

User adoption of a CRM-based information system within a financial services organisation: An empirical analysis

- *On page 2, the author raises a few research questions, most of which appear to be focused entirely on the organization, and thus are rather uninteresting. For example, how interesting/important is it to know “how the delivered implementation of the original requirements, [sic] compares to the initial business specification”? For Company O, it may be interesting...*
- *Similarly, the author states that “the paper also attempts to raise the question of whether or not the system implementation, [sic] changed the way that the FSO executed its business (processes) and whether or not the implemented system, [sic] was at all aligned to the strategic IT objectives of the organization”. This question can lead to some very interesting yes/no answers.... It would be more interesting to know about the how and why...*
- *It is only in the conclusion that the author raises some interesting points, such as that “the survey results show that an organizational IS can enforce power structures and hierarchies in organisations where there is a strong culture of influence within the decision making task”, or briefly mentions issues relating to adoption and risks. These are the issues that I would have liked to see discussed, as this can help us learn something from the study.*
- *The author should have spent the space to provide his or her interpretations of the events at Company O. What can we learn from this case study?*
- *Need more up to date references*
- *punctuation (especially commas)*

ABSTRACT

Financial Services firms require processes and systems which can support and maintain customer-related information for the purposes of core business-focussed activity. Specifically within the investment banking sector, the importance and criticality of such customer information underpins the firm’s ability to transact sales, trading and other advisory-based services in an efficient and relevant manner. The design and development of Customer Relationship Management (CRM) systems to address the given external vs. internal customer information touchpoints, therefore provides a vital link between financial services professionals, client data and business processes. In doing so, the input of CRM user requirements is a key step in deriving benefit from such a technology solution. This paper henceforth identifies and details user requirements and experiences of such an information system within a case study company and highlights pertinent issues for the adoption of such systems within the given sector.

Keywords

Customer Relationship Management, Financial Services, Information Systems, Case Study

INTRODUCTION

Information management is key to maintaining an organisation's internal competitive advantage, and is generally accepted as a cornerstone of a modern day organisation. As a result, organisations have been wishing to extend the depth and breadth of the information available within computerised and human capital assets in order to embrace external influences upon the company (i.e. suppliers, partners and clients). The financial services sector in particular, has grown to be an industry where information itself is a tradeable commodity, the control and management of which is implicitly linked to the capital markets themselves (Wilhelm and Downing, 2000). This has arisen out of the need for organisations to service their clients in the most effective manner. The provision of professional financial services and advice to institutional (corporate and multinational organisations), as well as affluent and high net worth individuals (HNWI) is of prime concern to many of the world’s leading investment institutions (Valdez, 2000). This field has therefore always been directly concerned with the effective and efficient supply of market critical information and knowledge to the right person, at the right place and at the

right time. The advent of internet business technology has changed and accelerated adoption of this model, via a multitude of marketing channels. In particular, the financial services industry has been quick to provide access to its services via channels such as the telephone, internet and via digital television, whilst also enabling customer relationship management initiatives (Phifer, 2001). Hence, extending the reach of the organisation, beyond and within the boundaries of the company, is also a vital component of maintaining and sustaining market share (Porter, 1985). The implementation and delivery of information systems is therefore of crucial importance to industries such as this. With the development of powerful underlying information technologies and service-oriented architectures and delivery platforms, internal business processes and procedures can be enforced and managed in order to amalgamate and solidify the client-facing capability of the financial institution. However, in seeking to adopt current and emerging technologies to realise synergies across business processes, requires at the very least, progressive and visionary change management and leadership skills. There is a real requirement also, for a coherent understanding of the holistic impact of deploying and enabling any IT/IS which will change the way the organisation consolidates and uses information about the customer (so-called “joined-up thinking”, Sharif, 2003).

Thus, this paper focusses on examining the interplay between delivering business process and IT/IS requirements and the perceived success of a Customer Relationship Management (CRM) process re-engineering programme, within a multinational financial services organisation (FSO), operating as a global investment bank. The author highlights these issues through the analysis of an empirical case study of a leading FSO in the field, which implemented an intranet-based web application for its Equities product line staff. Essentially, the paper attempts to focus on those factors which relate to how the FSO in question dealt with the output effects of an implemented IT/IS to achieve its business aims; the manner by which organisational structures and user groups perceived and used the implementation, across a range of end users. To these ends, this paper proceeds with outlining the research methodology used to gather the case data from the FSO, in Section 2. This encompasses the selection of an appropriate empirical stance, research protocol, research design and related data analysis techniques to be used. Following this, Section 3 provides a brief overview of the software development and socio-technical factors inherent within the financial services, and in particular, securities trading industry. Section 4 then details the case of the FSO itself, providing a context to the implementation of the Customer Relationship Management (CRM) intranet web application. The relevant results from the participant survey is also given here. Following on from this, section 5 analyses the data gathered. Finally the paper concludes in section 6, highlighting the core findings of this research and suggesting recommendations for further investigation.

