interviewee 5).</i></li> <li>- <i>“It depends on the topics on which the person participates. If his status could be of relevance, why not disclose it? Company's representatives should think about possible implications of telling or not-telling their status. Anyway, people on the Internet will find out and if it makes any difference they will let you know on the OC with positive or negative reactions” (Expert Interviewee 13).</i></li> </ul>	
Characteristics	Perceived characteristics and communication behaviour of a COR.	<p>People who interact form impressions of one another, even if they do not meet directly. These impressions are based on the other's behaviour and characteristics (Downey &amp; Christensen, 2006).</p> <p>Characteristics have not been assessed in this kind of context before and have not been measured this way (especially for a COR).</p> <p>Qualitative interviews helped to adopt existing measures to the actual research context (see chapter 5).</p>	The positive perception of a COR's characteristics has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
Interpersonal communication	<p>This can be defined as the communication between OCMs. This means the posted messages of OCMs, which address either other OCMs or the company. This might be messages posted by a company that are shared and discussed with either the company and/or other OCMs.</p> <p>Thus, OCMs are not only confronted with the messages</p>	<p>It is assumed that communication among online community members influences the impression formation process. Interviewees discuss this topic as follows:</p> <ul style="list-style-type: none"> <li>- <i>“I think that other contributions can influence me, I might reflect again and rethink things” (Community Interviewee 4).</i></li> </ul>	Communication between OCMs on the online community platform has a positive effect on online community corporate impression

	of the company but also with messages of other OCMs.	<ul style="list-style-type: none"> <li>- <i>“Yes, it is perceived more credible since it eludes the company's control and because people obviously invested some effort and time to communicate s.th. So the issues seem to be important/emotional” (Expert Interviewee 4).</i></li> <li>- <i>“As mentioned earlier, other consumers points of view are often regarded as more valuable than that of the company. Thus discussions help the user to establish a perception” (Expert Interviewee 6).</i></li> <li>- <i>“Yes, everything which has public audience gets attention” (Expert Interviewee 9).</i></li> </ul>	(OCCIP).
Online Community Corporate Impression (OCCIP)	OCCIP is the immediate impression an OCM forms of a company during the interaction on an online community.	<p>The focal construct has been described and discussed by interviewees as follows:</p> <ul style="list-style-type: none"> <li>- <i>“I believe the image of the company representative speaks for the perception of the company (so do your homework guys)” (Expert Interviewee 14, 2010).</i></li> <li>- <i>“I believe that a VC member does not make the difference between a company-representative and the company itself” (Expert Interviewee 9, 2010).</i></li> <li>- <i>“When I am speaking with a company-representative on a VC to me this is the company, thus the impression I get during our conversations is the direct impression I get of the company” (Community Interviewee 12, 2011).</i></li> <li>- <i>“Actually to me it really does make a difference. Anyway I “only” speak with a virtual person on a VC, so am I speaking with a company-representative or with the company as an abstract building, which is the same, I cannot see any difference” (Community Interviewee 8, 2011).</i></li> <li>- <i>“Honestly, I don't care. Anyway it is virtual, so am I communicating with a company-representative or with the company...what is the difference” (Community Interviewee 3, 2011).</i></li> </ul>	OCCIP is the focal construct.

		<p>- <i>“Company representatives are seen as the company, so what they do, who they are, how they behave is always directly attributed to the company. This at least is what I experienced during my consultancy jobs with many clients” (Expert Interviewee 3, 2010).</i></p>	
Attitude towards the company’s OC	General evaluation (global affective response) of the company’s OC.	<p>The first consequence of OCMs bearing in mind a positive impression is seen in their global attitude towards the company’s OC. In this sense, an Expert Interviewee states that “Attitude is greatly influenced. Positive and negative images have a tendency to become exaggerated in OC's” (Expert Interviewee 6).</p> <p>If we take into considerations Muniz &amp; O’Guinn’s (2001) definition of brand communities and have a closer look at their suggestion that a brand community has three central relationships: brand to customer, customer to customer and customer to community, we can conclude the following:</p> <p>The immediate impression formed during the interaction in a company’s OC is formed during a discussion where the brand interacts with the OCM directly and where OCM’s interact. However, attitude is formed when the OCM is outside of this direct interaction. That means when this interaction is over and he reflects about the interaction on the OC (customer to community).</p>	Online community corporate impression (OCCIP) has a positive effect on attitudes towards a company’s OC.
Intention to use the company’s OC again	The behavioural intention of an OCM to use the company’s OC again.	As defined by TRA, the attitude will be followed by conative responses such as the intention to use the company’s OC again. An Expert Interviewee describes this by saying: “I mean, yes, if someone likes the company and has a positive attitude towards its VC that person most probably comes back to the OC, either to get new information or to discuss other issues” (Expert Interviewee 5).	Attitude towards a company’s OC has a positive effect on intention to use the company’s OC again.
Word of mouth	When speaking about word of mouth here, we are focussing on word of mouth as a consequence of the impression formed by OCMs.	<p>It is believed that OCMs engage in word of mouth communication as an outcome of their impression formation about a company. This is underlined by an interviewee’s comment about the influence of OCCIP on word of mouth:</p> <p>“Greatly and growing. Since the Web adds some sense of anonymity and also because of the immediate nature and extent of</p>	Online community corporate impression (OCCIP) has a positive effect on word-of-mouth activities by OCMs.

		distribution on the Web it is both easy to establish the sense that one's opinion is picked up by others as well as adding one's own experiences to positive or negative feedback, thus amplifying already positive or negative images” (Expert Interviewee 6).	
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*Source: Developed for the present study*



The academic literature provides elaborated specifications of the various domains of the constructs that have been conceptualised in this study. Therefore, the literature review was chosen as the main technique to define the domains of the constructs. Those hypothetical constructs cannot be measured directly and require a specific operational definition that is described below.

#### 4.6.1.2 Item generation

Different attempts to operationalize the same and similar construct as well as to identify existing and empirically tested measurement scales are made in literature and thus, to remain consistent with previous research, items were derived from existing scales of prior studies (Clark & Watson, 1995). In addition, twenty-four items were developed based on the findings of the qualitative studies. The antecedents, the focal constructs and the consequences were measured using multi-item scales.

In total, the initial item pool comprised 73 items. The following table shows the construct, the item sources and the number of items (for details, see Appendix).

*Table 24: Constructs, scale items and item sources*

<i>No</i>	<i>Construct</i>	<i>Item Source</i>	<i>Items</i>
C1a	Relevance of message	Cheung et al., 2008 ; Citrin, 2001	3
C1b	Timeliness of message	Cheung et al., 2008; Wixom & Todd, 2005	3
C1c	Accuracy of message	Cheung et al., 2008; Wixom & Todd, 2005	3
C1d	Comprehensiveness of message	Cheung et al., 2008; Wixom & Todd, 2005	4
C2	Social context cues	Liu & Ginther, 1999; Walther, 1996; qualitative study and Jacobson, 1999	10
C3	Perceived similarity	Gilly et al., 1998; qualitative study	7
C4	Source credibility	Cheung et al., 2008, based on Wu & Shaffer, 1987	4
C5	Affiliation	Qualitative study	3
C6	Characteristics	Garlick, 1993 adopted and supplemented by qualitative study.	15

C7	Interpersonal communication	Gruen et al., 2006 adopted and supplemented by qualitative study	6
C8	OCCIP	Sundar S. Shyam and Kalyanaraman Sriram, 2004.	3
C9	Attitude towards the company's OC	Ko et al., 2005	6
C10	Intention to use the company's OC again	Ko et al., 2005	3
C11	Word of mouth	Harrison-Walker, 2001	3

*Source: Developed for the present study*

#### **4.6.1.3 Questionnaire design**

A questionnaire was developed based on the item generation process described above. The rationales for selecting surveys as research approach is based on Pinsonneault and Kraemer's (1993) definition of three main objectives for conducting investigations based on surveys. They propose that a survey approach should be followed when:

- Data collection in a study is based on quantitative methods that investigates relationships between variables or seeks other kind of structured information
- Pre-defined instruments are used for data collection
- A study requires the ability to generalise the findings of a sample to a whole population.

This study is based on a quantitative method of inquiry. It is grounded on existing theories and hypotheses explaining relationships between variables. Previous theories and their constructs using pre-defined instruments, together with items derived from qualitative research, are used for data collection. A sample of the population was drawn in order to generalise the findings to the whole population of the online community. Therefore, it seems to be adequate to select a survey approach for the present study.

##### **4.6.1.3.1 Online survey**

Online community members were interviewed by means of a structured, self-administered online questionnaire. As suggested by the literature, SMoM community

members were motivated to respond to the survey by raffling ten CHF 50 vouchers of the online store [www.applesap.ch](http://www.applesap.ch), which sells baby and children clothes (Deutskens, Ruyter, Wetzels, & Oosterveld, 2004). The Maurice Lacroix Facebook members were not motivated by the raffling off of a voucher as this does not correspond to the way a luxury brand communicates with its members.

In the following, a rationale for having selected the method of online survey is provided and the advantages and disadvantages of online surveys are discussed.

Scholars have investigated the validity of e-mail surveys (similar to online surveys) by sending out surveys by post and by e-mail and comparing the data collected by both methods (Kiesler & Sproull, 1986; Bachman et al., 1996). The response rate as well as the mean of the responses did not differ; however, the e-mail surveys had a shorter response time and were less expensive. In addition, in e-mail surveys the social desirability seemed to play a less important role and questions were answered more openly (Kiesler & Sproull, 1986).

Online surveys have also become commonly accepted in communication research investigating areas such as interpersonal communications (Tidwell & Walther, 2002; Wright, 2005; Gruen et al., 2006), group communication (Hobman et al., 2002), mass communication (Flanagin & Metzger, 2001), and organizational communication (Ahuja & Carley, 1998). Online surveys have therefore become an accepted and valuable data collection tool for social scientists and researchers in the user community field (Lüthje, Herstatt, & Von Hippel, 2005).

In contrast to offline surveys they have a number of advantages, such as low cost (Schonlau et al., 2003), high speed of delivery (Sills & Song, 2002), and ease of data cleaning (Sills & Song, 2002). Though, online and offline surveys have the same sources of bias, such as non-response, item non-response, and sample selection bias (Burkey & Kuechler, 2003).

#### **4.6.1.3.2 Non-response bias**

Non-response bias refers to the question if some respondents would be inhibited from participating in the study and if they would respond differently to the questions. It further refers to the question if the survey were distributed differently, would the participants answer questions in another way? The target population consists of OCMs of the Swissmom and the Maurice Lacroix forum respectively, thus it is legitimate to assume that all of them are computer literate. Well-established standard software, called survey console ([www.surveyconsole.com](http://www.surveyconsole.com)) was used to ensure that even less computer literate OCMs would be able to participate in the survey. This suggests that respondents answered questions in the same way than they would have if they were surveyed with an offline method.

Previous studies have found that late respondents answer another way than early respondents. As the survey was published on the forum site, OCMs who frequently visited the forum had a greater exposure to the survey than OCMs who less frequently visited it. Therefore it should be tested if early respondents have the same results with regards to their demographic data. This can be done by using the time-trend extrapolation (Armstrong & Overton, 1977). If the control variables of both groups do not significantly differ, it can be assumed that the overall characteristics of the sample are not degraded. In order to analyse this for the present study, the control variables of early and late respondents were compared and no significant difference could be found.

#### **4.6.1.3.3 Common-method bias**

The survey collected dependent and independent variables using a single instrument, which might cause a common method bias (Podsakoff et al., 2003). In order to make sure that no common method bias exists three analyses were conducted: i) Harman's one-factor test, ii) controlling for the effect of an unmeasured latent methods factor (Podsakoff et al., 2003) and iii) adding a second-order factor to the model (Hair et al., 2006).

#### **4.6.1.3.4 Language of the questionnaire**

Initially, an English-language questionnaire was created. The reason for doing so is that all items that have been taken from the literature are in English. It was pre-tested with 10 students from an International Management class at the ZHAW School of Management and Law. Subsequently, a few refinements were made and then the German-language version of the questionnaire was developed via the back-translation method to make sure that both versions were the same in terms of their function and semantics (Craig & Douglas, 2005). The reason why the questionnaire was translated into German is that many Swissmom users are German native speakers and feel more comfortable filling in a German version of the questionnaire.

Churchill (1979) stresses the importance of purifying measurements after having developed the measurement scales. The purification of the measurement scale is related to issues of validity and reliability and is presented in the next section.

#### **4.6.1.4 Scale purification**

The scale purification process consists of several steps including the test of reliability, validity and unidimensionality. Following these steps are described in more detail.

##### **4.6.1.4.1 Reliability**

Reliability is the most commonly used method and is defined as the degree to which measurements do consistently measure what they are intended to measure (Hair et al., 1998). It is assessed via Cronbach's alpha (DeVellis, 1991). According to Nunnally and Bernstein (1994), a cut-off point of 0.7 should be used for reliability. However, in the early stage of the research, 0.5 or 0.6 is satisfactory (Nunally, 1978). The coefficient alpha sometimes has been misunderstood as a manifestation of unidimensionality rather than one of reliability (Gerbing & Anderson, 1988). Netemeyer (2001) states that "internal consistency is concerned with the degree of interrelatedness among items, and unidimensionality (i.e. homogeneity) assesses if the items underlie a single factor or

construct. It is quite possible for a set of items to be interrelated but not homogeneous. As such, coefficient alpha is not a measure of unidimensionality” (p. 57).

#### 4.6.1.4.2 Validity

Validity on the other hand refers to the degree to which test scores are eloquent and measure what they are intended to measure. There are several types of validity that should be tested, including content validity, construct validity and discriminant validity.

**Content validity:** This is concerned with the “extent to which a specific set of items reflect a content domain” (DeVellis, 2003, p. 49). In order to test content validity of the scales used for the present study, a document, called *scale development document* was sent to academic experts to evaluate domain representativeness, item specificity and clarity of constructs, in order to eliminate misleading wording and non-relevant scales (DeVellis, 2003). This document included the following parts:

- cover letter
- one page abstract of the study
- graphical representation of the conceptual model
- definition of the constructs
- various information about the scales and items such as type of scale, type of date, type of indicator and the source of existing items in the literature
- questionnaire.

It was sent to nine academics in areas such as marketing, online communities, corporate image, branding and psychology (with specialization in customer behaviour and some expertise in online communities). However, only six of them found the time to respond. In marketing it is common to use academic experts as judges of a scale’s domain (e.g. Zaichowsky, 1985; Babin & Burns, 1998).

The academics provided written feedback, some of whom included short remarks and others detailed recommendations. Nevertheless, all of the feedback was useful in improving content validity significantly. Based on the suggestions of the academic reviewers, two constructs, namely OCCIP and word of mouth, were operationalized in a

different way. The initially proposed measures consisted of too few items and thus, according to the reviewers, did not properly represent the constructs. The author went back to literature and found measurement scales that better represented the construct in the context of the study. As one of those measurement scales is the focal construct, it is described in more detail below.

Many corporate image scales as well as impression management scales were not suitable to measure the focal construct as they include elements such as products, product quality, sales staff, points of sales, and after-sales services for the corporate image measurements, and the impression formation measurements were too focused on communication between individuals. Therefore, some additional consideration needed to be made in order to properly define the construct and find appropriate measurement scales.

In the present study, it is a company-representative that communicates, which means that interpersonal communication is simultaneously combined with an element of corporate communication. Corporate communication in turn is an element of corporate identity and makes up a part of the corporate image an individual forms. A further consideration is that the elements of the COR's identity, such as its messages, characteristics, etc., can be compared to the elements of a company's identity, hence their reflections make up the OCCIP, which it can be said are part of a corporate image.

To measure OCCIP, the scale "website perceptions" was used based on the following reasoning. The company of the first study (Swissmom) is an online company (in physical terms: a website) which provides a service. As presented in Table 6, corporate image can be treated in many ways. Some researchers, for example, treat it as impressions (e.g. Williams & Moffit, 1997) and others as perceptions (e.g. Karaosmanoglu & Melewar, 2006). The two pre-tests as well as the main survey have confirmed that this measurement scale is suitable to measure OCCIP in the context of the present study. The appropriateness of this scale is supported by findings of the qualitative research.

After a thorough evaluation of these measurements, the author consulted the academic experts again to ask them for a review of the measurements. The new measurement for

OCCIP as well as the new measurement for WOM were considered appropriate. Furthermore, five items were dropped as they were considered not relevant for measuring the construct. In addition two items were added to the construct affiliation. These items, which stem from qualitative research, were added based on the academic experts' comments.

The measurement instrument called “characteristics” was adjusted based on the results of the qualitative study which is described in more detail in chapter 5.2.2.2.

The following table depicts the amount of items before and after the expert review.

*Table 25: Items prior and after content validity*

<i>No</i>	<i>Construct</i>	<i>Item prior content validity</i>	<i>Items after content validity</i>
C1a	Relevance	3	3
C1b	Timeliness	3	3
C1c	Accuracy	3	3
C1d	Comprehensiveness	4	4
C2	Social context cues	10	9
C3	Perceived similarity	7	6
C4	Source credibility	4	4
C5	Affiliation	3	6
C6	Characteristics	15	13
C7	Interpersonal communication	6	5
C8	OCCIP	3	14
C9	Attitude towards the company's OC	6	6
C10	Intention to use the company's OC again	3	3
C11	Word of mouth	3	4

*Source: Developed for the present study*



As a result of the purification of the scales by means of expert judgement, content validity has been established for all scales that were used in the research instrument (revised scale development document can be found in Appendix).

After revision based on content validity, the new focal construct was used in the Swissmom study. However, based on the feedback, this construct needed some further investigation, which was conducted prior to the Maurice Lacroix study. The results of the qualitative study were consulted and an open question was published on the Maurice Lacroix community asking the community members what adjectives they would use to describe the focal construct. A total of 54 community members answered this question. Based on these two analyses, the focal construct was revised and the amended focal construct used for the survey in the Maurice Lacroix community.

The table below details the pool of items used for the main surveys. The sources of the items are as follows:

- Items have mostly been drawn from existing scales → termed: **“existing measurement scales”**.
- Some items have been adopted from existing measurement scales in order to fit this particular research context → termed: **“adopted from”**.
- A few have not been taken from existing literature, however, they have been developed from sources such as definitions and conceptualisations in existing literature → termed: **“based on”**.
- Some items have been developed based on the qualitative interviews → termed: **“from exploratory fieldwork”**.

Table 26: Pool of the items used

Construct	No.	Item	Item Source	Item Type	Indicator
C1a Relevance of message	C1a1	The messages of the author are relevant.	Cheung et al., 2008 based on Citrin, 2001	Items are <b>adopted</b> from existing scales.	Reflective
	C1a2	The messages of the author are appropriate.			
	C1a3	The messages of the author are applicable			
C1b Timeliness of message	C1b1	The messages of the author are current.	Cheung et al., 2008, based on Wixon and Todd, 2005	Items are <b>adopted</b> from existing scales.	Reflective
	C1b2	The messages of the author are timely.			
	C1b3	The messages of the author are up-to-date.			
C1c Accuracy of message	C1c1	The messages of the author are accurate.	Cheung et al., 2008, based on Wixon and Todd, 2005	Items are <b>adopted</b> from existing scales.	Reflective
	C1c2	The messages of the author are correct.			
	C1c3	The messages of the author are reliable.			
C1d Comprehe nsiveness of message	C1d1	The messages of the author sufficiently complete my needs.	Cheung et al., 2008, based on Wixon and Todd, 2005	Items are <b>adopted</b> from existing scales.	Reflective
	C1d2	The messages of the author include all necessary values.			
	C1d3	The messages of the author cover my needs.			
	C1d4	The messages of the author have sufficient breadth and depth			
C2 Social Context Cues	2.1	Chronemics, such as indications of time when (e.g. early in the morning, late night) the message has been sent, provide useful cues.	Liu and Ginther, 1999; Tidewell and Walther, 2002	Items 1-5 are <b>based on</b> existing literature as well as supported by the qualitative study.	Reflective
	2.2	The amount of messages sent by the author provides useful			

	cues.	And supported by the qualitative study.		
	2.3 How fast a reply has been sent provide useful cues.			
	2.4 Paralinguistics (emoticons, orthographic exaggeration etc.) provide useful cues.			
	2.5 Authors should follow the emerging forum language norms to express their attitudes and ideas.			
	2.6 Authors should provide some personal information.	Qualitative study and Jacobson, 1999	Item 6 comes from <b>exploratory fieldwork</b> .	
	2.7 A user name does provide useful cues.	Qualitative study and Jacobson, 1999	Item 7 comes from <b>exploratory fieldwork</b> .	
	2.8 A user status does provide useful cues.	Qualitative study	Item 8 comes from <b>exploratory fieldwork</b> .	
	2.9 A picture of the author does provide useful cues.	Qualitative study and Walther, 1996	Item 9 comes from <b>exploratory fieldwork</b> and is <b>based on</b> existing literature (see Walther, 1996).	
C3 Perceived similarity	3.1 Considering your outlook on life, how similar are you and the author?	Gilly et al., 1998	Items 1-3 are <b>existing measurement scales</b> . Item 4-5 from this existing measurement scale have been dropped as they do not suit the study context.	Reflective
	3.2 Considering your likes and dislikes, how similar are you and the author?	And supported by the qualitative study		
	3.3 Considering your values and experiences, how similar are you and the author?			
	3.4 Considering your interests in life, how similar are you and the author?	Qualitative study	Item 4 comes from <b>exploratory fieldwork</b> .	

	3.5	Considering the topics you would like to discuss, how similar are you and the author?	Qualitative study	Item 5 comes from <b>exploratory fieldwork</b> .	
	3.6	Considering your writing style, how similar are you and the author?	Qualitative study	Item 6 comes from <b>exploratory fieldwork</b> .	
C4 Source Credibility	4.1	The author who left comments in the forum is knowledgeable in the topic he discusses.	Cheung et al., 2008, based on Wu and Shaffer, 1987	Items 1-4 are <b>adopted</b> from existing measurement scales.	Reflective
	4.2	The author who left comments in the forum is an expert in the topic he discusses.			
	4.3	The author who left comments in the forum is trustworthy.			
	4.4	The author who left comments in the forum is reliable.			
C5 Affiliation	5.1	If an author is a company-representative he needs to be recognizable.	Qualitative study	All items come from <b>exploratory fieldwork</b> .	Reflective
	5.2	If an author is a company-representative he should disclose his affiliation to the company.			
	5.3	An author's affiliation to the company needs to be clearly declared.			
	5.4	An author's affiliation to the company needs to be visible on the first site.			
	5.5	If an author is a company-representative he should disclose his motivation of participating in the forum.			
	5.6	If an author is a company-representative he should not only disclose his affiliation to the company but also disclose his status in the company (e.g. head of communication, marketing director, CFO, CIO, CEO).			

C6 Characteristics	6.1	Unfriendly-friendly	Garlick, 1993 adopted and supplemented by qualitative study	None of the instruments found in literature seems to be 100% adequate to measure characteristics. Thus, the author has taken three instruments from impression formation literature that might be used to measure impression formation in this specific online community and has tested them in the qualitative study with OC members. Based on the qualitative study, Garlick's instrument appears to be the most appropriate for measuring the impressions formed about the moderator in the Swissmom community. In order for the instrument to suit the study context, it has been adjusted according to the results presented in the qualitative study. This means that all items, which have been selected by more than 50% of the respondents have been included in the measurement instrument.  →Therefore, items 1, 4, 6, 7, 9, 10, 14 and 17 have been deleted.	Formative
	6.2	Cruel-kind			
	6.3	Rude-courteous			
	6.4	Negative-positive			
	6.5	Uncaring-caring			
	6.6	Disagreeable-agreeable			
	6.7	Unlikable-likable			
	6.8	Insincere-candid	Qualitative study	Item 8 comes from <b>exploratory fieldwork</b> .	
	6.9	Uncommunicative-communicative	Qualitative study	Item 9 comes from <b>exploratory fieldwork</b> .	

	6.10	Incompetent-competent	Qualitative study	Item 10 comes from <b>exploratory fieldwork</b> .	
	6.11	Not committed-committed	Qualitative study	Item 11 comes from <b>exploratory fieldwork</b> .	
	6.12	Unreliable-reliable	Qualitative study	Item 12 comes from <b>exploratory fieldwork</b> .	
	6.13	Indifferent-interested	Qualitative study	Item 13 comes from <b>exploratory fieldwork</b> .	
C7 Interpersonal communication	7.1	Overall, the forum is an important source of information for me.	Gruen et al., 2006	Items 1-2 are <b>existing measurement scales</b> . Item 3-4 from this existing measurement scales have been deleted as they do not fit the research context.	Reflective
	7.2	I find the interaction among forum participants enhances my knowledge.			
	7.3	Contributions by other forum participants help me to form my opinions about discussed topics.	Qualitative study	Item 3 comes from <b>exploratory fieldwork</b> .	
	7.4	Discussions between forum participants do influence my view on the discussed topics.	Qualitative study	Item 4 comes from <b>exploratory fieldwork</b> .	
	7.5	Contributions by other forum participants direct me to reflect on the discussed topics.	Qualitative study	Item 5 comes from <b>exploratory fieldwork</b> .	
C8 OCCIP	8.1	appealing		All items are <b>existing measurement scales</b> .	Formative
	8.2	informative			
	8.3	useful			
	8.4	positive			

	8.5	good			
	8.6	favourable			
	8.7	attractive			
	8.8	exciting			
	8.9	clear			
	8.10	sophisticated			
	8.11	coherent			
	8.12	high quality			
	8.13	responding			
	8.14	transparent			
C9 Attitude towards the company's OC	9.1	Swissmom builds a relationship with me.	Ko et al., 2005	All items are <b>existing measurement scales</b> .	Reflective
	9.2	I would like to visit Swissmom again.			
	9.3	I am satisfied with the service of Swissmom.			
	9.4	I feel comfortable in surfing Swissmom.			
	9.5	Swissmom is a good place to spend my time.			
	9.6	I would rate Swissmom as one of the best sites.			
C10 Intention	10.1	Likely-unlikely	Ko et al., 2005	All items are <b>existing measurement scales</b> .	Reflective
	10.2	Probable-improbable			

to use the company's OC again	10.3	Possible-impossible			
C11 Word of mouth	11.1	I mention this service organization to others quite frequently.	Harrison-Walker, 2001	All items are <b>existing measurement scales</b> . Two dimensions of the four aspects of WOM have been used: WOM activity (1-4) and WOM praise (5-6). The other aspects were rejected by Harrison-Walker (2001) during the scale purification process.  Two items were dropped based on content validity	Reflective
	11.2	I've told more people about this service organization than I've spoken about most other service organizations.			
	11.3	I seldom miss an opportunity to tell others about this service organization.			
	11.4	When I tell others about this service organization I tend to talk about the organization in great detail.			
	11.5	I have only good things to say about this service organization.			
	11.6				

*Source: developed for the present study*



**Construct validity:** It assesses “how well the measures relate to measures of other construct that we expect to be theoretically related” (Churchill & Iacobucci, 2005 p. 294). According to Churchill & Iacobucci (2005, p. 295), “a construct should also be measurable by several different methods, otherwise it could be considered nothing more than an artefact of the measurement procedure. In attempting to triangulate, the methods should be independent if possible”. They suggest the use of convergent as well as discriminant validity to assess construct validity.

**Convergent validity** has been defined as the “confirmation of the existence of a construct determined by the correlations exhibited by independent measures of the construct” (Churchill & Iacobucci 2005, p. 673).

**Discriminant validity:** This refers to the degree to which the constructs of a model are distinct. It is specified by “predictably low correlations between the measure of interest and other measures that are supposedly not measuring the same variable or concept” (Heeler & Ray, 1972 p. 362).

#### **4.6.1.4.3 Unidimensionality**

Churchill (1979) has stated that constructs are often complex and thus cannot be correctly measured with a single scale. Hence, complex constructs are often measured using multi-item scales that average out specificities of individual items. In this context, one important aspect to consider is the measurement of unidimensionality. Unidimensionality means that the items used in the measurement instrument measures the same latent construct (Gerbing & Anderson, 1988). Unidimensionality can be tested in different ways: i) Cronbach’s  $\alpha$ , ii) exploratory factor analysis and iii) confirmatory factor analysis. Cronbach’s  $\alpha$ , however, is an index of reliability rather than one of unidimensionality (Gerbing & Anderson, 1988) (see also 4.6.1.4.1). Gerbing and Anderson (1988) argue that “in the computation of coefficient alpha, one assumes that (1) the items already form a unidimensional set

and (2) the items have equal reliabilities” (Nunally, 1978). Therefore, Cronbach’s  $\alpha$  was only considered in the context of reliability assessment.

**Exploratory factor analysis (EFA)** was conducted on all the items for all the latent constructs of the present study. The data reduction tool in SPSS 19.0 for Windows was used to conduct EFA.

Factor analysis was employed to determine whether the individual items were loaded on their appropriate factors as hypothesised and whether every item measured only one construct. Variables that load on the same latent construct can be understood to be measuring it (Tabachnick & Fidell, 2007).

Items should have higher loadings on their own than other constructs. Items with a loading below 0.4 should be deleted. Sharma (1996) recommended a cut-off value of 0.6, while Comrey (1973) provided a guideline of factor loading such as “reasonable” (0.45), “good” (more than 0.5), “very good” (0.63), and “excellent” (0.71).

The present study uses principal component analysis with Varimax rotation. Items with factor loadings greater than 0.50 were retained in the factor solution (Tabachnick & Fidell, 2007), except of the item C24 that was also retained even if its loading was below 0.5. C24 loaded with 0.462 on the factor, which is still reasonable according to Comrey (1973). The number of factor to be extracted was specified a priori according to the previous steps (Churchill, 1979).

To assess the factorability of items, the author examined the Kaiser-Meyer-Olin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity. A satisfactory factorability of items is given if the values for KMO are above 0.50 and p-values for Bartlett’s test of sphericity are below 0.05.

**Confirmatory factor analysis (CFA)** provides evidence concerning the external and internal consistency. In other words, it confirms the measurement model

(Diamantopoulos & Siguaw, 2000). In CFA, the measurement model is evaluated separately from the structural model. If the goodness-of-fit indices for the measurement model are satisfactory, it can be concluded that the construct is unidimensional and the indicators sufficiently measure the intended constructs (Gerbing & Anderson, 1988; Hair et al., 1998). CFA is discussed in more detail in the section 4.6.7.

The next section describes each step of the data collection process in detail.

#### **4.6.2 Pre-test with Swissmom members**

As proposed in the literature, the instrument was pre-tested using online community members (Nardi, 2003). A first version of the questionnaire (after having included revisions stemming from the assessment of content validity), was sent by e-mail to twelve SMOm members. These SMOm members were selected and approached for support during the on-going netnography. Some of them commented on the questionnaire by using the “track changes” function of the Office Word program, while others printed out the questionnaire, adding some remarks manually and sending it back by mail. The author has scanned these documents in order to be able to store all documents in one research database. The respondents were asked to report any ambiguity or difficulty they faced while answering the questions.

#### **4.6.3 Pilot-test with Swissmom members**

In order to further refine the questionnaire, a pilot-test was conducted. For all constructs one can easily find measurement scales in the literature. Nonetheless, the author decided to test their appropriateness by conducting a pilot-test. A convenience sample of 51 respondents participated in the pilot-test of the instrument (step 3 in Churchill’s (1979) process). The post with the link to the test-survey was placed on a specific forum and the e-mail addresses were collected to prevent those participants from being included in the main survey. They were not sent the newsletter including

the link to the survey. They received a newsletter without the announcement of the survey. (They had previously been informed that they would get this version of it).

Using the data from the convenience sample, the reliability and validity of the measurement scales was studied (step 4 in Churchill's (1979) process). Exploratory factor analysis was conducted to establish if all items were measuring only one construct. The author was well aware that for reliable results EFA needs a sample of about 300 responses, which was not the case for the pilot-test. EFA has nevertheless been conducted just to get a feel for the data.

In a next step, Cronbach alphas were computed for each of the measures. The alphas were very high for all the constructs, so no items were deleted (alphas are displayed in Table of chapter 6). High coefficient alphas, however, have been under attack because they imply a high level of item redundancy (Boyle, 1991) and may reflect a poor design of the measurement instrument (Smith, 1999). Therefore, Smith (1999) "emphasizes the need for researchers constantly to assess the nature of scale items as interpreted by respondents and the need to recognize the potential negative indicants of high-reliability scores" (p. 113). Netemeyer (2001) emphasises the issue of item redundancy by stating that "although similarity of items and some level of redundancy are necessary to tap a construct's domain, several items that are essentially only slight wording modifications will reflect redundancy as well as internal consistency. That is, adding items to a scale worded in a highly similar manner to existing items will tend to increase coefficient alpha without substantively contributing to internal consistency" (p. 57). Since the coefficient alphas of the pilot survey were very high and the author wanted to make sure, that the Swissmom forum members understood the questions correctly and they were not redundant, a second pre-test with seven SMoM forum members was conducted and a few questions were revised according to the responses of the pre-test 2.

#### 4.6.4 Pre-test with Maurice Lacroix members

The questionnaire was pre-tested again with a few members of the Maurice Lacroix community. The author directly approached a few members through the message function on Facebook, asking them if they would like to pre-test the questionnaire. Eight persons could be found for the pre-test. Very few amendments were made before the questionnaire was published.

#### 4.6.5 Data collection method

The first study was announced through a direct link on the SMoM forum. To ensure that OCMs who access the forum less frequently also had a chance to participate, the survey was kept accessible for a period of four weeks. The online survey was also advertised through an electronic newsletter. This increased the chances of OCMs who had not accessed the forum during the four weeks of also being part of the sample. The newsletter in question is sent monthly by the Swissmom team to all SMoM community members and contains, among other things, actual subjects, links to studies, and book recommendations.

Figure 28: Teaser for interview participation in newsletter



Source: Swissmom Newsletter, sent 18.6.2012

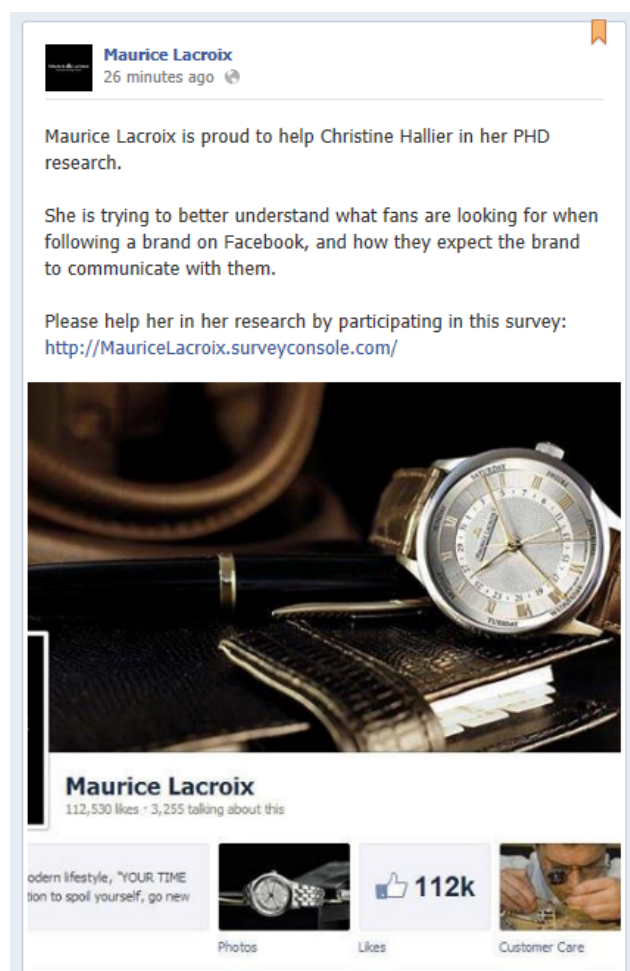
The purpose of the survey was briefly explained and the reader was kindly asked to participate in by selecting on a direct link to the online survey (“*Hier gehts zur Umfrage*”). The intro page of the questionnaire explained the purpose of the study,

contained some guidance for filling in the questionnaire and assured participants that confidentiality and anonymity was guaranteed.

In respect to how many times a survey should be announced, some scholars claim that too many rounds might upset OCMs (Lakhani & von Hippel, 2002), others assert the opposite, arguing that the response rate can be increased (Cook et al., 2000). Since, it was important to generate a medium to high sample size, the author decided on conducting more than one round of announcements, as described above.

The second study was announced directly on a post on the Maurice Lacroix Facebook Group. One week later, the study was announced again.

*Figure 29: Announcement of the ML study*



Source: <https://www.facebook.com/mauricelacroixwatches>, Retrieved, 22.6.13

#### **4.6.6 Target population and sampling**

The following describes the population of the main study as well as the whole sampling process.

##### **4.6.6.1 Target population**

The research population is comprised of participants of the online community in general. Within the present context, the population of the first survey consists entirely of registered and active online community members of the Swissmom forum ([www.swissmomforum.ch](http://www.swissmomforum.ch)), which had, at that time, a total of 7,322 members. The population of the second survey consists entirely of all active Maurice Lacroix Facebook Group members, which were at that time a total of 3,984 (as per 23. June 2013).

##### **4.6.6.2 Sampling**

After having defined the target population, the next section delineates the aspects of sampling frame, sampling procedure and sample size (Churchill Jr. & Iacobucci, 2004).

##### **4.6.6.3 Sampling Frame**

The first stage of the sampling process requires the researcher to define a sampling frame from which a sample of the target population can be drawn. A sampling frame can be defined as a “listing of all units in the population from which the sample will be selected” (Churchill Jr. & Iacobucci, 2004, p. 182). The sampling procedure that was applied for this study is presented below. The author did not have access to a listing of all units in the population due to confidentiality and data protection. However, by sending out the newsletter to all registered SMoM members and posting

the announcement of the study directly on the front page of the Maurice Lacroix Facebook site, all units in the population were addressed.

#### **4.6.6.4 Sample unit**

The social object that is studied is the unit of analysis, which can be either a single unit such as an individual or multiple units such as a group of individuals (Baker, 1999). According to Bernard (2000) data should be collected at possibly the lowest-level unit, which in the present study is the individual level, namely either the expert, academic or online community member. If needed, data can still be aggregated at a later point in time (Bernard, 2000).

#### **4.6.6.5 Sampling Procedure**

There are two main sampling methods, namely probability and non-probability sampling (Churchill Jr. & Iacobucci, 2004). In probability sampling, each individual of a population has the same chance of being included in the sample. With this procedure, there is a high chance to generate a representative sample (Bryman & Bell, 2007). Probability sampling can be divided in: i) simple random sampling, ii) stratified random sampling, iii) systematic sampling or iv) cluster sampling (Bryman & Bell, 2007).

With nonprobability sampling, the probability of each individual in the population being selected is not known and thus some individuals might have a greater chance to be selected than others (Bryman & Bell, 2007). Convenience sampling, judgemental sampling and quota sampling are nonprobability sampling methods (Baker, 1999).

Lee and Lings (2008) state that in organisational and social research it is more common to use non-probability samples, as “the probability sample is more often an ideal than a reality “ (Lee & Lings, 2008, p. 270). Calder et al., (1982) (cited in Lee



& Lings, 2008) provide an interesting perspective on this issue. Essentially, they define two types of generalization: “(a) effects generalization, where you are interested in applying your findings directly to some specific population or interest, and (b) theory generalization where you are trying to find basic theories which apply to a variety of real-world contexts” (p. 266). As stated by Lee and Lings (2008), “in most academic research we are more interested in our theories as a whole rather than their specific effects” (p. 266). In theory generalization, the researcher is interested in testing his or her theory, and any relevant sample can provide this test (Lee & Lings, 2008). Here, it is important to note the notion of “relevant” sample. The sample needs to be able to provide a good test of the theory.

The present study applies a volunteer convenience sample, namely a sample consisting of SMoM community members, as well as Maurice Lacroix Facebook Group members that have shown interest in participating in this study. The proposed theory is a theory regarding online communities and thus the sample of this study can be considered to be relevant. The author could not be provided with a list of all contact details of all SMoM members because of confidentiality. Further, the SMoM team did not want to use the e-mail addresses of the members for such a personal request. They were happy to support the study (including the teaser in the newsletter), but they wanted the members to be free to choose if they wanted to be confronted with this survey.

#### **4.6.6.6 Sample size**

While the ideal size of a sample has been extensively discussed in academic literature, however, the specification of the correct sample size is still an unsolved issue (Hair et al., 2006). Nevertheless, sample size needs to be carefully considered, as many statistical techniques are strongly affected by it. The sample size for this study was selected by considering the most important rules of thumb cited in academic literature.

According to Sekaran, (2000), Krejcie and Morgan (1970) suggested a ratio comparing the population to the sample. They stated that if the given population (N) were 15,000, the required sample would have to be 375. If this rule is applied to the present studies, which deals with a population of i) 7,322 SMOm online community members, the sample size would have to be 183.05 and ii) 3,984 Maurice Lacroix members, the sample size would have to be 99.60.

Another procedure to decide the sample size is based on analysis methods (Fowler, 2002). A review of the literature provides a variety of suggestions on which sample size to use. Prior to the discussion of those rules of thumb, it must be remembered that the present study applies structure equation modelling, which includes statistical techniques such as confirmatory factor analysis (CFA), total variance extracted ( $R^2$ ), causal modelling with latent variables, structural path analysis ( $\beta$ ) and multiple regression.

For instance, according to Stevens (1996) 15 cases per construct are sufficient when a test of least square multiple regression analysis is conducted. This study proposes 14 constructs multiplied by 15, equals 210 cases. Whereas Hair et al (2007) hold that a rigorous statistical analysis should be  $> 300$  cases, they recommend a sample size of no less than 200 to perform a maximum-likelihood-based estimation. Bollen (1989), on the other hand, suggests a ratio of five samples per variable. According to Jöreskog and Sörbom (1996), the sample size should be at least ten observations per parameter estimated to perform CFA. Comrey and Lee (1992) propose that a sample size of 50 is very poor, 100 is poor, 200 is reasonable, 300 is good, 500 is very good and 1000 is brilliant. Finally, Tabachnick and Fidell (2007) suggest having at least 300 valid responses for factor analysis.

This study generated 304 valuable responses for the Swissmom community and 397 valuable responses for the Maurice Lacroix community, which is in line with most of the above suggestions.

#### 4.6.7 Data analysis

This study proposes a conceptual model consisting of complex latent constructs. **Structure equation modelling (SEM)** was used to test the proposed hypothesis, as it has the ability to model latent constructs, i.e. constructs that cannot be directly observed. These constructs are abstract concepts such as “motivation” or “attitude”. The behaviour of latent variables can only be observed indirectly, and imperfectly, through their effects on manifest variables. Tabachnick and Fidell (2007, p. 676), describe SEM as a “collection of statistical techniques that allow a set of relationships between one or more independent variables, either continuous or discrete, and one or more dependent variables, either continuous or discrete, to be examined”. SEM takes measurement errors into account, and thus predictions of relationships between variables are not influenced by measurement errors.

SEM is largely confirmatory, that means it for instance confirms a theory or a model. In other words, it tests whether a proposed model is valid. Structure equation modelling includes data analysis methods that combine multiple regression and CFA to simultaneously assess relations (Tabachnick & Fidell, 2007). It establishes the relationships between the latent variables (Loehlin, 1992) by using multiple regression analysis (Edwards & Bagozzi, 2000), while the association among a construct and its measures (also called items, indicators, manifest variable or observed variable) can be estimated with particular measurement models. The validation of the measurement scales is conducted by using confirmatory factor analysis.

