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Master Degree Project in Marketing and Consumption

Technology and the Implementation of CRM in Norwegian Football

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Abstract

Purpose:
This article aims to identify how understanding technology's role in CRM implementations can benefit sales and marketing.
Methodology: The research was designed to investigate the CRM-implementation taking place in the Norwegian top football division. A qualitative study was used and the research design centred around four semi-structured interviews with representatives from actors involved in the implementation. A structurational model was applied to analyse and understand the empirical data gathered.
Findings: It was found that technology affects various actors in the implementation process, and that there is a lack of unified understanding when it comes to the purpose of CRM Further the findings suggests that understanding the role of technology will benefit sales and marketing by giving them an understanding of how new technology will be received in the organisation.
Research limitations/implications: One could argue that the model, location and organisation are not optimal for generalizing across the sport industry. However, the research sheds new light on CRM research and offers a new perspective to CRM implementation studies.
Practical Implications: Understanding the nature of technology and its role in the implementation of CRM is managerially beneficial as it can be used to identify the technology's potential in the organisation, prepare human agents in an effective manner, and identify knowledge gaps within the firm.
Originality: A mid-implementation process case was analysed by applying a modified structiorational model divided into two dimensions.

Keywords: CRM, Technology, Implementation, Structurational Model
Paper Type: Research paper as a Master Thesis

Introduction

Customer Relationship Management (CRM) has become important for firms as they seek to improve their profits through long-term relationship with their customers (Coltman et al. 2011). According to Becker et al. (2010, p.36), CRM concerns "... marketing capabilities that focuses on initiating, maintaining, and retaining long-term customer relationships...". According to Nairn (2002), CRM is used to collect data in order to understand customers and use insights to achieve better segmentation and communication. By doing this, Nairn (2002) argues that a higher level of service can be provided, leading to a stronger customer loyalty. According to various scholars (Ryals, 2005; Meadows & Dibb 2012; Becker et al. 2010; Nairn, 2002), using CRM to gain customer loyalty and retention has proven to have financial advantages for many enterprises.

However, not all CRM systems are successful (Nairn 2002), in fact a third of the CRM systems fail (Becker et al, 2010). The reasoning for the failure is split between scholars. Bohling et al. (2006) names resistance to change as a factor, other scholars argue for over-emphasis on IT (Reinartz et al. 2004; Becker et al. 2010; Meadows & Dibb 2012; Payne & Frow 2006), whilst Kriemadis et al. (2009) argues that there is an inadequate investment in IT. The inability to find a unanimous reason for CRM failure is in particularly interesting as many have invested heavily in IT assets and CRM software to better manage their interactions with customers, both pre- and post-purchase (Bohling et al. 2006).

This research centres on Viking FK, a football organisation in Stavanger, Norway, that has together with Norsk Topp Fotball, an interest organisation for the Norwegian top football organisations, invested in a common CRM technology that is currently in the implementation phase. The CRM supplier is Lundalogik, that with this project aim to be Northern Europe's CRM experts, and the biggest supplier of CRM systems to sports organisations. The system being implemented will be a common system for 15 Norwegian football clubs, which contradicts previous research on the importance of customized CRM system in organisations (Raman et al. 2006; Sluis 2014).

The technology in this implementation is not created for a specific organisation rather than an industry. And as Capon and Glazer (1987) stated: the rapidly changing technology is a key reason for instability within organisations. Moreover, Zackariasson et al. (2009) argue that it is difficult to overemphasize the vital role played by technology within organisational environments. Concretely, Klein et al. (2001) argue that it is not the technical innovation per se that is the major issue, but rather the task of implementing it. Moreover they state that many organisations fail to completely implement technology due to financial reasons and getting the employees to embrace the change and acquire the necessary skills.

According to Orlikowski (1992) there are two major scopes when it comes to technology research, a technological-deterministic view and a social-deterministic view. The prior focusing on technology as "hardware", such as equipment and machines that humans use as mere tools in order to produce a good. The latter is focusing on the social context of technology and the knowledge, techniques and social context in which the technology is used (Orlikowski 1992). As identified, research regarding CRM either has a technological-deterministic approach (Chen & Popovich, 2003; Eckerson and Watson, 2000; Davenport and Short, 1990) or a social-deterministic approach (Finnegan & Currie 2010; Becker et al. 2010; Meadows & Dibbs, 2012), the authors would argue for a different conceptualization where both scopes are involved. One such approach was taken by Orlikowski (1992) when she proposed the *Structurational Model of Technology*, which enables the researchers to obtain a deeper and more dialectical understanding of the interaction between technology and the organisation.

By adopting Orlikowski's (1992) model, and applying it to CRM implementation the authors aim to identify: *How can understanding technology's role in CRM implementations benefit sales and marketing?* By identifying the relationship between human agents, technology and institutional properties the authors believe they shed new light on technology's role in CRM. In doing this, the authors argue that a greater understanding of CRM implementation has been provided, which is the cornerstone for companies and marketers to utilize CRM to its full potential. Furthermore, this research contributes to the field of CRM literature by adopting a new approach observing technology's dual nature as objective reality and as a socially constructed product.

