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Potential Impact of Cultural Differences On Electronic Customer Relationship Management (eCRM) Systems

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ABSTRACT

Over the last decade there has been a dramatic growth in the acquisition of Customer Relationship Management (CRM) Systems. However, more recently there has been an increase in reported eCRM failures, suggesting that the implementation issues are not just technical, but encompass wider behavior factors.

In this paper the authors highlight the cultural issues as a new trend in studying CRM. The authors differentiate between three different levels of culture: individual, organizational, and national cultures. Also, the authors highlight the interaction between these different levels of culture in the context of eCRM systems and highlight universality versus particularity of culture and the effect of that on the eCRM implementation process.

The paper also presents a framework, which proposes a set of best practices and guidelines for management of eCRM systems within a multinational environment. This framework will be tested in future research stages and will be modified according to the results.

Keywords

CRM, eCRM, Individual Culture, Organizational Culture, National Culture, Implementation, Framework.

INTRODUCTION

Customer relationship management (CRM) strategies have gained momentum in recent years. Understanding and responding to customer needs and improving customer service have become important elements of corporate strategy. IT based CRM applications are being used by companies to support corporate strategies. The market for CRM applications totaled \$ 11.2 billion in 2002 and is expected to reach \$ 20.6 billion by 2007 (Forrester.com). El Sway and Bowles (1997) and Cooper et al. (2000) provide in-depth reviews of how companies were able to leverage customers facing IT based systems to increase customer satisfaction and subsequently company performance.

Although Customer Relationship Management (CRM) is a recent concept, its tenets have been around for some time (Peppard 2000; Sathish et al. 2002). Neighborhood shop owners knew customers by name and built close relationships with them. Over the years, through mass marketing and increased consumerism, customers traded relationships for anonymity, reduced variety and lower prices (Peppard 2000; Sathish et al. 2002). Today, through effective use of information and communications technology, such a tradeoff is not necessary. Organizations can offer customers variety, lower prices and personalized service and all at the same time (Peppard 2000; Sathish et al. 2002)

CRM requires a customer-centric business philosophy and culture to support effective marketing, sales, and service processes. (Smith 2002) CRM applications can enable effective Customer Relationship Management, provided that an enterprise has the right leadership, strategy, and culture." (CRM Guru, 2002).

However, the performance impacts of CRM applications to date have been mixed. Anecdotal evidence suggests that between 30 to 75 percent of CRM initiatives fail because organizations roll them out without assessing their cultural readiness and considering CRM applications to be the end of customer centric approach (Simpson, 2002). Thus, a systematic analysis of cultural factors that contribute towards successful implementation of CRM system projects is required.

In this paper the authors, in section two, highlight the cultural issues as a new trend in studying CRM, also, the authors differentiate between three different levels of culture: individual, organizational, and national cultures. Also, in section two, the authors propose the interaction between these different levels of culture in the context of eCRM systems. In section three, the authors try to question the argument of the universality versus particularity of culture and the effect of that on eCRM

implementation process. The authors, in section four, presents a theoretical framework (depending on Fjermestad and Romano (2003) eCRM implementation framework, & Jarvenpaa, et al. (1999) trust model), which proposes a set of best practices concerning cultural factors as guidelines for management of eCRM systems within a multinational environment. In section five, the research methodology is proposed which will be used in future research stages to validate the framework. At the end of the paper in section six, the authors propose the conclusion and future research.

CULTURE LEVELS WITHIN ECRM

The literature on culture provides a set of general concepts and ideas as a way of looking at the world. However, the typologies of culture have inherent weaknesses e.g. they do not reflect the variety of values and attitude that may exist in a country, nor do they explain how cultures have developed over time. These limitations will need to be borne in mind, as we consider potential culture impact on the use of information systems, particularly customer relationship management systems. (Skok and Legge 2001)

There are three identified dimensions of culture that are of relevance. First, is the culture that a society shares (national culture), which is a set of core values, that shapes the behavior of individuals as well as the whole society, and influences all the customers of an eCRM. Second, is the culture on a smaller level, namely organizational culture which senior managers, marketing managers, developers of the eCRM sales representatives are influenced by it (Adler 1997; Bagchi and Cerveny 2003). The third dimension is the individual level of culture, and was provided by Dorfman and Howell (1988) in their investigating the effects of national culture on individual behavior, e.g. technology acceptance, which influence the customer behavior even towards opposite direction of the society culture does.