**Confirmatory factor analysis (CFA)** is based on a theoretical model assumed to confirm the relationship between the observed variables and their respective factors (Jöreskog & Sörbom, 1996). According to Anderson, Gerbing and Hunter (1987) “the preferred approach for assessing unidimensional measurement is confirmatory factor analysis of multiple-indicator measurement models; that is, models in which each construct is defined by at least two measures and each measure is posited as an indicator of only one construct” (p. 435). Gerbing and Anderson (1988) state that “a

primary conceptual difference between exploratory and confirmatory analyses, though, is that the exploratory analysis typically does not provide an explicit test of unidimensionality [...] to each factor” (p. 189). Additionally, they underline that “only a confirmatory factor analysis of a multiple-indicator measurement model directly tests unidimensionality” (p. 187). The use of item-total correlation in assessing unidimensionality has long been advocated. However, according to Gerbing and Anderson (1988) the issue is “that item-total method does not account for external consistency. By not accounting for the relations of the posited alternate indicators with indicators of different factors, an item-total analysis may fail to discriminate between sets of indicator that represent different, though correlated, factors” (p. 188).

Assessing unidimensionality is an important property because i) it is only meaningful to calculate the coefficient alpha for unidimensional measures (Clark & Watson, 1995; Cortina, 1993) and ii) the calculation of composite scores that are used in covariance models is appropriate when the items are unidimensional (Floyd & Wideman, 1995).

#### **4.6.7.1 Specification of measurement model**

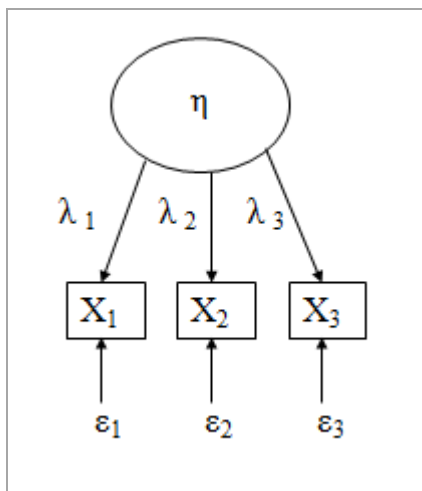
The importance of proper specification of measurement models has been highlighted by Anderson and Gerbing (1982) stating that “the reason for drawing a distinction between the measurement model and the structural model is that proper specification of the measurement model is necessary before meaning can be assigned to the analysis of the structural model” (p. 453). There are two forms of specification of the measurement model: (i) the reflective measurement model and (ii) the formative measurement model.

In a reflective measurement model, a change in the latent construct ( $\eta$ ) will simultaneously cause a change in all items ( $x_i$ ) reflecting the construct (Bollen &

Lennox, 1991). The effect of  $\eta$  on  $x_i$  is a linear function captured by the coefficient  $\lambda$  plus measurement error  $\varepsilon$  (see Figure 30).

According to Bollen (1989), all items must be positively inter-correlated, while a high correlation among them enhances internal consistency (measured by Cronbach's alpha) (Bollen & Lennox, 1991). Further, Nunnally and Bernstein (1994) claim that the indicators are essentially interchangeable.

*Figure 30: Reflective measure*

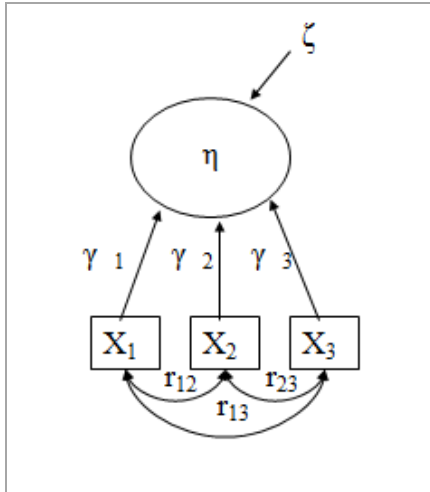


*Source: Developed for the present study*

According to Midgley et al. (2008), it is “equally plausible to define a construct as being determined by (or formed) from a number of indicators without any assumption as to the patterns of inter-correlation between these items” (p. 1). In formative measurement models, “a concept is assumed to be defined by, or to be a function of its measurements” (Bagozzi & Fornell, 1982 p. 34). This means that “measures are causes of the construct rather than its effects” (Diamantopoulos et al., 2008, p. 1205). Since the latent construct ( $\eta$ ) is now formed by its manifest variables ( $x_i$ ), a change in the latent construct is not necessarily accompanied by a change in all of its manifest variables. Rather, if any one of the manifest variables changes, then the latent construct would also change. Formative measurement models are multiple regression equations where the coefficient  $\gamma$  captures the effect of the measurement

( $x_i$ ) on the latent variable ( $\eta$ ). Manifest variables ( $x_i$ ) have no individual measurement errors (Edward & Bagozzi, 2000) but a disturbance term ( $\zeta$ ) that is specified at the latent construct level (Diamantopoulos et al., 2008). For illustration, see Figure 31.

Figure 31: Formative measure



Source: Developed for the present study

Two of the constructs used in this study are formative constructs, namely the construct called “characteristics” (C6neu) and the construct called “OCCIP” (C8neu). Conversely to reflective measurement models, an exclusion of an item may alter the construct itself (Bollen & Lennox, 1991). For illustration, let us take a closer look at the construct “characteristics”. Even if OCM’s did not agree that a COR is candid in all it is saying, they might still all perceive this person to be kind, friendly, positive, caring, etc. Thus, if the manifest variable “insincere-candid” was excluded, the “characteristics” of a COR would be judged more positively than if it were included; as a result, the construct itself would be altered.

More recent studies investigating constructs such as customer perceived value (Lin et al., 2005), firm reputation (Helm, 2005), corporate identity and corporate culture (Witt & Rode, 2005), as well as corporate descriptors and corporate reputation (Dowling, 2004), have used formative measurements.

The theoretical considerations for defining the constructs “characteristics” as well as “online community corporate impression” as formative constructs are: i) the nature of the construct, (ii) the direction of causality among the items and the latent construct, and (iii) the characteristics of the items used to measure the latent construct (Midgley et al., 2008). With regards to this definition it can be understood that a character of an individual consists of a number of elements (items) that form the construct *characteristics*. A character is formed by different types of elements (items). The same can be said of the construct “OCCIP” that is formed of a number of elements perceived by the OCMs. Thus, these two constructs were defined as formative, which was confirmed by academics during the content validity process, as well as by Müller (2012), a statistician who was consulted for validation.

Diamantopoulos, Riefler and Roth (2008) state that “most researchers apply scale development procedures without even questioning their appropriateness for the specific construct at hand [...] indeed, Diamantopoulos and Winklhofer (2001, p. 274) speak of an ‘almost automatic acceptance of reflective indicators’ ” (p. 6). This is a measurement model misspecification by adopting “reflective indicators where formative indicators (and thus index construction approaches) would be appropriate (which is a Type I error in Diamantopoulos and Siguaw’s (2006) terminology). The other case of misspecification, that is, the incorrect adoption of a formative model where indeed a reflective would be appropriate (Type II error), is rather negligible (Fassot, 2006; Jarvis et al., 2003)” (Diamantopoulos, et al., 2008, p. 6). For a detailed discussion of misspecification of measurement models and its consequences on parameter bias due to reversed causality, parameter bias due to incorrect item purification and effects on fit statistics, see Diamantopoulos et al. (2008).

To conclude, an example proposed by Helm (2005) can be cited: “If reputation in this case were understood as a reflective construct, this would mean that the indicators – such as product quality, management quality, and treatment of employees – are ‘effects of a construct’ (Bollen & Lennox, 1991, p. 305). Reputation would lead to these effects meaning that reputation determines the quality of products, the quality of management, the treatment of employees, and so forth” (p.

99). Taking the construct “online community corporate impression” of the present study as reflective would mean that, e.g. the indicators ‘appealing, ‘useful, ‘sophisticated’, ‘high quality’ are effects of these constructs. Hence, ‘online community corporate impression’ would lead to ‘high quality’ etc.

As discussed in chapter 6, multicollinearity is an unwanted property in regression models as it might cause estimation problems. Thus, the question is if there are specific issues in terms of multicollinearity that need to be discussed for formative indicators. According to Diamantopoulos et al. (2008, p. 10), several authors “suggest indicator elimination based on the variance inflation factor (VIF), which assesses the degree of multicollinearity [...] However, considering that this multicollinearity check leads to indicator elimination on purely statistical grounds and given the danger of altering the meaning of the construct by excluding indicators (Bollen & Lennox, 1991), ‘indicator elimination – by whatever means – should not be divorced from conceptual considerations when a formative measurement model is involved’ (Diamantopoulos & Winklhofer, 2001, p. 273)”. The VIF for both formative constructs were calculated and none of the indicators of both constructs was found to exceed the threshold value of 10. (For a detailed discussion of multicollinearity, see chapter 6).

#### **4.6.7.2 Evaluating the fit of the model**

Fit indices are used to detect model misspecification. In order to evaluate the measurement model and its specification, goodness-of-fit criteria and unidimensionality were used.

To assess goodness-of-fit, three types of indices are used: i) absolute fit indices, ii) incremental fit indices and iii) parsimony fit indices. There is a plethora of fit indices, but not all indices need to be included. According to McDonald and Ho (2002) the most frequently used fit indices are the CFI, GFI, NFI and NNFI. Hooper et al. (2008) stress that it is not necessarily a good practice reporting a fit index only



because it is the most frequently used. Especially, as some of these statistics (such as GFI and AGFI) are often relied on purely because other scholars have used them, rather than for their sophistication. The goodness-of-fit (GFI) and the adjusted goodness-of-fit (AGFI) indices have been proposed by Jöreskog and Sörbom (1996) and used by many scholars. However, those indices have become less popular in recent years as sample size has an important effect on those two fit indices (Hooper et al., 2008; Sharma et al., 2005). Due to the fact that GFI and AGFI have become less popular, and researchers even advise others not to use them anymore (e.g. Sharma et al., 2005; Müller, 2012), the author has decided not to use these two indices.

Researchers make different recommendations on which fit indices to include: chi-square (Kline, 2010, Hooper et al., 2008) CFI (Hu & Bentler, 1999; Kline, 2005; Hooper et al., 2008), NNFI (TLI) (Hu & Bentler, 1999; Hooper et al., 2008) RMSEA (Hu & Bentler, 1999; Kline, 2005; Hooper et al., 2008), SRMR (Hu & Bentler, 1999; Kline, 2005, Hooper et al., 2008). All these goodness-of-fit indices were used in the present study.

**Absolute fit indices** are used “to measure the overall goodness-of-fit for both the structural and measurement models collectively” (Hair et al. 2006. p, 706-708). It evaluates the goodness-of-fit of a specific model independently from any other model. The following absolute fit indices were used in the present study:

- The **chi-square ( $\chi^2$ )** test, which is related to “the fit between the sample covariance matrix and the estimated population covariance matrix” (Tabachnick & Fidell, 2007, p. 715). The difference between the two matrices should not be statistically different ( $p > .05$ ) (Barrett, 2007). The use of  $\chi^2$ , however, has been criticised since it assumes multivariate normality (McIntosh, 2006), and the power differs according to sample size, i.e. the statistical test will be significant with a very large sample size and vice versa (e.g. Hair et al., 2006; Tabachnick & Fidell, 2007). Due to the restrictiveness of the  $\chi^2$  test, alternative fit indices to quantify the degree of fit have been

proposed. The normed chi-square ( $\chi^2/df$ ) is one example of statistic that diminishes the effect of sample size (Wheaton et al., 1977).

Recommendations regarding the ratio for this statistic, range from 5.0 (Wheaton et al., 1977) to 2.0 (Tabachnick & Fidell, 2007).

- Another method to test model fit is to admit that models are only approximations and to evaluate how well a predicted model approximates the true model. In other words, instead of testing how well the model fits the data it looks at how bad it fits it. In this respect, an index called the **root mean square error of approximation (RMSEA)** has been introduced, which “takes into account the error of approximation in the population and asks the question: how well would the model, with unknown but optimally chosen parameter values, fit the population covariance matrix if it were available?” (Browne & Cudeck, 1993, pp. 137-138, as cited in Byrne, 2001 p. 84.) “RMSEA represents how well a model fits a population” (Hair et al., 2006 p. 748). The parsimony-adjusted index (**RMSEA**) that “includes correction for model complexity, approximates the discrepancy that could be expected in the population, and estimates the lack of fit of the hypothesised model to the population covariance matrix” (Wong et al., 2011 p. 6594), ranges between 0 and 1. However, smaller values are indicative of better model fit. RMSEA with values < 0.05 indicates good fit, with values from 0.05 to 0.08 being acceptable, and with values > 0.08 considered poor and thus an unacceptable fit (Byrne, 2001; Hair et al., 2006; Tabachnick & Fidell, 2007).
- **The standardized root mean square residual (SRMR)** can (based on residuals) be described as the average difference between the predicted and manifest variances and covariances in the model. The smaller the SRMR, the better the model. SRMR with values of 0.08 or less are acceptable (Tabachnick & Fidell, 2007).

**Incremental fit indices** (comparative fit indices) are used for “assessing how well a specified model fits relative to some alternative baseline model” (Hair et al., 2006 p.

749). In other words, it measures the relative enhancement in fit by comparing a model with a more constrained, nested baseline model. Since absolute fit indices do not compare the models to a specific null model, this study uses incremental fit indices to do so, in line with Hair et al. (2006), referring to the baseline model as a null model in which all the manifest variables are uncorrelated. This study focused on the following incremental fit indices:

- **The normed fit index (NFI)** compares nested models. It measures the difference among the model being evaluated and the baseline model (Tabachnick & Fidell, 2007). NFI values range from 0 to 1, with values  $\geq 0.9$  considered as a good fit (Byrne, 2001; Hair et al., 2006; Tabachnick & Fidell, 2007).
- **The comparative fit index (CFI)**, which is considered as an improvement of the NFI index. It controls for degrees of freedom and does not underestimate fit in small samples (Byrne, 2001). CFI values range from 0 to 1, with values  $\geq 0.9$  considered as a good fit (Byrne, 2001; Hair et al., 2006; Tabachnick & Fidell, 2007).
- **Tucker-Lewis index (TLI)** (also known as non-normed fit index (NNFI)) compares the  $\chi^2$  value of the model to that of the independence model and takes degrees of freedom for both models into consideration (Bentler, 1990). TLI values range from 0 to 1, with values  $\geq 0.9$  considered as a good fit (Byrne, 2001; Hair et al., 2006; Tabachnick & Fidell, 2007).

**Parsimony fit indices** consider the model fit compared to its complexity (Hair et al., 2006 p. 749), i.e. it determines whether the model can be improved by specifying fewer estimated parameter paths. This thesis used the normed chi-square ( $\chi^2/df$ ) index to decide which model among the competing models is the best (Hair et al., 2006). According to Hair et al. (2006),  $\chi^2/df$  ratios of the order 3:1 or less are acceptable.

The following table summarises the data analyses required for the present study.

Table 27: Summary of data analysis

<i>Analysis</i>	<i>Analytical technique</i>	<i>Required values</i>	<i>Software package</i>	<i>References</i>
<b>Coding:</b> Defining the labels of the variables	Variable coding	NA	SPSS19	Pallant, 2007
<b>Missing data:</b> Examination of missing data	Item non-response bias Survey non-response bias	NA	SPSS19	Armstrong & Overton, 1977
<b>Common method bias:</b> Examination of potential bias as data were collected using one method	Harman's one-factor test  Controlling for the effect of an unmeasured latent methods factor  Second-order factor as method factor	Covariance < 50% - order factor  Higher RSMEA of first	SPSS19  R lavaan  R lavaan	Podsakoff et al., 2003  Podsakoff et al., 2003  Hair et al., 2006
<b>Analysis of outliers:</b> Are there extreme values	Univariate outliers: histograms, boxplots, standard scores  Multivariate outliers: Mahalanobis D <sup>2</sup>	$\geq \pm 3$ $\Delta$ mean-5% trimmed mean  $\chi^2$ (df=50) is 86.67 $\chi^2$ (df=60) is 99.60	SPSS19	Hair et al., 2006; Tabachnick & Fidell, 2007
<b>Testing for normality:</b> Examination if data distribution is linear and normally distributed	Normal Q-Q plots detremed normal Q-Q plots  Kolmogorov-Smirnov and Shapiro-Wilk test  Skewness and kurtosis  Mardia's coefficient	Straight line  $p > 0.05$  value < $\pm 2.58$  value < 3	SPSS19      R lavaan	Hair et al., 2007, Tabachnick & Fidell, 2007
<b>Testing for homoscedasticity:</b> Examination if dependent variables display an equal variance across the number of independent variables.	Levene's test	$p \leq 0.05$	SPSS19	Tabachnick & Fidell, 2007
<b>Test of multicollinearity:</b> Testing if there is a high level of intercorrelation	Pearson's correlation matrix	corr. coeff. < 0.90	SPSS19	Tabachnick & Fidell, 2007

among the independent variables	Tolerance impact and VIF  Standardised regression weights	VIF < 10 tolerance > 0.1  value within $\pm 1$	R lavaan	Kaplan, 1994; Kent, 2000
<b>Reliability:</b> Testing if the measurement instrument yields consistent results	Cronbach's $\alpha$  Composite reliability AVE	value > 0.7  value > 0.7 value > 0.5	SPSS19  R lavaan R lavaan	Nunnally, 1967, 1978  Hair et al., 2010
<b>EFA:</b> Evaluating the instruments validity by testing unidimensionality	Kaiser-Myer-Olkin (KMO) test  Bartlett's test of sphericity  Factor loadings	value > 0.6  value > 0.3 (p = 0.000)  value > 0.4	SPSS 19	Kaiser, 1974  Bartlett, 1954  Churchill, 1979
<b>Measurement model:</b> Assessment of the measurement model	Parameter estimates  Standardised factor loadings  Variance explained SMC  Goodness-of-fit: CFI TFI NFI RMSEA SRMR $\chi^2 / df$	z-values $\geq \pm 1.96$  value $\geq 0.5$ (p < 0.001) value > 0.3  value $\geq 0.9$ value $\geq 0.9$ value $\geq 0.9$ value < 0.05 value < 0.08 ratio 2-3	R lavaan	Hair et al., 2006, 2010  Tabachnick & Fidell, 2007
<b>Convergent validity:</b> Measures internal consistency of the measurement	Composite reliability AVE  Cronbach's $\alpha$	value > 0.7  value > 0.5  value > 0.7	R lavaan  SPSS 19	Fornell & Larckers, 1981  Anderson & Gerbing, 1988
<b>Discriminant validity:</b> Assessment of uniqueness of measures of different models	$\chi^2$ tests for every pair of estimates  Comparison of construct's correlation with the square roots of AVE	Constrained model > $\chi^2$ values as unconstrained  AVE values > than any correlation	R lavaan	Fornell & Larckers, 1981
<b>Nomological validity:</b> Assessment of whether the measures behave as expected	Correlating the scales of the model with two variables which the literature suggested were related to aspects of impression formation  Measurement model	Significance of anticipated links  Good fit	R lavaan	Peter & Churchill, 1986  Larger, 2000;

	overall fit Path estimates	indices Significance of path estimates		Steenkamp & Trijp, 1991 (Chin, 1998)
<b>Assessment of the structural model:</b> Assessment of relationships of the constructs	Coefficient parameters Goodness-of-fit	z-value > ± 1.96, p < 0.05 see measurement model	R lavaan	Hair et al., 2006; Anderson & Gerbing, 1988

Source: Developed for the present study

#### 4.6.7.3 Software package for analysis

The software used for structure equation modelling was *R lavaan*, a free, open source R package. This is a package designed for structural equation modelling implemented in the R system for statistical computing (Werner, 2012a, 2012b). “The lavaan package is developed to provide users, researchers and teachers a free, open-source, but commercial-quality package for latent variable modelling” (Russeele, 2010 p. 2). It is intuitive to use, yet has a number of useful modelling features. It also can produce outputs that resemble the output of Mplus or EQS. (LISREL and AMOS outputs are to be included in future releases).

Using lavaan allowed the author to do various kinds of analysis by using only one system (e.g. clustering for checking the formative measures, Rasch scaling, testing multivariate normality, using Satorra-Bentler  $\chi^2$  and robust standard errors). Further, the author consulted statisticians from the data analysis department at Zurich University of Applied Sciences for questions which arose during the data analysis process. They all recommended using R lavaan (e.g. Müller, 2012). Furthermore, a statistician at the University of Zurich also recommended using R lavaan because of its flexibility (Werner, 2012a, 2012b). The author found this to be a valuable resource for a PhD candidate to be able to check back with the statistics experts at any time during the whole set up and analysis process.

The lavaan package is freely available at <http://CRAN.R-project.org/package=lavaan> and supported by a website, <http://lavaan.org>. For reasons of transparency, the codes for all the SEM analysis are provided in electronic form on the CD in the Appendix. These codes can be copy-pasted into the R lavaan package and all required outputs can easily be obtained. The most relevant outputs are also provided in PDF format on the CD for the output to be checked without having to install the R lavaan package.

#### **4.7 Research ethics**

The subjects of both the qualitative and the quantitative study were people. Research ethics being an essential aspect of all research projects, some rules had to be followed to protect their rights, in particular their right to privacy. The author has followed the ethical standards set by Brunel University for its research projects. In addition, this project has been approved by the Research Ethics Committee of Brunel University.

Both the participants of the qualitative and the quantitative study were advised that their participation was voluntary and that they would be able to withdraw from the survey at any time. The cover letters sent out with the two qualitative surveys (the expert and the community member interviews) informed the respondents that their names would not be disclosed and their data not be passed to a third party. Further, their responses would be reported only as aggregate data. A participant consent letter was attached.

The quantitative study followed the same procedure as the qualitative study, except that the information was displayed on the cover page of the online questionnaire. The cover page also included a brief description and the aim of the study as well as information how to fill in the questionnaire.

## 4.8 Summary

In summary, this chapter presents the research methodology, the research design and the method, as well as the analysis techniques employed. The author first used qualitative methods including netnography to conduct some exploratory research, followed by use of the quantitative method as the main tool to collect and analyse data. Netnography methods were used to better understand the context of the present study, namely the online community and its members. Standard procedures suggested by Churchill (1979) and Netemeyer et al (2001) were used to develop and validate measurement scales for constructs in the model. Pre-testing was conducted with 51 respondents to ensure that the research instrument was valid and reliable. Preliminary data analysis was conducted using the software package SPSS 19 to test the integrity of the data. The study followed the two-stage approach suggested by Anderson and Gerbing (1988), in which first the measurement model is tested, followed by application of the structural model. Structure equation modelling was conducted using the lavaan package of R.

The next chapter presents findings from the qualitative studies, discussing the most important findings. Chapter 6 reports the results of the quantitative study.



## **Chapter 5 - Results of the qualitative studies**

### **5.1 Introduction**

In order to be able to specify the domains, build the conceptual model and formulate the hypotheses, the author started with a thorough literature review of the following topics: i) online environments, ii) communities, iii) communication with a main focus on computer-mediated communication and impression formation and iv) corporate identity and corporate image. This provided the basis on which to define the items of measurement for this research. Following Churchill's (1979) process for developing better measures, exploratory fieldwork was conducted before embarking on developing the questionnaire and the main study.

This study used two sets of interviewees: i) seventeen academics and practitioners who are experts in the field of online communities (called expert interviewees) and ii) twelve online community members (called community interviewees). The interviews with the experts were conducted in a very early stage of the whole research, that is just after the literature review and after the first draft of a conceptual model. The reason for this was that the author wanted to gain additional knowledge about online communities in general and wanted to make sure the conceptual model made sense. The second study was conducted later on, when an appropriate online community was found and the netnography was conducted on the Swissmom community.

The following table illustrates which set of interviewees was used for which of the qualitative investigation tasks.

Table 28: Qualitative investigation

<i>Task</i>	<i>Description</i>	<i>Expert Interviewees</i>	<i>Community Interviewees</i>
<p><b><i>Gain new insights</i></b> Gain new insights from practitioners and academics. Gain additional knowledge that relates to corporate communication in online communities and corporate impression formation.</p>	<p>The aim was to gain additional knowledge about the phenomenon. Furthermore, the expert interviews provided insight from outside the communities under study. It aggregated knowledge from different industries and from individuals with many different types of experiences regarding online communities.</p>	X	
<p><b><i>Test face validity</i></b> Test face validity of the conceptual model and refine constructs.</p>	<p>The aim was to clarify the concepts and discover additional key aspects of the constructs. The OCMs themselves contributed some <b>insights</b> into which constructs they considered to be important, thus providing additional information for the adjustment of the conceptual model.</p>	X	X
<p><b><i>Adjust measurement instrument</i></b> Adjust existing measurement scales of impression formation.</p>	<p>Adopt existing measurement scales to the specific context of the study.</p>		X

Source: Developed for the present study.

The present chapter is structured according to the table above, and discusses each task of the qualitative investigation: First, the method used to analyse the data is presented, followed by interview results which address the new knowledge gained about the phenomenon. Next, the results of testing face validity of the conceptual model are presented and discussed in comparison with the conceptualisations in the literature and, finally, some of the adjustments made to the measurement instrument are discussed.

## 5.2 Method of data analysis

Interview data were analysed using NVivo7 software. The use of computer-assisted qualitative data analysis makes data analysis more reliable, transparent and accruable (Gibbs, 2002). The data analysis was guided by the conceptual model and associated theories (Miles & Huberman, 1994). The initial list of variables was defined by concepts found in literature and by the hypotheses. In order to be consistent with prior work, the categories were also labelled in the same manner (Strauss & Corbin, 1990). The data were grouped according to relevant codes. A coding hierarchy, including a principle category, a sub-category and a value was introduced. The table below is an excerpt of the coding book and uses an example to illustrate the coding hierarchy.

*Table 29: Excerpt of coding book for the qualitative data*

<i>Categories</i>	<i>Code</i>	<i>Value</i>	<i>Theoretical references</i>
Interactivity	INT	+/-	Walther & Tidewell, 1985, Liu et al. 2002
Messaging frequency	INT_MF	+/-	
Messaging duration	INT_MD	+/-	
Relevance of contribution	REL	+/-	e.g. Kiesler et al., 1984

*Source: Developed for the present study*

Items then were compared with those gained from literature. Further, some scales that were found in impression formation literature were tested. Respondents were asked to what extent the items matched their perceptions and how they could be used to measure the construct. The researcher used tables and metrics for visualisation. The metrics were organised according to concepts.

The content was coded twice by the researcher to establish stability, and the inter-coder reliability was tested by a senior lecturer of the University of Applied Sciences ZHAW, Switzerland (Weber, 1990).

### **5.3 Interview results addressing new insights**

This section discusses the new insights gained from interviews with academics and practitioners who are experts in the field of online communities.

#### **5.3.1 General questions about online communities**

General questions were asked to gain new insights regarding online communities. These included why people use them, whether they are influenced by them and whether companies are welcome in online communities.

#### **5.3.2 Reasons why people use online communities**

People use online communities (OCs) because they would like to find special interest communities; they would like to discover new friends and they need to talk anonymously (Expert Interviewee 2, 2010). Furthermore, it helps them to be linked, connected and have access to a network (Expert Interviewee 17, 2010).

Expert Interviewee 4 (2010) believes that people use OCs as an informal way to communicate things. He believes that an online community is very interactive and promotes the possibility to discuss one's concerns with experts. Moreover, people use OCs for the same reasons why they take part in real communities, such as for the purpose of networking in a private or business setting, communicating, entertainment, learning, contributing, promoting and in general interacting with other humans (Expert Interviewee 6, 2010). People also use OCs because they consider other participants to be like-minded, they get ego-boosters, they can search for help and advice and they can search for products and people (Expert Interviewee 10, 2010).

### 5.3.3 Influence of discussions held or read in online communities

One of the general questions asked if people were influenced by the discussions they read or contribute to in OCs.

According to Expert Interviewee 2 (2010), people might be influenced by some of the discussions held or read in OCs. For him, this depends on the character. Expert Interviewee 2 (2010) believes that younger people are more easily influenced than older ones, but that this depends on the kind of OC. Expert Interviewee 17 (2010), however, notes that people are very much influenced by the discussions they hold or read in OCs. The community has more source credibility than the classic media and/or the commercial communication. The sentiment that people are influenced by other online OCMs was also shared by all the other Expert Interviewees. To stress the importance of online communities, six statements made by interviewees are presented below:

*“Yes, first of all because the senders of the information are more real and tangible than channels that are perceived to be more official. Secondly, the informal style, the rapidness and the pull accessibility is the only media accepted by certain demographic groups” (Expert Interviewee 5, 2010).*

*“Yes. Several research projects including some of our own indicate that other people’s opinions about trademarks, companies, people and politics matter nearly as much in online communities as in real communities. In general, my hypothesis would be that the only reason the influence is slightly lower from OCs is that OCs tend to be one or two steps further removed from the closest circles of users than their friends and family. However, recent trends would indicate that this gap is closing and that users more often view friends on OCs as close relationships” (Expert Interviewee 6, 2010).*

*“[...] as much as they are influenced by face-to-face discussions - subconsciously or consciously. On the other hand, the online dialogue may be more superficial and does not incorporate all the senses, and therefore leaves fewer traces” (Expert Interviewee 7, 2010).*

*“Yes. Communities are self-selective by definition. Thus, people already have an involvement in the topic and are therefore open for advice and opinions. Otherwise they would not self-select into communities” (Expert Interviewee 10, 2010).*

*“Yes, of course. I believe its impact is at least as important as the impact that discussions in the real world have” (Expert Interviewee 14, 2010).*

*“Definitely and without any doubt people are influenced by discussions held in communities. A community is not an anonymous space, but is held together by commitment and trust. OCMs sharing the same interests usually trust each other, similar to friendship. And whose advice would you more rely on than that of a friend?” (Expert Interviewee 15, 2010).*

#### **5.3.4 Should companies use OCs for corporate communication activities?**

The literature stresses that online communities are a means for companies to communicate with their audiences in ways that were not possible before. Companies are able to build relationships with stakeholders by creating a community around their brand and/or company-specific interests (Hagel & Armstrong, 1997; Kozinets, 1999).

Companies, however, should try to control the communication taking place in online communities (Kozinets, 1999; Locke et al., 2001; de Chernatony, 2001; Christodoulides & de Chernatony, 2004).

In line with the literature, Expert Interviewee 3 (2010) believes that companies should use OCs for corporate communication activities. He thinks that it is vital for companies to build a positive image and engage in direct communication with their target group (Expert Interviewee 3, 2010). These sentiments are reflected by four further interviewees:

*“Yes, but they have to adapt to existing practice and rules and they should never try old style / old patterns in virtual media” (Expert Interviewee 5, 2010).*

*“Yes, to keep in touch with their customers or fans of the brand. Also customers themselves will feel they have an opportunity to connect with people with the same interests or with the company itself. Marketing should not be too intensive, providing information to OCMs should be more important than trying to convince them of something they are already convinced of (the company, the brand)” (Expert Interviewee 13, 2010).*

*“Definitely, and if it's just for getting a sense of how their brand or product is perceived within the community. This, however, strongly depends on the company and its product or services” (Expert Interviewee 15, 2010).*

*“If they want to survive, yes they should. They should act as they are positioned and as the corporation strategy requires it: you can be very active and open (Apple) or very inactive and passive (Coca-Cola). But in both ways you have to know very well, what's going on in the web 2.0. Coca-Cola uses “brand-cops” to search and control the web, for*

*nobody must use/misuse the brand without permission” (Expert Interviewee 17, 2010).*

In contrast to the above, one expert does not believe that companies should participate in OCs. Expert Interviewee 2 (2010) states that companies should not use OCs for corporate communication activities. He thinks that to be an active OCM companies need time, and he does not know if it makes sense for them to use OCs in company communication activities, especially since time is money.

### **5.3.5 How can a company have a successful communication in an OC?**

To describe what he considers to be important for a company wishing to have a successful communication in an online community, Expert Interviewee 2 (2010) stated that candidness is everything. Expert Interviewee 3 (2010) wrote that for a company to have a successful communication in an online community it must have good editors who take into account their users’ wishes and problems. One interviewee emphasised that:

*“For people, the recipe is more or less to behave as they would in real life, reaping the benefits of digital communication. In addition, there is a tendency that openness is a key to success. The more open an individual is, the more attention they will normally receive. For companies, the recipe is more or less the same, but this poses a transitional problem since openness and a more personal approach towards communication is not how companies generally communicate with the public [...] In addition to the elements described above, one needs to understand that OC communication is person-driven and not company-driven. It's important for individuals in key positions to understand that they need to learn how the communication works and not delegate their own representation in an OC to a subordinate or outsource it. Outsourcing works for companies in OCs only when they*



*are open about it. Another key element is to let go of the desire to control information” (Expert Interviewee 6, 2010).*

### **5.3.6 What is the OCM’s perception of a company?**

One of the experts thinks that if company representatives (employees) participate in OCs “it shows the OCM that real people are working there and, in the best case, the member feels understood and taken seriously” (Expert Interviewee 1, 2010). Further, it was said that this activity increases the company’s credibility, since it will be perceived as open and interested in its customers’ opinions. However, it might also change the participants’ style of communication. For instance, participants might voice more extreme views when they realise that their voice is being heard. There might also be less communication among OC participants because questions can be addressed to the company representative” (Expert Interviewee 4, 2010). Three interviewees stated the following:

*“A company that does not take part in discussions in OCs concerning its products will often be perceived as old-fashioned, unable to provide answers which are resistant to "daylight", or just plain arrogant towards the customer” (Expert Interviewee 6, 2010).*

*“[...] the member gets the feeling that the company is interested in his opinion” (Expert Interviewee 12, 2010).*

*“It depends on how the company representative does it. If it's apparent marketing, it might cast a damning light on the whole community or company. On the other hand, the participation of a company representative in an OC can also be interesting, since the members have a direct link into the company and to get information the direct way” (Expert Interviewee 13, 2010).*

To sum up, it can be stated that most experts believe that companies should engage in OCs as it gives them the opportunity to directly communicate with their customers and project a more personal view of the company.

#### **5.4 Face validity of constructs and their relationships**

In the first qualitative study, the experts were interviewed in order to test face validity of the conceptual model. In a second stage, after an online community was selected, face validity was also tested with the OCMs as it was considered to be important not only to have the opinion of experts from different fields (outside view), but also to test whether the conceptual model made sense to the OCMs of the study site (inside view).

The constructs have all been deduced from literature (see chapter 3). The community interviewees were also asked about the relevance of certain constructs in terms of impression formation. This adds to the understanding of the importance of these concepts and provides a fuller picture.

The Community Interviewees were first given three questions about perception in order to determine if the message sent by the COR, or indeed the COR him- or herself, can influence people's perceptions of the COR or of the organisation, respectively.

As is shown in the following table, 75% of the interviewees feel that the impression they form about a COR's messages affects the impression they have of the COR him- or herself. 83% of the interviewees think that the impressions they form about the COR influence the impressions they have about his or her message, and 100% of them believe that the impressions they form about the COR influence the impression they have about the organisation. This was also explicitly mentioned by one expert interviewee.

*Table 30: Influence on impression*

	<i>does influence</i>	<i>influences moderately</i>	<i>does not influence</i>	<i>does influence (in %)</i>
Impression message -> influence COR	9		3	75
Impression COR -> influence message	10	2		83
Impression COR -> influence organisation	12			100

*Source: Developed for the present study*

In summary, it can be said that the impressions which are formed about the CORs and their messages influence the impression an OCM has of the company. This is underlined by the statement made by one OCM who said that the impressions formed about the COR can influence the impression of the organization.

One of the interviewees stated that if the COR behaves in a fair way, it will influence the way he views the organization (Community Interviewee 3, 2011). Community Interviewee 1 (2011) thinks that the messages written by the COR influence his impression of the COR; he always forms an impression about a COR when reading his messages. This image is built on the basis of how he builds his sentences, his orthography and the content of the text. According to Community Interviewee 7 (2011), the COR's message should not be threatening. If the message is not relevant, it cannot create a good impression and it thus has a negative effect on the impression formed of the COR. Both statements support the fact that the impressions the interviewees have about the message influences the image they have about the COR. In contrast, Community Interviewee 4 (2011) argues that the impressions about the COR's messages do not influence the impression formed of that COR's personality.

To test the face validity of the constructs and their relationships, the interviewees were asked about how important they consider the proposed constructs to be compared to impression formation in online communities. The results are discussed in the following sections.

### 5.4.1 Relevance

Conversations in computer-mediated environments are assumed to convey fewer social context cues than face-to-face conversations (Short et al., 1976). The removal of nonverbal cues may actually focus attention on the message itself. In line with Burgoon et al. (2002), Boyd and Ellison (2007) claim that contributions in digital spaces are persistent and searchable, which further stresses the importance of providing relevant contributions, especially as OCMs can read and refer to earlier contributions. In fact, three interviewees share similar views:

According to one of the expert interviewees: “Because the company member is regarded as a representative of the company, and the OCMs would assume that he or she acts on behalf of the company, it not only has an impact on the perception of the company member, but on the perception of the company as a whole. OC communication is more personal and the reactions will be on a personal level” (Expert Interviewee 6, 2010). This is in line with the statement of a Community Interviewee who stated that “if a contribution is not relevant, to me it is not important and it sheds a negative light on the author” (Community Interviewee 2, 2011). Expert Interviewee 15 (2010) stated that “if the contribution is well thought out and of value to the community, it will have a positive impact” (Expert Interviewee 15, 2010).

One Community Interviewee does not consider it to be important that each message needs to be relevant. She stated that “not all sentences I make in a normal conversation are relevant, sometimes I am also just saying something because it is fun or sometimes I am just speaking about a topic for the purpose of the communication, so not a really relevant conversation.[...] to me the same things happens on our online community, a moderator [COR] just chat with his community members without always having to exchange very serious and relevant information. [...] and this is very good, I mean otherwise how can he become one of us if he is always only very formal and serious” (Community Interviewee 7, 2011).

Most of the statements underline the importance of the relevance of a contribution. It seems apparent that a contribution has to be relevant in order to be read and to be taken seriously by the OCMs.

#### **5.4.2 Communication style**

Linguistic style is another factor that, according to the literature, seems to affect impressions. Adkins and Brashers (1995) analysed the effect of “powerful” and “powerless” communication styles on small CMC groups. As a result of this study, the authors drew two general conclusions: i) language style significantly impacts impression formation in CMC groups. People who use a dominant communication style are believed to be more trustworthy, attractive, and convincing than the ones using less dominant communication styles, and ii) contrasting communication styles resulted in more extreme perceptions than when users had a similar communication style (Adkins & Brashers, 1995).

Scholars also state that online contributions have to be “written in a conversational voice” (Weil, 2006 p. 7) and need to reflect the users communication style (Zerfass, 2005). Most of the experts agree on this point. Expert Interviewee 2 (2010), for example, argues that the communication style needed for an online community would depend on the user. If the user is a private individual, the style would be informal; if the user is a BB (business-to-business), more formal communication would be used. The importance of communication style is also stressed by Expert Interviewee 3 (2010), who stated that direct communication is important for communication in an online community to be successful. He further mentioned that direct communication will help create an optimised target group. Three further interviewees propose the following:

*“The communication style must be optimised for the target group”  
(Expert Interviewee 3, 2010).*

*“I think it is a platform where you should go for a slightly informal style. (The extent depends on the type of company/brand.) Such a style would involve pictures and illustrations, humour, creativity, and personal views” (Expert Interviewee 4, 2010).*

*“She definitively needs to speak the same language as the other community members, otherwise I would not appreciate it because it would disturb me” (Community Interviewee 4, 2011).*

It seems that messages written in online communities should be written in an informal communication style in order to create a positive impression with the audience.

### **5.4.3 Social context cues**

According to Walther (1995) an individual communicating in computer-mediated environments can overcome the lack of social context cues by “various linguistic and typographic manipulation, which may reveal social and relational information” (p. 190). Paralinguistic cues, such as using capitals, were often context-based. In typical e-mails, this is recognized as shouting; but in certain software languages such capitals are required (Adkins & Brashers, 1995).

Fewer social cues in CMC allow senders of messages to present themselves very selectively by constructing their messages carefully. Receivers, in turn, tend to over-attribute perceived similarities and create an idealised impression of a sender (Walther, 1996). Most expert interviewees agree that social context cues are an important concept. For example, they state that:

*“Yes, it is always important to know who gives the answer, the tip or the piece of advice” (Expert Interviewee 2, 2010).*

*“Important – makes the virtual person physical” (Expert Interviewee 3, 2010).*

*“Might be helpful if you want to have strong credibility, and I also think it becomes more interpersonal and therefore more emotional for members to communicate on the platform” (Expert Interviewee 4, 2010).*

*“It is important in the sense that it replaces the social context cues the receiver would normally miss; this can be either utilised or abused. Both are connected to the sender’s ability to control which social context cues to convey” (Expert Interviewee 6, 2010).*

*“Indeed, because it replaces the facial expressions, tone of voice, etc. [...] Yes, it helps to know more about the sender, for example by being able to set-up member pages or profiles. The more transparency and credibility a community offers, the more influential is it” (Expert Interviewee 15, 2010).*

*“Yes, absolutely. Perception is more important than reality” (Expert Interviewee 17, 2010).*

As a result, personal descriptions and the use of paralanguage are considered to be important. Inter alia, the use of paralanguage can make up for the lack of social context cues and have a positive impact on image formation. A few interviewees, however, do not fully agree:

*“It could help a little, but could also cause much more misunderstanding, you never know if, for example, a smile is just a smile, or forced laughter, sardonic laughter, a self-conscious laugh or a sneer... The writer could probably be less honest if the reader knew more about him. People who write in forums or blogs like the fact that*

*they are anonymous. This might be the reason why they're writing at all” (Expert Interviewee 11, 2010).*

*“Too many smilies make me nervous” (Community Interviewee 1, 2011).*

*“Personal information about a moderator is very welcome, but I hate the use of too many paralinguistics. I mean, it looks really silly if there are smilies in nearly every sentence” (Community Interviewee 9, 2011).*

*“To me the use of capital letters is an aggressive way of expressing oneself. It is like shouting at someone” (Community Interviewee 5, 2011).*

It can be concluded that while social context cues are considered to be important, paralinguistics such as capital letters or smilies are not appreciated by everyone.

#### **5.4.4 Affiliation**

OC members do not always approve of companies participating in their community (Hogenkamp, 2007). This is one of the reasons why it is believed that it is even more important that participants must disclose their affiliation to the company they work for. Interviewees emphasised that:

*“It depends how they behave. If they stick to the community rules, it is OK, as long as they do not only want to sell something” (Expert Interviewee 1, 2010).*

*“They should only disclose their affiliation to the company, not their status in the company” (Expert Interviewee 2, 2010).*



*“If the company does not understand how to communicate in an OC, this is true. If they communicate on the terms of the OC, this is usually appreciated [...] As long as the company discussions are open and do not resort to pure defence, propaganda or side-tracking, this is usually welcomed by the community...That the company participates out of a sincere [...] It is essential unless for market research purposes. Communities have a tendency to find out if a company is participating in secret; in such cases, the perception of the company is at risk” (Expert Interviewee 6, 2010).*

*“Yes, I've already mentioned it. Members in OCs regard such things as honesty as a precondition for communication in OCs” (Expert Interviewee 13, 2010).*

*“It's ok if they participate as long as they do not try to sell something” (Community Interviewee 5, 2011).*

*“Honestly when I first read this question I thought you must be kidding asking such a question, for sure they have to tell who they are and that they are a company member. However, the more I think about it, what if they participate in the community and suddenly speak about a very personal point. They may sometime speak as a company member and sometimes as an individual being interested in this subject. So actually, to me that is not that clear anymore” (Community Interviewee 12, 2012).*

The discussion above can be summed up by saying that company representatives are welcome in communities, provided they adhere to the community's rules and disclose their affiliation to the company.