EMPIRICAL CASE RESEARCH METHODOLOGY

The aim of this paper is to investigate and analyse how end users of a web-based application, perceive and rate the impact of the IS that they use. Furthermore, another aim is to evaluate through empirical case data, how the delivered implementation of the original requirements, compares to the initial business specification. Hence, the objective is to identify those specific critical success factors (CSFs) which define the output of the implemented CRM system in relation to the user expectations of the intended specification, constrained within the lens of Strategic, Tactical and Operational concepts (Irani *et al.*, 2001). Specifically, this empirical approach attempts to analyse the case data, via posing three research questions. Firstly, what was the impact of the implemented IS on the business, as a factor of either the development approach used or as a result of a wider change management approach. Secondly, the paper also attempts to raise the question of whether or not the system implementation, changed the way that the FSO executed its business (processes) and whether or not the implemented system, was at all aligned to the strategic IT objectives of the organisation. Thirdly, did senior management’s requirements fit with their subordinates day-to-day working requirements?

The philosophy and methodology of the research, follows that of the structured linear research process as described by Mumford (1985), and is based upon an empirical approach, supplanted by both interpretivist and positivist stances via the accepted case study approach advocated in the literature (Avison and Fitzgerald, 1998; Walsham, 1993; Yin, 1994). In terms of this research, it is suggested that an empirical, interpretive case study approach is taken in principal, based upon direct, participant observation, as defined by Yin (1994), and supplanted by a positivist structured survey approach to identify areas of significant user interaction with the given CRM system. This approach is similar to that mentioned by Probert (2001), who suggests adopting a blend of both “hard” rigorous justification for a chosen methodological approach, as well as a “soft” or authentic method for collecting and situating data from the case study. This is in terms of increasing the understanding of how the IS works and the causes and effect of the individual and the organization upon such systems.

Participant observation was used in the guise of the researcher being subjective participants in interacting with the research subject (i.e. the participants at the case study companies), as well as being objective observers (i.e. recording and detailing the subjects tasks, opinions and behaviours). More specifically, the level of detail of the observation can be classified along

Quinn-Patton's 5 dimensions of participant observation (Quinn-Patton, 1986): (i) the role of the observer was as defined within the case study firm; (ii) the managers and end-users of the system knew that observations and surveys were being conducted for research purposes; (iii) the research motivation, objectives and protocol were outlined beforehand; (iv) adhoc interviews conducted with the research subjects lasted from between 20 to 40 minutes as appropriate to validate the survey results; and finally (v) the data collected pertained to the specific search for evidence relating to the perceived effects of the impact of the IS and its usage.

The second research instrument used was that of a user survey to elicit feedback about the perceived success of the IS implementation. This survey was based upon feedback given to the management team sponsoring the application rollout, from key end users. The survey instrument used a Likert scale between 1 and 5, where 1 signified a least important and 5 signified a most important aspect. This feedback was the culmination of consolidated management reports which were gathered by members of the business analysis team on the behest of management, as part of the initial rollout of the CRM web application. These questions were then based upon the impact of the CRM application functionality, with respect to end-user groups (management, trading floor and administrative users). These questions were :

- What functionality is important to the business?
- What functionality is important to you?
- What functionality is important to your team?
- What functionality has most impact?

Thus, the research design provides the basis for collecting data within the confines of a case study approach, via directed empirically-based survey responses. The case study participant population used, was across 3 main user groups (management, trading floor and administrative users), and consisted of a total of 18 key user responses (out of a total worldwide population of 1000 users). These participants were chosen as they were representative of key "power" or business process experienced users from each user group. The data analysis which will be shown later in this paper, consists of an explanatory approach of the findings, using descriptive narrative to analyse the mixture of both quantitative (actual) and qualitative (inferred) data. Adhoc (and hence largely semi-structured) interview questions were used to give depth and resonance to the captured survey data. Whereupon, the analysis of the findings were evaluated in terms of Strategic, Tactical and Operational research "lenses", i.e. contexts. Given this research approach, the author now presents a brief overview and context to the case study in the next section.