Theoretical Framework

Since its introduction in the late 1990s, there has been a vast number and variation of CRM definitions (Payne & Frow 2005; Parvitiyar & Sheth 2001; Singh & Agrawal 2003; Glazer 1997). It has become one of the most epochal and controversial business concepts (Becker et al. 2010) and its contribution to the business sector has been

widely discussed. The core of CRM strategies builds on the notion of creating strong relationships with customers and therefore increasing their loyalty (Adamson et al. 2006). Interestingly CRM's origin can be viewed from two different perspectives. From a commercial perspective, CRM was IT-related solutions to the problem of channel integration, with some direct database marketing (Adamson et al. 2006). Academically, CRM theories have a foundation in relationship marketing, introduced by Grönroos (1994), who describes relationship marketing as more than a strategy for a firm. Further he states, it is the very essence of business, which should be deeply imbedded in the core of the company, placing commitment and relationship to its customers higher than short-term profit. More recently, CRM-theories have developed into a mix of the two origins, with CRM-systems being introduced as company-wide market orientation strategy, with IT-enabling marketing tools (Adamson et al. 2006). Further, Raman et al. (2006) argue that modern CRM systems can still be categorized into analytical (academic) and operational (commercial). Operational CRM systems look to reduce costs through sales force automation, marketing and customer support, by making the technology behind it more efficient and effective. Analytical CRM systems concerns using technology to process customer data in order to make appropriate managerial decisions. Regardless of whether the CRM system is operationally or analytically grounded, the general opinion between scholars regarding the modern CRM system is positive, as it is believed to be financially beneficial when implemented correctly, due to better firm performance (Ryals 2005), increase customer retention and satisfaction (Meadows & Dibb 2012) and by ensuring maintenance of valuable relationships (Reinartz et al. 2004). However, research points towards difficulties with implementation of CRM-systems, causing no bottom-line improvement for approximately 70 % of CRM projects initiated (Reinartz et al. 2004; Becker et al. 2010; Kriemadis et al. 2009, Finnegan & Currie 2010). CRM systems failure has received immense attention from scholars within this particular field of study, which is understandable due to the high failure rate, and the potential benefits organizations can reap from successful implementation.

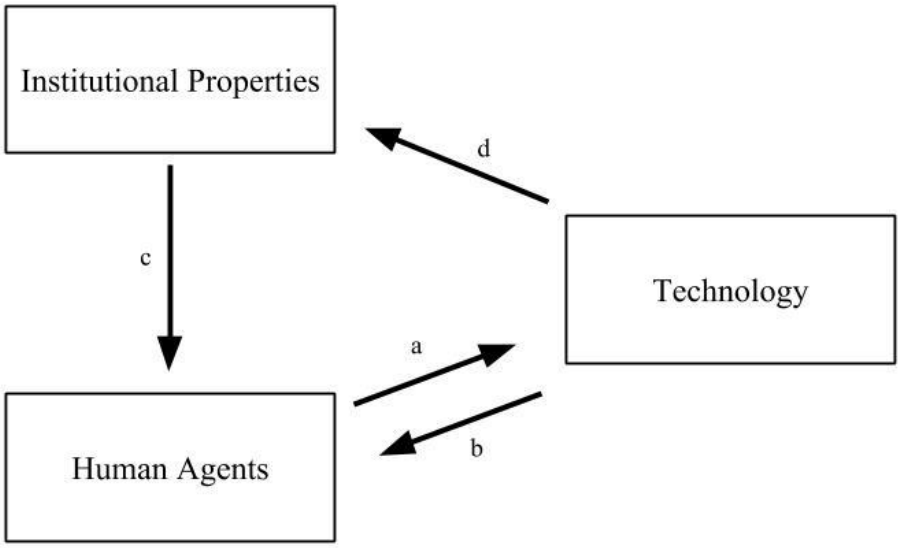
The high failure rate of CRM implementation has lead to various schools of thoughts through the evolution of CRM. In the beginning, CRM was heavily looked upon from a technological perspective, with the rapid improvements in technology, along with the birth of the Internet. Further, Adamson et al. (2006) stated that CRM originates from IT-led solutions to channel integration problems, with later adding some database marketing, showing that CRM has its roots in information technology. Furthermore, according to Davenport and Short (1990), information technology was argued to completely change business procedures with the aim of improving companies' performance. As noted by Chen and Popovich (2003), CRM was viewed as nothing more than a technological solution that bridge sales and marketing functions through extending separate databases and sales force automation. Further Eckerson and Watson (2001) argued CRM applications take full advantage of technology innovations, and that this technology gives organisations the ability to collect and analyse data on customer patterns and respond with effective communication. This initial way of looking at CRM can be associated with technological-determinism, as the focused laid on the "hardware" of the technology.
With initial focus on the hardware, and along with the mentioned high failure rate of CRM systems, the research field transcended into scholars focusing more on strategic decisions, organizational structure and human aspects of the implementation process (Payne & Frow 2005; Becker et al. 2010; Meadows & Dibb 2012; Nairn 2002). This

is known as a social-determinism approach to CRM theory as it builds on the notion that social interactions and constructs determine individual behaviour. Much of the existing research with this approach states that reasons for CRM failure is the lack of organisational changes to structure and processes (Becker et al. 2010; Meadows & Dibb 2012), neglecting the customer-centric nature of CRM (Reinartz et al. 2004) and training insufficiencies (Meadows & Dibbs 2012). Furthermore, Finnegan and Willcocks (2006) found in their research that knowledge issues and what constructs them, along with stakeholders interest is what causes implementations to fail.