#### 5.4.5 Perceived similarity

According to Brown and Reingen (1987), Price et al., (1987) and Gilly et al., (1998), perceived similarity between individuals is a key factor affecting the persuasiveness of word-of-mouth information. Lazarsfeld and Merton's (1954) theory of homophily suggests that it is easier to communicate with individuals that are perceived to be similar (Price et al., 1987; Dellande & Gilly, 1998). Most experts agree that perceived similarity is an important concept, as do the following four interviewees:

*“In online communities this still holds in my opinion. However, because we have less clues to derive our image of a participant from, the notion of similarity might be achieved easier (also with relative big unsimilarity)” (Expert Interviewee 4, 2010).*

*“It matters even more in online communities” (Expert Interviewee 15, 2010).*

*“This bears the same truth in OCs as in real life or even more so because users are provided with a higher ability for being selective in OCs than in real life” (Expert Interviewee 6, 2010).*

*“I mean, what does similar mean? Yes, I prefer to speak to someone I think has the same interests and values than I have. I kind of trust this person more” (Community Interviewee 7, 2011).*

Most of the experts stress that in the context of online communities the following criteria to describe perceived similarity are important:

*“[...] same interests, same values” (Expert Interviewee 1, 2010).*

*“[...] same interests” (Expert Interviewee 2, 2010; Expert Interviewee 3, 2010).*

*“[...]similarity in the way of communication (so yes, expressions, style, maybe language ability and slang), same values (if they become salient in the posts), maybe similar behaviour on the internet (links to pages one likes or finds useful as well or provides links that appear to be useful)” (Expert Interviewee 4, 2010).*

Hence, it is assumed that perceived similarity is an important concept in online communities.

#### **5.4.6 Source credibility**

Fombrun (1996), cited in Lafferty et al. (2002), posits that “corporate credibility, or the extent to which consumers, investors, and other constituents believe in a company’s trustworthiness and expertise, makes up a portion of a corporation’s image” (p. 2). Source credibility has been conceptualised in two ways: corporate credibility and endorser credibility (Goldsmith et al., 2000). Interviewees mainly stressed that credibility is important. In the words of one interviewee:

*“[...] would you believe somebody not credible, without any expertise, or someone you just don’t like at all?” (Expert Interviewee 15, 2010).*

The significance of source credibility is underlined by the fact that 100% of the expert interviewees recognized its importance.

#### **5.4.7 Interpersonal communication**

Studies about Facebook and other social networking sites explore how a person’s own disclosures, compared to testimonials from others about the target, or what is called the ‘warranting theory’ (Walther et al, 2009), influences the impressions formed. The warranting theory refers to impression formation in online

communication, suggesting that judgments about a person depend more on information one cannot influence than on self-descriptions (Walther et al, 2009).

Numerous studies have shown that customers influence one another while exchanging information about a product (e.g. McAlexander et al., 2002; Ahonen & Moore, 2005). It is assumed that communication among OC members influences the image formation process. This is supported by Stammerjohan et al. (2005), who suggest that the short-term image can be influenced by word of mouth, and by Melewar and Karaosmanoglu (2006), who propose that corporate image can be positively influenced by positive information received from intermediary sources. The importance of interpersonal communications is underlined by the following statements:

*“Yes. Others do always influence” (Expert Interviewee 1, 2010).*

*“It might influence the image of a company/product, his buying behaviour, usage of product, word of mouth, opinion on specific company related issues [...]. So a whole array of behaviour just because you can communicate anything on that platform. Of course reactions can be for the good or bad of the company. Also the reactions might be stronger if the sources on the vp seem credible and also if many users share a particular point of view... [The discussion]... is perceived more credible since it eludes the company's control and because people obviously invested some effort and time to communicate something. So the issues seem to be important/emotional” (Expert Interviewee 4, 2010).*

*“As mentioned earlier, other consumers’ points of view are often regarded as more valuable than those of a company. Thus, discussions help the user to establish a perception” (Expert Interviewee 6, 2010).*

*“I believe it influences the member in the same way comparable discussions in real life do, according to my personal experience” (Expert Interviewee 14, 2010).*

*“I am probably much more influenced by the others than I like to admit, does not everything and everyone have an influence on us anyway” (Community Interviewee 3, 2011).*

Based on the above discussion it can be assumed that messages, which are posted by the COR are influenced by the messages of other OCMs participating in the same discussion. This, in turn, means that the messages of the other OCMs influence the impression formed about the COR.

#### **5.4.8 Adjustments to conceptual model**

In the following section, the findings from the face validity test are critically discussed and based on these findings, a slight adjustment of the conceptual model is proposed.

Only 33% of the community interviewees believe that communication style has an impact to image formation. The view formed of an OCM, for instance, indicates that informal and formal communication can create a medium influence over the impression he has about the COR (Community Interviewee 1, 2011).

This view contrasts with the opinion of the experts, as 94% of the expert interviewees think that communication style is important. This might be due to the fact that the experts often took the point of view of a company whereas the OCMs spoke from their own perspective. However, for the present study the opinion of the OCMs are considered to be more relevant in this respect. Based on this finding, the construct of communication style has been removed. Another, unanticipated finding was that only 33% of the respondents consider paralinguistic information to be

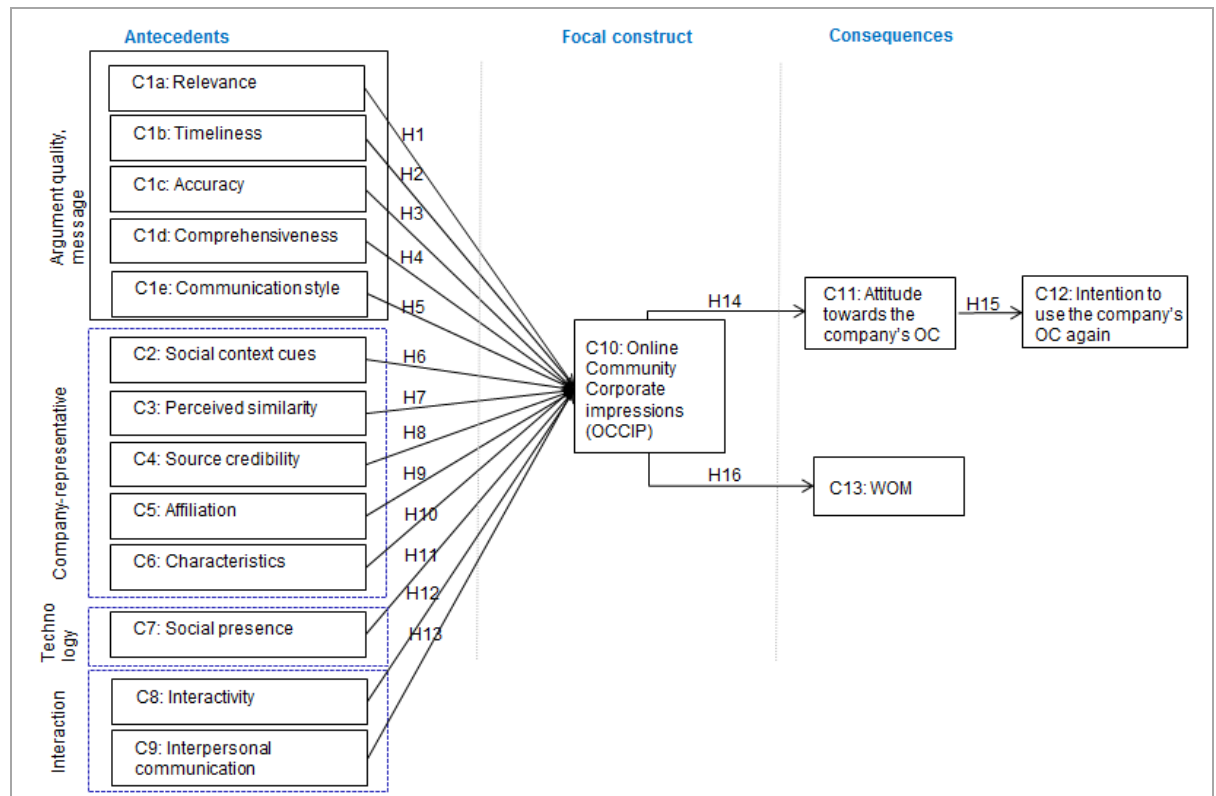
relevant, whereas additional information about the COR seems to be an important factor. According to Community Interviewee 1 (2011), paralinguistic information and the use of capitalisation is not a good idea. For her, the use of capital letters seems to imply that the other person is shouting. Smilies, on the other hand, are considered positive, since they imply empathy. For Community Interviewee 3 (2011), paralinguistic signs have no influence on the impression he has of the COR (company representative). In contrast to those findings, the literature stresses the importance of paralinguistic cues and theories were found confirming the importance of it. Furthermore, it is “only” an indicator of the construct *social context cues*. Therefore, this dimension has been kept in the construct of social context cues.

Only 33% of the community interviewees consider social presence to be a relevant construct for impression formation. This view is in line with the experts’ assessment. Only 41% of the experts considered this construct to be important, while 59% think that social presence is not relevant in terms of impression formation. Additionally social presence addresses the media itself, which is not the focus of this study. For that reason this construct has been removed from the conceptual model. Another surprising result is that only 33% of the respondents believe that interpersonal communication is not relevant in terms of impression formation. This result may be explained by the assumption that OCMs think that they are not influenced by others. They stress the fact that they are not influenced by other OCMs’ messages because they have their own point of view. The experts, however, do have a more objective point of view when assessing the influence of interpersonal communication. The reason for this is that they figure as observers of the situation, and are not part of the community. Additionally, most of the literature supports the view that interpersonal communication is relevant for impression formation. Thus, this construct has remained in the conceptual model.

Even though the construct “interactivity” is considered to be important, it is seen by the experts as a pre-condition of all online communities and therefore has not been further elaborated on, either.

Based on the results of the qualitative study, the conceptual model has been slightly adapted. The initial conceptual model as well as the adjusted conceptual model are presented below:

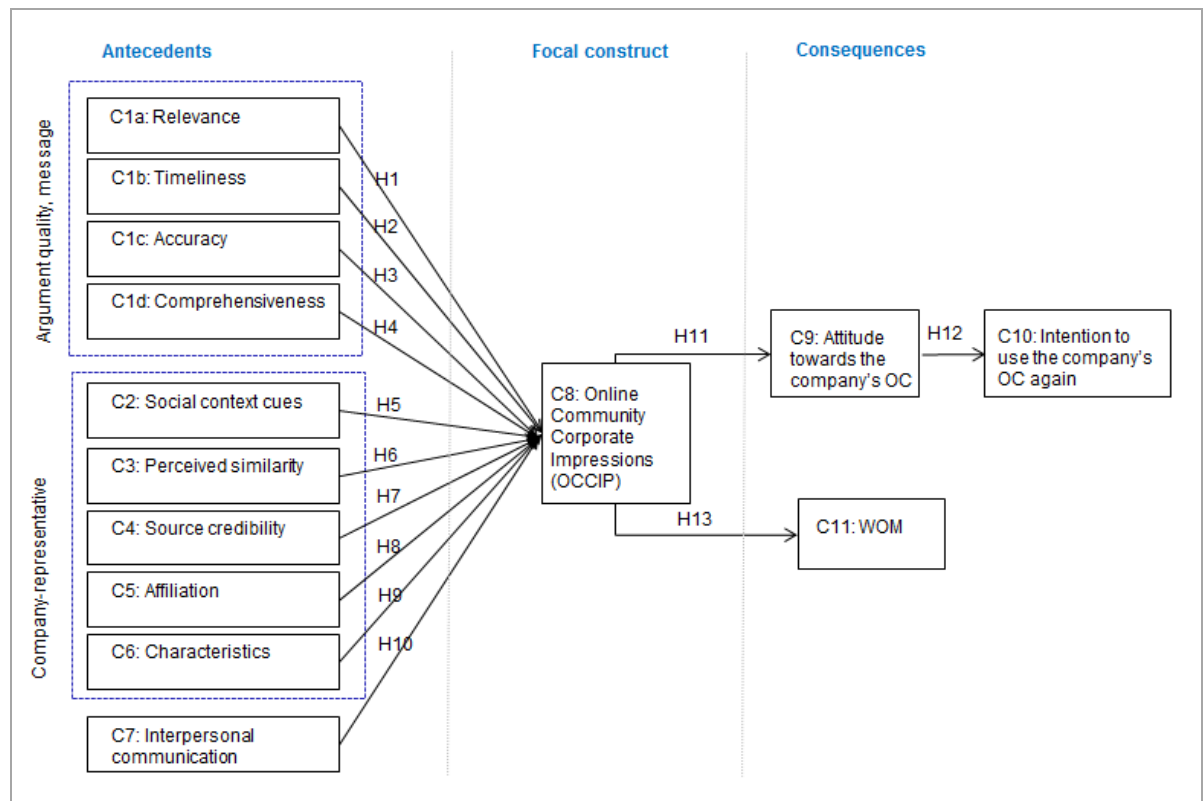
Figure 32: Initial conceptual model



Source: Developed for the present study

Taking into consideration the above-mentioned adjustments, the revised conceptual model is presented below.

Figure 33: Revised conceptual model



Source: Developed for the present study

Due to the fact that the conceptual model was revised and three constructs were eliminated the new table of hypothesis looks as follows:

Table 31: Summary of hypotheses - revised

No.	Hypothesis
H1	Relevant contributions of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H2	Timely messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
H3	Accurate messages of a COR are positively related to the online community corporate impressions (OCCIP) OCMs form of the company.
H4	Comprehensive messages of a COR are positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
H5	Social context cues that OCMs receive about the COR have a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
H6	Perceived similarity of the COR is positively related to the online community corporate impressions (OCCIP) OCMs form of the company.



H7	Perceived credibility of the COR is positively associated with the online community corporate impressions (OCCIP) OCMs form of the company.
H8	The COR's disclosed affiliation to the company has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
H9	The positive perception of a COR's characteristics has a positive effect on the online community corporate impressions (OCCIP) OCMs form of the company.
H10	Communication between OCMs on the online community platform has a positive effect on online community corporate impression (OCCIP).
H11	OCCIP has a positive effect on attitudes towards a company's OC.
H12	Attitude towards a company's OC has a positive effect on intention to use the company's OC again
H13	OCCIP has a positive effect on word-of-mouth activities by OCMs.

*Source: Developed for the present study*

## **5.5 Adaptation of existing measurement scales**

Because the Internet is changing so fast and online communities differ a lot from one another, it is essential not only to use existing measures but to incorporate qualitative findings in order to adopt the measurement to the specific context of the Swissmom community. Therefore, OCMs were confronted with three measurement instruments that might be used to measure the construct characteristics which they had to rate. Furthermore, they were asked to provide additional information with regard to this measurement instrument. A new measurement instrument for impression formation in OCs was thus provided which can be used with similar kinds of online communities.

Impression formation literature was considered, since whenever two or more individuals interact they form an impression of each other. Due to the specific context of online communities, the interaction between two or more individuals takes place in the environment of a CMC.

In the literature on impression formation was searched for possible measurement instruments for measuring a COR's characteristics. In the following, three measurement instruments are presented which were employed in earlier studies.

None of the instruments found in literature seems to be 100% adequate to measure impressions formed in the Swissmom and/or the Maurice Lacroix Community. Thus, the author has taken three instruments from impression formation literature that might be used to measure the characteristics of a COR in this specific community. A brief description of those measurement instruments is provided below. Walther's (1993) instrument for the measurement of impression development has been assessed by three different tests. This initial impression development instrument was empirically tested in a study "contrasting the effects of message exchange over time in FtF versus computer-mediated groups" (Walther, 1993 p. 31). Downey and Christensen (2006) present a four-item rating scale for impression formation. Their study aimed to establish if "impression formed on the basis of incorrect information would persist when correct information was provided" (Downey & Christensen, 2006 p. 479). Garlick (1993) investigates impression formation to determine if "prior descriptions may influence the evaluative judgements one makes of another" (Garlick, 1993 p. 59). To do this, he uses a 15-item, nine-point semantic differential format.

In order to adapt one of the measurement instruments to the use with the Swissmom Community, 12 Swissmom Community members (cf. Table 9, labelled as I1-112) were asked to assess various measurement instruments. The interviewees were asked which of the statements they perceived to be adequate to describe a COR. The tables below present the results.

As has been shown in numerous studies (e.g. Conway et al., 1995; Hoyt & Kerns, 1999, Childs et al., 2009), when more than one individual is involved in rating a response, there might be some disagreement. The agreement among raters can be assessed by checking the interrater reliability. There are numerous rater agreement measures such as Cohen's Kappa coefficient, weighted Kappa coefficient, interclass Kappa, tetrachoric correlation coefficient, and Fleiss Kappa (Banerjee et al., 1999). This study adopts Fleiss Kappa, which is a generalization of Cohen's Kappa coefficient and allows for the assessment of multiple raters. Cohen's Kappa is limited to two raters only.

According to Altmann (1991), the Kappa ( $K$ ) can be interpreted as follows:

<u>Value of <math>K</math></u>	<u>Strength of agreement</u>
< 0.20	Poor
0.21-0.40	Fair
0.41-0.60	Moderate
0.61-0.80	Good
0.81-1.00	Very good

None of the Fleiss Kappa's values for the three measurement instruments can be considered moderate or good:

The Fleiss Kappa for Walther's (1993) measurement instrument is 0.3665. The Fleiss Kappa for Downey & Christinsen's (2006) measurement instrument is 0.3853. The Fleiss Kappa for Garlick's (1993) measurement instrument is 0.1938. Therefore, it must be concluded that interrater agreement is not given for any of the proposed instruments. The author was looking for another way to decide on which of the three measurement instruments to use for the present study. The tables below show the assessments of the interviewees.

*Table 32: Interviewees' assessment of Walther's (1993) measurement instrument*

	<i>I1</i>	<i>I2</i>	<i>I3</i>	<i>I4</i>	<i>I5</i>	<i>I6</i>	<i>I7</i>	<i>I8</i>	<i>I9</i>	<i>I10</i>	<i>I11</i>	<i>I12</i>	Total	%
Honest	1	1	1	1	1	1	1	1	1	1	1	1	12	100
Unintelligent	1			1			1		1	1		1	6	50
Lazy	1									1			2	17
Sociable	1	1	1	1	1	1	1	1	1	1	1	1	12	100
Interesting	1	1			1		1			1		1	6	50
Unpersuasive	1						1		1	1	1		5	42
Unfriendly	1		1		1				1	1	1		6	50
Aggressive	1		1		1				1	1		1	6	50
Romantic													0	0
Conservative		1											1	8

Easy-going	1	1					1	1				1	5	42
Serious	1	1	1	1	1	1		1	1	1	1	1	11	92
Minded	1							1	1	1			4	33
Compulsive	1									1			2	17
Religious													0	0

Source: Developed for the present study

The final column of None of the Fleiss Kappa's values for the three measurement instruments can be considered moderate or good:

The Fleiss Kappa for Walther's (1993) measurement instrument is 0.3665. The Fleiss Kappa for Downey & Christensen's (2006) measurement instrument is 0.3853. The Fleiss Kappa for Garlick's (1993) measurement instrument is 0.1938. Therefore, it must be concluded that interrater agreement is not given for any of the proposed instruments. The author was looking for another way to decide on which of the three measurement instruments to use for the present study. The tables below show the assessments of the interviewees.

Table shows the percentage of respondents who consider this item to be adequate to describe the COR. It is shown that overall only 46.67% of the items are considered to be appropriate. To generate this result, the researcher only counted the items selected by at least 50% of the respondents.

Table 33: Interviewee's assessment of Downey & Christensen's (2006) measurement instrument

	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	Total	%
Attractiveness				1									1	8
Liking	1	1		1						1		1	5	42
Possibility of developing a friendship	1	1	1	1			1			1	1		7	58
Perceived truthfulness	1	1	1	1	1	1	1	1	1	1	1	1	12	100

Source: Developed for the present study

This table shows that Downey and Christensen's (2006) measurement instrument has been considered to be a bit more adequate to measuring impression formation in this community. The table shows that 50% of the items are considered to be appropriate to describe a COR.

*Table 34: Interviewee's assessment of Garlick's (1993) measurement instrument*

	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	Total	%
nasty-nice									1				1	8
unfriendly-friendly	1	1	1	1	1	1	1	1	1	1	1	1	12	100
mean-kind	1		1	1					1	1		1	6	50
unhappy-happy							1						1	8
cold-warm		1					1	1	1	1	1		6	50
gloomy-cheerful			1				1			1			3	25
cruel-kind	1	1	1	1				1	1		1		7	58
rude-courteous	1		1	1		1	1		1	1	1		8	67
negative-positive	1	1		1	1	1	1	1		1		1	9	75
obnoxious-polite	1						1			1			3	25
uncaring-caring	1	1		1			1	1	1	1	1	1	9	75
disagreeable-agreeable	1	1		1			1		1	1	1		7	58
unpleasant-pleasant	1			1			1		1	1		1	6	50
inconsiderate-considerate	1						1	1	1				4	33
unlikable-likable	1	1	1	1		1	1		1	1	1		9	75

*Source: Developed for the present study*

As can be seen from Table , 67% of all the items are considered to be adequate to describe a COR.

Even if Garlick's instrument has not been used in the context of an online community, it seems that, out of all three measurement instruments, Garlick's instrument is the most appropriate for measuring the impressions formed about the COR in the Swissmom Community. However, in order for the instrument to suit the study context, it was adjusted according to the results presented in the table above.

All the items selected by fewer than 33% of the respondents were not included in the measurement instrument. Due to the results of Fleiss Kappa and the fact that none of the three proposed measurement instruments seem to be 100% adequate to describe a COR's characteristics, additional items were added. These items stem from qualitative interviews, in which the interviewees were asked: i) which words they would use to describe a COR and ii) how a COR should be. Based on the analysis of these answers, six more items were added to the measurement instrument: insincere-candid, uncommunicative-communicative, incompetent-competent, not committed-committed, unreliable-reliable and indifferent-interested. Reliability as well as unidimensionality were given for this adjusted measurement instrument (see 6.4.1 and 6.4.2).

## **5.6 Summary**

The increasing interest in online communities has heightened the need for a better understanding of the people who gather there. To date, a great number of researchers have tended to focus on subjects such as: (i) motivation to participate in communities, (ii) types of communities, and (iii) communities' influence on customers' behaviours and perceptions, etc. However, there has been little discussion about corporate communication targeting online communities. Specifically, the author could not find any research addressing the question how corporate communication that targets online communities might influence impression formation.

This study started with qualitative expert interviews that helped to clarify concepts, purify measures and discover additional important aspects of the constructs. OCs differ a lot from one another. It is thought to be essential to use not only existing measures but to incorporate the qualitative findings of the interviews with OCMs. Thus, the aim of the interviews in stage two is to refine existing measurements of impression formation in CMC and adapt the measurement to this specific context.

## **Chapter 6 - Results of the quantitative study**

### **6.1 Introduction**

The adjusted conceptual model in chapter 5 is specified as a structural equation model with 14 latent variables, each operationalized by a set of survey questions to the online community members of the SMoM and Maurice Lacroix forum. The questions used to operationalize the model were developed based on literature review and the qualitative study.

To validate the measurement model, an online survey was conducted during four weeks, using SMoM forum as the research site and to test the relationships a second online survey was conducted using the Maurice Lacroix forum as the research site. A questionnaire was designed consisting of 81 questions (respectively 83 for the Maurice Lacroix study) designed to measure the model's 14 latent variables. Background questions were also added. Most questions were formulated as statements. The respondent was asked to rate his or her level of agreement on a 7-point Likert scale (from "strongly disagree" to "strongly agree").

This chapter presents research findings from the main study outlined in chapter 4. It starts by presenting initial data examination, followed by the findings of confirmatory factor analysis (CFA) as well as the assessment of scale reliability and validity based on the data from the main study. It is followed by the outcome of hypotheses testing and the evaluation of relevant assumptions.

## 6.2 Sample characteristics

The key descriptors of the samples for the main study are presented in the following table, including the demographic data of the a) 304 SMoM members and b) 397 Maurice Lacroix members.

*Table 35: Demographic profiles of SMoM and Maurice Lacroix members*

Category	Description	SMoM		Maurice Lacroix	
		N	%	N	%
Gender	Male	27	8.9	227	57.2
	Female	277	91.1	170	42.8
	<i>Total</i>	<i>304</i>	<i>100</i>	<i>397</i>	<i>100</i>
Age	< 20	-	-	1	0.3
	20-25	14	4.6	6	1.5
	26-30	43	14.1	11	2.8
	31-35	91	29.9	82	20.7
	36-40	100	32.9	121	30.5
	41-45	39	12.8	112	28.2
	46-50	5	1.6	44	11.1
	> 50	12	3.9	20	5
<i>Total</i>	<i>304</i>	<i>100</i>	<i>397</i>	<i>100</i>	
Educational level	Up to high school	5	1.6	5	1.3
	Professional education	125	41.1	133	33.5
	Bachelor's level	77	25.3	108	27.2
	Master's level or higher	89	29.3	147	37.0
	N/A	8	2.6	4	1.0
<i>Total</i>	<i>304</i>	<i>100</i>	<i>397</i>	<i>100</i>	
Marital status	Single	73	24	64	16.1
	Married	214	70.4	231	58.2
	In partnership	4	1.3	66	16.6
	Divorced	13	4.3	35	8.8
	Widowed	-	-	1	0.3
<i>Total</i>	<i>304</i>	<i>100</i>	<i>397</i>	<i>100</i>	
Employment status	Student	3	1	5	1.3
	Employed	168	55.3	225	56.7
	Taking care of the children	65	21.4	N/A	N/A
	Self-employed	59	19.4	141	35.5
	Unemployed	5	1.6	21	5.3



	Retired	1	0.3	3	.8
	Others	3	1	2	.5
	<i>Total</i>	<i>304</i>	<i>100</i>	<i>397</i>	<i>100</i>

Source: Developed for the present study

### 6.3 Initial data examination and data preparation

Prior to any multivariate analysis, data have to be examined and prepared carefully. This has provided the researcher with a deeper understanding of the data and helped to identify any potential violation of the underlying assumptions for conducting multivariate analysis (Hair et al., 2006). According to Tabachnick and Fidel (2007), there are two different ways to do data screening, one for ungrouped data and one for grouped data. The present research deals only with one group, and thus the procedure for ungrouped data has been followed: i) analysis of missing values, ii) analysis of outliers, iii) test of normality of data distribution, iv) test of homoscedasticity and v) test of multicollinearity (Tabachnick & Fidell, 2007). All analyses were performed using IBM SPSS Statistics 19 and 20.

#### 6.3.1 Missing data and non-response bias

It is not unusual for research data to be incomplete. Missing data is “information not available for a subject (or case) about who’s other information is available. Missing data often occur when a respondent fails to answer one or more questions in a survey” (Hair et al., 2006 p. 35).

When checking for missing data, there are two questions that need to be addressed: are the missing values happening randomly (missing at random = MAR) or are there some systematic patterns?

The questionnaire was quite long for this type of study. (One characteristic of online communication is that messages are rather short, thus OCMs are used to short

messages.). The author suspected that many respondents would only fill in a few questions, namely the ones they felt comfortable with. Hence, the questionnaire (for the SMoM sample as well as the Maurice Lacroix sample) was set up in such a way that all questions testing the conceptual model were mandatory. As a result, there are no missing data, and thus there is no *item non-response bias* (Armstrong & Overton, 1977).

The *survey non-response bias* was controlled by comparing early and late respondents (Armstrong & Overton, 1977). The two samples were split into two groups each: one of early and one of late respondents. For the SMoM sample the early respondents filled in the survey in the first week of the study, while late respondents filled in the survey in the fourth week (after a reminder in the July newsletter). For the Maurice Lacroix sample, the early respondents filled in the survey in the first week of the study, while late respondents filled in the survey in the second week (after a reminder post on the Facebook site). For both samples, the latter group served as a proxy for non-responding community members. The author could not find any bias in either sample.

### **6.3.2 Analysis of outliers**

According to a definition provided by Tabachnick and Fidell (2007), “an outlier is a case with such an extreme value on one variable (a univariate outlier) or such a strange combination of scores on two or more variables (multivariate outlier) that it distorts statistics” (p. 72). Outliers bias the mean and inflate the standard deviation (Field & Hole, 2003), and “it has much more impact on the value of the regression coefficient than any of those inside the swarm” (Tabachnick & Fidell 2007, p. 72). The reason why outliers cause problems is that they can distort the results of a statistical test due to the fact that many of them often rely on squared deviations from the mean (Aron & Aron, 1997).

First the histograms and the boxplots were inspected. This analysis indicates that the data of both samples contain a number of univariate outliers. Next, the mean and the 5% trimmed mean were compared in order to see if the outliers have a great influence on the mean. The results show that the two mean values were similar for all the cases in both samples.

Further, univariate outliers were identified by converting all the scores for a variable to standard scores. For a sample size of  $< 80$ , a case is considered as an outlier if its standard score is less than  $-2.5$  or greater than  $2.5$ . However, for a sample size of  $> 80$ , a case is an outlier if its standard score is less than  $-3.0$  or greater than  $3.0$  (Hair et al., 2006). Field (2005) recommends using  $\pm 2.0$  as a threshold for the standard scores. Field (2005) further states that “in an ordinary sample we would expect 95% of cases to have standardized residuals within about  $\pm 2.0$ . We have a sample of 200, so it is reasonable to expect about 10 cases (5%) to have standardized residuals outside of these limits” (p. 199). The results of this analysis showed that with a sample of 304 for the SMoM sample there are 9 cases (2.96%) that are outside of the limits and with a sample of 397 for the Maurice Lacroix sample there are 14 cases (3.52%) that are outside of the limits (see Table 36 and Table 37).

*Table 36: Casewise diagnostics for the SMoM sample*

<i>Case number</i>	<i>Std. Residual</i>	<i>C81</i>	<i>Predicted value</i>	<i>Residual</i>
16	2.629	7	4.92	2.081
19	2.003	7	5.41	1.586
51	2.905	7	4.70	2.300
66	-2.107	3	4.67	-1.668
93	-2.694	1	3.13	-2.133
96	2.445	7	5.06	1.935
102	-3.519	2	4.79	-2.786
111	-2.269	4	5.80	-1.797
133	-2.972	3	5.35	-2.353

*Source: Developed for the present study*

Table 37: Casewise diagnostics for the Maurice Lacroix sample

Case number	Std. Residual	C8I	Predicted value	Residual
27	-2.143	5	6.59	-1.590
32	2.440	7	5.19	1.810
46	2.025	7	5.50	1.502
59	2.111	7	5.43	1.566
62	2.870	7	4.87	2.129
85	2.286	7	5.30	1.696
119	-3.560	3	5.64	-2.641
126	-2.076	4	5.54	-1.540
167	-2.282	4	5.69	-1.693
175	-2.240	4	5.66	-1.662
251	-3.166	4	6.35	-2.349
306	2.407	6	4.21	1.785
312	3.065	7	4.73	2.274
339	-2.042	4	5.51	-1.515

Source: Developed for the present study

To detect the multivariate outliers, Mahalanobis  $D^2$  was used. It is a multi-dimensional version of a z-score, measuring the distance of a case from the centroid of a distribution (Hair et al. 2007). Tabachnick and Fidell (2007, p. 74) describe the Mahalanobis distance as follows: “Mahalanobis distance is the distance of a case from the centroid of the remaining cases where the centroid is the point created at the intersection of the means of all the variables”. For a case to be considered as an outlier, the larger the Mahalanobis  $D^2$  value for a case and the smaller its corresponding probability ( $\leq 0.001$ ). Tabachnick and Fidell (2007) describe the condition for multivariate outliers as follows: “The criterion for multivariate outliers is Mahalanobis distance at  $p < 0.001$ . Mahalanobis distance is evaluated as  $\chi^2$  with degrees of freedom equal to the number of variables” (p. 99). The critical value is 99.60 for a  $df$  of 60 and 86.67 for a  $df$  of 50. (For a full list of these critical values, see Tabachnick & Fidell, 2007, Table C.4). In the present study, there are 56 independent variables, thus the  $\chi^2$  ( $df=50$ ) is 86.67 and the  $\chi^2$  ( $df=60$ ) is 99.60. The results of this analysis show that depending on which  $df$  is considered for the SMoM sample either six cases ( $df=50$ ) or two cases ( $df=60$ ) and for the Maurice Lacroix sample only one case is determined as multivariate outliers. Cook’s distance was

used to examine whether the outliers are having any undue influence on the model. Cases with values greater than 1 can be considered to be a potential problem. The results for both samples show that none of the Cook's distances are greater than 1 (see Table 38 and Table 39).

*Table 38: Case summaries for the SMOm sample*

	<i>Case number</i>	<i>Mahalanobis Distance</i>	<i>Cook's Distance</i>	<i>Centred Leverage Value</i>
1	16	97.59155	.08666	.32208
2	19	91.05280	.04412	.30050
3	51	83.15838	.07881	.27445
4	66	91.82497	.04959	.30305
5	93	116.90562	.13277	.38583
6	96	159.46310	.25088	.52628
7	102	79.01879	.10595	.26079
8	111	91.09165	.05667	.30063
9	133	56.09714	.04434	.18514

*Source: Developed for the present study*

*Table 39: Case summaries for the Maurice Lacroix sample*

	<i>Case number</i>	<i>Mahalanobis Distance</i>	<i>Cook's Distance</i>	<i>Centred Leverage Value</i>
1	27	43.10174	.01137	.10884
2	32	69.58575	.02756	.17572
3	46	62.99231	.01654	.15907
4	59	74.86283	.02291	.18905
5	62	66.09938	.03549	.16692
6	85	63.56105	.02134	.16051
7	119	54.99628	.04265	.13888
8	126	78.66704	.02384	.19865
9	167	74.58891	.02665	.18836
10	175	48.90567	.01453	.12350
11	251	60.22911	.03804	.15209
12	306	73.82855	.02919	.18644
13	312	111.52125	.09136	.28162
14	339	44.45942	.01072	.11227

*Source: Developed for the present study*

Hair et al. (2006) suggest retaining outliers for further analysis, unless there is a proof that they truly deviate from the normal and are not representative of any observation of the population. Thus, those items were retained for the further analysis.

### **6.3.3 Testing for normality**

After having tested for outliers the normality of distribution was examined. Normality is “the most fundamental assumption in multivariate analysis, referring to the shape of the data distribution for an individual metric variable and its correspondence to the normal distribution, the benchmark for statistical methods” (Hair et al., 2006, p. 69). Graphical as well as statistical methods were applied for testing normality (Tabachnick & Fidell, 2007).

First univariate normality was tested. To perform the graphical examination the following plots were inspected for all metric variables (Hair et al., 2006): i) histograms that show the actual shape of the distribution, ii) normal probability plots (labelled Normal Q-Q Plots) in which each score for the manifest variable is plotted against the expected value from the normal distribution. There should be a straight line signifying a normal distribution; iii) detremed normal Q-Q plot that are plotting the actual deviation of the scores from the straight line. There should be no real clustering of points, with most collecting around the zero line; iv) the boxplot. These examinations indicated deviation from normality for both samples.

In a second step, the shapes of the distributions of the scores were inspected by testing skewness and kurtosis. The skewness provides information of the symmetry and the kurtosis indicates the peakedness of the distribution. In a perfectly normal distribution, skewness and a kurtosis value of zero should be obtained (Tabachnick & Fidell, 2007). Z-values calculated from skewness and kurtosis scores exceeding a critical value of  $\pm 2.58$  (at a 0.01 significance level) indicate deviation from normal distribution (Hair et al., 2006; Tabachnick & Fidell, 2007).

In the SMOm sample 76 variables show scores that indicate skewness and 39 variables kurtosis. In the Maurice Lacroix sample 71 variables show scores that indicate skewness and 36 variables kurtosis (analysis of skewness and kurtosis can be found in Appendix). In consequence, most variables indicate deviation of univariate normality.

In addition, normality was further investigated by calculating the Kolmogorov-Smirnov and Shapiro-Wilk statistic, which are two of the most common statistical tests (Hair et al., 2006). A non-significant result (sig. values of more than 0.05) indicates normality. In the present study, the sig. value is  $< 0.05$  for all variables in the two samples, suggesting a violation on the assumption of normality (see Appendix for a full table including the results of the Kolmogorov-Smirnov test for all variables of the two samples).

With respect to multivariate normality DeCarlo (1997) stresses that “a first step in assessing multivariate normality is to separately test each variable for univariate normality, because univariate normality is a necessary condition for multivariate normality [...] So if univariate normality is not rejected, then the next step is to check for multivariate normality” (pp. 296-297). The aforementioned results of the tests for univariate normality indicate that most variables have a deviation of univariate normality. Since, “univariate normality is a necessary condition for multivariate normality” (DeCarlo, 1997 p. 296) the rejection of univariate normality leads to the conclusion that multivariate normality is also violated (in Appendix the Mardia’s coefficient can be found that was merely calculated for verification).

#### **6.3.4 Test of homoscedasticity**

The homogeneity of variance is another important assumption of multivariate tests. Homoscedasticity is the assumption that “the variability in scores for one continuous variable is roughly the same at all values for another continuous variable” (Tabachnick & Fidell, 2007, p. 85). In other words, the violation of homoscedasticity

means that there are unequal variances. If this is the case, it might weaken the analysis; however, it is “not fatal to an analysis of ungrouped data” (Tabachnick & Fidell, 2007, p. 85). A graphical examination by consulting the scatterplots of both samples showed that the residuals were fairly equally distributed above and below the central line of the y-axis. This result indicates the absence of homoscedasticity for the SMoM as well as the Maurice Lacroix sample.

The Levene’s test was used to further investigate this assumption. According to Hair et al., (2007), it is the most common test used “to assess whether the variances of a single metric variable are equal across any number of groups” (p. 207). As defined by Field (2005), the “Levene’s test tests the hypothesis that the variances in the groups are equal (i.e. the difference between the variances is zero). Therefore, if Levene’s test is significant at  $p \leq 0.05$  then we can conclude that the null hypothesis is incorrect and that the variances are significantly different – therefore, the assumption of homogeneity of variances has been violated” (p. 98). The results of the Levene’s test indicate that the assumption of homoscedasticity is tenable. However, for the SMoM sample out of 81 variables that were tested, seven variables show patterns of heteroscedasticity; and for the Maurice Lacroix sample out of 83 variables that were tested, eight variables show patterns of heteroscedasticity. More details of the Levene’s statistic values and statistical significances are provided on the CD.

### **6.3.5 Test of multicollinearity**

Multicollinearity is an inadmissibly high level of intercorrelation between the predictor variables that makes it impossible to separate their effects. When facing a collinearity problem, the estimates are unbiased, however, the calculation of the relative strength of the predictor variables and their shared effects ( $\beta$ -weights and  $R^2$ ) is not reliable, in that it inflates standard errors and produces strange parameter estimates (Kaplan, 1994; Kent, 2000).



Multicollinearity can be detected in multiple ways. Two of them, however, are very common: inspecting the bivariate and multivariate correlation matrix and calculating the tolerance impact and variance inflation factors (VIF) (Tabachnick & Fidell, 2007).

First, the bivariate correlation matrix for the independent variables was studied. Intercorrelation between the independent variables above 0.90 (Hair et al., 2006; Tabachnick & Fidell, 2007) signals a possible problem. The correlation matrix (correlation matrix for both samples can be found on CD in Appendix) showed that in the SMoM sample 3 of the bivariate correlation were above the threshold value of 0.90, namely C51 and C52 with a correlation coefficient of 0.947 (sig. 0.01), C53 and C54 with a correlation coefficient of 0.935 (sig. 0.01) as well as C73 and C74 with a correlation coefficient slightly above the threshold level, of 0.909 (sig. 0.01). In the Maurice Lacroix sample no intercorrelations above 0.90 were found.

As mentioned above the assumption of multicollinearity can also be assessed by checking the VIF (variance inflation factor). In order to do so the collinearity diagnostics in SPSS was used. If the VIF values are higher than 10 and the tolerance values below 0.1 there is reason for concern (Myers, 1990; Bowerman & O'Connell, 1990). The examination of the VIF and tolerance values showed the following: In the SMoM sample 7 variables were found to exceed the threshold values, namely C51 (tolerance = 0.071, VIF = 14.117), C52 (tolerance = 0.065, VIF = 15.400), C53 (tolerance = 0.073, VIF = 13.632), C54 (tolerance = 0.096, VIF = 10.412), C72 (tolerance = 0.094, VIF = 10.606), C73 (tolerance = 0.094, VIF = 10.661), C74 (tolerance = 0.091, VIF = 11.004). In the Maurice Lacroix sample, no VIF values are higher than 10 nor is any tolerance value below 0.1. These results confirm the findings from the examination of the correlation matrix in the last section.

There seem to be a problem of collinearity among the predictor variables in the SMoM sample. Thus, this problem was investigated further by assessing the table called collinearity diagnostics. This table shows i) the eigenvalues of the scaled, uncentred cross-products matrix, ii) the condition index and iii) the variance

proportions for each predictor. According to Field 2005 “if any of the eigenvalues in this table are much larger than others then the uncentred cross-products matrix is said to be ill conditioned, which means that the solutions of the regression parameters can be greatly affected by small changes in the predictors or outcome” (p. 260). Only the variables that had a VIF value  $> 10$  and tolerance values  $< 0.1$  were investigated further. The results indicate that the eigenvalues are fairly similar, so it is likely that the derived model is accurate even if small amendments in the measured variables are made.

Next, the condition indexes were examined. They are “another way of expressing these eigenvalues and represent the square root of the ratio of the largest eigenvalue to the eigenvalue of interest“ (Field, 2005 p. 261). The data show that the conditional indexes do not differ much from one to the other what reflects the findings of the examination of the eigenvalues.

Finally, the variance proportion needs to be studied. The variance proportions “tell us the proportion of the variance of each predictor’s regression coefficient that is attributed to each eigenvalue [...] in terms of collinearity, we are looking for predictors that have high proportions on the same *small* eigenvalue, because this would indicate that the variances of their regression coefficients are dependent” (Field, 2005 p. 261). For the variable C51 58% and for the variable C52 87% of the variance of the regression coefficient are associated with eigenvalue number 57, which indicates dependency between these variables. For the variable C53 44% and for the variable C54 40% of the variance of the regression coefficient are associated with eigenvalue number 54, which also indicates dependency between these variables. Furthermore, a slight dependency of the variables C73 (14% on eigenvalue 51) and C74 (16% on eigenvalue 51) was found (full table can be found on CD in Appendix). To investigate from where this collinearity stems the Pearson correlation between the variables can be examined. As stated above the variables C51 and C52 (0.947), C53 and C54 (0.935) as well as C73 and C74 (0.909) are highly correlated with each other.

According to Field (2005) not much can be done with the variables with collinearity, as a variable cannot just be omitted as it is unclear which one to omit.

Multicollinearity can further be detected in the results of the assessment of the model in SEM, by inspecting the standardized regression weights (SRWs). A metric of 1 has been assigned to all latent constructs and thus, all the SRWs should be within the range of  $\pm 1$ . SRWs close to 1 indicate a multicollinearity problem. When very similar latent constructs cause a third latent construct, the SEM method will have difficulty computing distinct regression weights from the very similar latent construct to the third latent construct (Kaplan, 1994; Kent, 2000). All standardized regression coefficients are far from  $\pm 1$ , except for the ones of H11, H12 and H13. However, all of them only cause one other latent variable, and thus there should not be a problem.