IT/IS DEVELOPMENT WITHIN FINANCIAL SERVICES

The usage of IT/IS within financial services and securities operations, assists FSOs in delivery a superior customer service of the timeliness and quality which the business demands, within the context of key trends centred around Business, Economics and Technology factors. These are in terms of several identified factors as outlined by studies by the IMF (2000) and OECD (2001): increasing trading volumes (maximizing fee-based and commission-based incomes to generate sustainable trades); increasing pressure to eliminate ineffective business operations; Interconnected and risk-averse Global Markets: flexible use of business knowledge as a business asset; Enablement of access to functional and geographic markets via deregulation; the application of complex computer models for programmed buying, selling, monitoring and managing within capital markets; boosted trading volumes underpinned by streamlined data processing and reduced transaction costs; and integrated systems to assist with sales, trading, risk management and business advisory services via highly distributed, internet-ready platforms.

Technology has transformed investment services in recent years, bringing tighter competition and lower prices. Advancements in technology now permit daily trading volumes well in excess of 1 billion shares and programmed trading that has caused abrupt swings in prices. With deregulation, different sectors of the broader financial services industry are encroaching on each other's business. It is for this reason that information services need to provide value-added information to the FSO and are now fundamental to the strategic, tactical and operational direction of the sector. In these cases, the goal of IT/IS is to deliver information and when utilised by brokerage and investment firms alongside core banking operations, these services and processes, uphold the traditional business processes within securities operations. However, market data services (such as news and stock price feeds from organisations such as Reuters and Bloomberg for example), are only a small component of the overall IT/IS spend in FSOs. A significant amount of capital is also spent on infrastructure (networks, servers and desktop machines), as well as another core driver, application development. FSOs have always recognised that a key contributor to organisational excellence has been to adopt and implement technology appropriately. Indeed many FSOs have dedicated IS organisations which are solely run to provide innovative application solutions to the business, which this

paper focusses on. Strategies for effectively managing and delivering such software internally have been discussed for as long as the subject of computer science and information systems has existed. From traditional formal methods such as the waterfall method embodied in the software development lifecycle (SDLC) within the Structured Systems Analysis and Design Methodology (SSADM), through to spiral or iterative models as via Object-Oriented and Rapid Application Development (RAD) approaches (Avison and Fitzgerald, 1998; Booch, 1994). Within this timeframe, complementary methodologies which involve a deeper study of the interaction of either user, analyst or implementer have evolved. Of the former type of methodology, the most prevalent is that given to the action-research school of thought, made popular by the concept of Soft Systems Methodology (SSM, made popular by Checkland and others – see Rose, 2002) and more specifically, Participatory Design (for example, as detailed in Bødker, 2000; Clausen, 1994; Ehn, 1988; Winograd, 1995); whilst the latter encompass those ideas which are now encapsulated under the guise of Agile methodologies (Highsmith, 2002). Hence the basis for latter approaches to software development, have attempted to encompass a more holistic view of the human processes involved in software development by addressing the most effective way for small teams to work and communicate in the face of vague and changing requirements (Beck, 2000). This approach, was one of the driving forces behind the CRM web application, within the case study of this paper. Thus in the next section, the author presents how this model relates to a real world case study investigation of a financial services organisation, and the user implications of the delivery of an intranet-based CRM web application.

IMPLEMENTATION OF A CRM INTRANET WEB APPLICATION WITHIN AN FSO

The FSO firm in question, henceforth known as Company O, is a leading global financial services company, which has strengths in the major areas of fund and asset management, investment banking and wealth management. As a result of both organic and mergers and acquisitions growth, Company O has grown over the years to become a leading player within the so-called “Bulge Bracket” set of investment banking organisations (Valdez, 2002). In addition to its impeccable business and financial credentials, Company O has a reputation within the industry for having a healthy and strong IS delivery organisation. This IS organisation is recognised as being a clear leader within the FSO community, having recruited and retained knowledgeable and expert IS professionals for many years. Through the combination of this business and IT/IS acumen, Company O understands the significance and importance of clarity, visibility and accountability of professional business relationships, with its clients. As such, one of the key drivers within this global organisation, is a continual quest for process improvement via the innovative use of technology, in maintaining healthy and effective client relationships.