Interestingly, recent CRM implementation studies treat technology as a separate aspect. Becker et al. (2010) argue that technological changes (e.g. implementation of software) must be accompanied by organizational changes (e.g. educating employees), thus viewing these two as separate aspects. Meadows and Dibb (2012) examined people, company, customers and technology within CRM implementations, where the purpose for technology was to understand whether it was used as a strategic tool or to record transactional data. Raman et al. (2006) developed a framework for successful CRM implementation, where the aim was to transform CRM from being a technological tool, to become an advantage-producing resource. Their framework explained the roles of organizational learning, business process orientation, customer-centric orientation and task-technology fit. The latter one was described by Raman et al. (2006) as the users ability to work with the technology and were, just like the other components, viewed as a separate entity.

As noted above, research on CRM implementation has either had a technological-deterministic or social-deterministic perspective, where the latter one sprung from the idea of technology being overemphasized. In order to address this, recent studies have looked at technology as one of many aspects to take in consideration. However, CRM implementations continue to fail (Adamson et al. 2006; Rigby et al.2002; Foss et al. 2008). The authors of the present study therefore argue that technology within CRM implementation, has not found its place yet, since neither a technological-deterministic view nor a social deterministic view seems to lead to successful CRM implementations. Based on this, the authors identified a need to take a new approach to technology's role in CRM implementations.

Orlikowski (1992, 2000) has by reconstructing Giddens (1984) theory of structuration attempted to resolve the complexity surrounding technology development. Her study proposes a "theoretical conceptualization of technology which underscores its socio-historical context, and its dual nature as objective reality and as socially constructed product" (p.423). Orlikowski's (1992) model (figure 1) provides insights into the development of technology in an organisation, and investigates the relationship of technology both as technological artefacts and socio-historical context in which they are used. The structurational model of technology consists of three components; (i) *Human Agent* -, the technology designers, users and decision makers, *(ii) technology* - material artefacts mediating human action, (iii) *Institutional Properties* - business strategies, ideology, culture, division of labour and communication patterns.



Source: Orlikowski 1992

Figure: 1

Firstly, technology comes as a result of human agents. Orlikowski (1992) argues that technology only comes into existence through creative human actions (arrow a). Further she states that technological artefacts only exert influence through appropriation by humans. Secondly, since human agents in an organisation use technological artefacts, it mediates their activities (arrow b). Thus, its important to recognise the dual influence technology has, as both constraining and enabling effects on human agents. Thirdly, the institutional properties of an organisation restrict human actions (arrow c) as workers draw on the resources in the organisation, e.g. norms, knowledge and resources. Lastly technology, when used by human agents, acts upon the institutional properties in an organisation (arrow d). This is done either by reinforcing existing properties or by transforming them. The present study aims to take a new approach to the role of technology in CRM implementations by applying Orlikowski's (1992) model. Thus, the authors do not view technology as neither a technology-determinism view, nor a social-determinism view, but rather observes technology's dual nature as objective reality and as a socially constructed product. Moreover, with human agents and institutional properties, the model is useful in

understanding the role of technology and how it co-exist with other aspects of an organization. Thus giving marketers a different approach to CRM implementation, as well as a greater understanding of the role of technology, which opens possibilities to better implement, and consequently better utilize, a CRM system.

Methodology

This specific study focuses on implementation of CRM systems in the Norwegian Top Football league. The study is exploratory of nature as the implementation process of a communal CRM system is yet to be studied. According to Stebbins (2001), an exploratory research approach is preferred when a process has received little empirical investigation, not been viewed with open-mindedness and flexibility or changed drastically. The authors of the present study argue that communal CRM implementations has not received a great amount of empirical investigation, and that the application of the structurational model is a creative way of finding new angles to CRM implementation. Hence, the results from this study carry a significant value to the academic field when it comes to organisational roles of technology. As noted by Eriksson and Kovalainen (2008), qualitative research is best applicable when researchers aim to understand and interpret, rather than e.g. testing hypothesis. Based on the above description of the present study's nature, the authors argue that applying a qualitative approach is best suited.

The authors initiated the research process by conducting a review of CRM-systems and the implementation process. Secondary research was also conducted in terms of official statements from the stakeholders in regard to the CRM implementation. This gave the authors a glimpse into a complex implementation. The authors identified which organisations and people to contact, in order to get the best possible information for the present study.