In summary, it can be stated that the preliminary data examination indicated some problems with the data. There are different options for coping with those problems. Data transformation is one of the options that can be taken into consideration. Data were transformed in order to check if there might be some significant differences in the results (see Appendix). However, no significant difference could be found compared with the non-transformed data. It is generally not recommended to transform data. Thus, the author decided to use the Satorra-Bentler  $\chi^2$  and to calculate with robust standard errors. A thorough discussion of these methods is provided in the section below.

### **6.3.6 Estimation of the model**

SEM is often conducted under the assumption of univariate and multivariate normality (Kline, 2010). The violation of this assumption can cause incorrect results in SEM. In SEM, the parameters are usually estimated with the maximum likelihood (ML) method assuming a multivariate normal distribution of manifest variables. This assumption, however, is generally violated (Chou et al., 1991). Thus, many scholars

have investigated into ML estimation and its underlying assumptions (e.g. Anderson & Gerbing, 1984; Harlow, 1985). Chou et al. (1991) state that “in general, the ML estimates have been found to be fairly accurate, even when the assumption of normality is violated. The test statistics and standard errors, however, are usually biased. The bias is found to increase with the degree of non-normality as measured by the univariate skewness and kurtosis” (Harlow, 1985, p. 348). In other words, it can be said that when using ML estimates the measurement parameter, structural disturbance and coefficient estimates are robust to non-normal data (Bollen, 1989; Chou et al., 1991).

As discussed in 6.3.3, there is a high degree of non-normality in the data distribution, considering that 76 variables show scores that indicate skewness and 39 variables kurtosis. Supposedly, methods that do not require distributional assumptions on the observable variables are available. Test statistics, parameter estimators and standard errors of asymptotic distribution-free (ADF) methods are less restraining, (Browne, 1984). However, according to Satorra (1992) they might be affected by sample size as they do require forth-order sample moments and thus may lack robustness with small- and medium-size samples. Further, model size and the degree of non-normality might also affect it (Satorra, 1992).

In the present study, the sample size of 304 and 397 respectively, can be considered to be rather small to medium, while the size of the model is large. Hence, the ADF methods are not considered to be suitable for the estimations. Instead of using different estimation methods (ADF methods), the test statistic may be corrected. Satorra and Bentler (1986, 1988a) developed the Satorra-Bentler  $\chi^2$  statistic, which is a test statistic that divides the normal  $\chi^2$  statistic by a scaling amendment to better estimated  $\chi^2$  when normality is violated. The Satorra-Bentler  $\chi^2$  penalizes  $\chi^2$  for the extent of kurtosis in the data. As stated above, standard errors in the ML estimation method may be substantially off the mark when normality distribution is violated (Satorra & Bentler, 1986, 1988a). Therefore, robust standard errors need to be employed. Scaled test statistic and robust standard error were used for the present

study as they produce satisfactory results, even if normality is violated (Satorra & Bentler, 1986, 1988).

## **6.4 Scale simplification: Reliability and EFA**

Subsequently to the initial data examination, the measurement scales were assessed in terms of internal reliability and unidimensionality (Gerbing & Anderson, 1988). The results are presented below.

### **6.4.1 Reliability**

Reliability has been defined as “the extent to which [measurements] are repeatable and that any random influence which tends to make measurements different from occasion to occasion is a source of measurement error” (Nunnally, 1967 p. 206). Peter (1979) cited in Peterson (1994) defines reliability as “the degree to which measures are free from error and therefore yield consistent results” (p. 381). This definition implies that there is always a certain degree of measurement error in measurement.

Zeller and Carmines (1980) distinguish four types of reliability estimation models, namely i) test-retest, ii) alternative-form, iii) split-half and iv) Cronbach’s  $\alpha$ . As Cortina (1993) states, “the particular estimate of reliability that one may use depends on the particular error-producing factors that one seeks to identify [...] this is the essence of generalizability theory” (p. 98). It depends if an error factor used is related to the passing of time or to the use of different items. A test-retest, for instance, may be used if an error factor is related to passing time and if it is linked to the use of different items; the internal consistency is of importance and coefficient alpha can be applied (Cortina, 1993).

Test-retest reliability is tested by administering the questionnaire to the same people at two different points in time. This study looks at impression formation in an online community. Online communities are very “active” platforms where situations change very rapidly. In this context, an impression a community member gets from the various conversations. Conversations, however, evolve and thus this study is more a snapshot of the present time. Consequently, the test-retest reliability seems not to be appropriate for this study.

The alternative-form estimation method applies two different types of test forms which are, however, equivalent in the sense that a respondent’s true score on form A would be like the true score on form B (Davidshofer & Murphy, 2005). This again does not reflect the present research situation.

Some scholars advise against calculating split-half to assess reliability (e.g. Churchill, 1979). Churchill (1979) stresses that the problem of this approach “is that the size of this correlation depends on the way the items are split to form the two halves. With, say 10 items [...] there are 126 possible splits. Because each of these possible divisions will likely produce a different coefficient, what is the split-half reliability?” (p. 69). Therefore, this study does not apply split-half method to assess reliability.

Internal consistency determines if the indicators of a scale all measure the same underlying construct. One of the most used indicators of internal consistency is Cronbach’s  $\alpha$  (Cronbach, 1951). Calculating coefficient alpha is the appropriate method for establishing reliability in this study.

Recommendations on what constitutes a satisfactory coefficient alpha vary a lot in literature, and it depends on how and in which stage of a project a measure is being used (Peterson, 1994). In the early stages, values of 0.7 or higher are considered sufficient. Alpha values  $>0.9$  imply some possible redundancy whereas values  $<0.7$  indicate that the items do not correlate very well with one another (Peterson, 1994).

More detailed information about recommended reliability levels are presented in the table below:

*Table 40: Recommended reliability levels*

<i>Author</i>	<i>Situation</i>	<i>Recommended level</i>
Davis (1964, p.24)	Prediction for individual	Above .75
	Prediction for group of 25-50	.5
	Prediction for group over 50	Below .5
Kaplan & Saccuzzo (1982, p. 106)	Basic research	.7-.8
	Applied research	.95
Murphy & Davidshofer (1988, p. 89)	Unacceptable level	Below .6
	Low level	.7
	Moderate to high level	.8-.9
	High level	.9
Nunnally (1967, p. 226)	Preliminary research	.5-.6
	Basic research	.8
	Applied research	.9-.95
Nunnally (1978, pp. 245-246)	Preliminary research	.7
	Basic research	.8
	Applied research	.9-.95

*Source: Peterson, 1994 p. 382*

All multi-item measures used in this study were based on previous research, i.e. either studies presented in literature or the preceding qualitative study presented in chapter 5. The table below shows the reports in the literature with respect to coefficient alpha and the coefficient alpha values of the pilot and main study.

*Table 41: Coefficient alpha values*

<i>Code</i>	<i>Construct</i>	<i>Coefficient alpha reported in literature</i>	<i>Coefficient alpha of pilot study</i>	<i>Coefficient alpha of Swissmom</i>	<i>Coefficient alpha of ML</i>
C1a	Relevance	Instead of alpha, the convergent validity was reported: composite reliability (CR) and average variance extracted (AVE). “The critical values for CR and AVE are .7 and .5 respectively“ (Fornell & Larcker, 1981 cited in Cheung et al., 2008, p. 239) CR= 0.92, AVE=0.79	0.961	0.882	0.841
C1b	Timeliness	See construct “relevance”. CR=0.92, AVE=0.79	0.951	0.924	0.874
C1c	Accuracy	See construct “relevance”. CR=0.93, AVE=0.81	0.930	0.923	0.837
C1d	Comprehensiveness	See construct “relevance”. CR=0.90, AVE=0.68	0.956	0.928	0.904
C2	Social context cues	No alphas reported	0.831	0.914	0.880
C3	Perceived similarity	Items 1-3 are existing measurement scales. Item 4-5 from this existing measurement scales have been deleted as they do not fit the research context. Coefficient alpha has only been reported for the whole construct → $\alpha$ 0.86. Measurements 4-6 are derived from qualitative research.	0.971	0.937	0.904
C4	Source credibility	Expertise: CR=0.84, AVE=0.73 Trustworthiness: CR=0.91, AVE=0.83	0.963	0.932	0.912
C5	Affiliation	Derived from qualitative research → new measurement	0.909	0.957	0.851
C6	Characteristics	No alpha’s reported in Garlick’s (1993) study. Measures were adopted based on qualitative research.	0.970	0.969	0.921
C7	Interpersonal communication	Items 1-2 are existing measurement scales. Item 3-4 from these existing	0.937	0.966	0.870



		measurement scales were deleted as they do not fit the research context. Coefficient alpha has only been reported for the whole construct → $\alpha$ 0.864. Measurements 3-5 are derived from qualitative research			
C8	Online community corporate impression	$\alpha$ 0.89	0.967	0.972	0.920
C9	Attitude	$\alpha$ 0.85	0.980	0.960	0.862
C10	Intention	$\alpha$ 0.89	0.976	0.958	0.946
C11	Word of mouth	WOM praise: $\alpha$ 0.80 WOM activity: $\alpha$ 0.78	0.979	0.972	0.823

*Source: Developed for the present study*

The coefficient alphas for these measurements are high and thus explanations for these results are though. The measurements of this study can be used in making decisions in terms of corporate communication activities, namely, who should be a company representative in an online community and how should he or she behave. In addition, most of the scales were already used in several earlier studies. Thus, it might not be appropriate to speak about a preliminary research situation. In other words, as it is hypothesized that the impressions an online community member forms about a company representative have a direct impact on online community corporate impression, this could be an important decision-making instrument. Consequently, the minimum tolerable value of internal consistency should be the one of either basic research (.8) or applied (>.9) research see Kaplan and Saccuzzo (1982) or Nunnally (1978, 1967).

There are other explanations for the high internal consistency of this study, which are discussed below. According to Smith (1999), “Churchill and Peter (1984) highlight the effect of sample composition on reliability estimates. They argue that measures developed for particular subject populations may have to be redesigned for other populations and investigated before administration.” (p. 113). Further, she states that “Fitzpatrick (1990) emphasizes, with respect to health-care research, that, because

patients tend to express high values of satisfaction with most items, it is difficult to have confidence in correlations between items as a measure of the reliability of patient satisfaction measures” (p. 113). In this study, the instrument was designed to enable OCMs to assess a specific discussion and their resulting perception of it. Thus, this instrument might have to be adjusted when used in different types of OCs. It must also be noted that it can be assumed that Swissmom forum and Maurice Lacroix members are rather satisfied with the conversations that take place in the forums, or they would not participate in so many of them, and they would probably not have spent 20 minutes of their valuable time to fill in the questionnaire.

In contrast to the above discussion, very high coefficient alphas have been under attack because they imply a high level of item redundancy (Boyle, 1991) and may reflect a poor design of the measurement instrument (Smith, 1999). As discussed under section 4.6.3 discussing the pilot test, the researcher has taken this into account by conducting a second pre-test to further assess the design of the measurement instrument.

“Coefficient alpha is useful for estimating reliability in a particular case: when item-specific variance in an unidimensional test is of interest. If a test has a large alpha, then it can be concluded that a large portion of the variance in the test is attributable to general and group factors. This is important information because it implies that there is very little item-specific variance. These concepts come from Cronbach (1947) and are analogous to factor-analytic terms” (Cortina, 1993 p. 103). “One solution to such problems with the statistic is to use one of the many factor-analytic techniques currently available to make sure that there are no large departures from unidimensionality. For example, the first step in establishing unidimensionality is to conduct a principal-components analysis of a set of items. This provides information similar to that provided by the estimate of precision. If this analysis suggests the existence of only one factor, then alpha can be used to conclude that the set of items is unidimensional “(Cortina, 1993 p. 103). Taking this into consideration, unidimensionality was tested by conducting an EFA. The results are presented in the next section.

#### **6.4.2 Exploratory factor analysis**

Factor analysis was applied to evaluate the instruments' validity by testing unidimensionality of the scales (McDonald, 1981). Unidimensionality is a required condition for reliability analysis and validation of construct (Anderson & Gerbing, 1991). It defines how strongly manifest variables are associated with each other and represent a single construct (Hattie, 1985).

The sample met the required thresholds for sampling adequacy. The KMO value is 0.965 (KMO should be  $> 0.6$ ) and the Bartlett's test is significant ( $p = 0.000$ ). Therefore, factor analysis is appropriate.

EFA was employed on the data to determine whether every item was measuring only one construct. Convergent and discriminant validity were given as all items of the 14 constructs loaded higher on their own than on the other factors, except for the latent variables designated C1a-C1d and C9 and C10. To investigate this problem further, Rasch-Scaling was employed on C1a-C1d. Rasch-Scaling is a part of modern (for the past 50 years) test theory. Rasch-Scaling examines what is just assumed in the factor analysis. Factor analysis just assumes that the Likert scale is correct, e.g. that the "distance" between e.g. 1 and 2 is the same as between 4 and 5. However, a respondent may not feel like this and may consider the difference between e.g. 4 = neither agree nor disagree and 5 somewhat agree as not being the same as between 6 = agree and 7 = strongly agree (Müller, 2012). So, in brief, the Rasch model provides information about how well the items work to measure this construct. The results of Rasch-Scaling proved that C1a-C1d are not one single construct. Due to concerns regarding the four constructs, based on the results of Rasch-Scaling and on literature, where those constructs were defined and tested as four distinct constructs, the researcher decided not to change anything about them.

Most of the measures were taken from literature and thus have already been tested thoroughly. This explains the high loadings.

The measurement model specifies how the latent constructs are measured by the manifest variables. It was assessed using confirmatory factor analysis (CFA), which provided quantitative measures of the reliability and validity of the constructs. These results are presented in the section below.

## **6.5 Assessment of model identification**

One of the key requirements of SEM is overidentification. A model is overidentified if it contains more unique inputs than the number of parameters being estimated. In the present study, there are 81 manifest variables for the Swissmom study and 83 variables for the Maurice Lacroix study. The following formula can be applied to calculate the number of unique inputs:

$$\text{Number of unique inputs} = (p(p+1))/2$$

where  $p$  = the number of manifest variables. This results in  $(81(81+1))/2 = 3321$  unique inputs for the Swissmom study and  $(83(83+1))/2 = 3486$  for the Maurice Lacroix study. To get the number of parameters, we need to calculate as follows: i) 42 covariances, ii) 81 loadings and iii) 81 errors, which adds up to 204 for the Swissmom study and i) 44 covariances, ii) 83 loadings and iii) 83 errors, which adds up to 210 for the Maurice Lacroix study. Thus, the unique inputs (3321/3486) are greater than the number of parameters (204/210).

## 6.6 Assessment of the measurement model

A CFA was performed to assess overall model fit. The proposed items were specified to load on the factors determined in the conceptual model based on theory and content validity. The results indicate that the model with the specified items adequately fits the data. The tables below (from Table 42 to Table 53) present a detailed assessment of the measurement model of the Swissmom study. It includes the standardised factor loadings ( $\lambda$ ), estimates, standard errors (s.e.), z-values (critical ratios), squared multiple correlations, average variance extracted (AVE), composite reliability and Cronbach  $\alpha$  reliabilities for each construct. The tables reveal the following:

- In order to evaluate if the **parameter estimates** are sound, it was reviewed: i) whether the estimates are statistically significant, ii) whether the factors are practically important to the latent variables and iii) whether the direction is logical. The estimates are significant if the critical ratios are (z-value)  $\geq 1.96$  and  $\leq -1.96$ . The critical ratios for the estimates range from 9.467 to 40.910. The estimates are thus significant.
- The **standardised factor loadings** range from 0.584 to 0.977 (threshold values is  $\geq 0.5$ ) and are statistically significant ( $p < 0.001$ ).
- For the proportion of **variance explained (represented by SMC =  $R^2$ )**, the results should be higher than 0.30 for factors to be good. All the SMC values are more than 0.30, ranging from 0.955 to 0.341. This indicates that all the indicators of the latent variables are good factors.
- To evaluate internal consistency of constructs, two measures were used: i) composite reliability and ii) average variance extracted (AVE).

**Composite reliability** can be seen as the reliability of the summated scale and is a measure which is analogous to Cronbach's  $\alpha$  (Fornell & Larcker,

1981; Bagozzi & Yi, 1988). It does assess whether the items are adequate representations of their constructs. Composite reliability should be higher than 0.6 (Bagozzi & Yi, 1988; Fornell & Larcker, 1981) or 0.7 (Hair et al, 2010). All factors are above 0.7, and thus composite reliability is given.

**AVE** assesses the amount of variance captured by a latent construct's measures in relation to random measurement error (Fornell & Larcker, 1981). AVE varies between 0 and 1, whereas estimates that are above 0.5 are indicative of the validity of the construct (Dillon & Goldstein, 1984; Bagozzi & Yi, 1988; Fornell & Larcker, 1981). "If AVE is less than 0.50, then the variance due to measurement error is larger than the variance captured by the respective construct. Subsequently, the validity of the individual indicators, as well as the construct, is suspect" (Segars, 1997 p.113). As the tables below show, the values for all constructs except for C2 are significantly higher than the required criteria and therefore suggest good internal consistency. C2 with an AVE of 0.537 is still valid, although not significantly higher than the cut-off value of 0.5.

Detailed results of the constructs are shown in the tables below.

*Table 42: Assessment of the relevance construct*

Reliability Cronbach alpha = 0.882				Composite reliability: 0.887				Squared multiple correlations	Average variance extracted
η1 Relevance (C1a) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.723
C1a1	←	C1a	0.818	1.000				0.669	
C1a2	←	C1a	0.867	0.851	0.052	16.407	0.000	0.753	
C1a3	←	C1a	0.865	0.984	0.046	21.229	0.000	0.748	

*Source: Developed for the present study*

*Table 43: Assessment of the timeliness construct*

Reliability Cronbach alpha = 0.924				Composite reliability: 0.925				Squared multiple correlations	Average variance extracted
$\eta^2$ Timeliness (C1b) Standard factor loadings ( $\lambda$ )				Estimate	s.e.	z-value	p-value	Value	0.804
C1b1	←	C1b	0.908	1.000				0.825	
C1b2	←	C1b	0.900	0.987	0.066	14.850	0.000	0.810	
C1b3	←	C1b	0.883	1.049	0.052	20.113	0.000	0.779	

*Source: Developed for the present study*

*Table 44: Assessment of the accuracy construct*

Reliability Cronbach alpha = 0.923				Composite reliability: 0.925				Squared multiple correlations	Average variance extracted
$\eta^3$ Accuracy (C1c) Standard factor loadings ( $\lambda$ )				Estimate	s.e.	z-value	p-value	Value	0.804
C1c1	←	C1c	0.848	1.000				0.719	
C1c2	←	C1c	0.915	1.121	0.061	18.474	0.000	0.838	
C1c3	←	C1c	0.924	1.199	0.070	17.190	0.000	0.854	

*Source: Developed for the present study*

*Table 45: Assessment of the comprehensiveness construct*

Reliability Cronbach alpha = 0.928				Composite reliability: 0.932				Squared multiple correlations	Average variance extracted
$\eta^4$ Comprehensiveness (C1d) Standard factor loadings ( $\lambda$ )				Estimate	s.e.	z-value	p-value	Value	0.773
C1d1	←	C1d	0.892	1.000				0.795	
C1d2	←	C1d	0.893	0.980	0.045	21.676	0.000	0.797	
C1d3	←	C1d	0.876	1.175	0.050	23.563	0.000	0.767	
C1d4	←	C1d	0.857	0.899	0.057	15.669	0.000	0.735	

*Source: Developed for the present study*

*Table 46: Assessment of the social context cues construct*

Reliability Cronbach alpha = 0.914				Composite reliability: 0.912				Squared multiple correlations	Average variance extracted
η5 Social context cues (C2) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.537
C21	←	C2	0.738	1.000				0.544	
C22	←	C2	0.767	0.959	0.043	22.364	0.000	0.588	
C23	←	C2	0.737	0.819	0.059	13.908	0.000	0.544	
C24	←	C2	0.625	0.659	0.070	9.467	0.000	0.390	
C25	←	C2	0.584	0.652	0.063	10.406	0.000	0.341	
C26	←	C2	0.782	1.125	0.079	14.299	0.000	0.612	
C27	←	C2	0.819	1.116	0.074	15.123	0.000	0.671	
C28	←	C2	0.776	0.926	0.070	13.191	0.000	0.602	
C29	←	C2	0.735	0.933	0.075	12.428	0.000	0.540	

*Source: Developed for the present study*

*Table 47: Assessment of the perceived similarity construct*

Reliability Cronbach alpha = 0.937				Composite reliability: 0.939				Squared multiple correlations	Average variance extracted
η6 Perceived similarity (C3) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.721
C31	←	C3	0.909	1.000				0.826	
C32	←	C3	0.880	0.927	0.033	28.242	0.000	0.775	
C33	←	C3	0.880	0.922	0.037	24.799	0.000	0.775	
C34	←	C3	0.872	0.927	0.039	23.707	0.000	0.761	
C35	←	C3	0.829	0.937	0.037	25.142	0.000	0.687	
C36	←	C3	0.708	0.752	0.047	16.049	0.000	0.501	

*Source: Developed for the present study*



*Table 48: Assessment of the source credibility construct*

Reliability Cronbach alpha = 0.932				Composite reliability: 0.921				Squared multiple correlations	Average variance extracted
η7 Source credibility (C4) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.743
C41	←	C4	0.869	1.000				0.755	
C42	←	C4	0.830	0.982	0.047	20.810	0.000	0.688	
C43	←	C4	0.871	0.961	0.051	18.855	0.000	0.758	
C44	←	C4	0.879	0.987	0.050	19.754	0.000	0.772	

*Source: Developed for the present study*

*Table 49: Assessment of the affiliation construct*

Reliability Cronbach alpha = 0.957				Composite reliability: 0.952				Squared multiple correlations	Average variance extracted
η8 Affiliation (C5) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.768
C51	←	C5	0.908	1.000				0.825	
C52	←	C5	0.908	0.991	0.033	30.456	0.000	0.825	
C53	←	C5	0.972	1.154	0.061	18.771	0.000	0.944	
C54	←	C5	0.958	1.174	0.068	17.312	0.000	0.917	
C55	←	C5	0.767	0.846	0.064	13.232	0.000	0.588	
C56	←	C5	0.714	0.839	0.066	12.686	0.000	0.509	

*Source: Developed for the present study*

*Table 50: Assessment of the interpersonal communication construct*

Reliability Cronbach alpha = 0.966				Composite reliability: 0.967				Squared multiple correlations	Average variance extracted
η10 Interpersonal communication (C7) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.853
C71	←	C7	0.912	1.000				0.832	
C72	←	C7	0.946	0.946	0.025	37.440	0.000	0.895	
C73	←	C7	0.942	0.973	0.025	38.408	0.000	0.888	
C74	←	C7	0.932	0.985	0.024	40.910	0.000	0.869	
C75	←	C7	0.884	0.851	0.039	21.581	0.000	0.781	

*Source: Developed for the present study*

*Table 51: Assessment of the attitude towards Swissmom construct*

Reliability Cronbach alpha = 0.960				Composite reliability: 0.963				Squared multiple correlations	Average variance extracted
η12 Attitude towards Swissmom (C9) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.815
C91	←	C9	0.774	1.000				0.554	
C92	←	C9	0.941	1.273	0.057	22.304	0.000	0.885	
C93	←	C9	0.933	1.067	0.062	17.223	0.000	0.871	
C94	←	C9	0.950	1.119	0.060	18.592	0.000	0.902	
C95	←	C9	0.929	1.312	0.060	21.880	0.000	0.863	
C96	←	C9	0.901	1.202	0.059	20.509	0.000	0.812	

*Source: Developed for the present study*

*Table 52: Assessment of the intention to use Swissmom again construct*

Reliability Cronbach alpha = 0.958				Composite reliability: 0.947				Squared multiple correlations	Average variance extracted
η13 Intention to use Swissmom again (C10) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.857
C101	←	C10	0.966	1.000				0.934	
C102	←	C10	0.940	0.847	0.028	30.735	0.000	0.884	
C103	←	C10	0.867	0.739	0.040	18.709	0.000	0.752	

*Source: Developed for the present study*

*Table 53: Assessment of the word-of-mouth construct*

Reliability Cronbach alpha = 0.972				Composite reliability: 0.973				Squared multiple correlations	Average variance extracted
η14 Word-of-mouth (C11) Standard factor loadings (λ)				Estimate	s.e.	z-value	p-value	Value	0.900
C111	←	C11	0.937	1.000				0.879	
C112	←	C11	0.927	0.897	0.037	24.540	0.000	0.859	
C113	←	C11	0.977	0.992	0.025	39.753	0.000	0.955	
C114	←	C11	0.952	1.022	0.027	37.733	0.000	0.906	

*Source: Developed for the present study*

For the two formative constructs C6neu and C8neu, the measurement model was not assessed as “a formative measurement model, in isolation, is underidentified and, therefore, cannot be estimated” (Diamantopoulos et al., 2008 p. 3).

To validate the measurement instrument a second study was conducted using a different study site, namely the Maurice Lacroix Facebook Group. The following is a summary of the assessment of the measurement model of the Maurice Lacroix study:

- **Parameter estimates:** the critical ratios for the estimates range from 9.637 to 23.477 The estimates are thus significant.
- The **standardised factor loadings** range from 0.595 to 0.983 (threshold values is  $\geq 0.5$ ) and are statistically significant ( $p < 0.001$ ).
- For the proportion of **variance explained (represented by  $SMC = R^2$ )**, the results should be higher than 0.30 for factors to be good. All the SMC values are more than 0.30, ranging from 0.353 to 0.966. This indicates that all the indicators of the latent variables are good factors.
- To evaluate internal consistency of constructs, two measures were used: i) composite reliability and ii) average variance extracted (AVE).

**Composite reliability:** all factors are above 0.7 ranging from 0.823 to 0.934, and thus composite reliability is given.

**AVE:** the values for all constructs except for C2 and C5 are higher than the required criteria and therefore suggest good internal consistency. The values for C2 (0.441) and C5 (0.474) are a little lower than the cut off value.

### **6.6.1 Reliability and validity of constructs**

As stated by Peter and Churchill (1986), “reliability is the degree to which measures are free from random error and thus reliability coefficients estimate the amount of systematic variance in a measure. That is, an observed score for an object or person can be considered to be a function of three components: the subject’s or object’s ‘real’ score, systematic error, and random error. Random error affects the reliability of the measure. To the extent the random error component is large, the measure is unreliable. Systematic error, though, does not reduce reliability and a large amount of systematic error could be present in a very reliable measure. This is why it is often argued that reliability is a necessary but not sufficient condition for validity” (Peter and Churchill, 1986 p. 4). To assess reliability of the measurements, three analyses were carried out: i) Cronbach alpha, ii) composite reliability and iii) average variance extracted (AVE). Details can be seen above. As already discussed in 6.6 and 6.4.1 for Cronbach alpha, the reliability of the constructs is given.

As reliability is not a good enough condition for validity, it is “posited to be related positively to convergent and nomological validity estimates, but also to produce less favourable (higher) discriminant validity estimates” (Peter & Churchill, 1986 p. 4). Hence, the following section discusses convergent validity, discriminant validity and nomological validity.

#### **6.6.1.1 Convergent validity**

Internal consistency of the constructs was measured by convergent validity, which is assessed based on: i) the composite reliability ( $\geq 0.78$ ), ii) the average variance extracted ( $\geq 0.5$ ) and iii) Cronbach alpha ( $\geq 0.7$ ) (Fornell & Larckers, 1981; Anderson & Gerbing, 1988). As illustrated in the tables above (Table 42 to Table 53), all values for the Swissmom sample are good indicators of convergent validity. For the Maurice Lacroix sample, Cronbach alpha values range from 0.823 to 0.946,

and composite reliability values from 0.823 to 0.934. Except for two, all values of AVE are  $\geq 0.5$ .

#### **6.6.1.2 Discriminant validity**

The discriminant validity of a proposed scale is given if the variables used to measure the construct are not suitable for measuring other constructs. “Discriminant validity is assessed by estimating an alternative model where the correlation between constructs is constrained to unity of zero. The difference in  $\chi^2$  values between restricted and freely estimated models provides statistical evidence of discriminant validity” (Segars, 1997 p. 113). In other words, “discriminant validity can be assessed for two estimated constructs by constraining the estimated correlating parameter between them to 1.00 and then performing a chi-square difference test on the values obtained for the constrained and unconstrained models” (Anderson & Gerbing, 1988 p. 416). Discriminant validity was assessed via  $\chi^2$  tests for every pair of estimated. This was done by comparing  $\chi^2$  obtained from a constrained and an unconstrained model, where the correlation between two constructs was set to zero.

Bagozzi and Philips (1982) emphasise that “a significantly lower chi-square value for the model in which the trait correlations are not constrained to unity would indicate that the traits are not perfectly correlated and the discriminant validity is achieved” (p. 476). The results indicate that for both samples, discriminant validity is given between all the factors since the  $\chi^2$  values of the unconstrained model are all considerably lower than the ones of the constrained model (detailed presentation of the results can be found in Appendix).

Additionally, discriminant validity has been assessed by comparing the constructs' correlations with the square roots of AVE (see Table 54 and Table 55).

*Table 54: Assessment of discriminant validity II – Swissmom sample*

	C1a	C1b	C1c	C1d	C2	C3	C4	C5	C7	C9	C10	C11
C1a	<b>0.850</b>											
C1b	0.796	<b>0.896</b>										
C1c	0.820	0.664	<b>0.896</b>									
C1d	0.782	0.685	0.834	<b>0.879</b>								
C2	0.580	0.420	0.683	0.692	<b>0.732</b>							
C3	0.658	0.600	0.634	0.675	0.548	<b>0.849</b>						
C4	0.763	0.617	0.800	0.819	0.751 <sup>2</sup>	0.706	<b>0.862</b>					
C5	0.331	0.271	0.370	0.346	0.517	0.258	0.457	<b>0.876</b>				
C7	0.691	0.597	0.717	0.749	0.703	0.596	0.695	0.342	<b>0.924</b>			
C9	0.715	0.593	0.676	0.768	0.668	0.613	0.711	0.356	0.822	<b>0.903</b>		
C10	0.591	0.536	0.600	0.689	0.561	0.555	0.588	0.355	0.754	0.911 <sup>3</sup>	<b>0.926</b>	
C11	0.629	0.588	0.683	0.731	0.576	0.571	0.711	0.337	0.742	0.866	0.836	<b>0.949</b>

Diagonal elements are square roots of AVE.

Source: Developed for the present study

<sup>2</sup> The construct pair C4-C2 does not meet the discriminant validity test of Fornell and Larckers (1981) but meets that of Anderson and Gerbing (1988).

<sup>3</sup> The construct pair C10-C9 does not meet the discriminant validity test of Fornell and Larckers (1981) but meets that of Anderson and Gerbing (1988).

*Table 55: Assessment of discriminant validity II – Maurice Lacroix sample*

	C1a	C1b	C1c	C1d	C2	C3	C4	C5	C7	C9	C10	C11
C1a	<b>0.802</b>											
C1b	0.532	<b>0.838</b>										
C1c	0.566	0.569	<b>0.796</b>									
C1d	0.523	0.631	0.627	<b>0.841</b>								
C2	0.483	0.546	0.599	0.730	<b>0.664</b>							
C3	0.489	0.471	0.446	0.484	0.413	<b>0.784</b>						
C4	0.454	0.532	0.595	0.609	0.663	0.486	<b>0.849</b>					
C5	0.249	0.344	0.270	0.309	0.384	0.086	0.393	<b>0.688</b>				
C7	0.359	0.467	0.540	0.643	0.638	0.376	0.526	0.260	<b>0.756</b>			
C9	0.287	0.498	0.396	0.555	0.499	0.389	0.452	0.172	0.689	<b>0.716</b>		
C10	0.237	0.416	0.386	0.440	0.383	0.300	0.327	0.107	0.565	0.611	<b>0.908</b>	
C11	0.260	0.364	0.358	0.499	0.480	0.348	0.480	0.177	0.572	0.722 <sup>4</sup>	0.550	<b>0.732</b>

Diagonal elements are square roots of AVE.

Source: *Developed for the present study*

The diagonal line (highlighted in bold) shows the square roots of AVE for each construct. This value has to be higher than any correlation values below it, indicating an acceptable level of discriminant validity (Fornell & Larckers, 1981). These results also indicate that discriminant validity is given.

### 6.6.1.3 Nomological validity

The nomological validity assesses whether the measures behave as expected (Peter & Churchill, 1986). The nomological aspect of construct validity was assessed using the correlation matrix (Hair et al., 2006). The nomological aspect of construct validity was ascertained by correlating the scales of the model with two variables which the literature suggested were related to aspects of impression formation (Peter & Churchill, 1986). These two variables are described below.

<sup>4</sup> The construct pair C11-C9 does not meet the discriminant validity test of Fornell and Larckers (1981) but meets that of Anderson and Gerbing (1988).

Individuals have differing motivations for accessing online communities. Some do so purely to gather information, without any interest in social interaction, while others are there for primarily social purposes. Bagozzi and Dholakia (2002) distinguish between *network-based online communities* and *small group-based communities*. In network-based communities, the main motives are informational and instrumental, whereas in small group-based communities, social benefits are the main reason for participation. Based on Popp et al.'s (2008) study of motives for participation, we refer to 'network-based communities' motives as 'brand motives', and to 'small-group-based communities' motives as 'social motives'. The following relationships were expected:

- H14: The members with brand motives have higher values for the construct relevance (C1a) than the members with social motives.
- H15: The members with brand motives have higher values for the construct accuracy (C1c) than the members with social motives.
- H16: The members with brand motives have higher values for the construct comprehensiveness (C1d) than the members with social motives.
- H17: The members with social motives have higher values for the construct social context cues (C2) than the members with brand motives.
- H18: The members with social motives have higher values for the construct perceived similarity (C3) than the members with brand motives.
- H19: The members with brand motives have higher values for the construct source credibility (C4) than the members with social motives.
- H20: The members with social motives have higher values for the construct characteristics (C6neu) than the members with brand motives.
- H21: The members with social motives have higher values for the construct interpersonal communication (C7) than the members with brand motives.
- H22: The members with social motives have higher values for the construct corporate image (C8neu) than the members with brand motives.
- H23: The members with social motives have higher values for the construct attitude (C9) than the members with brand motives.



- H24: The members with social motives have higher values for the construct intention (C10) than the members with brand motives.
- H25: The members with social motives have higher values for the construct word of mouth (C11) than the members with brand motives.

All anticipated linkages were unfortunately not significant and provided no support for the nomological validity. Therefore, the author went back to literature to look for additional tests of nomological validity. Larger (2000) as well as Steenkamp and Trijp (1991) suggest that nomological validity can be assessed by looking at the measurement model's overall fit. All fit indices (see 6.6.1.2) show good levels of fit therefore nomological validity was confirmed according to Larges (2000) and Steenkamp and Trijp (1991). Furthermore, the path estimation (hypothetical relations) was performed for both samples (Chin, 1998). The second study did confirm the significance of some of the path estimates of the first study. Moreover, nine hypotheses out of thirteen were significant.

#### **6.6.1.4 Measurement errors**

**Measurement errors** should not have any covariances. However, in the present measurement model we can find some correlated errors (see Table 56 and Table 57).

Correlated errors in measurement models indicate that the distinctive variances of the manifest variable overlap. In other words they either measure something in common additional to the latent constructs, or the association is unanalyzed – is unknown (Müller, 2012). Explanations for correlated errors comprise a common method of measurement or that two items are both multidimensional in that they assess more than one latent construct. A further possibility for items involves very similar wording (Müller, 2012). Sources for correlated within-factor measurement errors could be: i) the presence of another common factor or direct causal relations between items (e.g. one indicator partly "causes" the answer to the subsequent indicator in a survey). As can be seen in Table 56 and Table 57, all correlations are within a factor.

The measurement error covariances were specified explicitly in the model and were modelled and estimated. As shown in the tables below, all measurement error covariances of the Maurice Lacroix sample are considerably lower than those of the Swissmom sample. The covariances between C41 and C42 as well as C43 and C44 are no longer significant in the Maurice Lacroix sample.

*Table 56: Measurement error covariances – Swissmom sample*

<i>Items</i>	<i>Estimate</i>	<i>SE</i>	<i>z-value</i>	<i>p-value</i>
C21 – C22	0.695	0.110	6.304	0.000
C27 – C28	0.360	0.095	3.772	0.000
C41 – C42	0.170	0.058	2.918	0.004
C43 – C44	0.170	0.052	3.238	0.001
C51 – C52	0.285	0.114	2.507	0.012
C55 – C56	0.594	0.143	4.164	0.000
C102 – C103	0.365	0.115	3.168	0.002

*Source: Developed for the present study*

*Table 57: Measurement error covariances – Maurice Lacroix sample*

<i>Items</i>	<i>Estimate</i>	<i>SE</i>	<i>z-value</i>	<i>p-value</i>
C21 – C22	0.298	0.065	4.567	0.000
C27 – C28	0.157	0.046	3.439	0.001
C41 – C42	-0.009	0.035	-0.248	0.804
C43 – C44	0.045	0.030	1.514	0.130
C51 – C52	0.123	0.046	2.695	0.007
C55 – C56	0.142	0.061	2.311	0.021
C102 – C103	0.097	0.039	2.476	0.013

*Source: Developed for the present study*

### 6.6.2 Goodness of fit

The majority of the statistical methods require a single statistical test for determining the significance of the analyses conducted. In CFA, various statistical tests are used. In addition to the  $\chi^2$  test, a number of goodness-of-fit (GOF) tests are produced as an indication of how well the data fit the model. The power of statistical tests assessing GOF often varies according to sample size. Given this fact, scholars have proposed a variety of additional GOF indices which are all some function of the  $\chi^2$  and the  $df$ . The GOF can be divided into i) absolute fit indices, ii) incremental fit indices and iii) parsimony fit indices.

The **absolute fit indices** used in the study are Satorra-Bentler scaled  $\chi^2$ , degrees of freedom ( $df$ ), p-value, RMSEA. The **incremental fit indices** NFI, CFI and TLI as well as a **parsimony fit index**, namely the normed  $\chi^2$ , are also used.

The GOF estimates of the measurement model exceed the threshold values recommended in the extant literature (for review, see 4.6.7.2) except for NFI, which is slightly below the recommended value of 0.9:

*Table 58: GOF estimates of the measurement model*

	Swissmom sample	Maurice Lacroix sample
CFI	0.954	0.959
TLI	0.950	0.956
NFI	0.877	0.869
RMSEA	0.041	0.026
SRMR	0.048	0.039

*Source: Developed for the present study*

In addition, the ratio of  $\chi^2 = 2126.6$  (p-value 0.000) over  $df = 1411$  is 1.507 for the Swissmom sample and the ratio of  $\chi^2 = 1776.6$  (p-value 0.000) over  $df = 1411$  is 1.259 for the Maurice Lacroix sample, which is smaller than 3 as suggested by Fornell and Larcker (1981), and thus also indicates a good fit of the model.

### 6.6.3 Common method variance

All of the data were collected using one questionnaire, and thus the potential for a common method variance exists. According to Hair et al. (2006), it infers that the covariance between observed variables is due to the fact that responses are collected with the same sort of scale.

Common method bias was assessed in three steps: i) the Harman's one-factor test, ii) controlling for the effect of an unmeasured latent methods factor (Podsakoff et al., 2003) and iii) adding a second-order factor to the model (Hair et al., 2006).

The Harman's (1967) one-factor test was conducted to test if a common method variance exists. Therefore, the author followed the method suggested by Podsakoff et al. (1984). Exploratory factor analysis with varimax rotation was performed by entering all the items of the study at once. If a single factor emerges or one factor explains more than 50% of the covariation a common method variance exists (Podsakoff et al., 1984). The results of the analysis show no single factor, nor does one factor explain more than 50% of the covariation. Thus, it can be concluded that there is no concern of a common method bias.

By controlling for the effects of a single unmeasured latent method factor, a first-order factor was added "with all of the measures as indicators to the researcher's theoretical model" (Podsakoff et al, 2003, p. 894). Podsakoff et al. (2003) stress that one of the main "advantages of this technique is that it does not require the researcher to identify and measure the specific factor responsible for the method's effects. In addition, this technique models the effect of the method factor on the measures rather than on the latent constructs they represent and does not require the effects of the method factor on each measure to be equal" (p. 894). This approach, however, only worked when all measurement factor loadings were constrained to be equal, otherwise the model could not be identified. Podsakoff et al. (2003) also stress this issue as being a potential problem. In the model which includes the method factor, all constructs are relatively unchanged, except for the construct C2. Half of

the items of C2 were no longer significantly related. Due to these issues, an alternative approach was chosen: a second-order factor was added to the model (Hair et al., 2006). According to Hair et al., (2006) a second-order factor can be interpreted as a common method factor. The table below shows the fit indices of both models.

*Table 59: First- and second-order models*

	First-order model	Second-order model
CFI	0.959	0.937
TLI	0.956	0.933
NFI	0.869	0.848
RMSEA	0.026	0.031
SRMR	0.039	0.058

*Source: Developed for the present study*

The indices of the second-order model are all a little lower than the first-order model. The second-order factor, however, is inevitably a little lower as fewer parameters are adjusted. Thus, it has to be expected that all the fit indices that do not consider (or do not well enough) the number of parameters are worse than the ones which do. Hence, only fit indices which are not sensitive to the number of parameters should be considered. The RMSEA of the first-order model is better than the one of the second-order model and thus it can be argued that the first-order model fits the data better. Furthermore, the factor loadings of the second-order model are very similar to the ones of the first-order model. Therefore, it can be concluded that a second-order factor, which might be down to a common method factor, does not play a role (Müller, 2013).

## 6.7 Assessment of the structural model

This section discusses the assessment of the structural model and presents graphical representations of the model as well as the regressions. The structural model specifies which latent constructs influence other latent constructs (Byrne, 2001). Following Anderson and Gerbing (1988), structural model testing was only conducted after the measurement model was validated. The theoretical model containing 14 latent constructs was specified to test the path that is represented in the hypothesis (for review, see chapters 3 and 5). The coefficient parameter estimates were examined and the GOF indices assessed to determine if the hypothesised model fits the data.

Lleras (2005) stated that “path models often report the standardized regression coefficients (beta) or estimated path coefficients that have been converted into standardized z-scores. Standardized coefficients allow researchers to compare the relative magnitude of the effects of different explanatory variables in the path model by adjusting the standard deviations such that all the variables, despite different units of measurement, have equal standard deviations” (p. 27). The table below presents the estimated path coefficient (estimates), the z-value (z-score) as well as the standardized regression coefficient. The relative strength of the influence of an independent to a dependent variable is measured by the standardized regression coefficients.

The significance or insignificance of the relationships between the latent constructs is determined by the critical ratio (z-statistic). In order to be able to reject the null hypothesis, the critical ratio (z-value) needs to be larger than  $\pm 1.96$ , based on a level of  $p < 0.05$ .