Drivers for change within the Sales and Research business cycles

The implementation and delivery of a CRM web application within the Equities business of Company O, was principally driven in response to a general change management programme to streamline and control costs associated with business processes in each of the functional Equities-related areas : Sales and Marketing ; Research Distribution and client logistics; Client and account management; and Reporting and MIS. Processes relating to team strategy and client relationship history for example, were ad-hoc in nature before the CRM web application was implemented, being based around silos of information. As such, within this lifecycle, management noted that “tactical” Microsoft Access and Microsoft Excel spreadsheet “databases” provided multiple views and sources of information relating the client at both global and regional levels within the organisation. Little information and knowledge sharing used to occur as a result of this approach, which management believed had an impact upon the revenues of the business.

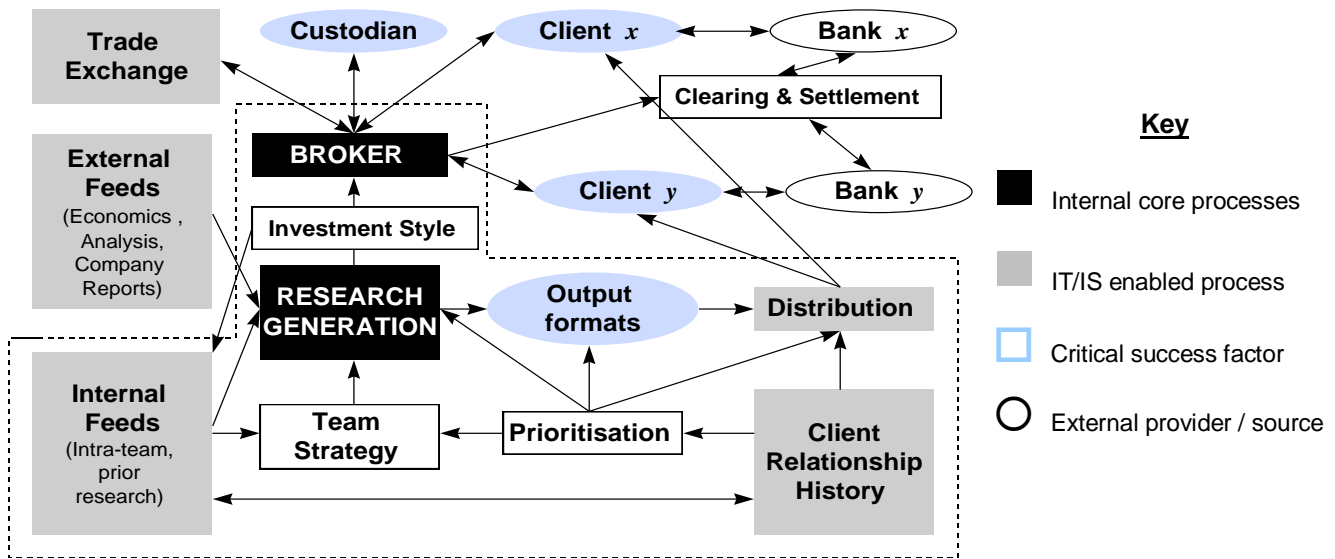


Figure 1. Example of a generic Research and Trading Cycle

Looking at the generic research cycle in Figure 1, we can see that the processes involved have a number of deep inter-relationships, both within the organisation (research and broker) and external to it (multiple client banks, x and y; exchanges). Company O found that although the generation and prioritization of research reports on exchange-listed companies was a based upon a significantly mature and technologically adept process, there was little knowledge about whether or not such research actually assisted clients at all in their investment decisions. Given that this is one of the main reasons for supplying clients of a securities and investment organisation with research data, it is therefore imperative that the FSO know and understand how that information is consumed, so that the FSO can service the client better. Specifically, the management within Company O found that there was little “line of sight” or correlation between the distributed research and the on-going client relationship. This was to the effect that significant costs were being incurred in distributing and marketing investment advice to key FSO clients, who would either ignore or not receive research at all.