National Culture vs. Individual Level of Culture

Adler, (1997) has defined national culture as a set of core values that shapes the behavior of individuals as well as the whole society. A few empirical studies have investigated the relationship between national culture and IT adoption, Straub (1994), Straub, Keil et al. (1997) have found that the technology adoption model (TAM) could not predict technology use across all cultures.

According to Hofstede (2001), national culture is equivalent to the collective mental programming of a group, tribe, minority, or a nation. It is the aggregate of individual personality traits. Hofstede developed an empirically based typology of cultural attributes by analyzing data obtained from surveys conducted among individuals in 53 nations in 1968 and 1972. Since all 116000 respondents were employees of the same firm, the IBM, Hofstede was able to hold constant the influence of organization culture. Based on the data obtained, he classified countries along to four dimensions: power distance, uncertainty, individualism/collectivism, and masculine/feminine. Hofstede rated each of the 53 countries in his study by their cultural dimensions (Hofstede 2001)

Hofstede's dimensions of culture are often chosen in cultural IS research, because they are the most widely cited and used. Given the number of years that have elapsed since Hofstede's work, it might not be appropriate to assume that the cultural scores of Hofstede still hold after over three decades. Further, it might not be appropriate to assume that the culture score of the entire country under investigation is the same as the score of the people within their sample; individuals might have drastically different cultural outlooks, even within the same country. The use of one company in data collection has been the focus of most criticism of Hofstede's country scores (McCoy, 2003).

Hofstede (1980) specifies that the original instrument he developed to categories nations, cannot be used to test individual level relationships, and should be used only at the national level (Hofstede 2000). It is important to look at national culture from a trait-based approach. In other words, because people from the same country can score differently on the cultural dimensions of Hofstede's work (1980), it is important to look at the effects of their scores and not only the country of origin (McCoy, 2003).

The problem with Hofstede's measures is that you cannot distinguish between people in the sample, but you can only aggregate to the group. This also makes it difficult to test cultural dimensions within individual level adoption models, like the TAM model. Because some dimensions can influence the relationships in different ways, researchers need to use individual level measures of culture. The constructs of Hofstede (2001) are measured at the national level, which cannot be used in individual models of behavior or technology acceptance (McCoy, 2003)..

McCoy (2003) stated that when investigating the effects of national culture on individual behavior, like technology acceptance, we should use individual level of culture provided by (Dorfman and Howell 1988).

Organizational Culture

Stahl, (2003) stated that cultural frequently named as a determinant of usability of computers. That means that the culture from which the developer, programmer, or user stems makes a difference regarding whether he/she is willing or able to use a certain technology.

Stahl, (2003) defined corporate culture as commonly shared values, which direct the actions of the employees towards the common purpose of the enterprise. Corporate or organizational culture fulfils the same role in an organization that culture fulfils in society. It defines what is real, what is important, and thus how one should act. This has led to an extensive use of the term as a vehicle of business ethics.

Culture in the sense of a meaning-constituting horizon of the collective life-world determines the perception and use of IT. This is also true for the organizational level where culture can influence whether employees are able and willing to use certain technologies. It is also true on social level where currently based perceptions have some bearing on the use of IT. A national culture that emphasizes sharing and the collective, for example, will lead to different uses of IT than one that emphasizes the individual and competition (Raboy 1997; Riis 1997).

The authors argue that studying the potential impact of culture on the eCRM systems implementation process require differentiate between these three levels of culture. The authors highlight the inappropriateness of using Hofstede work as the only way of investigating the culture impact on IS. The authors, in future research, will use concepts of Structural theory by Giddens (1979, 1984) to explore the impact of culture on the eCRM implementation process. Walsham (2002) stated that Structural analysis could be used to analyze differences in cultural sub-groups and even individuals.

CULTURAL UNIVERSALITY VERSUS PARTICULARITY

Stahl (2003) distinguished between two different proponents. The proponents of particularity of culture on one side believe that different cultures are fundamentally and possibly irreconcilable different, whereas the proponents of universality believe that all cultures share some universal attributes. These two ideal-typical positions appear in reality in different shades of gray. He has concluded that, despite obvious difference in cultures, there are similarities that are based on human nature.