*Table 60: Regressions of the model*

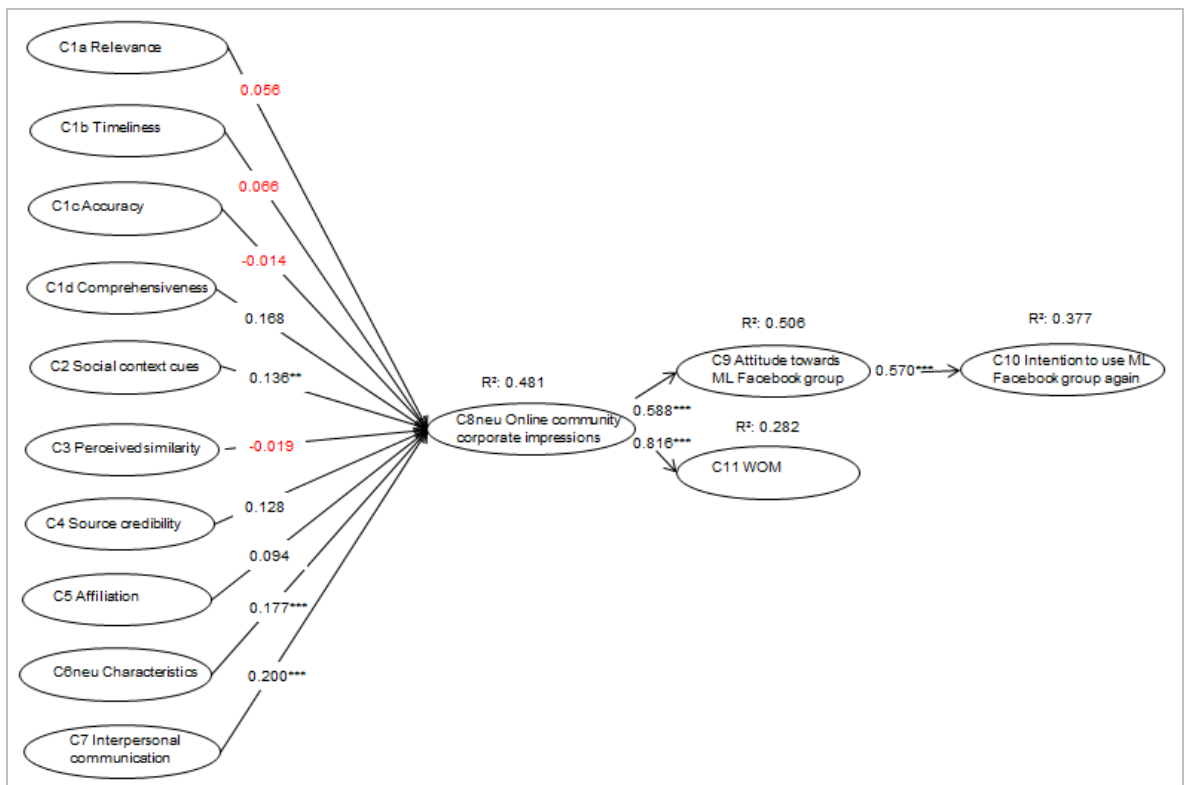
<i>Hypothesis</i>				<i>Estimate</i>	<i>s.e.</i>	<i>z-value</i>	<i>p-value</i>	<i>Standardised regression coefficient</i>	<i>Hypothesis</i>
H1	C1a	→	C8neu	0.405	0.360	1.125	0.261	0.056	Reject
H2	C1b	→	C8neu	0.592	0.443	1.336	0.181	0.066	Reject
H3	C1c	→	C8neu	-0.125	0.517	-0.242	0.809	-0.014	Reject
H4	C1d	→	C8neu	1.312	0.500	2.623	0.009	0.168	Accept
H5	C2	→	C8neu	1.393	0.677	2.059	0.039	0.136	Accept
H6	C3	→	C8neu	-0.119	0.277	-0.430	0.667	-0.019	Reject
H7	C4	→	C8neu	1.218	0.542	2.246	0.025	0.128	Accept
H8	C5	→	C8neu	1.018	0.487	2.090	0.037	0.094	Accept
H9	C6neu	→	C8neu	0.057	0.011	5.361	0.000	0.177	Accept
H10	C7	→	C8neu	1.466	0.414	3.539	0.000	0.200	Accept
H11	C8neu	→	C9	0.059	0.006	10.147	0.000	0.588	Accept
H12	C9	→	C10	0.742	0.056	13.258	0.000	0.570	Accept
H13	C8neu	→	C11	0.051	0.005	10.332	0.000	0.505	Accept

*Source: Developed for the present study*

The results of the model indicate a support for H4 and H5 as well as H7 – H13. However, the results indicate that H1-H3 need to be rejected because relevance, timeliness, and accuracy have an insignificant effect on OCCIP. Furthermore, perceived similarity has an insignificant effect on OCCIP and thus is also rejected. The model explained 48% of the variance in online community corporate impression and predicted 50% of the variance in attitude towards Maurice Lacroix, 38% of the variance in intention to use Maurice Lacroix again, and 28% of the variance in word of mouth. According to Chin (1998), models with a  $R^2$  as 0.67, 0.33, and 0.19 are considered to be substantial, moderate, and weak respectively. Following the criterion of Chin (1998), the  $R^2$  of the model (0.48, 0.5, 0.38 and 0.28) is not particularly high, however, it can be considered moderate.

The structural model presented in the table above is visualised in the path diagram below (a larger picture can be found in Appendix).

Figure 34: Graphical representation of the model<sup>5</sup>



Source: Developed for the present study

The overall fit measures put forward that the model is close to being an acceptable representation of the structures underlying the empirical data. However, not all of the indices clearly exceed the recommended threshold values (for review, see 4.6.7.2): CFI, 0.931, TLI 0.926, NFI 0.833, RMSEA 0.038, and SRMR 0.109. In addition, the ratio of  $\chi^2 = 2424.968$  (p-value 0.000) over  $df = 1540$  is 1.575, which is smaller than 3 as suggested by Fornell and Larcker (1981); thus, it also indicates a good fit of the model.

<sup>5</sup> Standardised regression coefficients were chosen to indicate the parameter estimates. \*\* significant at  $p \leq 0.001$ . \*\*\* significant at  $p < 0.0001$ .



## **6.8 Summary**

This chapter presented the results of the quantitative study. The purpose of the quantitative study was to explore the relationship between communication activities taking place in online communities and online community corporate impression.

Firstly, the sample characteristics and data examination were presented. Reliability and unidimensionality were tested followed by the assessment of the measurement model and the structural model using the R lavaan package. Following that, the results of the hypotheses tests were presented. This study found that in terms of the initial conceptual framework only six hypotheses were supported. Subsequently, by applying the process of model-trimming, an alternative model was found. The results presented in this chapter are further discussed in the next chapter.

## Chapter 7 - Discussion

### 7.1 Introduction

This study sets out with the aim of evaluating the difficulties companies encounter when communicating with OCMs and how this impacts their impression. It was designed to determine the relationships among corporate communication in online communities and impression formation. Online platforms on which people interact are here to stay and their importance is still growing. This has also been discovered by companies, which increasingly include online communities in their communication activities. Three academics who have recently been interviewed confirm this. These interviews were conducted to verify some of the information contained herein. Since this study took several years to be completed, the author wanted to make sure that online communities are still a hot topic and that businesses still use them for communication activities. The academics who were contacted emphasise the on-going importance of online communities:

*“Yes, in Switzerland we see that more and more companies use online communities on various channels/platforms to communicate with their stakeholders and to facilitate the interaction between customers, employees or other communication stakeholders” (Ledergerber, 2013).*

*“Oh yes, there is an almost dramatic shift – before it was nice to have, now it’s a must (in BTC)” (Steinmann, 2013).*

*“Today a company cannot neglect the online media and most companies I’ve investigated have implemented communication strategies using online communities” (Kaul, 2013).*

Since online communities are increasingly being used for communication, they have become an important element in companies' efforts to project a positive impression. It is therefore vital for managers to understand how impressions are formed in online communities, how this communication channel must be managed and what needs to be done to ensure that this group of stakeholders forms a positive impression of the company in question.

The results of the current study were presented in chapter 6. This chapter discusses the validation of the measurement model and the evaluation of the research hypothesis in more detail. First, an overview of the study is provided, which is followed by a discussion on issues which arose in the context of measurement scales. Next, the focal construct is presented and a discussion of the hypotheses is provided.

## **7.2 Overview of the study**

In order to link corporate communication activities to impression formation in online communities, literature in computer-mediated communication, impression formation, corporate identity and corporate image was reviewed.

The theoretical foundation of this study is Goffman's (1959) theory of self-presentation that refers to how individuals "perform an expression of themselves to others. This expression is usually intended to form a favourable and amicable impression" (Laughey, 2007 p. 79). Individuals produce a variety of roles on various social stages, according to Goffman (1959), and thus they create different identities. This identity production can also be observed online and has been adopted by companies. The production of a company's identity in online environments results in impressions that are formed by the constituencies.

This study focuses on impression formation in an online community and, thus, the theories of computer-mediated communication (CMC) were thoroughly studied. Initial studies in CMC indicate that many social context cues are absent or reduced

and thus communication is less effective (Short et al., 1976; Daft & Lengel, 1984). Later theories claim that CMC has the ability to convey social cues (Reicher, 1984; Walther, 1992). Walther (1996) found that even with fewer social cues, CMC does form impressions, although this may not be as immediate as face-to-face communication. Individuals create simple impressions and test them over time. The CMC cues include such aspects as emoticons, user names, descriptions and the dialogues in which individuals engage (Walther, 1996).

Controlled and uncontrolled corporate communication, which are an important part of corporate identity have been investigated thoroughly by many scholars (e.g. Christensen & Askegaard, 2001; Dacin & Brown, 2002). However, no data was found on the relationship between corporate communication activities in online communities and their effect on impressions. Furthermore, companies often do not really know what impact their communication activities have on online media. Many of their activities are still based on “trial and error” (Sulzer, 2013).

To investigate the research problem, a sequential multi-method approach was adopted (Creswell, 2003). It started off with a qualitative investigation that helped to discover the key aspects of the constructs, which provided the foundation for the quantitative research. Further, it tested the face validity of the conceptual model and helped to gain additional knowledge relating to corporate communication in online communities and impression formation. In stage one of the qualitative study, seventeen expert interviews were conducted to clarify the concepts and their relationships and gain new insights from practitioners and academics. In stage two, netnography methods were employed, i.e. twelve online community members were interviewed to adjust an existing measurement scale of online impression formation and clarify constructs. Netnography was also used to observe Swissmom in order to get to know the platform itself, as well as the OCMs and the topics discussed on Swissmom.

In the second phase, quantitative methods were used to generalize from the sample to the whole population of the online community. A questionnaire was developed based

on a thorough literature review and the findings of the qualitative research. It was a cross-sectional study in which OCMs were interviewed by means of a structured, self-administered online questionnaire. Two quantitative studies were conducted; the first study collected data in the Swissmom online community, while the second study was conducted in the Maurice Lacroix community. This data was used to validate the measurement model and test the hypothesised relationships.

This study proposes a conceptual model consisting of complex latent constructs, and thus data were analysed using structural equation modelling. The analysis was conducted using the lavaan package of R, and the results showed that online community corporate impression is a unidimensional construct in this study. In addition, the constructs measured indicated a high degree of reliability, convergent, discriminant and nomological validity. Some of the pathways were confirmed as being statistically significant, while others were not. There were acceptable fit indices for both the measurement and the structural model.

### **7.3 Measurement scales**

With respect to the measurement scales, two issues need to be discussed in more depth. First, the measurement error covariances need to be addressed, followed by the discussion of the problems of multicollinearity.

#### **7.3.1 Measurement error covariances**

Measurement errors of the items of a measurement model should not have any covariances. However, as can be seen in Table , there are seven covariances of measurement errors. Measurement error covariances can be caused by a *common method of measurement* or by the fact that indicators might measure more than one construct (Müller, 2012). As has been described in chapter 6, there is no common method bias, and the measurement scales are unidimensional.

As is shown in Table , all measurement errors are correlated within one factor. This might imply the existence of another common factor or direct causal relations between items (Müller, 2012). No causal relations with a measurement error variance could be identified among these indicators.

Another issue is very similar wording for items. If the items are nearly identical, the errors are correlated. However, the possibility is also given that items may group more tightly than others on the same latent variable (Müller, 2012).

Items C21 and C22 are both related to “time”, which could be the reason why they have correlated measurement errors. The wording, however, is not too similar, and neither in pre-test 1 nor in pre-test 2 was the wording of these items challenged. The items C27 and C28 have similar wordings: one is a question about user name and the other one about user status. While the sentences are quite similar, user name is fairly different from user status. All the source credibility items (C41-C44) address the credibility and expertise of the COR, and even if each question does refer to a different aspect of source credibility, those aspects might not be very different in the perception of the OCMs. With respect to C51 and C52, those two items are worded very similarly, and this might cause this high correlation. In contrast, C55 and C56 are not only worded very different, but they also address a different aspect of the construct affiliation. Regarding the items C102 and C103, the wording is very similar; however this is a well-established construct that has already been used in numerous studies. The measurement error covariances of the Maurice Lacroix sample are considerably lower than those of the Swissmom sample. The covariances between C41 and C42 as well as C43 and C44 are no longer significant in the Maurice Lacroix sample. Nevertheless, the author suggests further investigation into these items, especially with regards to wording.

### 7.3.2 Problems of multicollinearity

Chapter 6 refers to a possible problem of multicollinearity for the Swissmom sample. There is not problem of multicollinearity for the Maurice Lacroix sample. The possible problem of multicollinearity for the Swissmom sample is discussed in more detail below.

As already mentioned in chapter 6, multicollinearity can influence the strength of the estimates and inflate standard errors (Kaplan, 1994; Kent, 2000). The consequence of that is that a Type II error can be committed. Grewal et al. (2004 p. 526) propose a set of rules for the likelihood of a Type II error:

- “When multicollinearity is extreme (around 0.95), Type II error rates are generally unacceptably high (above 80%).
- When multicollinearity is between 0.6 and 0.8, Type II error rates can be substantial (greater than 50% and frequently above 80%) when composite reliability is weak ( $\leq 0.7$  or),  $R^2$  is low (0.25), and sample size is relatively small. However, as reliability improves (0.80 or higher),  $R^2$  reaches 0.75, and the sample becomes relatively large, Type II error rates become negligible (below 5%).
- When multicollinearity is between 0.4 and 0.5, Type II error rates tend to be quite small, except when reliability is weak ( $\leq 0.7$  or below),  $R^2$  is low (0.25), and sample size is small, in which case error rates can still be high ( $> 50\%$ )”.

The bivariate correlation matrix shows that there are three bivariate correlations of independent variables with an intercorrelation of around 0.8. Since the study has a reasonable sample size, this was not investigated further, while composite reliability as well as  $R^2$  need to be examined. As shown in Table , composite reliability for all factors is above 0.8. However, neither are all  $R^2$  of the initial model (before trimming) above 0.75 ( $R^2$  ranging from 0.623 to 0.780) nor are all  $R^2$  of the trimmed model higher than 0.75 ( $R^2$  ranging from 0.711 to 0.835). The discussion above shows that, as stated in chapter 6, the study may have a multicollinearity problem.

In chapter 6 collinearity between the variables C51 and C52, C53 and C54, as well as C73 and C74 were reported. The variables C51-C54 are variables of the construct affiliation. This construct has faced a few problems (see discussion below) and will need to be investigated further in future research, see chapter 8. The items C73 and C74 stem from qualitative research. Those items will have to be questioned and further investigated. Questions such as, do they measure the same, should be posed.

## **7.4 Focal construct**

The focal construct of this study is online community corporate impression (OCCIP), which was deduced from the construct corporate imag. This study basically aims to understand how impressions formed in online communities are influenced by variables working in the online community context. The literature review has revealed a substantial shortage of academic research regarding the role of corporate impression formation in online communities. Even though more and more people gather online, and companies as well as individuals interact on online platforms, very little has been investigated on the question of how the interactions might influence the impressions one forms about a company.

Corporate images are immediate impressions about a company built on an individual level (Brown, 1998). A company thus has several images which are held by various groups of stakeholders. Each group has different contacts and therefore forms other impressions about a company (e.g. Abratt, 1989; Bernstein, 1984; Brown, 1998; Dowling, 1988; Gray, 1986; Spector, 1961; Topalian, 1984). Corporate image can be said to be an aggregation of impressions an individual forms in a certain type of interaction with the company. Because in online communities, it is not the company as persona but a COR who communicates with the audience, the OCMs are immediately influenced by the COR. It is they who undertakes the corporate communication activity. Thus, this study addresses one element of corporate image, the OCCIP. Hence, the OCCIP is the immediate mental picture online community members (one specific group of stakeholders) have of the company.



The research sites are two online companies that provide a service (information) and a product to their customers respectively. The first research site is a website of firm called Swissmom that provides information on a wide range of topics to its online community members. The second company online community site that was studied is Maurice Lacroix's Facebook Group, which discusses topics on premium class to luxury watches. Many corporate image scales are not suitable to measure corporate image in this specific context as they include elements such as products, product quality, sales staff, points of sales, after-sales services, and many more. Hence, the author initially proposed to use a very generic measurement scale (including 3 items). During the content validity process, this measurement scale was challenged and considered insufficient to measure the focal construct. Thus, the author went back to the literature and, based on an additional literature review and the results of the content validity process, she used the scale "website perceptions" to measure OCCIP. The communities investigated are online communities (in physical terms: a website) which provide a service and have discussions about products respectively. As presented in Table 6, corporate image can be treated in many ways. Some researchers, for example, treat it as impression (e.g. Williams & Moffit, 1997) and others as perceptions (e.g. Karaosmanoglu & Melewar, 2006). Based on the above statements, the author decided on "website perceptions" as an appropriate measurement scale. The measurement scales have been adjusted according to the input of 54 OCMs of the Maurice Lacroix community. The two pre-tests with the Swissmom OCMs and one pre-test with the Maurice Lacroix OCMs, as well as the main survey have confirmed that this measurement scale is suitable for measuring OCCIP in the context of the present study. The appropriateness of this scale is supported by findings of the qualitative research. Expert Interviewee 8 (2010) stresses that the "quality of message" (= item *high quality*) and the fact that it should be "fun to read" (= item *appealing* or *exciting*) might be underlying components in impression formation in an online community. Other experts concur:

*"Is it informative, useful and interesting content? Does it mostly appeal to the OC member?" (Expert Interviewee 12, 2010).*

*“Is it interesting and appealing content for OC members? OC members need to be excited about the company and thus about what the company has to say” (Expert Interviewee 16, 2010).*

Moreover, during an interaction with a COR on an online community an OCM does form an impression of the company (for review see Table 30). Thus, the communication activities on online communities need to be added into the discussion of corporate image formation.

## **7.5 Discussion of the hypothesis tests**

Based on literature review (see chapter 2) and the findings of the qualitative study, thirteen hypotheses were put forward. The qualitative findings confirmed that there are ten hypotheses that are related to antecedents of OCCIP and three that are linked to the consequences of OCCIP. However, the findings of the qualitative study indicated that three constructs that have been proposed based on literature were not considered to be important in predicting OCCIP, namely, informal communication, social presence and interactivity. These constructs are briefly discussed below.

*Informal communication:* Some sources claim that communications on online platforms have to be conducted in the “language” of the target audience (Zerfass, 2005). In other words, they should be open, honest and informal. However, only 50% of the community interviewees (OCMs) believe that communication style has an impact on impression formation. A company is not necessarily expected to use an informal style of communication, as they are considered to be experts in the field under discussion, and an expert is expected to speak more formally. This view is not necessarily supported by the experts. 94% of the expert interviewees think that communication style is important. This might be due to the fact that the experts take their company’s point of view, whereas the community members speak from their own perspective. To illustrate this, here are three statements by experts:

*“You need to talk with the community members as if they were talking to you directly face to face, take them seriously, and don’t lose yourself in standardized phrases” (Expert Interviewee 1, 2010).*

*“It has to be a more informal style, however it has to happen within the context of a well-behaved polite adult human being” (Expert Interviewee 6, 2010).*

*“Communities always speak the language of the target audience, since it grows and develops with its members, meaning the target audience. The communication style thus differs from community to community and cannot generally be put down to one common point” (Expert Interviewee 15, 2010).*

Nevertheless, because only 33% of the OCMs consider informal language to be an important predictor of online community corporate impression, and since it seems that the communication style very much depends on the type of community, this construct was not included in the main study.

*Social presence* can be described as the extent to which a medium is supposed to be able to convey psychological presence felt by individuals who communicate with each other. For a message to be effective the ‘sense of being with one another’ is needed (Short et al., 1976). The perceived social presence of an individual is assumed to be important because users today expect more personal communication (Zerfass, 2005; Weil, 2006; Wright, 2006). From interview responses it can be inferred that social presence has not been considered to be a relevant construct for impression formation. Only 41% of the experts considered this construct as important, while 59% think that social presence is not relevant in terms of impression formation.

Furthermore, online communities are built and used on various media platforms as has also been stressed by Ledergerber (2013). Thus, the media platform itself is not

of importance for the present study as the study takes place on one specific platform. Media platforms as such might be an important aspect when comparing different kinds of communities, or when looking at a company's online communication activities using several types of media such a Facebook group, a blog, twitter, etc. However, research taking the media platform into consideration has to face several challenges such as the fact that they are often not stable and change over time. Based on the discussion above, this construct was not considered further for the main study.

*Interactivity* in online communities is considered to be important. It is assumed that when consumers are able to participate in communication it will increase their enthusiasm and build trust. Bagozzi et al. (2007) state that interactivity can be determined by contingency, that is the extent to which a community member's response is based on preceding conversation and mutuality, and the extent to which community members connect to each other. Interactivity is furthermore characterised by increased involvement (Shih, 1998), control over the information exchange (Ariely, 2000) and the sense of presence, i.e. "to have the feeling to talk, discuss with another person" (Expert Interviewee 2, 2010). According to Expert Interviewee 4 (2010), "interactivity is important in order to have a real conversation online. Since platforms should allow for conversations and exchange of opinions, this is important. Interactivity in an online community mainly the possibility to react to a certain statement, post, item, on this very OC".

Nevertheless, despite the high importance of interactivity it is a pre-condition of any online community. In other words, "online communities are interactive" (Expert Interviewee 9, 2010). Expert Interviewee 11 (2010) adds that "interaction is a central element, without interaction it would not be an online community". A slightly different view, which is however still in line with the statements above, is given by Expert Interviewee 13 (2010), who states that "if you visit an online community, you are already interactive. It is the basic requirement for OCs that people are interactive. Some more or less. Even reading the comments of other members is already interactive search for information". Due to the fact that an online community needs to be interactive, this construct was not included in further steps of the research.

The following section discusses the findings for the antecedents that were considered to be important predictors of online community corporate impression.

### **7.5.1 Antecedents of online community corporate impression**

The antecedent constructs that were included in the model and their hypothetical relationships to OCCIP are discussed below.

The four constructs addressing the message itself were labelled C1a-C1d, as they all are part of argument quality. An academic expert asked the following question with regard to the content validity process: “Are you using 12 items for C1? It seems that you want to operationalize it as a second-order construct” (Algesheimer, 2012). As a result, the author went back to the literature to make sure that she had four distinct constructs. It was confirmed that it is not a second-order construct, these are four different constructs (thus also four hypothesis) however they all deal with argument quality. During the data analysis process, the author kept a close eye on the constructs, based on the slight uncertainty created by the above-mentioned comment. During exploratory factor analysis, it was found that all indicators loaded higher on their own than on other factors, except for the latent variables designated C1a-C1d. This problem was investigated using Rasch-Scaling, and it could be established that C1a-C1d were not one single construct (for a more detailed discussion, see 6.4.2). Further, during confirmatory factor analysis the scale was set up as second-order measurement scale, however no significant improvement could be made. Based on these findings and the fact that in literature these constructs are defined as four separate constructs, further analysis was conducted with C1a-C1d as four separate constructs. Further studies taking these variables into account will need to be undertaken.

*Relevance of message (C1a):* Current research supports the idea that the relevance of a message is of high importance in computer-mediated environments. The fact that fewer social context cues can be conveyed through CMC redirects the intention

toward the message itself, and the importance of providing relevant contributions increases (e.g. Kiesler et al., 1984, Burgoon et al, 2002; Boyd & Ellison, 2007). The findings of the qualitative study underline the importance of providing relevant messages; most experts as well as most OCMs agree on that. For example, Expert Interviewee 1 (2010) states that for him, relevance is “very important: Why should I read the contribution if it is not relevant”? Moreover, an OCM states the following: “If the message is relevant I consider the moderator (COR) to be competent and intelligent” (Community Interviewee 1, 2011).

Surprisingly, the relationship between relevance of messages and OCCIP is not significant, and thus the hypothesis that relevance of messages is an important predictor of online community corporate impression had to be rejected. A possible explanation for this outcome might be that nowadays customers are active and well-informed. They are interconnected and regularly exchange information with others. Thus, they do not depend on one piece of information but actively discuss topics with a wide array of individuals. A single piece of information thus has less weight and its relevance is not always of high importance. This has also been confirmed to some extent by two experts:

*“I don’t think a contribution needs to be particularly relevant. People might also like to know about details, personal views, gossip” (Expert Interviewee 4, 2010).*

*“There are moments in life where it is important to be there and not necessary to speak up” (Expert Interviewee 5, 2010).*

In addition, it might be that because individuals today are faced with information overload and have become very selective about what kind of information they read they would not even bother reading an irrelevant message. Thus, they would not engage in any communication with the COR and hence not form any impression about him or her.

Furthermore, an explanation can be thought in the fact that an individual overemphasizes the importance of his or her contribution compared to messages written by other OCMs (Sproull & Kiesler, 1986). This might be a reason why relevance is not perceived as being a predictor of impression formation.

*Timeliness (C1b)*: The information that customers are looking for no longer has to be detailed. However, it has to be current and up to date. Enhancing the timeliness of sent messages can be an important step in better online communication (Adjei, et al., 2010). Based on the above statement, timeliness was considered to be a predictor of OCCIP. However, this hypothesis is not supported by the data.

An explanation for this might be that conversations taking place in online communities are rather short-lived and many more messages are posted within a short time. Furthermore, customers are used to receiving information quickly and having access to current information from different channels. Thus, in line with the construct relevance, OCMs would not engage in any communication with the COR when a message is not up to date and hence it would not form an impression of the COR.

The study exhibits no support for the hypothesised effects of *accuracy (C1c)* on OCCIP. By accuracy it is understood that the message is perceived to be correct. Literature as well as some qualitative findings regards accuracy as an important construct for impression management. One expert says:

*“It is very important, because in face-to-face communication we have personal limitation, but in online community communication everyone can participate and we can see more point of views (Expert-Interviewee 9, 2010).*

This finding is also quite surprising. However, taking into consideration the non-significant relationship of relevance of message on OCCIP this might be explained in the same way.

The results of the test of hypothesis 4 support the notion that *comprehensiveness* (C1d) has a direct, positive effect on OCCIP. This relationship is supported by previous literature such as Cheung et al. (2008), who suggest that “the more comprehensive the messages are, the higher the perceived information usefulness of the message” (Cheung et al., 2008 p. 234).

The results of the present study confirm that *social context cues* (C2) contribute to OCCIP. These findings are consistent with that of former studies and suggest that social context cues such as “various linguistic and typographic manipulation” (Walther, 1995 p. 190) may reveal relational information that is important for impression formation in online communities. The finding is also in line with the judgements of the qualitative interviews. An OCM stated that:

*“Some additional information about the moderator (COR) makes it more personal and nicer. Social context cues influence very positively”*  
(Community Interviewee 3, 2011).

Contrary to expectations, this study did not find a statistical significant effect of *perceived similarity* (C3) on OCCIP. These findings do not support previous studies which suggest that perceived similarity between individuals is a key factor affecting the persuasiveness of word-of-mouth information (Brown & Reingen, 1987; Price et al., 1989; Gilly et al., 1998). Furthermore, the theory of homophily suggests that it is easier to communicate with individuals that are perceived to be similar (Price & Feick, 1984). The importance of perceived similarity was also stressed by an expert stating that:

*“The messages are written by members of the community. The member that reads the message might think that the one who wrote it is ‘one of us and thus I can believe him’”* (Expert Interviewee 12, 2010).

However, not all interviewees consider similarity to be important. An OCM for instance, stated that “I think that if someone is similar to me I might find this person



to be nicer. However, for a COR this should not have any relevance. In communication with a company it is the content of the message that is important” (Community Interviewee 9, 2011). The reason for this rather contradictory result is not clear but it may have something to do with how similarity is perceived. As an expert stated: “Similarity of individuals is not important; it is the similarity of interests, common values or opponents that is relevant” (Expert Interviewee 5, 2010). Literature about online communities also posits that the ‘sense of community’ emerges from mutual interest and symbols (Obst & White, 2005; McMillan & Chavis, 1986; von Löwenfeld, 2006). This is supported by qualitative findings. OCMs were asked how they would define similarity in their OC and many took interest, common values etc. as example. This leads to the conclusion that conventional measurement scales measuring perceived similarity are not appropriate to measure perceived similarity in online communities. New measurement scales will need to be found in further research.

A further explanation might be that even if perceived similarity influences persuasive word of mouth and that the fact that it is easier to communicate with someone that is perceived to be similar, this not necessarily has an effect on impression. These two constructs might just not be directly related to each other.

*Source credibility (C4)* is an important concept, which has been studied by numerous scholars (e.g. McGuire, 1969; Ohanian, 1990; Belch & Belch, 1994; Goldsmith et al., 2000; Lafferty et al., 2002; Massey, 2003). It has been conceptualised in two ways: corporate credibility and endorser credibility (Goldsmith et al., 2000). For the purposes of the present study, source credibility refers to the credibility of the endorser, namely the COR. The relationship between perceived source credibility and corporate image is validated in numerous previous studies. It has also been corroborated by the qualitative findings. An OCM, for instance, mentioned that “credibility is very important. If it is not credible -> bad image” (Community Interviewee 10, 2011). The results of the present study confirm the relationship between *source credibility* and *OCCIP*.

Online community members do not always appreciate companies participating in their community (Hogenkamp, 2007). This is one of the reasons why it is believed that it is important for a COR to disclose his or her *affiliation (C5)* to the company he or she works for. Most of the OCMs would welcome companies in their discussions as long as they act as experts providing interesting information. However, they would cease to be welcome if they addressed the OCMs using corporate language and if they tried to sell them something. One of the experts argued:

*“So the main point is to make things transparent and maybe even explain how and why the company wants to join a discussion” (Expert Interviewee 4, 2010).*

A direct linkage between affiliation and OCCIP was supported by the quantitative data that was available in the present study. This result supports the findings of the qualitative study.

Evidence was found that *characteristics (C6neu)* contribute to OCCIP. This construct describes the perceived characteristics and communication behaviour of the COR, which consist of various elements. This is supported by literature pointing out that people form impressions of one another based on the others' behaviour and characteristics (Downey & Christensen, 2006). These findings confirm the appropriateness of the adapted measurement scale of Garlick (1993) to measure characteristics in online communities (adaption process see chapter 5).

The results of the current study indicate that *interpersonal communication (C7)* has a direct effect on OCCIP. These results are consistent with those of other studies and suggest that the relationships with and the attitudes toward a company or brand depend fundamentally on the social interactions between the members of the group (Baumgarth, 2004). This is supported by Melewar and Karaosmanoglu (2006), who propose that corporate image can be positively influenced by positive information received from intermediary sources. As mentioned in chapter 5, a surprising finding of the qualitative study was that only 33% of the OCMs believe that interpersonal

communication is not relevant in terms of impression formation. This result may be explained by the assumption that community members think that they are not influenced by others. The experts, in contrast, have a more objective point of view when assessing the influence of interpersonal communication and consider it to be important. One expert argued: “others always have some influence” (Expert Interviewee 1, 2010).

### **7.5.2 Consequences of online community corporate impression**

Based on the theory of reasoned action (Ajzen & Fishbein, 1980), Pina et al. (2008) delineate the consequences of corporate image as follows: “As a bundle of beliefs, corporate image will give rise to a service brand attitude, which means the global affective response toward the brand. This attitude will be followed by conative responses such as the intention to use the brand” (p. 4). In the above-mentioned sense, it seems reasonable to assume that if corporate image gives rise to a service brand attitude OCCIP will cause an attitude towards a company’s online community and influence behaviour through intention. For the present study, this means that a positive *OCCIP* positively influences *attitude towards Maurice Lacroix’s Facebook Group (C9)*, which in turn positively influences *the intention to use (C10) it* again. In this case, the *OCCIP* has “a very strong influence, since it is a peer-related activity” (Expert Interviewee 15, 2010). In line with the qualitative findings of the present study and the literature review, all proposed relationships of the consequences are statistically significant.

In other words, in addition to the above presented findings, the results illustrate the importance of *OCCIP* as a predictor of word of mouth. The significant association between *OCCIP* and *word of mouth (C11)* is consistent with previous studies that showed an effect of corporate image on word of mouth. This result is also supported by qualitative findings. As one expert points out:

*“I think this influences word of mouth a lot, since word of mouth can only be good if a person really has a good overall picture of a company. On the other hand, if a company’s image is bad it will certainly result in bad word of mouth since people like that gossip and the effect of negative experiences seems to be bigger and more stable”*  
(Expert Interviewee 4, 2010).

## **7.6 Summary**

Companies target online communities with their communication activities. The present study adds to the understanding of online impression formation and helps to better understand this phenomenon in order for companies to be better able to influence their perceived impression.

The first study made use of a qualitative research method in order to test face validity of the conceptual model and gain additional knowledge that relates to corporate communication in online communities and impression formation. In stage one, seventeen expert interviews were conducted and in stage two, twelve virtual community members were interviewed. For the second study, a quantitative research method was chosen, as ten hypotheses predicting OCCIP and three hypotheses describing the consequences of OCCIP were tested. The results of the qualitative and quantitative studies were triangulated and discussed in this chapter.

The next chapter presents theoretical as well as managerial implications of the present study. Moreover, limitations of this study are presented and avenues for future research outlined.

## **Chapter 8 - Conclusions**

### **8.1 Introduction**

The aim of this thesis is to provide a model of impression formation in online communities that determines the predictors of OCCIP. Although there are several studies that aim to increase our understanding of online communities or corporate image, there is still a lack of research to determine which factors affect online community corporate impression formation. Moreover, little is known on how to implement knowledge derived from CMC research into company-controlled communication activities.

This chapter presents the theoretical and managerial implications of the current study. This is followed by a description of the methodological, theoretical and practical limitations of the research. Finally, some future research avenues are proposed.

### **8.2 Implication of research findings**

More and more people meet in online communities, a fact which calls for a thorough analysis of this phenomenon. The present study has a number of essential implications for future practice. The following section discusses first the theoretical, and then the managerial implications.

### 8.2.1 Theoretical implications

This thesis advances knowledge on corporate communication, in particular communication which targets online communities, corporate identity in the context of corporate communication and impression formation as a reflection of these communication activities.

It constitutes a research contribution in that it is, to the best of the author's knowledge, one of the first attempts to investigate corporate communication activities in online communities in relation to impression formation. Moreover, this study helps to integrate the communication elements that are of importance in online communities into the corporate identity mix (Balmer & Soenen, 1999), into established corporate identity models (Melewar & Jenkins, 2002; Melewar, 2003; Melewar & Karaosmanoglu, 2006) and into corporate image models (Barich & Kotler, 1991). It is vital not to neglect the online media in the corporate communication mix, especially as they are not just another type of media but, rather, they target people who are part of online networks. Online media connects people all around the globe; they communicate with one another and are in another state of mind when communicating online (e.g. Walther, 1993, 1997; Boyd & Ellis, 2007). The investigation of OCCIP helps to unlock existing models and will allow additional dimensions of corporate communication to be integrated in the future. Any dimensions of online communication are of great importance as new online platforms are always being launched, affecting both communication and customer behaviour. This study contributes additional knowledge of what elements are important in corporate communication that targets online communities.

This study provides scales for measuring *online community corporate impression* (OCCIP). Many corporate image scales as well as impression management scales were not suitable for measuring the focal construct as they include elements such as products, product quality, sales staff, points of sales, after-sales services for the corporate image measurements, and the impression formation measurements were too much focused on communication between individuals. With the input gained

during the content validity process, further review of impression formation literature and the feedback of 54 Maurice Lacroix OCMs, the author found a measurement scale that is suitable for measuring OCCIP. The pre-tests as well as the main survey confirmed the suitability of this measurement scale to measure OCCIP. Furthermore, the measurement scales were statistically tested and confirmed to be reliable and valid.

Besides OCCIP measurement scales, scales for the constructs *affiliation* and *characteristics* were developed and statistically validated. The two measurement scales, affiliation and characteristics, will have to be tested further and put into other contexts. They are a solid basis for further research.

In addition, the measurement scale for the construct *social context cues* was developed. This construct was operationalized by developing measurement scales from sources such as definitions and conceptualisations in existing literature (see Appendix for more details). This measurement scale was also confirmed to be suitable to measure social context cues during the content validity process and the pre-tests. Moreover, it also was statistically tested and confirmed to be reliable and valid.

A conceptual model was also developed for this study. This model links elements of media theory and computer-mediated communication with OCCIP. Further, it links OCCIP to a set of consequences that scholars widely agree arise from corporate image. Thus, this research brings together various strands of theories and relates them for the present study. The combination of these theories laid the ground on which the conceptual model was built on. This conceptual model was empirically tested by assessing the significance of possible factors in determining OCCIP and its consequences. The proposed relations between the latent constructs were mostly confirmed.

This study used the netnography method (Kozinets, 1997, 1998, 2001 and 2002) in combination with structure equation modelling, which has not often been done

before. This may be explained by the fact that online research is still an emerging field and there are not yet a great number of studies available. In future studies, netnography methods and structure equation modelling might be combined.

The findings of the qualitative study challenge the view of many who believe that online community members do not appreciate it when companies participate in their discussions. Experts expressed their views on the question if companies should use online communities for their communication activities by statements such as the following:

*“Yes, of course – it’s important to build a positive image and to have a direct communication to the target groups” (Expert Interviewee 3, 2010).*

As was thoroughly discussed in chapter 2, corporate image is composed of many aspects. The proposed conceptual model addresses the most important attributes determining the impression an OCM forms when interacting with a COR in an online community. Within the context of the present study, communication is a key impression factor. Many types of communication have been defined in literature (e.g. Balmer & Gray, 1999; Cornelissen, 2000; Karaosmanoglu & Melewar, 2006; Williams & Moffitt, 1997). This study advances the concept of communication by adding communication activities in online communities. Additionally the present study investigates into the nature of uncontrolled communication because it occurs simultaneously to, and with no a priori difference in value from the message of the COR. More specifically, this study adds a new dimension to the whole corporate communication mix, which is significant in the context of addressing online communities. This study was carried out in two different types of context and the findings can be applied to other kinds of online communities, which differ either regarding the topics they discuss or the brands they support. By selecting two very different types of online communities, it has been shown that the new dimensions that have been added to the corporate communication mix are also valid in other types of online communities.



In summary it can be concluded that this study has added to the understanding of the phenomenon of corporate communication in online communities. The present study helps to explain the way how CORs should behave and interact with OCMs, taking into consideration the peculiarities of computer-mediated communication and the interplay of controlled and uncontrolled communication. It explains the phenomenon of people gathering on online communities having a new understanding of interaction also when they interact with CORs. It is permanent interaction, i.e. messages are commented on, passed along and mixed with comments of other participants.

### **8.2.2 Managerial implications**

In addition to the theoretical contributions presented above, the current study provides various implications for managers who are involved in corporate communication. These implications are outlined in this section.

By putting forward a research study on impressions built in online communities, the author offers some guidelines on how businesses should communicate with OCMs. Her findings shed light on the question whether OCMs want CORs to participate in online communities, how they might do so and, ultimately, how this might affect the impression formation.

Nowadays, the importance of online communication is still rising steadily, populated by new generations of digital natives, young adults buying products and services. They are our future, and many companies have understood the importance of integrating the online media in their corporate communication mix. Unfortunately, corporate communication activities are often still based on trial and error. Managers cannot build on their knowledge of traditional corporate communication to guide them. Existing corporate communication activities focus on management functions and integrated communication processes. However, these models were created at a time when social media did not exist. This study takes into account the peculiarities

of computer-mediated communication and thus provides useful insights that might help managers to better manage their corporate communication activities with regard to online communities.

The present study enhances the understanding of how online communication, i.e. individuals who meet in online communities, can be managed more effectively and how new online communication strategies can be found. This creates a new value dimension that has significant differentiation potential. This type of differentiation is neither contained in a product nor in a brand but stimulates the fact that a customer feels that he or she belongs to a community, is taken seriously and is connected to the company. In other words, as explained by the SIDE theory (Reicher, 1984), social (group) identity increases in online groups, which leads to in-group favourism and this again leads to stereotyping. Since, a receiver of a message is likely to stereotyping impressions and attribution of similarity he or she creates an idealised image of the sender of the message (Walther, 1996). Thus, if a COR succeeds to be considered as a part of the online community he or she will be idealised. As shown by the findings of this study the corporate communication activities undertaken by the COR do have an effect on impressions and thus it can be said that if the COR is idealised the company will be as well.

The aforementioned discussion as well as the fact that a positive OCCIP results in a positive attitude towards the company's OC and an increased intention to use the community site again, justifies the investment of a company into communication activities in online communities. The same can be said for the consequence word of mouth intention by OCMs.

Some answers could be found to end the on-going debate on whether CORs are welcome in online communities or not. In summary, it can be said that: "If the COR is a real benefit for the members – then everybody will accept it" (Expert Interviewee 3, 2010). In other words, companies are accepted in online communities if they i) do not use corporate speech, ii) stick to the rules of the community, iii) do not try to advertise their products and services and iv) add some real benefit for the OCMs by

acting as experts in their field. It is important for them to listen carefully to the discussions held in the community. This enables them to give feedback that adds value and to find the right register in which to address the OCMs.

As this study also shows, the role of the COR is crucial for the success of online communication. It matters considerably who is interacting with the members of an online community. As Expert Interviewee 6 (2010) confirms, “the COR is regarded as a representative of the company and the OCM would then assume the COR acts on behalf of the company. It not only has an impact on the perception of the COR, but on the perception of the company as a whole. Online community communication is more personal and the reactions will be on a personal level”. To put it in another way, the COR has a crucial role in terms of impression formation and thus should be selected carefully. A representative of the corporate communication department may not always be the right person. The following issues need to be taken into consideration when selecting a COR:

- A COR needs to be familiar with the peculiarities of computer-mediated communication in order to understand the communication patterns in online communities.
- He or she needs to have a style of writing that matches that of the OCMs, be genuinely interested in the issues and able to provide additional knowledge to the community.
- The COR should fit the online community in terms of characteristics. The findings of the study have shown that characteristics of the COR have a positive effect on OCCIP. Therefore, it is not necessarily a person from the corporate communication department that should communicate with a specific online community, however, the person that best fits the online community.

- Similarly, that person must be prepared to spend ample time in the community. For instance, he or she needs to send several messages a day in order to be seen in a positive light. The following statement on the amount of messages to be sent by a COR supports this: “It is important; it shows that he is interested in the forum discussion” (Community Interviewee 3, 2011). Another OCM adds: “The more messages he writes, the more engaged he seems. I like active moderators (COR)” (Community Interviewee 4, 2011).
- A COR always needs to declare his affiliation to the company. This transparency is requested by the OCMs and has been confirmed by the results of the qualitative as well as the quantitative studies.
- The effect of social context cues to OCCIP was confirmed by the study and implies that a COR should provide some additional information about him- or herself. Community Interviewee 10 (2011) underlines the importance of additional information by stating that “a moderator seems to be open and communicate if he provides additional information about himself”. Community Interviewee 2 (2011) stresses that “additional description about the moderator is very important to me. I can imagine who he is, and this gives me a better impression”.
- Finally, the findings of the present study approve that interpersonal communication is significant. A COR needs to take this into consideration and also engage in the on-going conversation between OCMs. It is not good enough for a COR to only respond to the OCM with whom he or she is having a discussion. A COR also has to participate in “side discussions” taking place on the platform. Scholars like Hermann (2006) have already stressed that marketing communication has to target social networks of people, taking into consideration the whole network, not only an individual person. The subjective reflections on a message are displayed on the same space as the original message itself and thus also influence users.