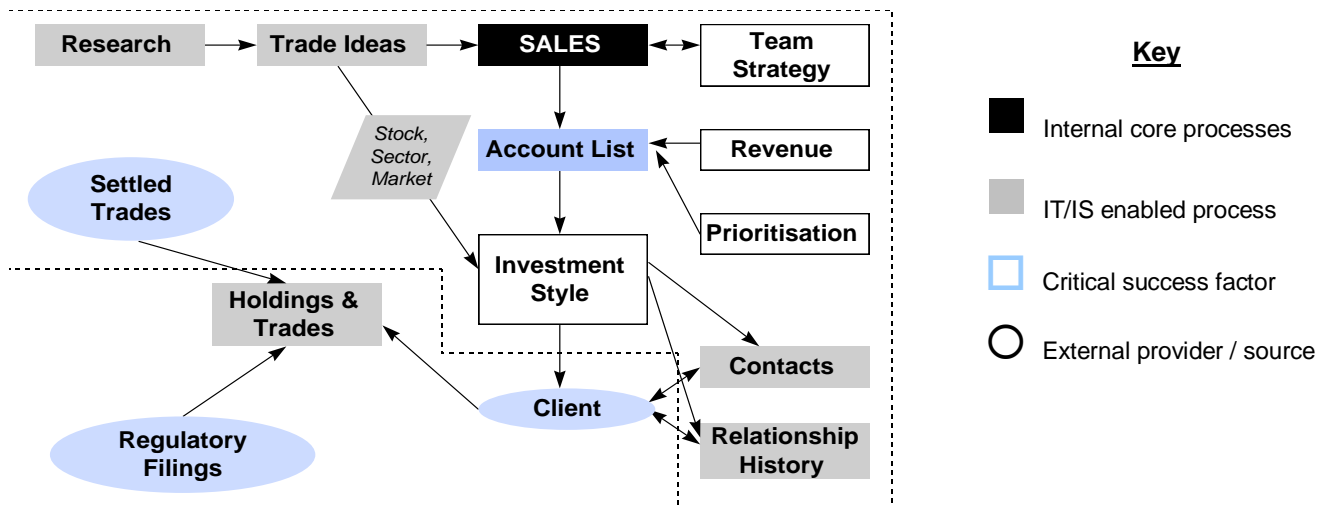


Figure 2. Example of a generic Equities Sales Cycle

The business process behind this lifecycle, then, ultimately revolved around largely operational/tactical approach to managing the client relationship, which manifested itself through a higher than normal level of communication between the FSO and the client (simply in order to find out who in the FSO was receiving research ideas and opinions with the client on a day to day basis and not necessarily discussing asset-class investment advice). This inefficiency therefore also had an impact on the sales cycle, as shown in Figure 2. The corporate or institutional sales cycle within this particular FSO, revolved around identifying, monitoring and maintaining an effective one-to-one relationship with each client. This has to also take into account a holistic view of the relationship with that client also: interactions with specific contacts at the external organisation; interactions with specific investment professionals internally within the FSO itself; investment style and research reports distributed; phone calls and emails sent; number of hours spent dispensing investment advice; and lastly, the throughput of all of these activities, culminating in trades booked and orders executed on behalf of the client's investment decisions. Again, any inefficiency or lack of coherent information about the client from downstream systems, processes or teams, would have had a severe effect upstream. Similarly within this business lifecycle, the prime area for concern was in tracking the number and quality of interactions made with the client and relating this to sales team priorities and objectives. There was no visible and clear method to correlate sales team performance with client performance. That is to say, it was impossible to relate successes or "wins" for the FSO firm, based upon effective sales and distribution efforts (both from sales and research teams). The only method available to management before the introduction of the CRM application, was to monitor and request hardcopy versions of all emails and telephone transcripts between Company O and external clients.

Hence, these core business processes before the implementation of the CRM web application, were largely discontinuous, ad-hoc and poorly integrated - as well as being not documented or indeed ratified as following company procedures. Those processes that were structured, involved silos of information controlled by fiefdoms of power and influence, within and across all levels of the organisation (from management through to desk assistants and secretarial staff). Furthermore, in contrast to the diverse nature of this global FSO's business, business practice varied wildly across the major regions (Americas, Europe and Asia). Thus, there was a concerted effort to develop a globalised and agreed set of business processes to mitigate the risks associated with this, as a result of a global Equities change management programme.

IT/IS delivery

A development team was identified within IS organisation, to carry out the design, analysis, development, delivery, and maintenance of a customer relationship management (CRM) system to integrate and overcome these deficiencies. This was in alignment with the aforementioned change management programme, to improve the business process activities of both the Sales and Research teams, within the Equities organisation. Through streamlining the existing business processes, and removing ad-hoc reporting and analysis of a multitude of information formats (spreadsheets, call transcripts, emails, etc), the business desired that at least some business process would be adhered to, instead of purely ad-hoc and undirected efforts. A key and important driver for this programme was also the benefit that clarifying the component parts of each lifecycle would bring, to the derivation of the Equities business cost / income ratio. As a result of eradicating silos of information, and a lack of re-use and sharing of knowledge, management hoped that better oversight and strategic as opposed to tactical decisions could be made to the benefit of Company O. Hence, the high-level requirements for IT/IS to enable and deliver these specific characteristics of the change programme were highlighted as a series of deliverables, detailed below:

- Provision of a global multi-region, highly available system accessible via the intranet;
- Target user base of 1000 global users in Equities;
- Performant and scaleable architecture;
- Rich user interface (in accordance with other firm-wide web applications);
- Integration with other systems and feeds to leverage as much client and sales / research information as possible for the benefit of the Company O – client relationship;
- Provision of "drillable" MIS reporting to the business and key managers;
- Provision of an ongoing rollout, replacement and / or introduction of business processes which mandate the overall management and leadership strategy of the Equities organisation.