The interviewees' chosen for this specific study is argued by the authors to be, based on time and resources available, the most influential individuals in relation to the implementation process. They are respectively:

- Jan Knudsen, Norsk Topp Fotball (consultant): CRM Project Leader
- Iren Brynhildsen, Norsk Topp Fotball: Chief Marketing Officer
- Jimmy Andersson, Lundalogik: Project Manager
- Morten Ristesund-Sele, Viking FK: Private Market Responsible
- Susanne Steenbøl, Viking FK: Business Developer

The interviews took place at various locations. Jimmy Andersson was interviewed at Lundalogik's office in Gothenburg. Jan Kundsen and Iren Bynhildsen were interviewed at Norsk Topp Fotball's office in Oslo. The interviews with Morten Ristesund-Sele and Susanne Steenbøl took place at Viking FK's office at the club's stadium in Stavanger, where the authors also worked for three weeks in order to be closer to the implementation process. Specific for this research was the language barrier. Three out of four interviewees had a different native tongue, Danish, Swedish and Norwegian. The authors decided to conduct the interviews in the interviewee's native tongue, in order for them to be relaxed and not feel restricted. Important to note is that the interviews were later transcribed, which means that the interviewee's words have been translated into another language. The authors therefore decided to analyse

the material based on the scope of the conversation rather than choice of specific words.

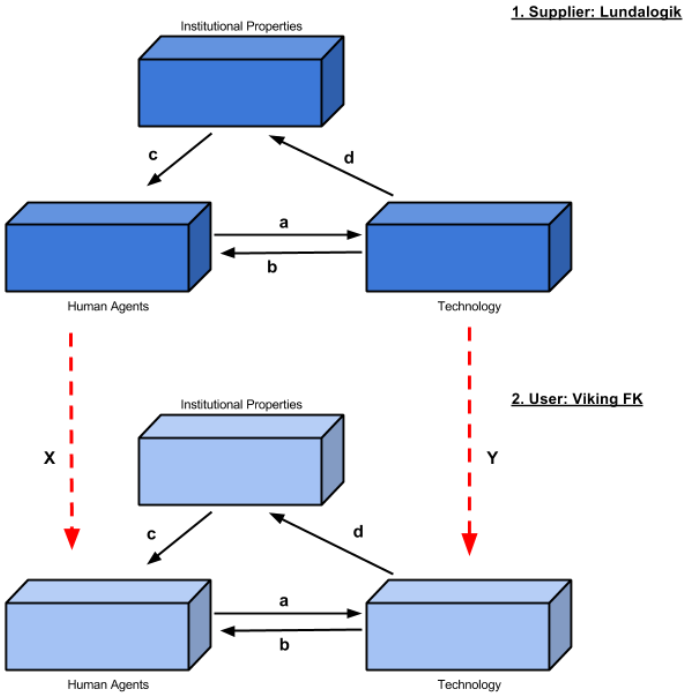
The interview questions were based on Spradley's (1979) 'Asking Ethnographic Questions', due to the range that could be captured by dividing the questions into grand and mini questions, as well as experience and example questions. This being an exploratory study, it was important to gather empirical material from various questions and angles. The authors of the present study applied what Crang and Cook (2007) describe as semi-structured interviews, namely to have a discussion with the interviewees, but at the same time keep within the research area. This to keep the interviewees relaxed, not miss out on interesting aspects by narrowing down the questions. This also gave the authors the possibility to naturally lead the conversation toward areas of interest to the project and specific events in the implementation process.

All interviews were tape-recorded, for a number of reasons. Firstly, it did not disturb the flow of the interview, noted as problematic by Eriksson and Kovalainen (2008) when applying other recording techniques, e.g. taking notes. Secondly, the tape recording made certain that no information were lost. Thirdly, transcribing the tape recording help the authors to familiarize with the information, described as positive by Eriksson and Kovalainen (2008). All interviewees were asked for permission to tape record beforehand following research ethics.

Furthermore, the transcripts produced were put through a multi-stage coding process in order to triangulate and analyse the data gathered. The authors began with what Crang and Cook (2007) describes as open coding, where no themes or relations were searched for but rather a way of understanding what had been said. The authors continued the coding processes by identifying different codes, before ultimately using a qualitative data analysis software called MAXQDA11 (Maxqda, 2014), to better organize and structure the codes into themes. Themes identified were respectively (i) *internal,* focusing on the implementation from Viking FK's perspective, *(ii) external,* which were related to other stakeholders and actions in the implementation process, *and (iii) holistic,* focusing on the relationship between the actors involved.

Observations

The study of Viking FK's CRM implementation separates itself from normal implementation processes as there are more actors involved (Andersson 2014). In order to relate and conduct analysis of various interactions the authors has made adjustments to Orlikowski's (1992) basic model, which consists of *Human agents*, *Technology* and *Institutional Properties*. The necessity of the modifications are inspired by Zackariasson et al's (2009) work on the introduction of CAD in the Swedish architectural industry, where they argue for the necessity of adding



dimensions to the model when technology comes from outside the firm. The authors identifies that similarly to Zackariassons et al's (2009) study, the technology in this project comes from outside Viking FK. Moreover, Viking FK is merely a user and the authors therefore opt for creating similar dimension to Orlikowski's (1992) model. Consequently naming two dimensions *Supplier* and *User*. With these two dimensions the interaction between them becomes more complex, however it gives the authors the possibility to analyse the technology implementation in an interorganizational context.