In summary it can be stated that companies are welcome in online communities if they stick to the rules of online communication and the community itself. It needs to show real engagement and interest in the online community and its members and avoid corporate speech and advertising. The COR needs to be part of the group and provide the OCM's with expert knowledge, then he might succeed to be perceived as one of them and a positive impression will be credited to him or her and the company.

## **8.3 Limitations and future research**

### **8.3.1 Limitations of the study**

A number of essential limitations need to be considered. Primarily, the extent to which the OCCIP affects the overall corporate image an OCM forms about a company has not been considered in this study. It might have an important impact on image formation.

The media platforms themselves might be another important aspect to consider in a company's online communication. A company's online communication mix normally consists of several activities which take place in different types of media. These can include Facebook groups, blogs, Twitter, and many more. Swissmom, for instance, has a Facebook group as well as a Swissmom Club website which have both not been considered in this study. Swissmom forum members (OCMs) are likely to access more than one platform and thus might be influenced by several online sources. Therefore, some further research would be required to investigate these circumstances. The same can be said for the Maurice Lacroix OCMs.

A further limitation is related to the issues of the external validity of the current study. Even if the study was conducted in two online communities, the results cannot be fully generalized to other online communities. Nevertheless, the fact that the

measurement model was validated with two different types of online communities enhances the external validity. As stated in the theoretical contributions, the findings can be applied to other kinds of online communities as they might have their validity in other types of online communities. Future research should investigate which of the findings can be applied to other online communities and what needs to be added or changed in order to fit the new research site.

Another shortcoming of the research arises from data protection. As personal information, such as the e-mail addresses of the OCMs, is confidential, the lack of access to a complete sampling framework has led the author to employ a non-probability sampling method, namely a voluntary convenience sample. Even though the convenience sampling method is appropriate for theory testing (see discussion in 4.6.6.5), to reduce potential bias a probability sampling method would have to be used.

The next limitation of this study is related to its cross-sectional design. This design allowed for a sufficient amount of data to be collected within a short period of time. However, the impact of the antecedents on online community corporate impression with regard to time has not been taken into account. Assuming that discussions in online communities can change over time, a long-term study would have to be conducted. An issue in conducting a long-term study is that technology evolves rapidly and the online community being studied might change its structure before the end of the long-term investigation. The evolution of the platform could have implications on how people communicate with each other, and thus might also impact the impression formation.

Furthermore, much work remains to be done on establishing the conditions under which OCMs change their perception of a COR, or of the company he or she represents. Possible conditions might be i) website structure, colour, ii) pictures or movies displayed on the platform, iii) the amount of discussion topics as well as the type of discussion topics not considered. In addition the influence of competing websites has entirely been omitted.

As described in chapter 6 some of the psychometric properties of the measurement scales were weak. For instance, multivariate normality, which is one of the fundamental requirements for multivariate analysis (Tabachnick & Fidell, 2007; Hair et al., 2006), was not tenable in the current study. Furthermore, there were some issues with the measurement scales addressing argument quality. As described in chapter 6, it was found during exploratory factor analysis that the items of the latent variables designated C1a-C1d were not all loading higher on their own than on the other factors. Although this problem was investigated, the author suggests that these measurement scales should be tested further.

Although the present study has some limitations with regard to its findings, it is believed that the potential bias in results can be addressed in further research. In the next section, some future research avenues are proposed that address the limitations discussed above, as well as additional areas of investigation relevant to online community corporate impression formation and its consequences.

### **8.3.2 Future research avenues**

To address the potential bias caused by the non-probabilistic sample, a further study with a random sample is suggested. This might now be possible, as the author got to know the Swissmom and the Maurice Lacroix team quite well due to the intensive communication during the whole research process. Even if this would mean some additional work, the Swissmom as well as the Maurice Lacroix team might draw a random sample out of the sampling frame and provide the author with anonymised contact details; or they might send out the questionnaire on her behalf. Such a procedure would not violate data protection law.

As stressed in the limitations of this study above, the extent to which the OCCIP affects corporate image and vice versa needs to be addressed in future studies. Questions such as how offline interactions and perceptions influence the image formation process in the online world, and vice versa, should be investigated.

Additionally, the constructs C5 and C7 need to be examined further due to the problem of multicollinearity with the data of the Swissmom sample. The existing measurement scales of e.g. perceived similarity was found not to be appropriate for the context of online communities (see discussion in chapter 7) and thus new measurement scales should be developed.

In order to address the influences of media platforms as such, future investigations also need to take into different types of devices, such as personal computers, tablets, mobile phones, etc., that are used to access different types of online communication platforms, such as Facebook, blogs, and more. Additionally, different kinds of online communities might also influence the perception of an online community member and thus will also have to be explored further. Moreover, the influence of competing websites needs to be considered in further studies.

To what a degree interpersonal communication influences the impressions formed by the OCM was highlighted repeatedly in the present study. More recent literature also underlines the importance of interpersonal communication. For instance, Johnson (2013) describes a study that shows that people who have read an article about nanotechnology were highly influenced by the comments and the tone of the comments. Brossard and Scheufele, cited in Johnson (2013), mention that “disturbingly, readers’ interpretations of potential risks associated with the technology described in the news article differed significantly depending only on the tone of the manipulated reader comments posted with the story”. Future studies on the current topic are therefore recommended.

The present study has confirmed the importance of the COR in terms of building impressions about a company. Thus, not everybody should be allowed to communicate with OCMs. Even though some important attributes of a COR are presented in the managerial implications, future investigations should be undertaken in order to gain additional knowledge about what kind of a person is needed for successful communications in online forums.



## 8.4 Conclusion

The present study contributes to a better understanding of impression formation in online communities. In the background theory (chapter 2), the author highlighted the inherent complexity of online communication targeting online communities and impression formation. The thorough literature review resulted in developing a conceptual model.

The methodology required to capture the empirical data was outlined in chapter 4. This entailed defining an empirical qualitative study in order to assess face validity of the conceptual model as well as gaining additional knowledge. Next, a quantitative study was conducted using an online questionnaire that was administered to online community members. By collecting qualitative data through expert and community member interviews as well as quantitative data from the online survey conducted in the Swissmom and Maurice Lacroix online communities, a triangulated research approach was followed.

Despite several limitations, this research provides a significant contribution by providing important findings on how to communicate to online community members in order to foster a positive OCCIP. It also raises some issues which might be studied in future. Recommendations and further research are suggested to enable companies to strengthen their knowledge about managing communication activities in online communities. It is hoped that future research will build on the findings presented here.

All in all, the author believes that this study significantly contributes to and advances existing knowledge in the computer-mediated communication, corporate image and corporate communication domain. Moreover, the author sincerely hopes that this thesis will stimulate the thinking of academics and practitioners alike regarding the role of CORs communicating on behalf of a company.

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# Appendix

## A. Appendix – Fleiss Kappa

### Fleiss Kappa – Walther’s measurement instrument

Number of cases size = 15

Number of raters or instruments=12

Minimum score = 1

Maximum score = 2

### Table subjects(rows) by scores(cols)

	1	2
1	12	0
2	6	6
3	2	10
4	12	0
5	6	6
6	5	7
7	6	6
8	6	6
9	0	12
10	1	11
11	5	7
12	11	1
13	4	8
14	2	10
15	0	12

**Fleiss Kappa for 12 raters = 0.3665 SE = 0.0318 95%CI = 0.3042 to 0.4288**



### **Fleiss Kappa – Dowling and Christensen measurement instrument**

Number of cases size = 4

Number of raters or instruments=12

Minimum score = 1

Maximum score = 2

#### **Table subjects(rows) by scores(cols)**

	<b>1</b>	<b>2</b>
<b>1</b>	1	11
<b>2</b>	5	7
<b>3</b>	7	5
<b>4</b>	12	0

**Fleiss Kappa for 12 raters = 0.3853 SE = 0.0615 95%CI = 0.2647 to 0.5059**

### **Fleiss Kappa – Glarlick measurement instrument**

Number of cases size = 15

Number of raters or instruments=12

Minimum score = 1

Maximum score = 2

#### **Table subjects(rows) by scores(cols)**

	<b>1</b>	<b>2</b>
1	1	11
2	12	0
3	6	6
4	1	11
5	6	6
6	3	9
7	7	5
8	8	4

9	9	3
10	3	9
11	9	3
12	7	5
13	6	6
14	4	8
15	9	3

**Fleiss Kappa for 12 raters = 0.1938 SE = 0.0318 95%CI = 0.1315 to 0.2561**

## A. Appendix – Testing for normality

Swissmom	Mean	SD	Skewness		z-value	Kurtosis		
	Statistics	Statistics	Statistics	SE		Statistics	SE	z-value
	C1a1	5.17	1.489	-.978		.140	<b>-6.997</b>	.315
C1a2	5.56	1.195	-1.357	.140	<b>-9.709</b>	2.511	.279	<b>9.008</b>
C1a3	5.40	1.387	-1.263	.140	<b>-9.033</b>	1.625	.279	<b>5.829</b>
C1b1	5.76	1.163	-1.275	.140	<b>-9.123</b>	1.855	.279	<b>6.656</b>
C1b2	5.75	1.159	-1.370	.140	<b>-9.800</b>	2.415	.279	<b>8.664</b>
C1b3	5.51	1.256	-.946	.140	<b>-6.764</b>	.778	.279	2.790
C1c1	5.43	1.249	-.908	.140	<b>-6.496</b>	.818	.279	<b>2.934</b>
C1c2	5.32	1.297	-.668	.140	<b>-4.776</b>	-.053	.279	-.192
C1c3	5.15	1.374	-.527	.140	<b>-3.771</b>	-.051	.279	-.181
C1d1	5.28	1.492	-.985	.140	<b>-7.049</b>	.465	.279	1.667
C1d2	5.20	1.461	-1.062	.140	<b>-7.596</b>	.707	.279	2.538
C1d3	4.87	1.786	-.663	.140	<b>-4.745</b>	-.545	.279	-1.954
C1d4	5.31	1.396	-1.101	.140	<b>-7.875</b>	1.071	.279	<b>3.844</b>
C21	4.77	1.734	-.663	.140	<b>-4.742</b>	-.605	.279	-2.172
C22	4.91	1.600	-.852	.140	<b>-6.095</b>	-.010	.279	-.036
C23	5.25	1.420	-.971	.140	<b>-6.946</b>	.626	.279	2.248
C24	5.42	1.350	-1.223	.140	<b>-8.747</b>	1.480	.279	<b>5.312</b>
C25	5.38	1.428	-.994	.140	<b>-7.113</b>	.600	.279	2.153
C26	4.68	1.840	-.540	.140	<b>-3.863</b>	-.762	.279	<b>-2.733</b>
C27	4.54	1.744	-.390	.140	<b>-2.788</b>	-.826	.279	<b>-2.964</b>
C28	4.84	1.526	-.623	.140	<b>-4.455</b>	-.272	.279	-.976
C29	5.10	1.625	-.905	.140	<b>-6.472</b>	.225	.279	.807
C31	3.91	1.546	-.303	.140	-2.170	-.814	.279	<b>-2.920</b>
C32	4.04	1.481	-.405	.140	<b>-2.900</b>	-.708	.279	-2.539
C33	4.09	1.473	-.366	.140	<b>-2.617</b>	-.576	.279	-2.065
C34	3.93	1.493	-.187	.140	-1.334	-.547	.279	-1.964
C35	3.63	1.589	-.120	.140	-.855	-.900	.279	<b>-3.231</b>
C36	4.10	1.494	-.296	.140	-2.115	-.605	.279	-2.172
C41	5.30	1.335	-.928	.140	<b>-6.638</b>	.611	.279	2.193
C42	5.36	1.374	-.952	.140	<b>-6.813</b>	.765	.279	<b>2.744</b>
C43	5.37	1.280	-.602	.140	<b>-4.305</b>	.057	.279	.203
C44	5.25	1.303	-.385	.140	<b>-2.753</b>	-.385	.279	-1.383
C51	5.78	1.537	-1.652	.140	<b>-11.815</b>	2.338	.279	<b>8.388</b>
C52	5.77	1.523	-1.644	.140	<b>-11.762</b>	2.327	.279	<b>8.350</b>

C53	5.65	1.658	-1.475	.140	<b>-10.549</b>	1.520	.279	<b>5.452</b>
C54	5.49	1.712	-1.268	.140	<b>-9.070</b>	.792	.279	<b>2.841</b>
C55	5.69	1.540	-1.469	.140	<b>-10.508</b>	1.716	.279	<b>6.158</b>
C56	5.32	1.641	-1.121	.140	<b>-8.022</b>	.559	.279	2.007
C61	5.88	1.067	-1.502	.140	<b>-10.745</b>	3.770	.279	<b>13.527</b>
C62	5.73	1.251	-1.536	.140	<b>-10.990</b>	3.256	.279	<b>11.683</b>
C63	5.74	1.192	-1.464	.140	<b>-10.470</b>	3.141	.279	<b>11.268</b>
C64	5.61	1.277	-1.224	.140	<b>-8.758</b>	1.861	.279	<b>6.678</b>
C65	5.41	1.250	-.878	.140	<b>-6.279</b>	.736	.279	<b>2.641</b>
C66	5.60	1.329	-1.137	.140	<b>-8.130</b>	1.228	.279	<b>4.408</b>
C67	5.57	1.433	-1.175	.140	<b>-8.407</b>	1.011	.279	<b>3.626</b>
C68	5.60	1.231	-.916	.140	<b>-6.554</b>	1.041	.279	<b>3.734</b>
C69	5.70	1.175	-1.299	.140	<b>-9.292</b>	2.630	.279	<b>9.437</b>
C610	5.36	1.340	-.932	.140	<b>-6.666</b>	1.003	.279	<b>3.599</b>
C611	5.68	1.181	-1.097	.140	<b>-7.844</b>	1.652	.279	<b>5.926</b>
C612	5.43	1.222	-.561	.140	<b>-4.015</b>	.130	.279	.466
C613	5.80	1.174	-1.632	.140	<b>-11.673</b>	3.786	.279	<b>13.585</b>
C71	4.65	1.934	-.643	.140	<b>-4.596</b>	-.819	.279	<b>-2.937</b>
C72	4.95	1.764	-.874	.140	<b>-6.253</b>	-.241	.279	-.864
C73	4.81	1.821	-.770	.140	<b>-5.511</b>	-.484	.279	-1.737
C74	4.64	1.865	-.657	.140	<b>-4.696</b>	-.714	.279	-2.560
C75	5.21	1.699	-1.256	.140	<b>-8.981</b>	.799	.279	<b>2.867</b>
C81	5.57	1.203	-.881	.140	<b>-6.305</b>	.663	.279	2.381
C82	5.75	1.247	-1.203	.140	<b>-8.608</b>	1.442	.279	<b>5.175</b>
C83	5.63	1.343	-1.154	.140	<b>-8.257</b>	1.039	.279	<b>3.727</b>
C84	5.55	1.236	-.934	.140	<b>-6.679</b>	.931	.279	<b>3.340</b>
C85	5.51	1.272	-.955	.140	<b>-6.834</b>	.777	.279	<b>2.787</b>
C86	5.15	1.375	-.635	.140	<b>-4.543</b>	.244	.279	.874
C87	5.17	1.507	-.666	.140	<b>-4.766</b>	-.152	.279	-.545
C88	4.82	1.679	-.420	.140	<b>-3.006</b>	-.764	.279	<b>-2.741</b>
C89	5.36	1.376	-.735	.140	<b>-5.254</b>	.074	.279	.265
C810	5.23	1.422	-.724	.140	<b>-5.177</b>	.000	.279	-.001
C811	5.28	1.371	-.701	.140	<b>-5.012</b>	.102	.279	.366
C812	5.24	1.569	-.780	.140	<b>-5.580</b>	.016	.279	.058
C91	3.59	1.879	-.058	.140	-.417	-1.207	.279	<b>-4.331</b>
C92	5.03	1.891	-.857	.140	<b>-6.132</b>	-.399	.279	-1.431
C93	5.15	1.598	-.817	.140	<b>-5.841</b>	.182	.279	.654
C94	5.13	1.647	-.858	.140	<b>-6.137</b>	.151	.279	.541
C95	4.75	1.975	-.604	.140	<b>-4.322</b>	-.833	.279	<b>-2.989</b>
C96	4.71	1.866	-.558	.140	<b>-3.993</b>	-.651	.279	-2.335

C101	5.22	2.084	-.989	.140	<b>-7.078</b>	-.465	.279	-1.670
C102	5.47	1.815	-1.169	.140	<b>-8.365</b>	.294	.279	1.055
C103	5.61	1.716	-1.333	.140	<b>-9.538</b>	.912	.279	<b>3.273</b>
C111	5.24	1.706	-.958	.140	<b>-6.854</b>	.088	.279	.316
C112	5.26	1.548	-.898	.140	<b>-6.420</b>	.347	.279	1.244
C113	5.36	1.623	-1.069	.140	<b>-7.648</b>	.444	.279	1.594
C114	5.22	1.717	-.899	.140	<b>-6.433</b>	-.105	.279	-.378

Notes: SD = standard deviation; SE = standard error; N = 304; The z-values were calculated by dividing the statistics by the standard errors (cf. Hair et al., 2009); Scores exceeding critical value of  $\pm 2.58$  (0.01 significance level) are marked bold.

Maurice Lacroix	Mean	SD	Skewness			Kurtosis		
	Statistics	Statistics	Statistics	SE	z-value	Statistics	SE	z-value
	C1a1	4.89	1.252	-.518	.122	<b>-4.230</b>	-.102	.244
C1a2	5.04	1.063	-.296	.122	-2.418	-.182	.244	-.744
C1a3	5.02	1.240	-.443	.122	<b>-3.614</b>	.168	.244	.686
C1b1	5.91	.988	-1.080	.122	<b>-8.814</b>	1.703	.244	<b>6.969</b>
C1b2	5.87	.949	-.829	.122	<b>-6.765</b>	.940	.244	<b>3.847</b>
C1b3	5.82	1.063	-.958	.122	<b>-7.823</b>	1.120	.244	<b>4.582</b>
C1c1	5.66	.991	-.754	.122	<b>-6.158</b>	.906	.244	<b>3.706</b>
C1c2	5.66	1.011	-.589	.122	<b>-4.810</b>	.020	.244	.082
C1c3	5.69	1.102	-.608	.122	<b>-4.964</b>	-.021	.244	-.085
C1d1	5.67	1.139	-.869	.122	<b>-7.098</b>	.678	.244	<b>2.776</b>
C1d2	5.64	1.139	-.797	.122	<b>-6.506</b>	.537	.244	2.198
C1d3	5.62	1.304	-.963	.122	<b>-7.864</b>	.682	.244	<b>2.790</b>
C1d4	5.69	1.145	-.793	.122	<b>-6.478</b>	.503	.244	2.059
C21	5.35	1.115	-.680	.122	<b>-5.549</b>	.515	.244	2.106
C22	5.44	1.044	-.585	.122	<b>-4.773</b>	.529	.244	2.165
C23	5.58	1.001	-.349	.122	<b>-2.851</b>	-.238	.244	-.974
C24	5.54	1.055	-.732	.122	<b>-5.981</b>	.987	.244	<b>4.040</b>
C25	5.56	1.101	-.700	.122	<b>-5.716</b>	.673	.244	<b>2.754</b>
C26	5.39	1.169	-.527	.122	<b>-4.306</b>	.080	.244	.329
C27	5.24	1.128	-.380	.122	<b>-3.107</b>	-.103	.244	-.421
C28	5.18	1.076	-.324	.122	<b>-2.649</b>	-.074	.244	-.303
C29	5.44	1.101	-.522	.122	<b>-4.262</b>	.354	.244	1.449
C31	3.74	1.415	-.206	.122	-1.682	-.605	.244	-2.478
C32	3.65	1.294	-.096	.122	-.781	-.473	.244	-1.937
C33	3.62	1.227	-.029	.122	-.240	-.095	.244	-.391

C34	3.65	1.293	.011	.122	.093	-.193	.244	-.791
C35	3.41	1.343	-.031	.122	-.249	-.401	.244	-1.640
C36	3.78	1.365	-.041	.122	-.332	-.364	.244	-1.488
C41	5.56	.977	-.403	.122	<b>-3.290</b>	-.226	.244	-.924
C42	5.68	.996	-.367	.122	<b>-2.997</b>	-.644	.244	<b>-2.636</b>
C43	5.64	.979	-.371	.122	<b>-3.028</b>	-.382	.244	-1.564
C44	5.60	1.055	-.439	.122	<b>-3.587</b>	-.372	.244	-1.522
C51	6.05	.936	-.721	.122	<b>-5.888</b>	-.214	.244	-.877
C52	5.94	.947	-.877	.122	<b>-7.159</b>	1.604	.244	<b>6.564</b>
C53	5.96	.924	-.551	.122	<b>-4.502</b>	-.304	.244	-1.243
C54	5.83	.932	-.581	.122	<b>-4.744</b>	.214	.244	.876
C55	5.83	1.004	-.956	.122	<b>-7.804</b>	2.102	.244	<b>8.604</b>
C56	5.83	1.014	-1.064	.122	<b>-8.685</b>	2.116	.244	<b>8.659</b>
C61	5.93	.902	-.721	.122	<b>-5.886</b>	.356	.244	1.458
C62	5.85	.973	-.817	.122	<b>-6.672</b>	1.053	.244	<b>4.309</b>
C63	5.84	.941	-.800	.122	<b>-6.534</b>	1.343	.244	<b>5.496</b>
C64	5.74	.949	-.442	.122	<b>-3.612</b>	-.062	.244	-.252
C65	5.64	.933	-.343	.122	<b>-2.797</b>	-.401	.244	-1.642
C66	5.75	1.005	-.638	.122	<b>-5.207</b>	.608	.244	2.490
C67	5.70	1.022	-.458	.122	<b>-3.743</b>	-.274	.244	-1.122
C68	5.77	.975	-.251	.122	-2.050	-.905	.244	<b>-3.703</b>
C69	5.86	.925	-.516	.122	<b>-4.214</b>	-.019	.244	-.079
C610	5.66	.986	-.316	.122	-2.577	-.381	.244	-1.557
C611	5.79	.997	-.647	.122	<b>-5.279</b>	.713	.244	<b>2.918</b>
C612	5.66	1.046	-.356	.122	<b>-2.907</b>	-.846	.244	<b>-3.461</b>
C613	5.88	1.016	-1.262	.122	<b>-10.305</b>	3.004	.244	<b>12.292</b>
C71	5.34	1.229	-.808	.122	<b>-6.597</b>	.879	.244	<b>3.596</b>
C72	5.20	1.158	-.659	.122	<b>-5.378</b>	1.127	.244	<b>4.611</b>
C73	5.27	1.160	-.569	.122	<b>-4.648</b>	.622	.244	2.546
C74	5.23	1.099	-.579	.122	<b>-4.726</b>	1.114	.244	<b>4.561</b>
C75	5.41	1.106	-.674	.122	<b>-5.500</b>	1.183	.244	<b>4.841</b>
C81	5.75	.942	-.274	.122	-2.240	-.746	.244	<b>-3.052</b>
C82	5.78	1.029	-.632	.122	<b>-5.161</b>	.269	.244	1.100
C83	5.81	1.015	-.666	.122	<b>-5.441</b>	.129	.244	.526
C84	5.75	1.000	-.510	.122	<b>-4.166</b>	-.396	.244	-1.622
C85	5.77	1.028	-.588	.122	<b>-4.803</b>	-.274	.244	-1.123
C86	5.68	1.041	-.372	.122	<b>-3.033</b>	-.393	.244	-1.610
C87	5.64	1.086	-.429	.122	<b>-3.501</b>	-.682	.244	<b>-2.790</b>
C88	5.66	1.126	-.719	.122	<b>-5.874</b>	.450	.244	1.843
C89	5.76	1.025	-.447	.122	<b>-3.649</b>	-.516	.244	-2.114

C810	5.75	1.007	-.488	.122	<b>-3.985</b>	-.452	.244	-1.849
C811	5.67	1.040	-.371	.122	<b>-3.030</b>	-.810	.244	<b>-3.317</b>
C812	5.73	1.055	-.425	.122	<b>-3.468</b>	-.715	.244	<b>-2.926</b>
C813	5.70	1.052	-.465	.122	<b>-3.796</b>	-.326	.244	-1.335
C814	5.60	1.065	-.382	.122	<b>-3.122</b>	-.540	.244	-2.211
C91	4.96	1.130	-.511	.122	<b>-4.174</b>	1.309	.244	<b>5.357</b>
C92	5.18	1.101	-.457	.122	<b>-3.729</b>	.974	.244	<b>3.987</b>
C93	5.17	1.074	.061	.122	.494	-.252	.244	-1.033
C94	5.14	1.053	-.016	.122	-.128	-.065	.244	-.266
C95	5.15	1.137	-.626	.122	<b>-5.109</b>	1.495	.244	<b>6.119</b>
C96	5.18	1.101	-.377	.122	<b>-3.076</b>	.943	.244	<b>3.861</b>
C101	5.93	1.023	-1.767	.122	<b>-14.427</b>	5.819	.244	<b>23.813</b>
C102	5.93	1.024	-1.543	.122	<b>-12.598</b>	5.015	.244	<b>20.524</b>
C103	6.01	.935	-1.419	.122	<b>-11.584</b>	4.852	.244	<b>19.855</b>
C111	5.51	1.031	-.711	.122	<b>-5.804</b>	1.818	.244	<b>7.442</b>
C112	5.49	1.053	-.511	.122	<b>-4.174</b>	.583	.244	2.387
C113	5.50	1.060	-.642	.122	<b>-5.244</b>	1.419	.244	<b>5.808</b>
C114	5.60	1.111	-.748	.122	<b>-6.109</b>	1.167	.244	<b>4.774</b>

Notes: SD = standard deviation; SE = standard error; N = 397; The z-values were calculated by dividing the statistics by the standard errors (cf. Hair et al., 2009); Scores exceeding critical value of  $\pm 2.58$  (0.01 significance level) are marked bold

SMoM						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistik	df	Signifikanz	Statistik	df	Signifikanz
C1a1	.227	304	.000	.869	304	.000
C1a2	.265	304	.000	.836	304	.000
C1a3	.227	304	.000	.847	304	.000
C1b1	.257	304	.000	.827	304	.000
C1b2	.270	304	.000	.824	304	.000
C1b3	.242	304	.000	.878	304	.000
C1c1	.231	304	.000	.885	304	.000
C1c2	.224	304	.000	.895	304	.000
C1c3	.172	304	.000	.913	304	.000
C1d1	.235	304	.000	.874	304	.000
C1d2	.251	304	.000	.865	304	.000
C1d3	.230	304	.000	.890	304	.000
C1d4	.220	304	.000	.868	304	.000
C21	.207	304	.000	.894	304	.000
C22	.215	304	.000	.887	304	.000
C23	.220	304	.000	.879	304	.000
C24	.239	304	.000	.850	304	.000
C25	.229	304	.000	.874	304	.000

C26	.174	304	.000	.906	304	.000
C27	.171	304	.000	.925	304	.000
C28	.188	304	.000	.918	304	.000
C29	.197	304	.000	.884	304	.000
C31	.190	304	.000	.930	304	.000
C32	.208	304	.000	.923	304	.000
C33	.172	304	.000	.935	304	.000
C34	.153	304	.000	.946	304	.000
C35	.168	304	.000	.935	304	.000
C36	.178	304	.000	.941	304	.000
C41	.229	304	.000	.885	304	.000
C42	.200	304	.000	.883	304	.000
C43	.199	304	.000	.904	304	.000
C44	.195	304	.000	.906	304	.000
C51	.277	304	.000	.755	304	.000
C52	.285	304	.000	.759	304	.000
C53	.254	304	.000	.772	304	.000
C54	.258	304	.000	.804	304	.000
C55	.260	304	.000	.787	304	.000
C56	.237	304	.000	.845	304	.000
C61	.280	304	.000	.811	304	.000
C62	.263	304	.000	.811	304	.000
C63	.261	304	.000	.823	304	.000
C64	.242	304	.000	.851	304	.000
C65	.240	304	.000	.887	304	.000
C66	.261	304	.000	.851	304	.000
C67	.260	304	.000	.842	304	.000
C68	.212	304	.000	.874	304	.000
C69	.246	304	.000	.841	304	.000
C610	.203	304	.000	.885	304	.000
C611	.249	304	.000	.858	304	.000
C612	.205	304	.000	.894	304	.000
C613	.286	304	.000	.799	304	.000
C71	.205	304	.000	.877	304	.000
C72	.226	304	.000	.867	304	.000
C73	.229	304	.000	.875	304	.000
C74	.207	304	.000	.886	304	.000
C75	.250	304	.000	.814	304	.000
C81	.234	304	.000	.880	304	.000
C82	.260	304	.000	.838	304	.000
C83	.255	304	.000	.845	304	.000
C84	.224	304	.000	.879	304	.000
C85	.238	304	.000	.877	304	.000
C86	.182	304	.000	.908	304	.000
C87	.193	304	.000	.906	304	.000
C88	.179	304	.000	.920	304	.000
C89	.199	304	.000	.897	304	.000
C810	.218	304	.000	.898	304	.000
C811	.207	304	.000	.903	304	.000



C812	.202	304	.000	.887	304	.000
C91	.153	304	.000	.905	304	.000
C92	.210	304	.000	.854	304	.000
C93	.185	304	.000	.882	304	.000
C94	.192	304	.000	.880	304	.000
C95	.194	304	.000	.879	304	.000
C96	.153	304	.000	.899	304	.000
C101	.261	304	.000	.782	304	.000
C102	.244	304	.000	.796	304	.000
C103	.245	304	.000	.780	304	.000
C111	.217	304	.000	.861	304	.000
C112	.208	304	.000	.881	304	.000
C113	.233	304	.000	.850	304	.000
C114	.215	304	.000	.864	304	.000

a. Signifikanzkorrektur nach Lilliefors

Note: Significance level  $p < 0.05$ .

Maurice Lacroix						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistik	df	Signifikanz	Statistik	df	Signifikanz
C1a1	.198	397	.000	.920	397	.000
C1a2	.185	397	.000	.916	397	.000
C1a3	.163	397	.000	.924	397	.000
C1b1	.262	397	.000	.838	397	.000
C1b2	.254	397	.000	.856	397	.000
C1b3	.244	397	.000	.854	397	.000
C1c1	.250	397	.000	.874	397	.000
C1c2	.246	397	.000	.884	397	.000
C1c3	.214	397	.000	.880	397	.000
C1d1	.238	397	.000	.875	397	.000
C1d2	.239	397	.000	.879	397	.000
C1d3	.236	397	.000	.864	397	.000
C1d4	.216	397	.000	.877	397	.000
C21	.216	397	.000	.900	397	.000
C22	.214	397	.000	.894	397	.000
C23	.205	397	.000	.896	397	.000
C24	.213	397	.000	.887	397	.000
C25	.211	397	.000	.891	397	.000
C26	.197	397	.000	.908	397	.000
C27	.190	397	.000	.916	397	.000
C28	.180	397	.000	.916	397	.000
C29	.196	397	.000	.902	397	.000
C31	.155	397	.000	.940	397	.000
C32	.167	397	.000	.943	397	.000
C33	.182	397	.000	.939	397	.000
C34	.171	397	.000	.944	397	.000
C35	.173	397	.000	.939	397	.000

C36	.152	397	.000	.949	397	.000
C41	.240	397	.000	.891	397	.000
C42	.231	397	.000	.884	397	.000
C43	.232	397	.000	.886	397	.000
C44	.228	397	.000	.889	397	.000
C51	.226	397	.000	.835	397	.000
C52	.224	397	.000	.844	397	.000
C53	.214	397	.000	.854	397	.000
C54	.237	397	.000	.869	397	.000
C55	.221	397	.000	.853	397	.000
C56	.243	397	.000	.848	397	.000
C61	.267	397	.000	.846	397	.000
C62	.249	397	.000	.860	397	.000
C63	.246	397	.000	.859	397	.000
C64	.222	397	.000	.880	397	.000
C65	.240	397	.000	.885	397	.000
C66	.225	397	.000	.873	397	.000
C67	.210	397	.000	.886	397	.000
C68	.192	397	.000	.872	397	.000
C69	.226	397	.000	.866	397	.000
C610	.201	397	.000	.888	397	.000
C611	.213	397	.000	.868	397	.000
C612	.230	397	.000	.879	397	.000
C613	.256	397	.000	.831	397	.000
C71	.207	397	.000	.896	397	.000
C72	.187	397	.000	.903	397	.000
C73	.185	397	.000	.910	397	.000
C74	.188	397	.000	.900	397	.000
C75	.189	397	.000	.894	397	.000
C81	.219	397	.000	.877	397	.000
C82	.223	397	.000	.870	397	.000
C83	.236	397	.000	.869	397	.000
C84	.237	397	.000	.877	397	.000
C85	.244	397	.000	.872	397	.000
C86	.189	397	.000	.883	397	.000
C87	.231	397	.000	.880	397	.000
C88	.226	397	.000	.878	397	.000
C89	.211	397	.000	.875	397	.000
C810	.242	397	.000	.872	397	.000
C811	.232	397	.000	.879	397	.000
C812	.211	397	.000	.878	397	.000
C813	.208	397	.000	.883	397	.000
C814	.212	397	.000	.893	397	.000
C91	.165	397	.000	.890	397	.000
C92	.173	397	.000	.897	397	.000
C93	.198	397	.000	.890	397	.000
C94	.199	397	.000	.902	397	.000
C95	.186	397	.000	.892	397	.000
C96	.186	397	.000	.892	397	.000

C101	.273	397	.000	.783	397	.000
C102	.239	397	.000	.801	397	.000
C103	.246	397	.000	.803	397	.000
C111	.187	397	.000	.877	397	.000
C112	.207	397	.000	.894	397	.000
C113	.184	397	.000	.883	397	.000
C114	.193	397	.000	.881	397	.000

a. Signifikanzkorrektur nach Lilliefors

Note: Significance level  $p < 0.05$ .

<i>Mardia tests of multivariate skew and kurtosis - Swissmom</i>	
b1p = 571.14	skew = 28937.8 with probability = 0
	small sample skew = 29237.75 with probability = 0
b2p = 2254.54	kurtosis = 101.06 with probability = 0>

<i>Mardia tests of multivariate skew and kurtosis - Maurice Lacroix</i>	
b1p = 1811.37	skew = 119852.4 with probability = 0
	small sample skew = 120779.8 with probability = 0
b2p = 7464.6	kurtosis = 34.35 with probability = 0>

## B. Appendix – Test of multicollinearity: tolerance values and VIF values

SMoM Modell	Nicht standardisierte Koeffizienten		Standardisierte Koeffizienten	T	Sig.	Kollinearitätsstatistik	
	Regressionskoeffizient B	Standardfehler	Beta			Toleranz	VIF
(Konstante)	0.644	0.386		1.669	0.096		
C1a1	-0.042	0.062	-0.051	-0.671	0.503	0.275	3.636
C1a2	0.211	0.086	0.209	2.452	0.015	0.222	4.499
C1a3	-0.078	0.069	-0.09	-1.136	0.257	0.257	3.889
C1b1	-0.019	0.097	-0.018	-0.192	0.848	0.182	5.496
C1b2	0.204	0.097	0.196	2.107	0.036	0.186	5.369
C1b3	-0.154	0.084	-0.161	-1.842	0.067	0.212	4.725
C1c1	0.179	0.08	0.186	2.228	0.027	0.233	4.289
C1c2	-0.026	0.088	-0.028	-0.301	0.764	0.182	5.506
C1c3	-0.054	0.088	-0.061	-0.611	0.542	0.161	6.229
C1d1	0.086	0.075	0.107	1.152	0.251	0.186	5.365
C1d2	-0.091	0.074	-0.11	-1.224	0.222	0.2	5.012
C1d3	0.068	0.065	0.1	1.035	0.302	0.173	5.795
C1d4	-0.009	0.07	-0.01	-0.125	0.9	0.246	4.069
C21	-0.002	0.058	-0.002	-0.027	0.979	0.231	4.324
C22	0.019	0.065	0.025	0.287	0.775	0.214	4.674
C23	-0.004	0.06	-0.005	-0.071	0.944	0.325	3.079
C24	0.123	0.053	0.138	2.325	0.021	0.461	2.167
C25	-0.047	0.045	-0.056	-1.043	0.298	0.563	1.777
C26	0.058	0.049	0.089	1.181	0.239	0.283	3.539
C27	-0.041	0.059	-0.06	-0.696	0.487	0.218	4.591
C28	0.115	0.06	0.146	1.907	0.058	0.276	3.629
C29	-0.087	0.051	-0.118	-1.708	0.089	0.339	2.951
C31	0.031	0.078	0.04	0.397	0.692	0.159	6.285
C32	-0.013	0.073	-0.016	-0.176	0.861	0.202	4.961
C33	-0.04	0.072	-0.049	-0.556	0.579	0.209	4.775
C34	-0.085	0.074	-0.106	-1.161	0.247	0.194	5.157
C35	0.157	0.064	0.208	2.452	0.015	0.225	4.437
C36	0.046	0.052	0.058	0.897	0.371	0.39	2.565
C41	-0.076	0.09	-0.084	-0.839	0.402	0.161	6.221
C42	0.001	0.072	0.001	0.012	0.99	0.237	4.219
C43	0.119	0.092	0.127	1.293	0.197	0.168	5.957
C44	0.095	0.098	0.103	0.976	0.33	0.145	6.908
C51	0.018	0.117	0.023	0.154	0.878	0.072	13.87
C52	0.029	0.122	0.036	0.235	0.814	0.068	14.808
C53	-0.043	0.107	-0.059	-0.399	0.691	0.075	13.395
C54	-0.056	0.091	-0.08	-0.622	0.534	0.097	10.297
C55	0.069	0.067	0.088	1.035	0.302	0.222	4.508

C56	0.057	0.059	0.078	0.961	0.337	0.246	4.069
C61	0.05	0.099	0.044	0.5	0.617	0.209	4.787
C62	-0.19	0.1	-0.197	-1.889	0.06	0.148	6.747
C63	0.204	0.104	0.202	1.966	0.05	0.153	6.545
C64	-0.008	0.085	-0.009	-0.097	0.923	0.199	5.028
C65	-0.194	0.087	-0.202	-2.221	0.027	0.196	5.111
C66	0.132	0.108	0.145	1.219	0.224	0.114	8.795
C67	0.008	0.098	0.01	0.086	0.932	0.117	8.515
C68	-0.085	0.091	-0.087	-0.94	0.348	0.187	5.36
C69	0.143	0.081	0.14	1.762	0.079	0.256	3.911
C610	0.044	0.087	0.049	0.501	0.617	0.17	5.869
C611	0.204	0.098	0.2	2.078	0.039	0.175	5.722
C612	0.072	0.098	0.074	0.737	0.462	0.162	6.155
C613	-0.17	0.089	-0.166	-1.913	0.057	0.215	4.653
C71	0.132	0.062	0.212	2.135	0.034	0.188	5.322
C72	0.081	0.083	0.119	0.975	0.331	0.126	7.964
C73	-0.047	0.079	-0.071	-0.595	0.552	0.13	7.694
C74	0.023	0.073	0.035	0.312	0.755	0.145	6.908
C75	0.29	0.063	0.41	4.605	0	0.235	4.263

a. Abhängige Variable: C81

ML Modell	Nicht standardisierte Koeffizienten		Standardisierte Koeffizienten	T	Sig.	Kollinearitätsstatistik	
	Regressionskoeffizient B	Standardfehler	Beta			Toleranz	VIF
(Konstante)	.896	.463		1.936	.054		
C1a1	.028	.049	.037	.578	.564	.374	2.672
C1a2	.024	.052	.027	.459	.646	.451	2.215
C1a3	-.021	.049	-.027	-.428	.669	.380	2.634
C1b1	.067	.066	.071	1.016	.310	.322	3.102
C1b2	-.034	.064	-.034	-.524	.601	.372	2.689
C1b3	.024	.061	.027	.395	.693	.328	3.049
C1c1	-.076	.062	-.080	-1.236	.217	.374	2.677
C1c2	.102	.058	.109	1.749	.081	.403	2.482
C1c3	.021	.052	.025	.409	.683	.418	2.391
C1d1	-.022	.059	-.026	-.371	.711	.308	3.246
C1d2	.107	.064	.129	1.660	.098	.260	3.851
C1d3	.027	.051	.038	.536	.592	.312	3.202
C1d4	-.045	.056	-.055	-.806	.421	.338	2.963
C21	-.047	.054	-.056	-.871	.384	.385	2.596
C22	.058	.057	.064	1.023	.307	.397	2.519
C23	.016	.055	.017	.301	.764	.465	2.150
C24	.015	.051	.017	.289	.773	.477	2.096
C25	.038	.047	.045	.817	.414	.526	1.903
C26	.010	.049	.012	.202	.840	.418	2.391
C27	-.010	.049	-.011	-.194	.846	.456	2.195
C28	.004	.051	.005	.078	.938	.453	2.208

C29	.012	.051	.015	.246	.806	.450	2.224
C31	.077	.050	.115	1.548	.123	.282	3.550
C32	-.013	.049	-.018	-.261	.794	.346	2.891
C33	-.097	.050	-.126	-1.956	.051	.374	2.671
C34	-.038	.048	-.052	-.797	.426	.361	2.767
C35	.056	.045	.079	1.245	.214	.386	2.590
C36	.059	.039	.085	1.518	.130	.503	1.989
C41	.036	.066	.037	.542	.588	.332	3.010
C42	-.065	.072	-.068	-.904	.367	.274	3.650
C43	.127	.074	.132	1.724	.086	.266	3.765
C44	-.038	.069	-.043	-.560	.576	.264	3.781
C51	.157	.063	.156	2.483	.014	.396	2.527
C52	.007	.062	.007	.113	.910	.409	2.447
C53	-.070	.055	-.069	-1.267	.206	.530	1.887
C54	.041	.056	.040	.730	.466	.513	1.949
C55	-.009	.052	-.010	-.176	.860	.514	1.947
C56	-.033	.052	-.036	-.648	.518	.506	1.975
C61	.042	.081	.040	.521	.603	.262	3.823
C62	-.057	.067	-.059	-.853	.394	.329	3.036
C63	.095	.062	.095	1.543	.124	.414	2.413
C64	.060	.055	.060	1.090	.277	.516	1.937
C65	-.030	.058	-.030	-.529	.597	.482	2.075
C66	-.038	.056	-.040	-.677	.499	.444	2.253
C67	.067	.053	.072	1.259	.209	.474	2.111
C68	-.009	.054	-.009	-.167	.868	.493	2.029
C69	.017	.056	.017	.305	.760	.512	1.951
C610	-.088	.057	-.092	-1.534	.126	.436	2.296
C611	.003	.056	.003	.052	.959	.445	2.247
C612	.156	.058	.173	2.669	.008	.372	2.685
C613	.030	.057	.032	.524	.601	.411	2.436
C71	.119	.053	.155	2.251	.025	.331	3.023
C72	.017	.049	.021	.339	.735	.427	2.343
C73	.090	.051	.111	1.767	.078	.400	2.500
C74	-.041	.050	-.048	-.829	.408	.469	2.133
C75	-.055	.052	-.065	-1.065	.288	.427	2.343
a. Abhängige Variable: C81							

### C. Discriminant validity

Construct pairs Swissmom sample		<i>Unconstrained model</i>		<i>Constrained model*</i>		<i>Difference**</i>	
		$\chi^2$	<i>df</i>	$\chi^2$	<i>df</i>	$\chi^2$	<i>df</i>
C1a	C1b	6.783	8	90.101	9	83.319	1
C1a	C1c	5.745	8	73.854	9	68.109	1
C1a	C1d	25.950	13	110.050	14	84.099	1
C1a	C2	209.674	53	397.814	54	188.139	1
C1a	C3	66.796	26	270.948	27	204.152	1
C1a	C4	42.069	13	162.898	14	120.829	1
C1a	C5	122.151	26	283.788	27	161.638	1
C1a	C7	47.095	19	209.679	20	162.584	1
C1b	C1c	11.045	8	243.384	9	232.339	1
C1b	C1d	30.74	13	249.77	14	219.03	1
C1b	C2	209.97	53	557.22	54	347.25	1
C1b	C3	51.48	26	405.12	27	353.64	1
C1b	C4	61.317	13	357.058	14	295.741	1
C1b	C5	117.31	26	358.75	27	241.44	1
C1b	C7	56.979	19	401.547	20	344.568	1
C1c	C1d	31.572	13	150.341	14	118.768	1
C1c	C2	190.66	53	429.09	54	238.44	1
C1c	C3	60.158	26	408.160	27	348.003	1
C1c	C4	71.449	13	259.246	14	187.797	1
C1c	C5	116.99	26	368.11	27	251.12	1
C1c	C7	55.957	19	330.255	20	274.298	1
C1d	C2	212.72	64	479.11	65	266.39	1
C1d	C3	74.423	34	412.361	35	337.938	1
C1d	C4	59.326	19	212.291	20	152.965	1
C1d	C5	145.75	34	544.42	35	398.67	1
C1d	C7	69.648	26	310.191	27	240.542	1
C2	C3	261.93	89	869.66	90	607.73	1
C2	C4	220.79	64	455.85	65	235.06	1
C2	C5	340.66	89	999.82	90	659.15	1
C2	C7	270.91	76	643.60	77	372.68	1
C3	C4	101.89	34	477.98	35	376.09	1

C3	C5	186.3	53	1011.2	54	824.9	1
C3	C7	114.02	43	789.52	44	675.50	1
C4	C5	147.65	34	494.45	35	346.80	1
C4	C7	98.004	26	453.224	27	355.220	1
C5	C7	171.14	43	949.17	44	778.04	1

\*Models were constrained to the extent that the correlation (phi) between any two latent constructs was set to be one.  
 \*\* The null hypothesis is the chi-square difference equal 0 (e.g. the unconstrained model is not different from the constrained one).