As such the key aspects of the required functionality centred around the following components:

- Analyst Lookup: ability to search for a research analyst by name and see a list of their publications and key clients
- Stock Lookup: ability to enter a stock ticker and view stock performance and other key valuation metrics
- Contact Lookup: ability to enter either a first name or last name of a client and retrieve their address and contact details
- Research Documents: search for a company or stock valuation research document and view it
- CTI (Computerised Telephony Integration): ability to dial through to a client contact from a contact lookup, analyst lookup, calendar lookup, team activity or watchlist directly to the landline phone number of the user requesting the service
- Calendar: ability to view all client interactions and events across a multitude of client types, sectors and interactions (meetings, roadshows, marketing, sales, research and trading calls)
- MDS/News: view and interrogate delayed market data services (MDS) such as Reuters and Bloomberg feeds as well as delayed news feeds, for a given client company, research analyst or stock ticker context
- IPOs: ability to search for IPO activity for a given client or company name, and / or against a lead banker or analyst
- Prime Brokerage: ability to view all prime brokerage activity for a given client or customer (i.e. all transactional level activity undertaken on behalf of hedge fund or money market brokers and managers)
- Personal Activities: ability for a user to enter a series of their own tasks in terms of a publishable task list (visible to only those on their own team /desk)
- Team Activities: as above, but generic team tasks and events administered by a central / desk administrator on behalf of a sales, marketing or trading team
- General Research: ability to search for research documents and notes for a given company, client, stock ticker, research analyst or contact context
- Customised Links: ability to define a user's own set of hyperlinks
- Training Docs: facility to link through to the CRM application's document repository on training material
- Reporting: executable MIS reports relating to client and company sales, research and trading activities
- Call Sheet: matrix-based view of concurrent client interactions and communications (via telephone, web, email or distributed print material); ability to drill down into CTI, contacts and research documents based upon client or stock context
- Activities: ability to view internal organizational key events and activities taking place (calendar-based view of individual and team events)
- Watchlists: ability to define and view key client activities to be tracked across individual and team contexts and allow alerting of upcoming company interactions and client engagements
- eRDS (Electronic Research Distribution Service): ability to view downstream and upstream research document workflow for electronic distribution of research notes directly to clients and companies
- Reviews: ability to search and interrogate pending feedback and broker reviews from clients and companies by individual analysts or teams or sector specialists

The IS Implementation approach used was a combination of a “buy and build” approach to IS development. The core application infrastructure was sourced from an external vendor (i.e. an application server platform), upon which a suite of CRM components would be customised and implemented for delivery as a web-based application. In order to maximize the functionality of the core CRM product, bespoke Java and database development was also carried out, to also satisfy some of the high level IS requirements shown above (such as a rich UI). Due to the tight global release schedules mandated by the business – a requirement stipulated by senior management in order to receive the buy-in of earlier adopters of the system – there was a continual global rollout of functionality every 4 to 6 weeks. As a result of this approach, the project team members had little time to document each piece of functionality thoroughly, although functionality was delivered to

specification almost always on time. Company O management prescribe most of the success of the implemented CRM application, based not necessarily on the fact that the technologies and tools used matched the business processes designed, but because the IS organisation was responsive, proactive and communicative in realising the requirements. Hence, in some sense, the IS organisation adopted a highly RAD, even agile-type development approach, whereby the business sponsors (users) were involved heavily in every stage of the development.

Case data and analysis

This section now provides detailed case data and analysis of both the quantitative survey responses based upon the research questions raised in section 3. This is in terms of both how functionality of the system is perceived and used, and also in terms of how specific user groups (management, trading floor and administrative / desk head staff) perceive the importance and success of the given system.