SUPPLIER LEVEL

The supplier level for this proposed model consists of the actors involved in the creation of the CRM-system, which will be implemented at Viking FK. They are identified as NTF, Lundalogik and the pilot clubs, which the authors argue to be the *Human Agents* in this project. The cornerstone *Technology* in the model is considered to be the CRM-solution, LimePro, which is according to the software designers description in line with Raman et al's (2006) theory of being operational and analytical CRM-system. Furthermore, the *Institutional Properties* is the combined knowledge, resources and time given for the project by all the stakeholders involved.

Figure: 2

Technology as a Product of Human Action (Arrow a)
Orlikowski (1992) states, "as a human artifact, technology only comes into existence through creative human action…" (p. 409). For this project, NTF has created the need for technology by identifying it as a solution to the spectator drop in the Norwegian Football League. Further, Lundalogik has created the software, LimePro, and are the designers of the technology. Orlikowski (1992) states that technology "... is sustained by human action through the ongoing maintenance and adoption of technology" (p. 409). This adaption and maintaining of technology is evident through the co-operation between Lundalogik and the pilot clubs, an important part of the design process as LimePro is a general CRM technology, not specified for the football industry. The collaboration between Lundalogik and the pilot clubs opt for technology maintenance and adjustments, and through empirical data it was found that the technology was sustained and adapted according to feedback from the pilot clubs, who contributed with useful information according to both Lundalogik and NTF. Together, Lundalogik and NTF are what Orlikowski (1992) describe as designers, i.e. the ones who build interpretive schemes, facilities and norms into the technology. By analysing how human agents create the technology on the Supplier level of the model, the authors identify findings regarding the core values of the CRM technology. Through the empirical data it is evident that the customer plays a pivotal role in the creation of the technology, as there was a unanimous consensus among the interviewees.

It have to be fun to visit a football match, even if you team isn't doing well it must be fun going to match… Jimmy Andersson, Lundalogik

We made a program, or a project overview, where we identified twelve initiatives to turn the negative trend. One of these measure were; how can we have better dialogue with our customers. Jan Knudsen, NTF

Needless to say, customers need to have a central role of CRM technology, as the very nature of CRM builds upon them. However, upon reflecting on the different approaches to CRM technology the authors argue that the created technology for this project is of an *Operational* nature (Raman et al. 2006), and seeks to improve processes, reduce labour hours and create effective communication strategies (Adamson et al. 2006). Thus giving the technology a transactional nature, focusing on increasing sales and improving communication activities.

What it is, is removing the personal dependency… so everyone has the same information and you get all information gathered in one place where everyone relate to the ONE truth. - Jan Knudsen, NTF

Simplicity, in everything! It should be easy to find information, easy to change information, easy to create reports and easy to send mail. That's what we are working with, the simplicity. That's our leading star in this project.- Jimmy Andersson, Lundalogik

We know that what the clubs really need to do is to keep track on their customers and their potential customers, keep track on what they have sold to each individual company, the need to keep track on what they haven't sold, what they have left to sell and so on. - Jimmy Andersson, Lundalogik

To the authors, these findings are intriguing. The technology being developed very much has an operational nature, focusing on creating a tool for transactional marketing purposes. However, from the empirical data, the *Human Agents* describes their notion of CRM from a relationship marketing perspective. Describing the importance of deep relationships with their customers. This shows that their vision is to create company-wide market orientation strategy, with IT-enabling marketing tools, rooted in Grönroos (1994) theories of creating strong relationships and dialogue with their customers. However, their actions are leading to creation of the technology leaning towards operational CRM focusing on transactional marketing. The owners of this project are "talking the talk" of relationships but "walking the walk" of transaction marketing (Adamson et al. 2006).

[*It is important for us*] *to create a personal relationship between club and a named person based on first name... Then you actually create this personal relationship where you actually look forward to getting emails* [*from the club*] - *Jan Knudsen, NTF*

So really to create, retain and deepen relationships with customers, it's really those three pillars that are of importance in CRM. - Jimmy Andersson, Lundalogik

Technology as a medium of Human Actions (Arrow b)
Orlikowski (1992) argue that technology, as a medium of human actions, can be both facilitating and constraining, depending on factors such as context, capability of user and designers motives and actions. With the project demanding a technological CRM solution to be implemented into 15 different organisation, there was inevitably going to be technological solutions restricting human actions. The empirical data shows that flexibility and possibility to customize the CRM technology is limited.