<i>Construct pairs</i> <i>Murice Lacroix sample</i>		<i>Unconstrained model</i>		<i>Constrained model*</i>		<i>Difference**</i>	
		$\chi^2$	<i>df</i>	$\chi^2$	<i>df</i>	$\chi^2$	<i>df</i>
C1a	C1b	12.174	8	282.580	9	270.406	1
C1a	C1c	9.4394	8	218.8407	9	209.4013	1
C1a	C1d	17.511	13	258.318	14	240.807	1
C1a	C2	194.12	53	471.87	54	277.75	1
C1a	C3	42.542	26	323.212	27	280.670	1
C1a	C4	25.188	13	319.978	14	294.790	1
C1a	C5	53.203	26	341.787	27	288.585	1
C1a	C7	48.59	19	377.78	20	329.19	1
C1b	C1c	14.558	8	217.604	9	203.046	1
C1b	C1d	22.496	13	270.380	14	247.884	1
C1b	C2	193.74	53	507.08	54	313.34	1
C1b	C3	24.793	26	372.936	27	348.143	1
C1b	C4	13.455	13	311.914	14	298.460	1
C1b	C5	47.986	26	365.929	27	317.943	1
C1b	C7	43.666	19	360.195	20	316.529	1
C1c	C1d	11.792	13	220.232	14	208.440	1
C1c	C2	187.24	53	397.85	54	210.61	1
C1c	C3	37.306	26	326.522	27	289.216	1
C1c	C4	11.455	13	212.364	14	200.909	1
C1c	C5	55.99	26	329.08	27	273.09	1
C1c	C7	46.146	19	304.890	20	258.744	1
C1d	C2	201.88	64	469.51	65	267.63	1
C1d	C3	37.484	34	592.285	35	554.801	1
C1d	C4	18.393	19	331.013	20	312.620	1
C1d	C5	63.271	34	572.422	35	509.151	1



C1d	C7	44.461	26	336.401	27	291.940	1
C2	C3	248.58	89	1024.44	90	775.86	1
C2	C4	193.56	64	573.23	65	379.67	1
C2	C5	250.01	89	749.51	90	499.50	1
C2	C7	238.11	76	539.06	77	300.95	1
C3	C4	39.822	34	701.152	35	661.330	1
C3	C5	80.37	53	678.51	54	598.14	1
C3	C7	84.98	43	570.99	44	486.01	1
C4	C5	68.138	34	523.536	35	455.398	1
C4	C7	50.633	26	416.891	27	366.258	1
C5	C7	98.325	43	525.968	44	427.643	1

\*Models were constrained to the extent that the correlation ( $\phi$ ) between any two latent constructs was set to be one.

\*\* The null hypothesis is the chi-square difference equal 0 (e.g. the unconstrained model is not different from the constrained one).

## Appendix - Details of Expert-Interviewees

Interview Date	Organisation	Interviewee's position
10.10.2010	Zurich University of Applied Sciences	Professor of Marketing
10.10.2010	BF-Games.net	Online Community Manager
11.10.2010	VM Digital	Online Marketing Manager
11.10.2010	Namics	CEO and Partner
12.10.2010	Universal Music	Online Marketing Manager
13.10.2010	University of Vienna	Lecturer
15.10.2010	ZANOX.de AG	Manager Online Communications & PR
16.10.2010	University of Zurich	Professor of Marketing
17.10.2010	die-pupille	Director
18.10.2010	Bernett PR	CEO and Owner
18.10.2010	IDG Business Media GmbH	Head of Business Communities
19.10.2010	Borey Art Online and Photostreet	Creative Director, CEO
20.10.2010	University of Applied Sciences Lucerne	Senior Lecturer
23.10.2010	Freelancer	Online marketing and/or community manager consultant
03.11.2010	Deutsche Online Medien GmbH	Community Manager
13.11.2010	fischbeck online U.G.	CEO
21.11.2010	Community Spark	Community Builder & Consultant

## D. Appendix – Expert Interview Questions

<i>No.</i>	<i>Topic</i>	<i>Literature</i>	<i>Question<sup>6</sup></i>
1	Argument quality	Kiesler et al., 1984; Burgoon et al., 2002; Christodoulides & de Chernatony, 2004; Scoble & Israel, 2006; Boyd & Ellison, 2007	1a) How important do you consider the relevance of a contribution to be? Why? 1b) Do you think the content of a message might have an impact on the perception an OCM could have of a COR? Why?
2	Argument quality	Norton, 1983; Hansford & Hattie, 1987; Rice & Torobin, 1992; Roed, 2003; Zerfass, 2005; Scobel & Israel, 2006; Weil, 2006; Wright, 2006	2) What sort of communication style is needed in an online community (e.g. formal, informal)? Why? Can you describe what a formal or informal communication style would be?
3	Social context cues	Mehrabian, 1969; Short et al., 1976; Sproull & Kiesler, 1986; Dubrovsky et al., 1991; Walther, 1992, 1995, 1996; Walther, et al., 1994; Lea & Spears, 1992; Jacobson, 1999	3a) Do you think that the use of paralanguage (e.g. smiles, misspelling such as COOL [all capital letters]) is important in an online community communication? Why? 3b) Do you think that it is important to receive some additional descriptions about the sender of a message in online communities (e.g. some personal description). Why?
4	Social presence	Wiener & Mehrabian, 1968; Short et al., 1976; Daft & Lengel, 1986; Argyle & Dean, 1965; Zerfass, 2005; Weil, 2006; Wright, 2006	4) Do you think that the following factors are important in online communities? Why? a) To get a good enough idea of how people at the other end are reacting. b) To get a real impression of personal contact with the people at the other end? c) To easily assess the other people's reactions to what has been said? d) That the conversation provides a great sense of realism? e) That one gets a good 'feel' for people at the other end?

<sup>6</sup> All questions generated by the researcher

			<p>f) That it is just as though all people are in the same room?</p> <p>g) That people on the other end seem to be real?</p>
6	Affiliation	Warnick, 2004; Hogenkamp, 2007	<p>5a) Online community members do not always appreciate companies participating in their community. How is your opinion about this statement?</p> <p>5b) Why would community members allow companies into their discussion?</p> <p>5c) What would be the premises for companies to be allowed in an online community?</p> <p>5d) Do you think that if a company member participates in an online community discussion it should clearly disclose their affiliation to the company and why they are participating? Why?</p> <p>5e) Do you think a company member should only disclose their affiliation to the company or also their status in this company (e.g. head of communication, marketing director, CFO, CIO, CEO). If yes, why?</p>
6	Perceived similarity	Lazarsfeld & Merton, 1954; Evans, 1963; Brown & Reingen, 1987; Price et al., 1987; Dellande & Gilly, 1998; Gilly et al., 1998; DeShields & Kara, 2000	<p>6a) In general, it is suggested that it is easier to communicate with individuals that are perceived to be similar. Do you think this is the same in online communities or does this not really matter in online communities?</p> <p>6b) Speaking about “similar”, how would you define “being similar” in the context of an online community? What criteria might be important to a person to perceive the other person as “being similar” (in an online community)? E.g. having the same interests, using the same expressions, sharing the same values, having the same preferences.</p>
7	Source credibility	McGuire, 1969; Ohanian, 1990; Belch & Belch, 1994; Goldsmith et al., 2000; Lafferty et al., 2002; Massey, 2003; Clow & Baack, 2004	7) Do you think it is important to a person that the source (i) is believable, (ii) has some expertise, (iii) has the public’s best interest (trustworthiness), (iv) is attractive and (v) likeable? Why?
8	Interactivity	Toffler, 1984; Sproull & Kiesler, 1986; Rafaeli, 1988; Tabscoott, 1997; Shih, 1998; Ariely, 2000; Dellaert, 2000; Liu & Shrum, 2002; Christodoulides & de Chernatony, 2004; Sicilia et al., 2005; Wright, 2006; Bagozzi et al., 2007	<p>8a) Do you think interactivity is important in online communities? How would you describe interactivity in online communities?</p> <p>8b) In the literature we can find three kinds of interactivity: human-machine, human-message and human-human interactivity. Which, if any, of this interactivity do you consider to be important in online communities and why?</p>

9	Interpersonal communication	Kozinets, 1999; Bickart & Schindler, 2001; McAlexander et al., 2002; Baumgarth, 2004; Godes & Mayzlin, 2004; Henning-Thurau et al., 2004; Gruen et al., 2006; Stammerjohan et al., 2005; Melewar & Karaosmanoglu, 2006; Dwyer, 2007	9a) How do you think does the discussion on the platform influence an online community member? Why? 9b) Do you think the discussion has a big influence? Why?
10	Motives for participating in an OC	Bagozzi & Dholakia, 2002	10a) How do you think does the perception in terms of user-message interactivity change if an OCM has mainly topic/brand related motives, compared to an OCM that has mainly community related motives? Why? 10b) How do you think does the perception in terms of user-user interactivity change if an OCM has mainly topic/brand related motives, compared to an OCM that has mainly community related motives? Why?
11	Motives for participating in an OC	Dholakia et al., 2004	11) How important do you consider source credibility to be for an OCM that has mainly topic/brand related motives, compared to an OCM that has mainly community related motives? Is there any difference?
12	Motives for participating in an OC	Simons et al., 1970; Walther, 1996; DeShields & Kara, 2000	12) How important do you consider similarity to be for an OCM that has mainly topic/brand related motives, compared to an OCM that has mainly community related motives? Is there any difference?
13	Motives for participating in an OC	Short et al., 1976; Bagozzi & Dholakia, 2002	13) How important do you consider social presence to be for an OCM that has mainly topic/brand related motives, compared to an OCM that has mainly community related motives? Is there any difference?
14	Motives for participating in an OC	Walther, 1996, 2001	11) How important do you consider social context cues to be for an OCM that has mainly topic/brand related motives, compared to an OCM that has mainly community related motives? Is there any difference?
15	Attitude towards the company	Ajzen & Fishbein, 1980; Barich & Kotler, 1991; Balmer, 1995; Brown, 1998; van Riel, 1995; Mykytyn et al., 2005; Pina et al., 2008	15) How do you consider a positive image to influence the attitude to the company of an OCM?
16	Attitude → Intention to buy/recommend a company's product	Ajzen & Fishbein, 1980; Pina et al., 2008	16) How do you consider a positive attitude to influence the intention to buy/recommend a company's products/services?
17	Image → Intention to buy/recommend a	Pina et al., 2008	17) How do you consider a positive image to influence the intention to buy/recommend a company's products/services?

	company's product		
18	Image → influence on word-of-mouth.	Godes & Mayzlin, 2004	18) How do you consider a positive image to influence word-of-mouth communication by OCMs?

*Source: Developed for the present study.*

## E. Appendix – Expert interviews



### Expert interviews

Dear <expert>,

I am conducting a research project to better understand if and how virtual community members expect companies to participate in conversations. The aim of this research is to gain knowledge of how virtual community (VC) members form impressions about a company that is using VCs for corporate communication activities. The data collected will be used for academic purposes only. The respondent cannot be identified and no personal name will be disclosed. Your participation is strictly voluntary, however, it is important for the success of this study and we greatly appreciate your help.

This expert interview will help to better understand how you perceive and describe the constructs as well as to generate additional information. This will allow verifying the proposed conceptual model and helping to better understand how experts see the single constructs and the relationships between them.

In section 1 you will find a brief description of the single constructs relevant to this research. In section 2 you will be asked some general questions about your perceptions of communication in virtual communities. Section 3 addresses questions regarding the relationships between the single constructs.

Many thanks for participating in this expert interview.  
Sincerely,

Christine Hallier  
PHD Student

## Section 1: Domain of Constructs

This section provides a brief explanation of each domain of construct in order to clarify what it stands for. Please note that we call a company's representative (the person/employee that participates in a VC discussion on behalf of a company): the *CVCM*; and a private VC member: the *PVCM*.

### Relevance of contribution

Conversations in computer-mediated environments are assumed to convey less social context cues compared to face-to-face communication. The removal of nonverbal cues is assumed to increase attention to the message. Boyd and Ellison (2007) state that contributions in digital spaces are persistent and searchable. This additionally underlines the importance of providing relevant contributions.

### Informal communication

Messages on VC platforms have to be written in the "language" of the VC members (Zerfass, 2005) and be "written in a conversational voice" (Weil, 2006 p. 7). People do not want to have any corporate speech on the VCs. Further, VC members tend to share more openly their viewpoints and are more honest (Roed, 2003).

### Social context cues

The absence of social context cues (e.g. facial expressions, tone of voice, age, posture, dress and nonverbal cues) in computer-mediated communication can be overcome through "various linguistic and typographic manipulation, which may reveal social and relational information" (Walther, 1995 p. 190). In line with Walther, Jacobson (1999) states that "in addition to the words people choose, paralinguistic cues also influence the ways in which participants see each other" (p. 7). Therefore, it is believed that inter alia the use of paralanguage can make up for the lack of social context cues and have a positive impact on image formation. Further, reduced social cues in CMC allow senders of a message to present themselves very selectively and in a good light by carefully constructing messages. Receivers, in turn, tend to over attribute perceived similarities and create an idealised image of the sender.

### Social presence

Social presence can be described as the extent to which a medium is seen to be able to convey psychological presence felt by individuals, who communicate with each other. It is proposed by Short et al. (1976) that in order for conversations to be fruitful and effective the 'sense of being with one another' is needed. The perceived



social presence of an individual is assumed to be important as today users expect more personal communication (Zerfass, 2005; Weil, 2006; Wright, 2006).

### **Affiliation**

VC members do not always appreciate companies participating in their community. This is one of the reasons why it is believed that it is even more important that CVCMs must disclose their affiliation to the company.

### **Perceived similarity**

According to Brown and Reingen (1987), perceived similarity between individuals is a key factor affecting the persuasiveness of word-of-mouth information. Lazarsfeld and Merton's (1954) theory of homophily suggests that it is easier to communicate with individuals that are perceived to be similar. Therefore it is assumed that the more a PVCM perceives a CVCM to be similar the more positive his impression about the CVCM is.

### **Source credibility**

It is posited that "corporate credibility, or the extent to which consumers, investors, and other constituents believe in a company's trustworthiness and expertise, makes up a portion of a corporation's image" (Lafferty et al., 2002 p. 2). Many studies investigate source credibility and its relationship to the *attitude-towards-an-ad* and subsequently the *attitude-towards-a-brand* and its consequences on purchase intention (e.g. Lafferty et al., 2002). Source credibility has been conceptualised in two ways: corporate credibility and endorser credibility. For the purposes of the present study, source credibility refers to the credibility of the endorser, namely the CVCM.

### **Interactivity**

Interactivity in VCs is considered to be important. Wright (2006) claims that "people don't want to be talked at, they want to be talked with" (p. 30). Therefore, it is expected that when consumers are able to contribute to communication this will increase their enthusiasm and it will build trust.

### **Interpersonal communication**

Customers who are part of a VC are not isolated but communicate among themselves. Therefore it is assumed that relationships with and attitudes toward a company or brand depend fundamentally on the social interactions between the participants of the community and that communication among the VC members will influence the image formation process.

### **Motives for participation in a VC**

Individuals have differing motivations for accessing VCs. Some do so purely to gather information, without any interest in social interaction, while others are there for primarily social purposes. Based on Popp et al.'s (2008) study of motives for participation, we refer to members that participate purely to gather information as '*PVCMs with topic/brand related motives*', and to members with primarily social interests as '*PVCMs with community related motives*'. It is assumed that those motives play a moderating role on some of the antecedents.

### **Impression formation**

Given that the present study emphasizes on VCs, the corporate image that will be given the main focus includes all aspects of the communication activities in this VC. Boulding (1956) suggests that rather of relying on reality people rely on their perceived images (De Chernatony et al., 2000). The "aim is to identify the underlying components relevant for VC members when it comes to build an impression of a CVCM" (Hallier, 2010).

### **Attitude and intention**

Literature attributes to corporate image several implications. It influences customer behaviour (Boulding, 1956; Cohen, 1967; Barich and Kotler, 1991), induces customer attitude towards a company's sales personnel and products (Brown, 1998) and leads individuals to buy a company's product (Balmer, 1995; van Riel, 1995). Because attitude influences behaviour through intention, it is assumed that the attitude about a company will influence the intention to use a company's products/services.

## Section 2: General questions

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### 1. Personal information

1.1 Name:

1.2 Company, Function:

1.3 Experiences with virtual communities (VCs) since:

1.4. What kind of experiences do you have with virtual communities?

---

### 2. Virtual communities in general

2.1 Why do you think do people use VCs?

2.2 Do you think people are influenced by the discussions hold or read in VCs? Why?

2.3 Could you please describe what is important for having a successful communication in a virtual community?

---

### 3. Virtual communities and companies

3.1 Should companies use VCs for corporate communication activities? If yes, why and how? If no, why not?

3.2 Could you please describe what you consider to be important for a company to have a successful communication in a virtual community?

3.3 How might it influence a virtual community member's perception about a company if a company member does engage in the discussion on the platform?

3.4 Should a company rather engage in existing VCs or establish an own one?

3.5 What kind of experiences (positive and/or negatives) have companies made when trying to participate in virtual communities or when trying to host a virtual community on their own?

### **Section 3: Constructs and their relationships**

This section addresses questions regarding the constructs and their relationships.

---

#### ***1. Relevance of contribution***

- a) How important do you consider the relevance of a contribution to be? Why?
- b) Do you think the content of a message might have an impact on the perception a PVCMM could have about a CVCMM? Why?

---

#### ***2. Informal communication***

What kind of communication style is needed in a virtual community (e.g. formal, informal)? Why? Can you describe what a formal or informal communication style would be?

---

#### ***3. Social context cues***

- a) Do you think that the use of paralanguage (e.g. smilies, misspelling such as COOL [all capital letters]) is important in a virtual community communication? Why?
- b) Do you think that it is important to receive some additional descriptions about the sender of a message in virtual communities (e.g. some description about the person itself)? Why?

---

#### ***4. Social presence***

Do you think that the following factors are important in virtual communities? Why?

- a) To get a good enough idea of how people at the other end are reacting.
- b) To get a real impression of personal contact with the people at the other end?

- c) To easily assess the other people's reactions to what has been said?
- d) That the conversation provides a great sense of realism?
- e) That one gets a good 'feel' for people at the other end?
- f) That it is just as though all people are in the same room?
- g) That people on the other end seem to be real?

---

### **5. *Affiliation***

- a) Virtual community members do not always appreciate companies participating in their community. How is your opinion about this statement?
- b) Why and in what form would community members allow companies into their discussion?
- c) What would be the premises for companies to be allowed in a virtual community?
- d) Do you think that if a company member participates in a virtual community discussion it should clearly disclose their affiliation to the company and why they are participating? Why?
- e) Do you think a company member should only disclose their affiliation to the company or additionally also disclose their status in this company (e.g. head of communication, marketing director, CFO, CIO, CEO). If yes, why?

---

### **6. *Perceived similarity***

- a) In general, it is suggested that it is more convenient to communicate with individuals that are perceived to be similar. Do you think this is the same in virtual communities or does this not really matter in virtual communities?
- b) Speaking about "similar", how would you define "being similar" in the context of a virtual community? What criteria might be important to a person to perceive the other person as "being similar" (in a virtual community)? E.g. having the similar interests, using the identical expressions, sharing the similar values, having the same preferences.

---

### **7. Source credibility**

Do you think it is vital to a person that the source (i) is believable, (ii) has some expertise, (iii) has the public's best interest (trustworthiness), (iv) is attractive and (v) likeable? Why?

---

### **8. Interactivity**

a) Do you think interactivity is important in virtual communities? How would you describe interactivity in virtual communities?

b) In the literature we can find three kinds of interactivity: human-machine, human-message and human-human interactivity. Which, if any, of this interactivity do you consider to be important in virtual communities and why?

---

### **9. Interpersonal communication**

a) How do you think does the discussion on the platform influence a virtual community member? Why?

b) Do you think the discussion has a big influence? Why?

---

### **10. Motives for participation in a VC**

Which of the above mentioned constructs (see 1-9) do you consider to be relevant or not to be relevant for *PVCMs with topic/brand related motives*, compared to *PVCMs that have mainly community related motives*? Please provide your answer by ticking the boxes in the table below, which to your point are accurate.

Construct	PVCM with mainly <i>topic/brand</i> related motives		PVCM with mainly <i>community</i> related motives		Not relevant at all
	Relevant	not relevant	Relevant	Not relevant	
Relevance of contribution					
Informal communication					
Social context cues					
Social presence					
Affiliation					
Perceived similarity					
Source credibility					
Interactivity					
Interpersonal communication					

---

### **11. Impression formation**

a) What do you think does influence the perception a PVCM have of a company representative and of a company as such?

b) What might be the underlying components relevant “for VC members when it comes to build an impression of a CVCM” (Hallier, 2010)?

---

### **12 Attitude and intention**

a) How do you consider a positive or negative image to influence the *attitude* a PVCM has about a company?

b) How do you consider a positive or negative attitude to influence the intention to buy/recommend a company’s products/services?

c) How do you consider a positive or negative image to influence the intention to buy a company's products/services?

---

***13 Interpersonal communication***

How do you consider a positive or negative image to influence the intention to recommend/speak about a company and its products/services?

-----Thank you very much for your participation! It is highly appreciated!!-----



## F. Appendix – Online Community Member Interviews



### Qualitative Interviews mit Swissmom Forum Members

Liebes Swissmom Mitglied,

Die untenstehenden Fragen dienen dazu, Erkenntnisse darüber zu gewinnen, wie Swissmom Forum Members Eindrücke (Image) bilden.

Ich danke Dir herzlich für Deine Teilnahme. Deine Meinung ist sehr wichtig und ich freue mich jetzt schon Deinen Beitrag zu lesen. Ohne Deine Teilnahme käme diese Studie nicht zu Stande!

#### ***Angaben zum Ausfüllen des Fragebogens:***

Beim Ausfüllen des Fragebogens gibt es kein richtig oder falsch. Es geht darum Deine Meinung kennen zu lernen. Ist für Dich eine Frage nicht verständlich kannst Du mich jederzeit per Email kontaktieren: [hall@zhaw.ch](mailto:hall@zhaw.ch) oder per sms: 076 331 0373.

Falls es Dir lieber ist, darfst Du gerne auch mit Kurzantworten (z.B. Stichworte) antworten. Du kannst Deine Antworten einfach unter die Fragen schreiben.

Wie Du bereits im Beitrag auf dem Forum gelesen hast werden die Interviews alle anonymisiert, d.h. nach der Auswertung werden keine Namen gespeichert. Vor der Anonymisierung erhältst Du das Interview nochmals, so dass Du kontrollieren kannst ob ich alles richtig verstanden habe und Du kannst noch Dinge ergänzen oder streichen. Sobald ich die korrigierten Interviews wieder zurück erhalte, werde ich sie auswerten. Von da an werden die Namen anonymisiert.

Vielen herzlichen Dank für Deine Teilnahme,

Christine Hallier  
PHD Student

## Teil 1: Generelle Fragen zur Entstehung von Eindrücken

1. Welche Worte würdest Du verwenden um einen Forums-Moderator zu beschreiben? i) positiv, ii) negativ

2. Welche Worte würdest Du verwenden um die Nachrichten eines Forum-Moderators zu beschreiben? i) positiv, ii) negativ

3. Welches der folgenden Aussagen findest Du adäquat um den Forums-Moderator zu beschreiben (positive und/oder negative):

ehrlich,	nicht intelligent,	träge,	sozial,
interessant,	nicht überzeugend,	unfreundlich,	aggressiv,
romantisch,	konservativ,	unbeschwert,	seriös,
mit Verstand,	zwanghaft,	religiös.	

Nenne den Grund für diejenigen die Du gestrichen hast. Kannst Du weitere hinzufügen?

4. Welches der folgenden Aussagen findest Du adäquat um den Forums-Moderator zu beschreiben (positive und/oder negative):

Attraktivität, Gefallen, Möglichkeit Freundschaft zu schliessen, Glaubwürdigkeit

Nenne den Grund für diejenigen die Du gestrichen hast. Kannst Du weitere hinzufügen?

5. Welches der folgenden Aussagen findest Du adäquat um den Forums-Moderator zu beschreiben (positive und/oder negative):

bösartig-nett,	unfreundlich-freundlich,	fies-liebeswürdig,
unglücklich-glücklich,	kalt-warm,	bedrückt-fröhlich,
gemein-freundlich,	unanständig-höflich,	negativ-positiv,
anstössig-artig,	nicht fürsorglich-fürsorglich,	unangenehm-angenehm,
nicht lebenswürdig-liebenswürdig,	rücksichtslos-rücksichtsvoll,	unsympathisch-sympathisch.

Nenne den Grund für diejenigen die Du gestrichen hast. Kannst Du weitere hinzufügen?

6. Inwiefern denkst Du hat sich das Image der Organisation (Swissmom) verbessert oder verschlechtert (basierend auf die Eindrücke die Du über den Moderator hast)?

7. Möchtest Du im Allgemeinen irgendetwas über den Kommunikationsprozess ergänzen?

8.a) Wie sollte ein Moderator sein (Charakteristiken und Kommunikationsverhalten) damit Du einen i) positiven resp. ii) negativen Eindruck von ihm gewinnst?

8.b) Wie sollte eine Nachricht sein damit Du einen i) positiven resp. ii) negativen Eindruck bei Dir hinterlässt?

9. Was hinterlässt bei Dir einen i) negativen, ii) positiven Eindruck über den Moderator?

10. Wie, meinst Du, kann der Eindruck den Du über die Beiträge des Moderators formst, den Eindruck den Du über den Moderator selber hast beeinflussen?

11. Wie, meinst Du, kann der Eindruck den Du über den Moderator hast, den Eindruck den Du über seine Beiträge hast beeinflussen?

12. Wie, meinst Du kann der Eindruck den Du über den Moderator hast, den Eindruck den Du über die Organisation hast beeinflussen?

## Teil 2: Konkrete Fragen zur Entstehung von Eindrücken

13. Wie kann Deiner Meinung nach die Relevanz eines Beitrages den Eindruck den Du über den Moderator hast beeinflussen?
14. Wie können Deiner Meinung nach i) informelle und ii) starke Kommunikationsstile den Eindruck den Du über den Moderator hast beeinflussen?
15. Wie kann die Verwendung von Paralinguistik (z.B. Smilies, Grossschreibung) den Eindruck den Du über den Moderator hast beeinflussen?
16. Wie können zusätzliche Beschreibungen über den Moderator (z.B. Username, Userstatus, persönliche Beschreibungen) den Eindruck den Du über den Moderator hast beeinflussen?
17. Wie kann eine Ähnlichkeit zum Moderator den Eindruck den Du über den Moderator hast beeinflussen?
18. Wie würdest Du „Ähnlichkeit“ in diesem Kontext beschreiben? (z.B. gleiche Interessen haben, dieselben Ausdrücke brauche, dieselben Werte haben, etc.)
19. Wie kann die Glaubwürdigkeit des Moderators den Eindruck den Du über den Moderator hast beeinflussen?
20. Wie kann die Häufigkeit der Beiträge im Allgemeinen den Eindruck den Du über den Moderator hast beeinflussen?
21. Wie kann die Dauer (Grösse) der Beiträge im Allgemeinen den Eindruck den Du über den Moderator hast beeinflussen?
22. Wie können Beiträge von anderen Forum Mitglieder den Eindruck den Du über den Moderator hast beeinflussen?
23. Was könnte sonst noch einen Einfluss auf den Eindruck den Du über den Moderator resp. die Beiträge hast ausüben?

### Teil 3: Generelle Fragen

Untenstehend findest Du einige generelle Fragen die wir für „statistische“ Zwecke brauchen.

24. Geschlecht:

25. Alter:

26. User Status: (z.B. Newby, Junior Member, etc.)

27. User seit:

28. Grund der Teilnahme an den Swissmom Forumdiskussionen:

29. Wie viele Stunden verbringst Du pro Woche auf dem Internet?

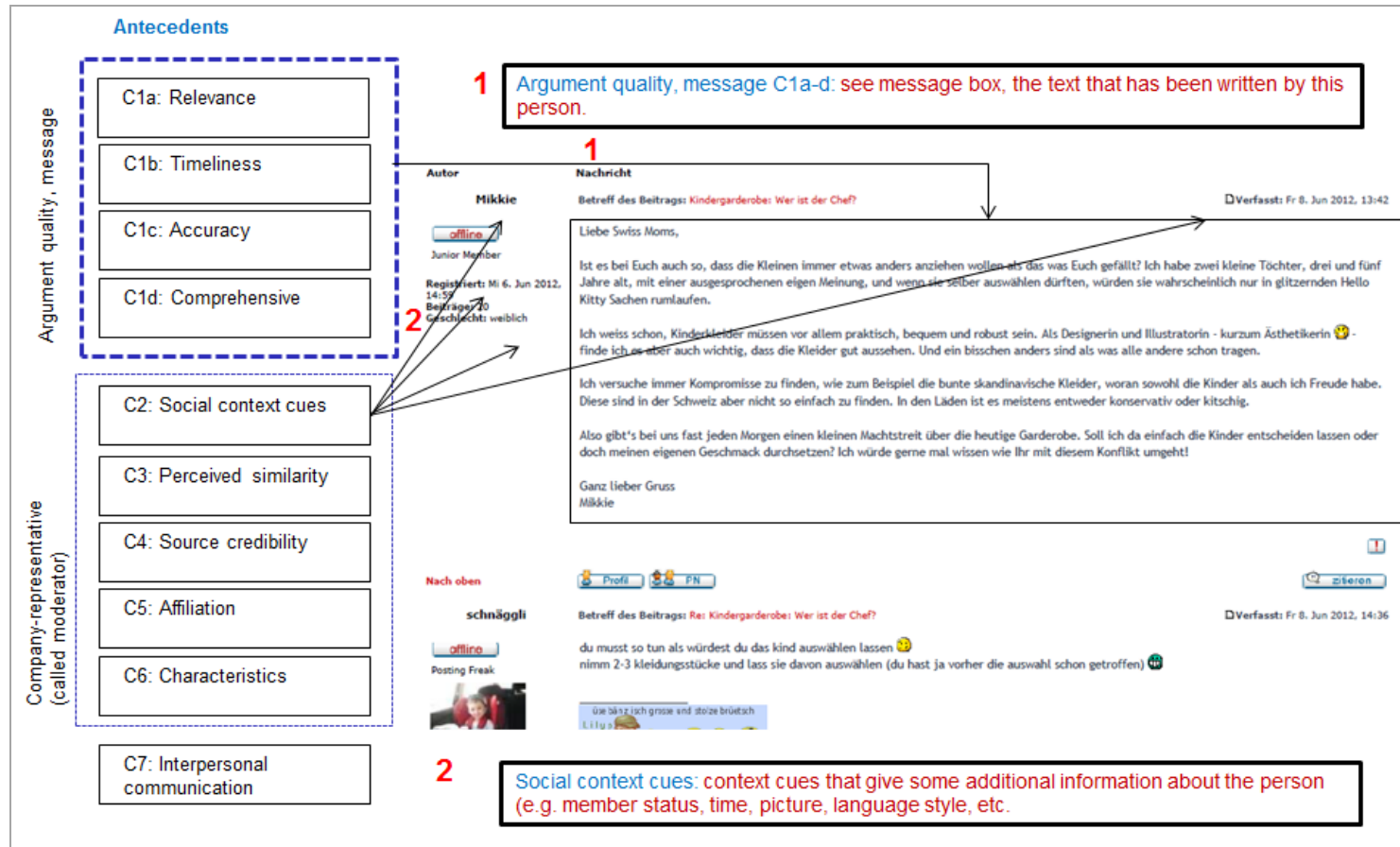
30. Wie oft besuchst Du die Swissmom Foren?

31. Wie lange verbringst Du im Durchschnitt auf den Swissmom Foren?

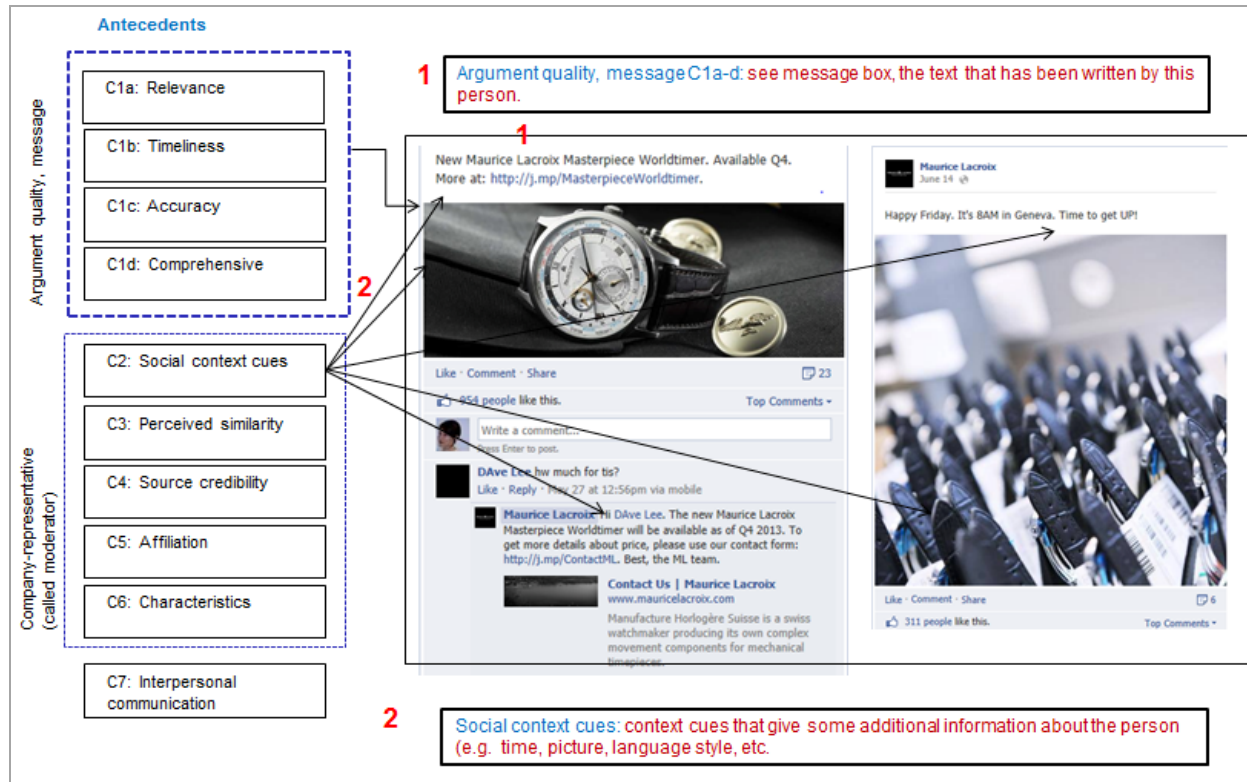
Vielen herzlichen Dank für Deine Teilnahme!!!!!!!!!!!!!!

Christine Hallier

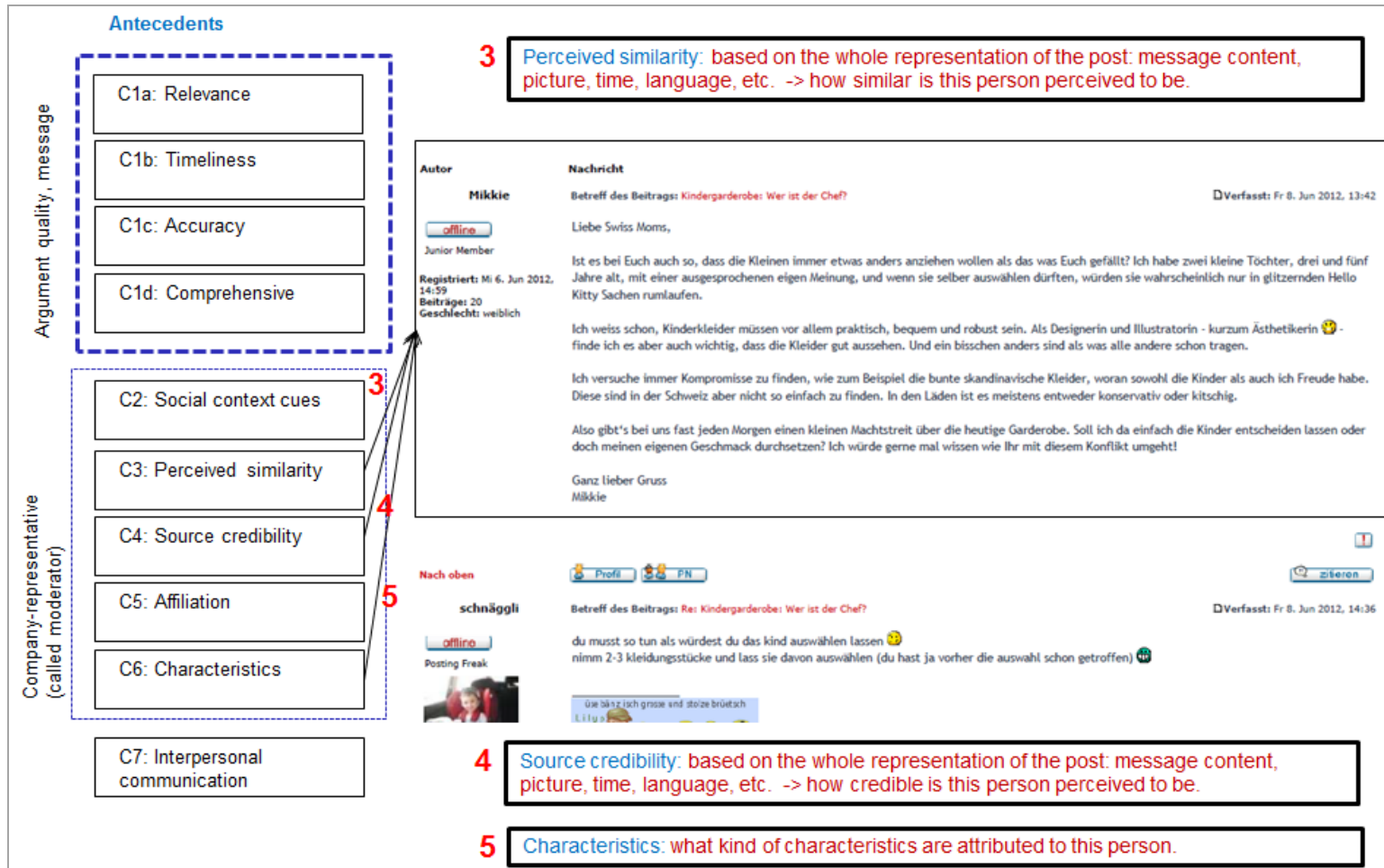
## G. Appendix – Linking the conceptual model to the SMoM forum I