Usage of CRM functionality

The primary question raised as part of the survey was to request users to define which parts of the CRM application they used most often, thereby providing a ranking of that functionality’s importance, which is shown in Table 1, where the Likert scale results of 1 – 5 are used (from least functionally / work-related important to most functionally / work-related important). Figure 3 shows the key functionality which was used most by the management user group. This shows that there is a mix of both IM and MIS functionality with the focus on marketing events (calendar) and deal flow (MDS news, IPOs and prime brokerage) and access to recent research publications. There is also a heavy emphasis on MIS (reporting) and also on team-related tasks (Team Activities and Callsheet), and also client-relationship (Reviews). This highlights the need by senior management to understand and monitor what their staffs are doing in terms of client interactions and other relationship activity. Furthermore, this shows that the majority of the key functional aspects of the web CRM application are crucial to the intended usage and implemented requirements. Several respondents also commented on the fact that the purpose of the functionality usage would be to relate the business goals to the goals of each sales and trading team’s priorities, gradually aligning the given CRM application with other business processes and IT/IS systems in existence,

1	2	3	4	5	Functionality
					Analyst lookup
					Stock lookup
					Contact lookup
					Client lookup
					Research Documents
					CTI
					Calendar
					MDS / News
					IPOs
					Prime Brokerage
					Personal activities
					Team activities
					General Research
					Customised links
					Training docs
					Reporting
					Callsheet
					Activities
					Watchlists

				eRDS
				Reviews

Table 1. Distribution of functionality usage by IS function and user group

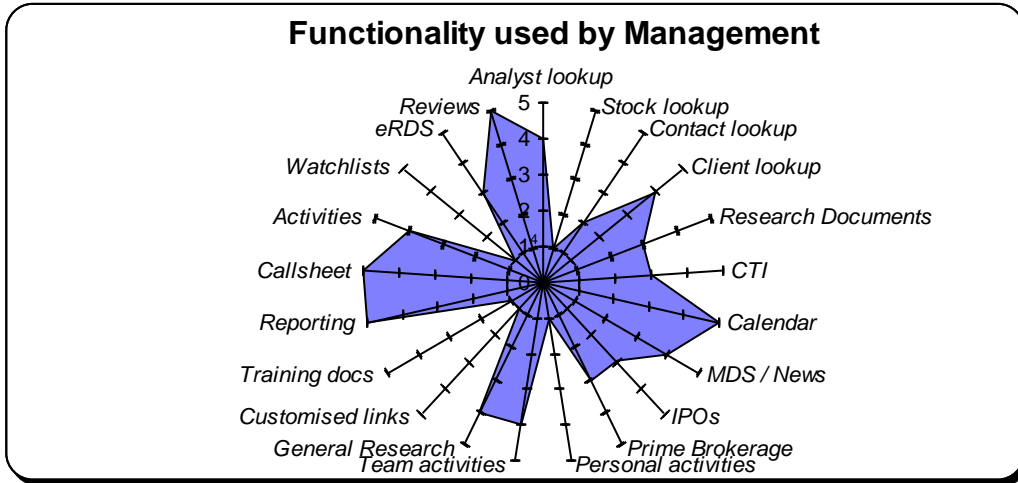


Figure 3. Management team: CRM functionality user responses

In contrast, Figure 4 shows that those functional aspects which are pertinent to trading floor users (i.e. marketers, sales traders, traders, research analysts, bankers and relationship directors) relates much more to lower level data and information which is pertinent to their day to day job – looking up stock data, client contacts, client activities and operational interactions – all of which are vital to servicing client interests and needs. Respondents from this survey group highlighted the importance of having rapid and accurate access to the right information at the right time, in order to simplify decisions made on behalf of clients (especially in terms of the primer brokerage case). In totality, many research analysts, sales traders, marketers and traders were of the view that this CRM application would be able to provide a live state of the dynamic relationship with clients. Finally Figure 5 highlights the tertiary view of the CRM system from the point of view of administrative staff who assist and manage data and information for both management and trading floor users identified above. Here the focus of the functional usage is in using the CRM system to prepare and input data through adopting and leveraging information as part of a series of MIS reports which relate to the activities identified within the plot. Also this user group identified the need to support business needs at the management level in terms of gaining transparency over costs and revenue generation efforts undertaken by individuals and teams. The design and development of these components of the CRM system as evidenced by the responses by this user group also highlighted the requirement to drill-down and drill-across into information and data, to help clarify revenue team performance for senior management reporting.