Certain parts they can create themselves, like sponsor levels. A lot of them work with sponsor levels in different clubs, for example gold, silver or bronze partner. Things like that we have put focus on, that they can do themselves, while other things are centrally controlled - Jimmy Andersson, Lundalogik

It's the clubs that decide which, what is the name of the sponsor levels they have, some call it "gold", "silver" or "bronze", other call it "one", "two" and "three". - Jan Knudsen, NTF

This stands in contradiction to previous research, as customization and the possibility to tweak CRM technology to suit a company's specific needs have been highlighted as extremely important for successful implementation (Sluis 2014; Raman et al. 2006). On the other hand, the studied CRM implementation is not being implemented in one company, but in 15 different football organizations with various levels of knowledge, resources and economy. It can therefore be argued that NTF and Lundalogik must design a CRM technology that is general and consequently more easily applicable. Thus, when relating back to Orlikowski (1992), the technology design with its interpretive schemes, facilities and norms can be argued to constrain the human agents in regards to customization possibilities. The authors also points out that the technological aspect of this project, may restrict the human agents in the

design process, as their vision of CRM as relationship based, may be restricted by the technology. Thus leading them to creating a transactional marketing tool.

Institutional Conditions of Interaction with Technology (Arrow c)
As noted by Orlikowski (1992), the institutional conditions of an organisation affects the human agents in the organisation, as they act on technology they are influenced by the institutional properties of their setting. According to Giddens (1984) theses influences are often unarticulated and are reflected on fleetingly by human agents. The institutional properties on the supplier level of the proposed model are complex, mainly due to the supplier consisting of two different organisations, thus having different norms, knowledge and resources. NTF has knowledge regarding the clubs and the football industry in general as they have close connections with the football clubs, whilst Lundalogik possess the knowledge regarding implementing CRM systems, with over 5000 completed implementations. From the empirical material collected it is evident that the different areas of expertise are complimenting each other, and enabling the human agents to find new solutions.

[*T*]*he idea is to take our experience from other industries, other companies, and reuse it in a way that we think will work for the clubs. - Jimmy Andersson, Lundalogik*

There are aspects that are entirely new for us, for example handling of members, something that our other customer's don't do... - Jimmy Andersson, Lundalogik

The quotes above, from the project leader at Lundalogik, shows that through working closely with NTF they are able to contribute with solutions inspired by other industries, whilst NTF knowledge of fan-membership handling benefits Lundalogik. Another important institutional property that affects human agents, are resources available. In projects time is often a stress factor, however the authors found that the project was developing according to schedule, and there was a relaxed attitude towards both time and budget.

From when the decision was made at the members meeting it has gone according to the plans. It did take a bit longer than planned but that was expected. - Jan Knudsen, NTF

Although complementing each other with knowledge, empirical material shows differences in NTF and Lundalogik's view on the implementation. Lundalogik, familiar with CRM implementation, stress the importance of thinking beyond technical installment. NTF, being an interest organization for the clubs, focuses on the system's ability to improve clubs financial situation, arguably by short-term profits through increased sales and sponsors attractiveness rather than relationship management.

[*T*]*he system in itself is perhaps 30 % of the implementation, but it has a lot to do with this part about learning, and use the statistics and how to manage it and develop it - Jimmy Andersson, Lundalogik*

Private market and business market [*will be affected by the implementation*]*. And it will give the administration in the clubs a better possibility to follow sales activities*

and sales statuses as they get all information and the truth in one place. But, it will not affect the sports or the finance, in another way than hopefully generate more income. - Jan Knudsen, NTF

Due to NTF's role as project leader, their vision will override Lundalogik's. It can therefore be said that the institutional properties restricts the human agents interaction with technology in the design mode, as Lundalogik will deliver a software capable of becoming an analytical tool for organisation wide strategy, however it will be implemented with the purpose of becoming a transactional marketing tool.

Institutional consequences of interaction with technology (Arrow D)
According to Orlikowski (1992) interaction with technology influences the institutional properties by reinforcing or transforming structures of signification, domination and legitimation. From the empirical data gathered, the authors found that the interaction with the technology will affect the organisational properties at Lundalogik and NTF.

With this we become the biggest CRM supplier for football clubs in the world - Jimmy Andersson, Lundalogik

The above quote shows that there is a lot at stake, and that the technology being created will have an impact on the actor's organisational properties. For Lundalogik, this becomes a marketing channel. By conducting this technological implementation, they create a competitive advantage towards their competitors and hope to strengthen their position as a CRM supplier. Empirical material indicates that NTF has the clubs best interest in mind, and aims to improve the club's financial situation with this implementation. However, just as Lundalogik has a personal gain from this implementation, so does NTF. NTF's vision is to be an interest organisation providing value for clubs through innovative competence with a goal to improve sporting and economic growth for its members. The members are football clubs from the two top tiers in Norwegian Football, whom pay an annual members fee. NTF provides a service that members pay for, and if NTF was a passive organisation the clubs would not receive any value. Hence, implementing this technology could be looked upon as a way for NTF to legitimize their existence.

USER LEVEL

The user in the proposed model is Viking FK as this research centres on the club. They are not involved in the research and development-process taking place, and will therefore receive a "complete" CRM-technology once it is developed. Due to this research being conducted during the implementation process, when writing this the technology had not yet been implemented at Viking FK. Thus, limiting the researchers to analyse the two remaining cornerstones of the level; *human agents* and *institutional properties.*

Cross Dimensional Relationship (arrow X and Y)
It is evident to the authors that the relationship between the supplier and the user is clearly defined as such, since Viking FK plays no part in the development and designing phase of the CRM system. The supplier will produce a product and pass it on to the user, who will then use the product, without abilities to influence the

product. The product will be given to Viking FK through two channels. Firstly interaction between human agents (arrow X), and technology (arrow Y), which were both found to be a "one-way" interaction, meaning that the receiving institution, Viking FK, were given insights, knowledge, information and technology without being expected to contribute with any feedback. The empirical material shows that the technology being implemented in Viking FK will be a "complete" product without room for major modifications. It is up to the club whether they want to use all the aspects of the technology being implemented.