## H. Linking the conceptual model to Maurice Lacroix III

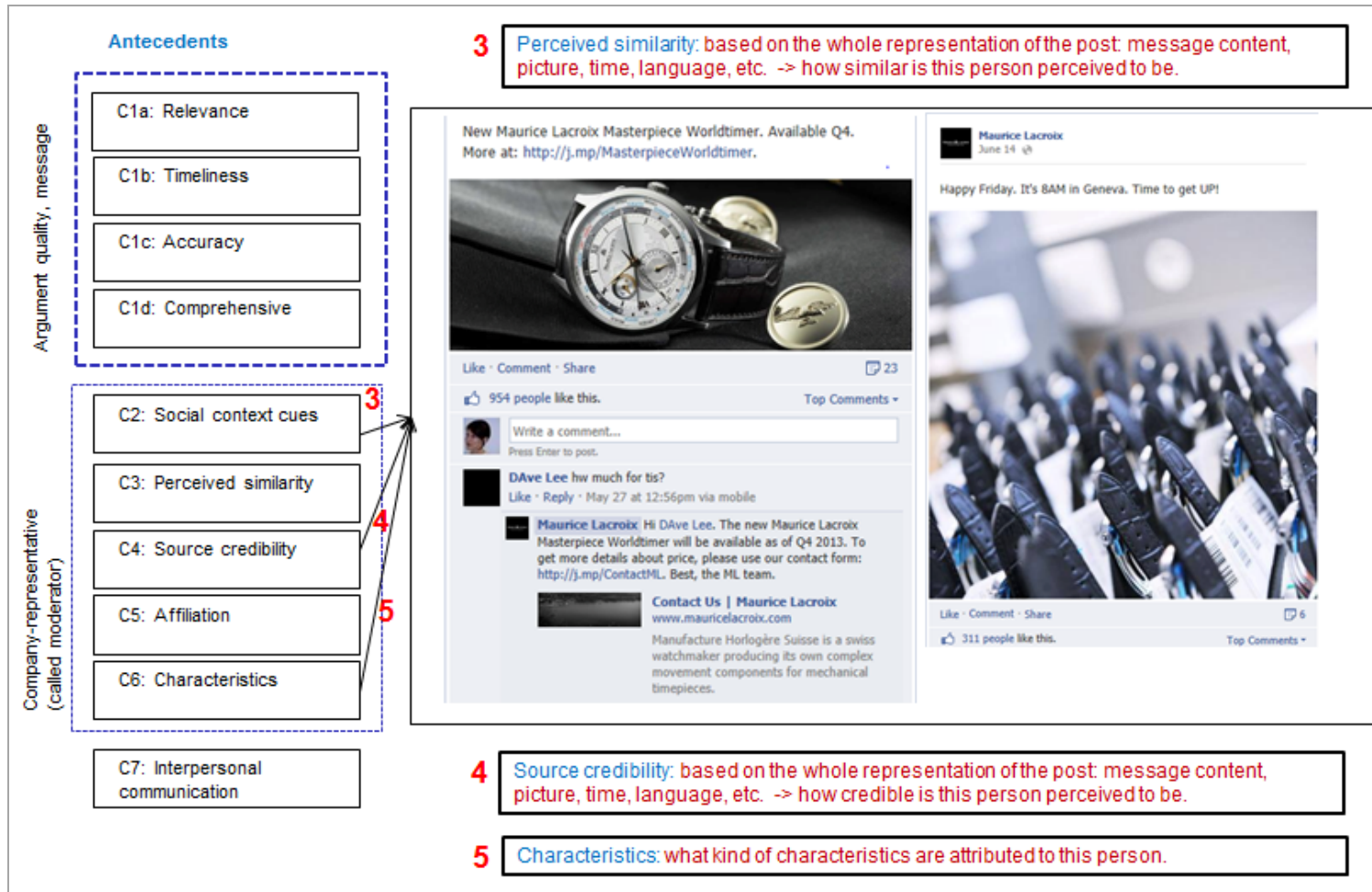


# I. Appendix – Linking the conceptual model to the SMoM forum II

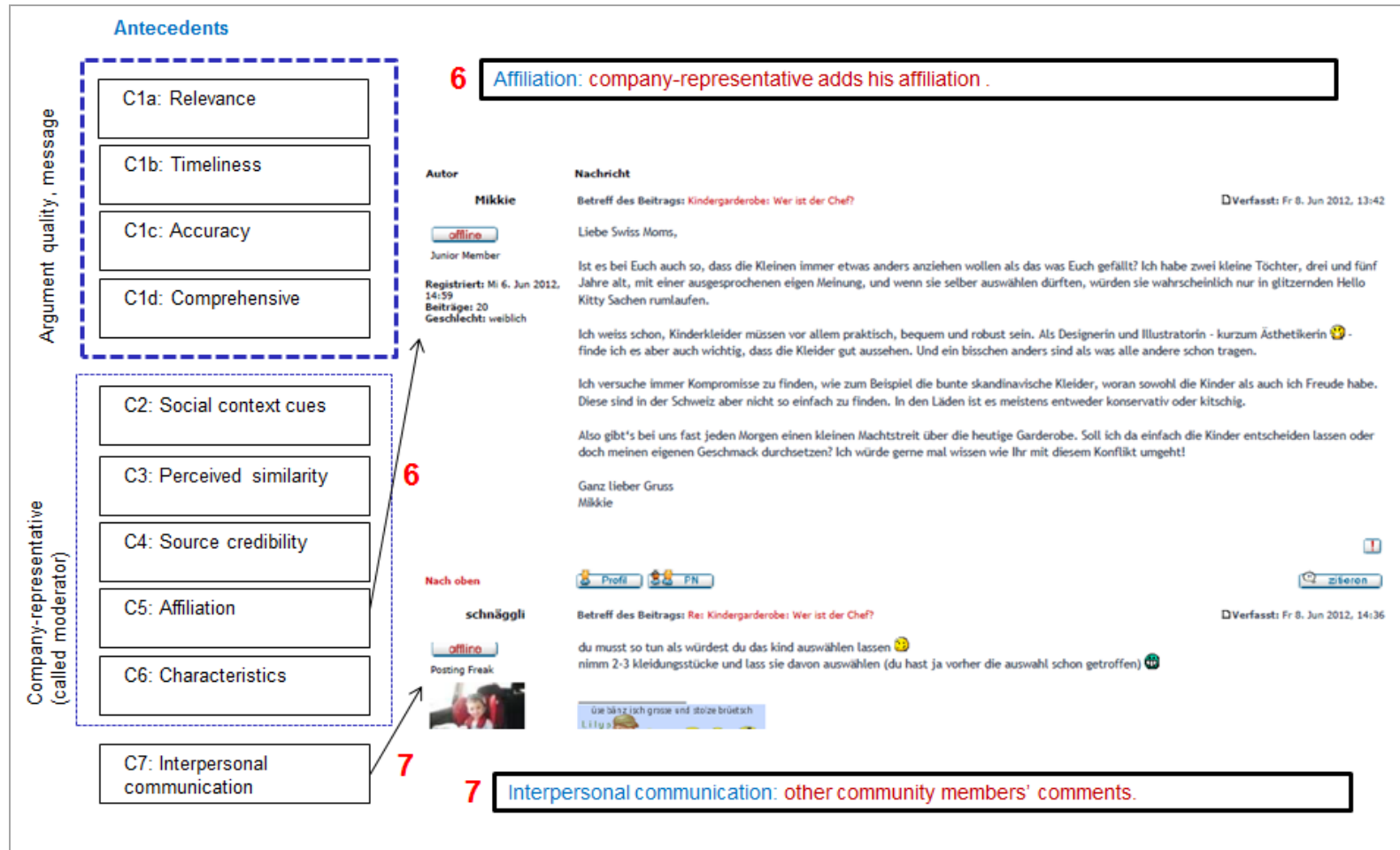




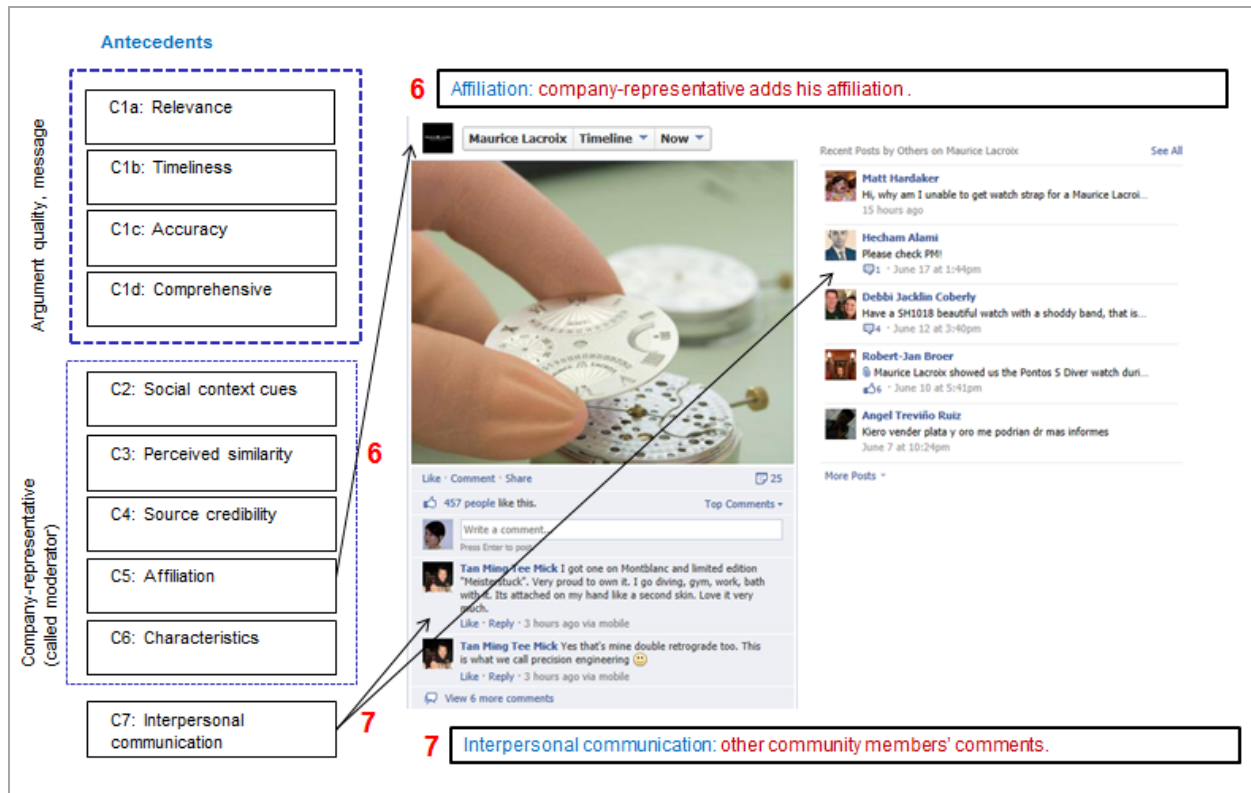
## J. Linking the conceptual model to Maurice Lacroix II



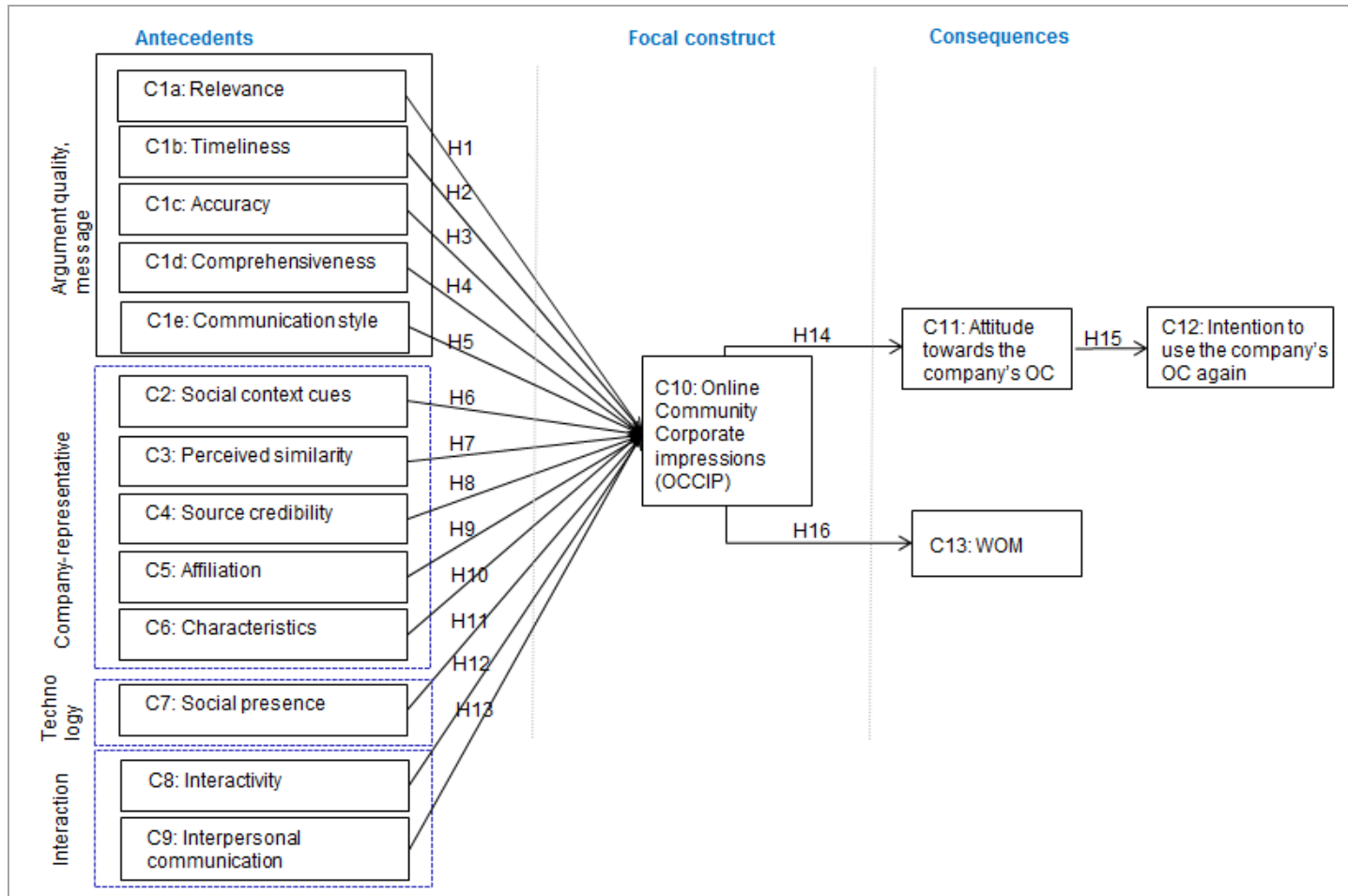
## K. Appendix – Linking the conceptual model to the SMoM forum III



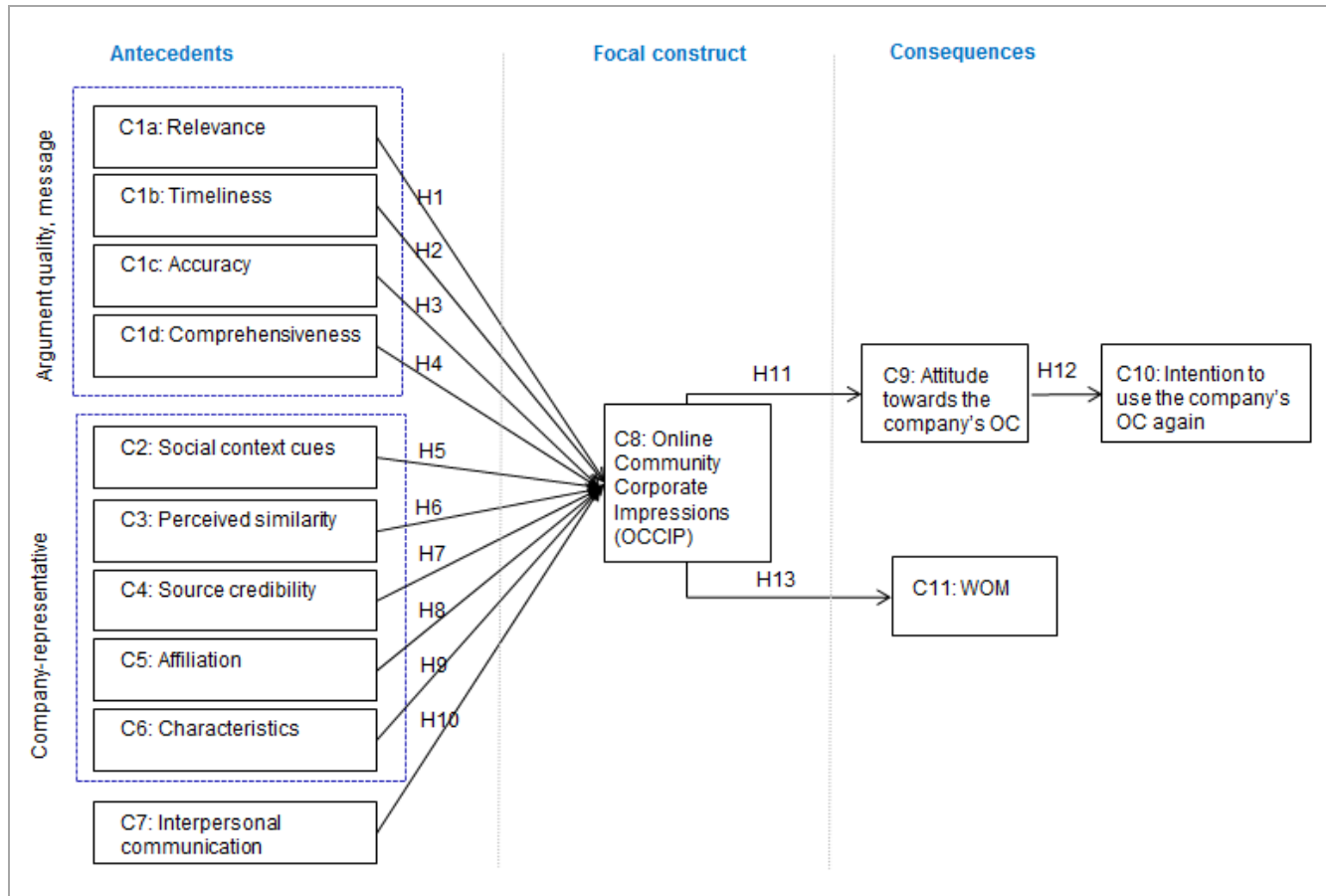
## L. Linking the conceptual model to Maurice Lacroix



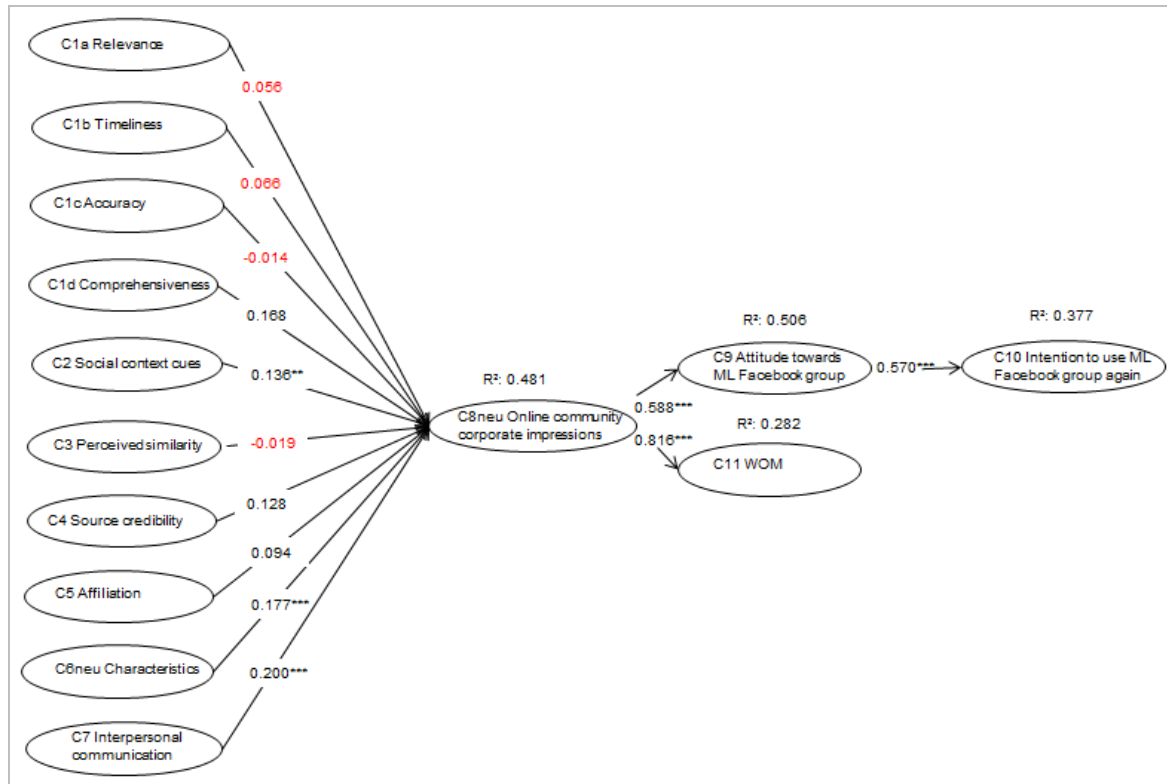
### M. Appendix – Initial conceptual model



## N. Appendix – Revised conceptual model



## Appendix – Graphical representation of the model



## Appendix – Questionnaire main study - Swissmom

Umfrage zum Swissmom Forum. Wir bitten um ihre Mithilfe!

Liebes Swissmom Mitglied,

Neben der wunderbaren Tätigkeit als Mutter von 2 Kindern, versuche ich für meine Doktorarbeit zu erfahren, wie Eindrücke auf dem Swissmom-Forum entstehen. Ich möchte Sie einladen an dieser Studie teilzunehmen. Sie soll Erkenntnisse darüber bringen, wie im Swissmom-Forum Eindrücke gebildet werden. Die direkte Kommunikation zwischen Menschen findet zu einem Grossteil über nonverbale Signale statt. Das können Gesten, Gesichtsausdrücke und sonstige Zeichen sein. In der Interaktion zwischen Menschen auf online Foren hat die Art der Kommunikation erheblich geändert. Im Gegensatz zur persönlichen Kommunikation mit vielen nicht-verbale Signalen, müssen die Menschen in online Foren ihre Meinungen auf wenigen textbasierte Signalen bilden. Diese Studie soll helfen, diese Interaktionen besser zu verstehen.

Für das Ausfüllen des Fragebogens benötigen Sie ca. 15 Minuten. Unter den fertig ausgefüllten Fragebogen verlose ich 10 Gutscheine à 50 CHF von [http://www.appelsap.ch/appelsap\\_presta/](http://www.appelsap.ch/appelsap_presta/). Die Gewinner werden direkt benachrichtigt.

Die Fragen sollten Sie in Bezug auf die Beiträge der Autorin Mikkie beantworten.

Wir sind an ihrer Meinung interessiert! Es gibt keine richtige oder falsche Antwort. Image Studien untersuchen den momentanen Eindruck einer Person oder Firma, d.h. den Eindruck den Sie sich gerade im Moment über etwas machen. Beim Ausfüllen des Fragebogens werden Sie vermutlich feststellen, dass gewisse Fragen eine gewisse Ähnlichkeit haben. Dies ist aus statistischen Gründen so nötig; lassen Sie sich davon nicht irritieren und beantworten Sie bitte jede Frage neu.

Ihre Antworten zu dieser Studie werden streng vertraulich behandelt. Aus diesem Forschungsprojekt hervorgehende Daten werden nur zusammengefasst veröffentlicht. Ihre Informationen werden anonymisiert und bleiben vertraulich.

Einige der Fragen sind geschlechtsneutral, aber auch dort wurde die weibliche Form gewählt um die Fragen nicht künstlich zu verlängern.

Für Fragen zur Studie oder zum Ablauf wenden Sie sich per Email an Christine Hallier ([hall@zhaw.ch](mailto:hall@zhaw.ch)).

Vielen herzlichen Dank für Ihre Zeit und Unterstützung!  
Christine Hallier

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## Fragen zum Swissmom Forum

**INSTRUKTIONEN:** In diesem Teil der Umfrage werden Fragen gestellt, die Sie mittels einer Skala beantworten müssen: Bitte wählen Sie jeweils die Nummer aus, die Ihrer Meinung am ehesten entspricht. Es gibt keine richtige oder falsche Antwort. Sie werden vermutlich feststellen, dass viele Fragen ähnlich formuliert sind. Dies ist aus statistischen Gründen so nötig; lassen Sie sich davon nicht irritieren und beantworten Sie bitte jede Frage neu.

Die nachfolgenden Aussagen beschreiben, wie Sie die Nachricht der Autorin im von Ihnen besuchten Swissmom-Forum auffassen. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einstellung am besten wiedergibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
Die Beiträge der Autorin in diesem Forum sind relevant. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Beiträge der Autorin in diesem Forum passen zur aktuellen Diskussion. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Beiträge der Autorin in diesem Forum sind anwendbar. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
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Die Beiträge der Autorin in diesem Forum sind aktuell. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die Beiträge der Autorin in diesem Forum reflektieren zeitgemässe Themen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die Beiträge der Autorin in diesem Forum sind auf dem neusten Stand. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
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Die Beiträge der Autorin in diesem Forum sind genau. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die Beiträge der Autorin in diesem Forum sind korrekt. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die Beiträge der Autorin in diesem Forum sind verlässlich. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
Die Beiträge der Autorin in diesem Forum sind für meine Bedürfnisse ausreichend. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Beiträge der Autorin in diesem Forum enthalten alle notwendigen Informationen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Beiträge der Autorin in diesem Forum decken meine Bedürfnisse ab. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Beiträge der Autorin in diesem Forum sind genug umfangreich und detailliert. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Continue](#)

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Die direkte Kommunikation zwischen Menschen findet zu einem Grossteil über nonverbale Signale statt. Das können Gesten, Gesichtsausdrücke und sonstige Zeichen sein. Elektronische Nachrichten sind in der Regel textbasiert und daher durch eine Reduzierung nonverbaler Signale gekennzeichnet (z.B. keine Gesichtsausdrücke oder Gesten). Die nachfolgenden Aussagen beschreiben wie Sie die nonverbalen Signale einer Autorin einschätzen. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einschätzung am besten beschreibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
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Angaben zur Tageszeit zu der die Nachricht gesendet wird, geben nützliche Signale (Informationen) über die Autorin. \*

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die Zeit, welche eine Autorin verstreichen lässt bis sie antwortet, gibt nützliche Signale (Informationen) über die Autorin. \*

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die Menge der Nachrichten, die eine Autorin sendet, geben nützliche Signale (Informationen) über die Autorin. \*

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Paralinguistische Informationen (Emoticons wie smiles, orthografische Übertreibungen, viele Ausrufzeichen, alles in Grossbuchstaben usw.), geben nützliche Signale (Informationen) über die Autorin. \*

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Die im Forum herrschenden Sprachnormen (z.B. Umgangssprache im Vergleich zu formeller Sprache) sollten von der Autorin beachtet werden. \*

Die Autorin sollte einige persönliche Informationen preisgeben. \*

Ein Benutzername gibt nützliche Signale (Informationen) über die Autorin. \*

Ein Benutzerstatus gibt nützliche Signale (Informationen) über die Autorin. \*

Ein Bild der Autorin gibt nützliche Signale (Informationen) über die Autorin. \*

Continue

In den nachfolgenden Aussagen geht es darum, wie ähnlich Sie sich im Vergleich zu der Autorin empfinden. Wählen Sie bitte die Antworten aus, die Ihre Einschätzung am besten beschreiben. Verwenden Sie dazu bitte die Skala von 1-7 (1 = sehr unähnlich, 4 = weder ähnlich noch unähnlich, 7 = sehr ähnlich).

	Sehr unähnlich	Unähnlich	Eher unähnlich	Weder ähnlich noch unähnlich	Eher ähnlich	Ähnlich	Sehr ähnlich
In Bezug auf Ihre eigene Lebenseinstellung, wie ähnlich sind Sie und die Autorin? *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In Bezug auf Ihre eigenen Vorlieben und Abneigungen, wie ähnlich sind Sie und die Autorin? *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In Bezug auf Ihre eigenen Werte und Erfahrungen, wie ähnlich sind Sie und die Autorin? *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In Bezug auf Ihre Interessen, wie ähnlich sind Sie und die Autorin? *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In Bezug auf die Auswahl von Themen, die Sie diskutieren möchten, wie ähnlich sind Sie und die Autorin? *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In Bezug auf Ihren Schreibstil, wie ähnlich sind Sie und die Autorin? *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Die nachfolgenden Aussagen beschreiben, wie Sie die Glaubwürdigkeit der Autorin empfinden. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einschätzung am besten beschreibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
Die Autorin die im Forum Beiträge geschrieben hat, ist kompetent was das diskutierte Thema betrifft. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Autorin, die im Forum Beiträge geschrieben hat, ist eine Kennerin des diskutierten Themas. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Autorin, die im Forum Beiträge geschrieben hat, ist vertrauenswürdig. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Autorin, die im Forum Beiträge geschrieben hat, ist zuverlässig. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue

Die nachfolgenden Aussagen beschreiben Ihre Einstellung zur Frage, ob eine Autorin ihre Zugehörigkeit zu einer Firma die sie vertritt erwähnen sollte.

	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
Wenn eine Autorin eine Firma vertritt, sollte dies ersichtlich sein. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wenn eine Autorin eine Firma vertritt, sollte diese Zugehörigkeit zur Firma erwähnt werden. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Zugehörigkeit einer Autorin zu einer Firma sollte klar deklariert werden. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Zugehörigkeit einer Autorin zu einer Firma sollte auf den ersten Blick erkennbar sein. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wenn eine Autorin eine Firma vertritt, sollte sie den Beweggrund für ihre Teilnahme am Forum erwähnen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wenn eine Autorin eine Firma vertritt, sollte sie nicht nur ihre Zugehörigkeit zur Firma erwähnen, sondern auch ihre Funktion in der Firma (z.B. Marketingleiterin, Finanzchefin). *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Die nachfolgenden Aussagen beschreiben wie Sie die Eigenschaften und das Kommunikationsverhalten der Autorin empfinden. Wählen Sie bitte jeweils die Antwort aus, die ihre Einstellung am besten wiedergibt.

- Die Autorin im Forum ist:

	1	2	3	4	5	6	7	
unfreundlich *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	freundlich
gemein *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	nett
unhöflich *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	höflich
negativ *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	positiv
gefühllos *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	mitfühlend
unangenehm *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	angenehm
unsympatisch *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	sympatisch
unaufrichtig *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	aufrichtig
verschlossen *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	mitteilsam
inkompetent *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	kompetent
nicht engagiert *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	engagiert
unverlässlich *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	verlässlich
gleichgültig *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	interessiert

Continue

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Die nachfolgenden Aussagen beschreiben, wie Sie die zwischenmenschliche Kommunikation empfinden, die im Forum stattfindet. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einstellung am besten beschreibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
---------------------------	--------------------	----------------------------	--	-------------------	--------------	-------------------

Im grossen Ganzen ist das Forum eine wichtige Informationsquelle für mich. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Die Interaktionen zwischen den Forumsteilnehmerinnen erweitern mein Wissen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beiträge von anderen Forumsteilnehmerinnen helfen mir bei der Meinungsbildung. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diskussionen zwischen Forumsteilnehmerinnen beeinflussen meine Ansichten über diese Themen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beiträge von anderen Forumsteilnehmerinnen veranlassen mich dazu, über die Themen nachzudenken. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue

Bewerten Sie bitte für jedes der nachstehenden Adjektive, wie gut sie Swissmom (die gesamte Plattform) im Allgemeinen beschreiben. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einstellung am besten beschreibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

- Swissmom ist:

	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
ansprechend *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
informativ *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
nützlich *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
positiv *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gut *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gefällig *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attraktiv *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
aufregend *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
klar *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
kultiviert *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
stimmig *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
qualitativ hochstehend *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue

POWERED BY Survey Console

Questions marked with a \* are required



60%

Die nachfolgenden Aussagen beschreiben Ihre Einstellung zu Swissmom im Allgemeinen. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einstellung am besten wiedergibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
Ich habe eine Beziehung zu Swissmom. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich möchte Swissmom gerne wieder besuchen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich bin mit dem Service von Swissmom zufrieden. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich fühle mich auf Swissmom wohl. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swissmom ist für mich ein guter Ort, um dort Zeit zu verbringen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich würde Swissmom als eine der besten Foren bezeichnen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Die nachfolgenden Aussagen beschreiben Ihre Absicht, Swissmom wieder zu benutzen. Wählen Sie bitte jeweils die Antwort aus, die Ihre Einstellung am besten widerspiegelt.

- Dass ich Swissmom wieder besuchen werde, ist:

	1	2	3	4	5	6	7	
unwahrscheinlich *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	wahrscheinlich
undenkbar *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	denkbar
unmöglich *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	möglich

Die nachfolgenden Aussagen beschreiben Ihre Absicht, das Swissmom Forum weiterzuempfehlen. Wählen Sie bitte die Antwort, die Ihre Einstellung am besten wiedergibt und verwenden Sie dazu die Skala von 1-7 (1 = stimme gar nicht zu, 4 = stimme weder zu noch nicht zu, 7 = stimme voll zu).

	Stimme gar nicht zu	Stimme nicht zu	Stimme eher nicht zu	Stimme weder zu noch nicht zu	Stimme eher zu	Stimme zu	Stimme voll zu
Ich würde Swissmom jemandem empfehlen der meinen Rat sucht. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich sage positive Dinge über Swissmom zu anderen Personen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich würde Swissmom anderen empfehlen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ich würde Swissmom Bekannten und Freunden von mir jederzeit empfehlen. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Persönliche Informationen

---

**INSTRUKTIONEN:** Bitte kreuzen Sie jeweils die Kategorie an, die Sie am besten beschreibt oder füllen Sie die Lücken mit den erforderlichen Angaben.

Ihre Antworten werden nur zu Forschungszwecken benötigt. Sie werden vertraulich behandelt und nur zusammenfassend veröffentlicht.

---

**Welches Geschlecht haben Sie?**

- männlich
  - weiblich
- 

**Wie alt sind Sie?**

- <20
  - 20-25
  - 26-30
  - 31-35
  - 36-40
  - 41-45
  - 46-50
  - >50
-

**Welchen Ausbildungsstand haben Sie?**

- bis Mittelschule (Maturität)
  - Berufsbildung
  - Bachelorstufe (Hochschulabschluss)
  - Masterstufe oder höher (Hochschulabschluss)
  - andere
- 

**Welchen Zivilstand haben Sie?**

- ledig
  - verheiratet
  - in eingeschriebener Partnerschaft
  - geschieden
  - verwitwet
- 

**Welchen Beschäftigungsstatus haben Sie?**

- im Studium
- angestellt
- Vollzeit Kinderbetreuung
- selbständig
- arbeitslos
- pensioniert
- andere

**Welche Aussage stimmt für Sie zu?**

- ich habe keine Kinder
  - ich bin Schwanger
  - ich habe ein Kind
  - ich habe mehrere Kinder
- 

**Seit wann sind Sie Swissmom Mitglied (Jahr)?**

**Wie oft sind Sie im Forum aktive pro Woche (nur Zahl, z.B. 3)?**

**Wie viele Stunden pro Woche sind Sie im Forum (nur Zahl, z.B. 3)?**

**Was ist Ihr Userstatus (z.B. newby, member, posting freek)?**

---

**Aus welchen Gründen benützen Sie das Swissmom-Forum? (Kreuzen Sie alle für Sie zutreffenden Aussagen an).**

**Ich besuche das Swissmom Forum:**

- weil ich andere Mitglieder unterstützen möchte
- weil ich mich gerne mit anderen Mitgliedern von Swissmom unterhalte
- um Leute kennenzulernen
- um aktiv am Swissmom Forum teilzunehmen
- weil die anderen Swissmom Mitglieder die gleichen Ziele haben wie ich
- weil ich Anschluss suche
- weil es mir wichtig ist, Teil des Swissmom Forums zu sein
- um Anerkennung von anderen Mitgliedern von Swissmom zu erhalten
- weil ich mich mit den Mitgliedern von Swissmom identifiziere
- um Informationen von anderen Mitgliedern zu erhalten
- um neue Erfahrungen zu sammeln
- weil ich auf Swissmom stolz bin
- weil ich mich mit Swissmom identifiziere
- wegen meiner Leidenschaft für Swissmom
- um Swissmom zu unterstützen
- weil Swissmom einen ausgezeichneten Ruf hat
- um Swissmom Rückmeldungen zu geben
- weil ich andere Marken/Seiten nicht mag



## Appendix – Questionnaire main study - Swissmom

**Dear Facebook Group Member**

**This study aims to provide a better understanding of how Facebook Group Members expect a company to communicate with them. Corporate communication in online communities has unique characteristics and calls for new ways of relating to an audience.**

**Your participation is significant – It is important for us to stress that your participation is strictly voluntarily. However, the success of this research study depends entirely on your contribution.**

**Confidentiality of your data is very important to us. For that reason, you can be absolutely assured that:**

- **No personal name will be disclosed**
- **All data will be reported in an aggregated form and will be used for statistical purposes only.**

**Advantage for you as respondent – This research study will provide valuable insight into how you expect Maurice Lacroix to communicate with its Facebook group, which ultimately will add to the whole communication on this platform.**

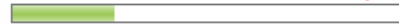
**How to fill in the questionnaire: Most importantly, there are no right or wrong answers. Just select the option that best reflects your opinion. It takes approximately 15 minutes to complete the questionnaire. If you require some additional information, please do not hesitate to contact me directly: [hall@zhaw.ch](mailto:hall@zhaw.ch).**

**We would like to thank you very much in advance for your valuable time and your support.**

**Yours sincerely,**

**Christine Hallier**

Questions marked with a \* are required



26%

### Maurice Lacroix Facebook Group

**INSTRUCTION:** This section asks questions which use rating scales: please choose the number that best describes your opinion. There are no right or wrong answers. Some of the questions are very similar, however, this is needed for statistical purposes. Therefore, please answer to all the questions.

The following statements describe your perception towards the message of the author of the Facebook group. Please select the response that best reflects your perception using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree).

	Strongly disagree	Disagree	Rather disagree	Neither agree nor disagree	Rather agree	Agree	Strongly agree
The messages of the author are relevant. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author are appropriate. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author are applicable. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Rather disagree	Neither agree nor disagree	Rather agree	Agree	Strongly agree
The messages of the author are current. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author are timely. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author are up-to-date. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

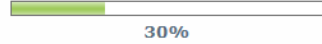
	Strongly disagree	Disagree	Rather disagree	Neither agree nor disagree	Rather agree	Agree	Strongly agree
The messages of the author are accurate. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author are correct. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author are reliable. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Rather disagree	Neither agree nor disagree	Rather agree	Agree	Strongly agree
The messages of the author sufficiently complete my needs. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author include all necessary values. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author cover my needs. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The messages of the author have sufficient breadth and depth. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Continue](#)

POWERED BY **Survey Console**

Questions marked with a \* are required



In traditional face-to-face communication, two or more individuals form impressions by focusing on a number of different nonverbal cues. In the interactions that occur through an online community, the type of communication is significantly changed. Instead of developing images through nonverbal communication, the people need to base personal opinions on verbal and/or linguistic cues.

The following statements describe your evaluation of social context cues of an author; please select the responses that best describe your evaluation using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree).

	Strongly disagree	Disagree	Rather disagree	Neither agree nor disagree	Rather agree	Agree	Strongly agree
Chronemics, such as indications of time when (e.g. early in the morning, late night) the message has been sent, provide useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of messages sent by the author provides useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How fast a reply has been sent provide useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paralinguistics (emoticons, orthographic exaggeration etc.) provide useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authors should follow the emerging forum language norms to express their attitudes and ideas. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authors should provide some personal information. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A user name does provide useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A user status does provide useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A picture of the author does provide useful cues. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following statements describe your opinion regarding the perceived similarity with the author; please select the responses that best describe your perception. Please use the following scale (1 = very dissimilar, 4 = neither similar nor dissimilar, 7 = very similar).

Very Dissimilar Rather Neither Rather Similar Very  
dissimilar dissimilar dissimilar nor similar similar similar

Considering your outlook on life, how similar are you and the author? \*

Considering your likes and dislikes, how similar are you and the author? \*

Considering your values and experiences, how similar are you and the author? \*

Considering your interests, how similar are you and the author? \*

Considering the topics you would like to discuss, how similar are you and the author? \*

Considering your writing style, how similar are you and the author? \*

The following statements describe your perception of the credibility of the author. Please select the response that best reflects your attitude using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree).

	Strongly disagree	Disagree	Rather disagree	Neither disagree nor agree	Rather agree	Agree	Strongly agree
The author is knowledgeable in the topic he discusses. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The author is an expert in the topic he discusses. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The author is trustworthy. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The author is reliable. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue

Questions marked with a \* are required



42%

This is a general question: The following statements describe your evaluation if in general an author should disclose his affiliation to a company. Please select the response that best reflects your attitude using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree)

	Strongly disagree	Disagree	Rather disagree	Neither disagree nor agree	Rather agree	Agree	Strongly agree
If an author is a company-representative, he needs to be recognizable as such. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If an author is a company-representative, he should disclose his affiliation to the company. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An author's affiliation to a company needs to be clearly declared. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An author's affiliation to a company needs to be visible on the first site. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If an author is a company-representative, he should disclose his motivation of participating in the forum. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If an author is a company-representative, he should not only disclose his affiliation to the company but also disclose his status in the company (e.g. head of communication, marketing director, CFO, CIO, CEO). *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Questions marked with a \* are required



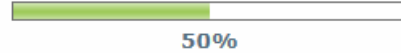
46%

The following statements describe the perceived characteristics and communication behaviour of the author. Please select the response that best reflects your attitude.

- The author is:

	1	2	3	4	5	6	7	
unfriendly *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	friendly
cruel *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	kind
rude *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	courteous
negative *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	positive
uncaring *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	caring
disagreeable *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	agreeable
unlikable *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	likeable
insincere *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	candid
uncommunicative *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	communicative
incompetent *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	competent
not committed *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	committed
unreliable *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reliable
indifferent *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	cheerful

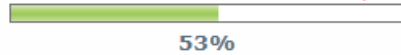
Questions marked with a \* are required



The following statements describe your perception of the interpersonal communication taking place in the facebook group. Please select the response that best reflects your perception, using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree).

	Strongly disagree	Disagree	Rather disagree	Neither disagree nor agree	Rather agree	Agree	Strongly agree
Overall, the Facebook group is an important source of information for me. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the interaction among Facebook group participants enhances my knowledge. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contributions by other Facebook group participants help me to form my opinions about discussed topics. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussions between the Facebook group participants influence my view on the discussed topics. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contributions by other Facebook group participants direct me to reflect on the discussed topics. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questions marked with a \* are required



For each scale below, please select the number to indicate how well the words describe Maurice Lacroix's site. Please select the response that best reflects your impression using the following scale (1 = describes very poorly, 4 = describes neither poorly nor well, 7 describes very well).

	Describes very poorly	Describes poorly	Describes rather poorly	Describes neither poorly nor well	Describes rather well	Describes well	Describes very well
Appealing *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informative *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Useful *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Positive *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has integrity *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Favourable *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a good usability *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exciting *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sophisticated *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coherent *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High quality *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responding *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transparent *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following statements describe your attitude towards Maurice Lacroix's site. Please select the response that best reflects your attitude, using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree).

	Strongly disagree	Disagree	Rather disagree	Neither disagree nor agree	Rather agree	Agree	Strongly agree
Maurice Lacroix's Facebook site builds a relationship with me. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to visit Maurice Lacroix's site again. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the service of Maurice Lacroix's site. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable in surfing Maurice Lacroix's site. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maurice Lacroix's site is a good place for me to spend my time. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rate Maurice Lacroix's site as one of the best. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following statements describe your intention to use Maurice Lacroix's site again. Please select the response that best reflects your attitude.

- My intention to use Maurice Lacroix's site again is:

	1	2	3	4	5	6	7	
unlikely *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	likely
improbable *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	probable
impossible *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	possible

The following statements describe word of mouth intention. Please select the response that best reflects your opinion using the following scale (1 = strongly disagree, 4 = neither agree nor disagree, 7 = strongly agree).

	Strongly disagree	Disagree	Rather disagree	Neither disagree nor agree	Rather agree	Agree	Strongly agree
I would recommend Maurice Lacroix's site to someone who seeks my advice. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I say positive things about Maurice Lacroix's site to other people. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend Maurice Lacroix's site to others. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend Maurice Lacroix's site to my friends and relatives. *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there further aspects that you consider important in terms of communication on Maurice Lacroix's Facebook Group?



100%

## Personal information

**INSTRUCTION:** Please place a mark in the category that best describes you or fill in the blank.  
Your responses are for research purposes only. They will be kept confidential and reported as aggregate data only.

**What is your gender?**

- male
- female

**What is your age?**

- <20
- 20-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- >50

**What is your educational level?**

- Up to high school
  - Professional education
  - Bachelor's level
  - Master's level or higher
  - N/A
- 

**What is your marital status?**

- single
  - married
  - in partnership
  - divorced
  - widowed
- 

**What is your employment status?**

- student
  - employed
  - self-employed
  - unemployed
  - retired
  - others
-

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**Member since:**

**Using times a Week:**

**Using hours a Week:**

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Continue



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**What are your motives for using the Maurice Lacroix Facebook Group?**

**I visit the community:**

- because I want to support other members
  - because I love to talk with other members of the community
  - for getting to know new people
  - for actively participating in the community
  - because the other members have the same goals I have
  - because I want to make friends
  - because it is important to me to be part of the community
  - for gaining recognition from other members of the community
  - because I identify with the members of the community
  - for getting information from other members
  - for gaining new experiences
  - because I am proud of the brand (Swissmom)
  - because I identify with the brand (Swissmom)
  - because of my passion for the brand (Swissmom)
  - for supporting the brand (Swissmom)
  - because the brand (Swissmom) has an excellent reputation
  - for giving feedback to the company
  - because I don't like other brands
-