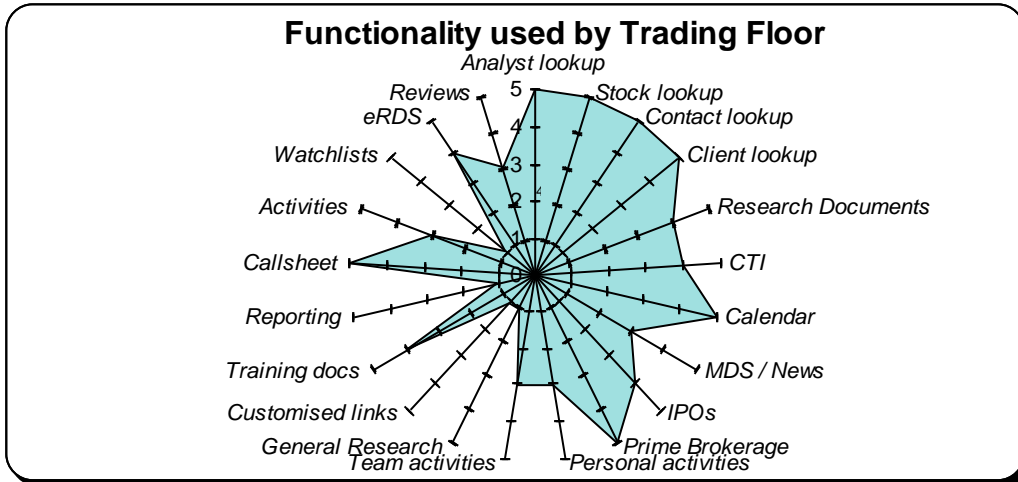


Figure 4. Trading desk team: CRM functionality user responses

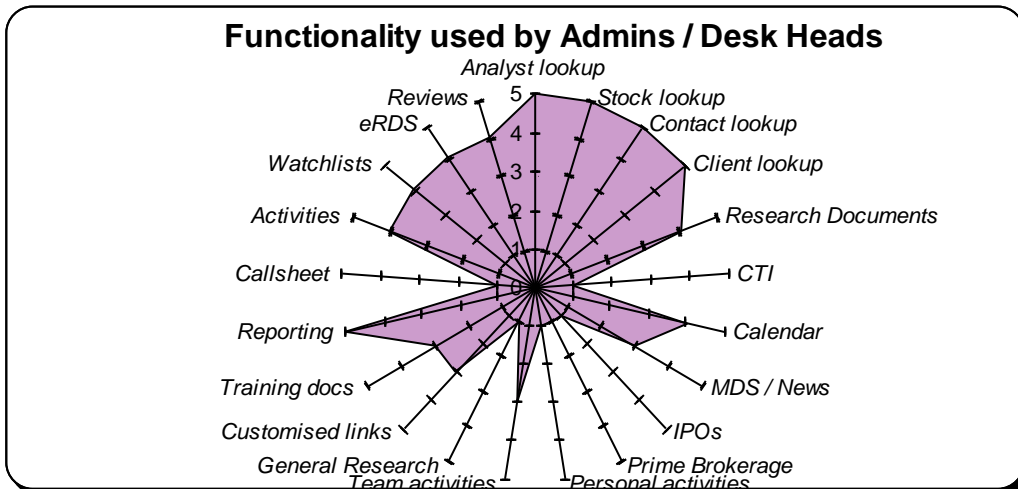


Figure 5. Administration team: CRM functionality user responses

CONCLUSIONS

The CRM system investigated and discussed within this paper outlines an IS approach in terms of using an IS as the core part of a strategy to drive organisational change and adoption of relationship and information management factors – hence in some sense, defining a technochange project (, 2004). The survey results show that an organizational IS can enforce power structures and hierarchies in organisations where there is a strong culture of influence within the decision making task. However, from the resulting implementation all survey respondents highlighted that even in technically adept organisations, management can “miss the wood for the trees”. This is again evidenced in the lack of complete usage of all implemented functionality by all users. Therefore there is a need to understand the nuances of the functionality such as through identifying appropriate user stories which validate or falsify the requirements (DSDM, 1993). That said, management were able to identify that this implementation project was a success and that in fact the intended user groups really did adopt the technology and functionality quickly to good effect, leading to a greater mitigation of client-related interaction risks and a wider adoption of the CRM technology as a platform across the whole of the case company. The main reason for this success was due to the strong underpinning of the CRM platform with regards to the core business processes and workflows as identified in Figures 1 -3. However, in the rush to deliver and rollout this platform across the firm globally, and the user uptake suggested by management, the system became a victim of its own success as there were account provisioning, user

load, system bugs and system performance problems. Although business risks were mitigated and controllable, IT risks due to the urgency of delivery and sheer number of users had to be dealt with on an operational basis.

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