They (*the clubs*) *might want to drop the "sales object" part of the CRM system. It's up to them, they don't have to use the whole package... - Jan Knudsen, NTF*

Further, the authors argue that the interaction between the human agents, also are of a "one-way" nature, even though the club will undergo a two-week implementation process. This process consists of installing software and a two-day training course, whereof one day is software related and the other is strategy related. Although a good intention, the authors argue that the allocated time, and the emphasis on this interaction, shows that the supplier's intention is not to have a relationship that is of a symbiotic nature, but rather a instructional relationship.

Institutional Properties

Through the empirical material gathered, it was evident that Viking FK was sceptical towards the technology being implemented. They were not against it, but feared that they did not possess the necessary skills and knowledge in order to utilize the system. Hence, organizational changes were argued to be necessary.

"One thing is finding the right person, or training the existing people to do this, that will be a challenge... because today we do not have anyone who knows anything about this, so we do not have the competence to run this system" Susanne Steenbøl, Viking FK

As mentioned in the supplier level, technology affects the institutional structures. Today, Viking FK communicates with their customers by ads in newspapers. Since Viking FK does not have the right competence, and the technology being implemented is the complete opposite approach to the one Viking applies today, the authors of the present study would argue that organisational changes must take place in order for Viking FK to utilize this technology fully. Interestingly, both NTF and Lundalogik argued that no organizational changes would take place as a consequence of implementing the technology. With this standing in contrast to Viking FK's opinion, the discussion regarding the personal gaining for the actors involved in the supplier level becomes more interesting.

Furthermore, monetary resources are also evident in the material, as Viking are investing heavily in sub-projects that will be aligned with the incoming technology. The authors interpret this as the organization's willingness to change in order to improve their customers experience. Further, the authors would like to point out that Viking FK as an organisation delivered negative results for the previous year (Viking FK, 2014), which may be the motivator for the investment.

Human Agents

As noted by Orlikowski (1992), institutional properties affect the human agents in organizations. With Viking FK's primitive way of doing business their employees does not, as previously described, possess the knowledge regarding the marketing approach the new technology is based on. Since Viking FK is not a pilot club, they were not involved in the development or designing phase of this technology. Consequently, the technology has already been attached meanings, as described by Orlikowski (1992), by the actors in the supplier level. Since the technology is thought to simply be transferred down to the user, Viking FK will be told what the technology is and what it is not. After getting that information, Viking FK will assign and attach their own meanings to the technology. From the empirical data, it was found that both an operational as well as a strategic view on the incoming technology existed. Interestingly, these two views came from two different employees with different backgrounds. The employee who saw the technology as an operational tool had been working in the organisation for seven years. The employee with a more strategic view on the technology had only been in the organisation for one year. In other words, it could be argued that the employees were differently affected by the institutional properties.

Reflections

A model is a simplification of reality (Springer et al., 1965, pp 4-7), meaning that a model has the capability to represent something of complexity, and make it conceptually easier to grasp. As noted by Zackariasson et al. (2009) the first step in development of a model is selecting variables that are thought to be of importance to understanding the situation. The second step is to posit some interaction between the variables, and thirdly see if the interaction replicates reality. The authors feel that reality has been captured in the proposed model inspired by Orlikowski (1992) and that the identified variables indeed have interactions which replicates the reality of the implementation process.

Noticeable in the present study is the perception of what the CRM system is suppose to do. It becomes evident that some view it as a way of building customer relationships, other as business operations efficiency. Without a clear view or a consensus regarding what role CRM is going to have, it becomes more difficult to implement correctly and consequently difficult for some to fully utilise. The authors argue that both a transactional CRM-system and an analytical one can potentially create beneficial results. However, the lack of alignment cause a gap between what users expect of the system and the actuality of it. In the case of VIKING FK, the notion is that the CRM system will become an analytical tool, hence other project has been initiated with the intention of working in synergy with LimePro. This synergy might be difficult to achieve, since Viking FK has no say in the design of the technology and thus consequently not knowing what they are getting. Interestingly, NTF together with Lundalogik has "simplicity" as their main goal when it comes to software design and solutions. Within this specific context, implementing CRM in 15 organisations, it becomes evident that the possibility of customization is being reduced. Ironically, the rigid and simple system may cause the technology to become restricting, rather than enabling. With very few possibilities to modify the system to one's specific needs, the user might end up with aspects of the CRM system that does not fit or can not be applied, potentially leading to a CRM that doesn't fulfil their expectations. The authors stress the importance of having a clear understanding of

what the CRM-system will be used for, and that this understanding will ease the implementation and lead to a better utilised CRM system. It is therefore important for suppliers to understand the role technology will have at a user level, in order to create an enabling CRM-tool.

As noted by Orlikowski (1992), organisations draw upon the knowledge and norms that they posses. In the present study, NTF see the CRM system as helpful in improving their current operations, i.e. create value for the clubs through more efficient business operations. Viking FK also draw upon their existing knowledge and norms, and it was noticeable how they have no expertise, nor any knowledge, of working in they way that the technology is demanding. CRM is a customer relationship tool that takes a one-to-one marketing approach. Viking FK's current marketing approach is the complete opposite, mass-marketing, and the implementation will therefore put pressure on them to either learn by doing, be educated by others or employ the necessary skill-set needed to fully utilise the system and gain positive effects from it. The authors therefore argue against the notion found in recent studies on CRM that technology should be put aside and focus should be on process, people and organisational changes, since it is evident that the technology has to work together with human agents. Human agents have the "know-how" and the CRM-system is the tool, neither creates positive results by themselves. Technology should not be over-emphasised, nor should it be viewed as just another factor. Instead, the technology needs to be viewed as living in symbiosis with organisations and the people in them. The authors argue that this view will ease CRM implementations, thus making it a more useful tool for marketers and more profitable for companies.

In reflection upon the model proposed by the authors of this research, it can be argued that given the three cornerstones of technology implementation; *Human agents, Technology and Institutional properties*, it is possible to identify the likely impact technology will have at a *user* level. In the case of Viking FK, given the timing of this research, only two of the three cornerstones can be analysed on the *user level*, as *technology* is not yet introduced to this level of the model. Thus, leaving the researchers with an insight into Viking FK's *Human agents* and *Institutional Properties.* As Orlikowski's model (1992) is of a circular nature, where the cornerstones are symbiotic, the authors argue that the initial relationship between technology and the organisation can be predicted by analysing the two known cornerstones. However, a prerequisite is that the technology being implemented is known and analysed on a *supplier level.* In order to illustrate, by understanding Viking FK's resources, time and knowledge base (*institutional properties)* it can be used to explain and analyse the employees' capabilities and behaviour (*Human Agents)* in the organisation. One can illustrate this, by looking at the different cornerstones from Viking FK's perspective. According to the authors findings the club has a primitive communication with their customers and little knowledge about the one-to-one marketing approach that is CRM, combined with lack of time. These *institutional properties* in turn affect the *Human Agents* in Viking FK as they restrict them from acquiring the necessary skill-set and preparing for adoption to new business processes, which the technology implementation will bring. The authors gained an insight into the technology that will be transferred downstream from the supplier level to the user level, and can therefore identify possible *enabling and restrictive* factors that the technology will have on human agents in Viking FK.

Further, the authors point out that the proposed model can be implemented in other industries or similar cases where there is a supplier and user level. As Orlikowski's (1992) model is a model that looks at technology's role in organisations in a retrospective manner, the authors aim to create a tool for evaluating the role technology will have in an organisation prior to implementation. The authors argue that the contribution to the academic field is two-fold. Firstly, the application of the structurational model has been applied in a CRM implementation, providing a new context for the model and a new way of perceiving technology's role in CRM implementation. Secondly, it proposes a theory for testing potential impact technology will have on an organisation prior to implementation, given that technology user and supplier are separate.

Managerial implications

An important question for practise-oriented readers of this article is; how can this information be put in practical use and be valuable for marketing and sales departments? The authors of the present study would argue for the following to be taken in consideration:

- For organisations considering implementing technology from an external organisation the structurational model can be a valuable tool as using it proactively, implications and problems, as well as possibilities, can be identified and consequently addressed. Therefore the model can be used as an evaluation tool for marketers where they analyse the cornerstones and their fit to the incoming technology.
- The knowledge of how technology evolves in an organisation is useful for marketers considering implementing CRM systems, as they can expect and see the changes that will happen to Human Agents and Institutional properties. Therefore, by understanding how technology is an objective reality as well as socially constructed product, the decision makers can base their CRM system decision based on accurate evaluations.
- By viewing CRM from the studied perspective, marketers can better understand the operational and/or analytical nature of it and consequently come up with suitable goals for the implementation. With a clear understanding and clear goals, a CRM system will be more likely to succeed.
- By addressing the technology and its nature, potential knowledge gaps within the organisation may be easier to identify, e.g. lack of skills or lack of resources.

Conclusions:

This article has combined the technical-deterministic and social-deterministic views on technology's role in CRM implementations by applying Orlikowski's (1992) structurational model of technology. The cornerstones of the model are human agents, institutional properties and technology, and the authors of the present study offers a new dimension with a supplier and user-level. This research provides marketers considering implementing a CRM system a theoretical model in order to understand the role of technology during the implementation.

Moreover, this article distinguishes between different scopes of CRM and how technology can become either enabling or restrictive in the implementation process. It is argued that CRM implementations can benefit from looking at technology as an

integrated part of the implementation, as oppose to viewing it as an external or less important aspect which has been popular in recent studies on the subject.

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