Levy (1997) argued that the Internet is not only seems to be cultural independent but may even producing a new universal worldwide culture. Weckert (2000) and Stahl (2003) argued that the homogeneity of technology use is not based on cultural universals but instead on cultural imperialism.

Habermasian view of culture is based on Habermas, (1981) theory of communicative action, which holds that our reality is shaped by discourses. These discourses consist of arguments concerning contentious validity claims. Every speech act contains at least three validity claims, namely truth, legitimacy, and authenticity. Whenever the claims of a speech act are doubted the affected parties are called upon to clarify them in a discourse. Discourses are acts of communication that are characterized by the fact that they emulate the ideal discourse in which there would be no distortions due to power differences, different abilities etc. and where only better argument would count. The result of such discourses would be a consensus about the validity claims, which constitute part of the life-world.

This means that discourses constitute culture, and they are the resource that produces the collective knowledge, values and perceptions that defined as culture. In Habermas theory there is a close relationship between culture, society, and person (Habermas, Faktizitat et al. 1998). In this framework it is not problematic to concede that there are different cultures that affect our use of technology. Different people have different life-worlds and different cultures can develop according to different perceptions. However, there are universals combining these particularities and that constitute cultural universals. The first universal is that all humans have a culture and that culture is a constitutive part of personality. Second, the way a culture is formed by discourse is universal. While discourses deal with different matters, their structures and the fact that they are built upon validity claims is universal. Stahl, (2003) argued that there are cultural universals that are based on the anthropological constant of communication and the universality of validity claims (Stahl, 2003)

Here, the authors highlight the argument of universality versus particularity of the culture. The authors will use Structural analysis by Walsham (2002) to take that into consideration while investigating the culture impact on the eCRM systems implementation process. Walsham (2002) stated that Structural analysis could be used as detailed way of relating contradiction and conflict of cultures and subcultures.

A PROPOSED ECRM IMPLEMENTATION FRAMEWORK

At this juncture, it would be useful to clearly differentiate the term eCRM, which some may confuse with CRM. ECRM involves taking advantage of the revolutionary impact of the Internet to expand the traditional CRM techniques by integrating

technologies of new electronic channels such as Web, wireless, and voice technologies and combining it with e-business applications into the overall enterprise CRM strategy (Pan & Lee 2002).

In eCRM systems the users are much more diverse than in any other Information System, ranging from senior managers to marketing managers, from field sales engineers to temporary customers workers (internal in the organization) and to customers (external of the organization), the main aim of the eCRM. (Fjermestad and Romano 2003)

To develop a framework to the eCRM systems implementation process, the authors argue that the framework should include all actors of the eCRM system to be integrated. The integrated framework for eCRM implementation by Fjermestad and Romano (2003) gives a perspective of actors inside the organization. The Internet consumer trust model by Jarvenpaa, et al. (1999) gives perspective of actors outside the organization.

For investigating the potential impact of culture on eCRM systems implementation, the authors combined these two frameworks, so cultural conflict and contradiction between different actors of eCRM systems could be explored. The authors combine the integrated framework for eCRM implementation (minimizing resistance and enhancing usability) by Fjermestad and Romano (2003) and the Internet consumer trust model by Jarvenpaa, et al. (1999). The authors argue that by combining these two models we could reach a framework for eCRM implementation that involves all actors of eCRM systems. The first framework by Fjermestad and Romano (2003) emphasis on the eCRM implementation process actors inside the organization. These actors are eCRM managers, sales and marketing mangers, sales representatives, eCRM developers, eCRM users and technology and processes, which is more related to building customer-centric organizational culture. The second model by Jarvenpaa, et al. (1999) lays emphasis on the eCRM implementation actors outside the organization. These actors are customers and society, which are related to the individuals' level of culture and national culture.

Jarvenpaa, et al. (1999) argued that although their testing of the Internet Consumer Trust model on cultural differences in the antecedents of trust and the rest of the model did not find strong difference. However, they are warranted to used the results to suggest that web merchants can use the same site design attributes to engender trust among customers from different cultures. They expect there may be cultural differences, particularly when the concept of trust is broadened to include affective and social components.

Fjermestad and Romano (2003) have developed an integrative framework for analyzing eCRM case studies. They have concluded from secondary analysis of 13 case studies that many have limited success implantations and can be attributed to usability and resistance factors. Fjermestad and Romano, (2003) framework assumes that the key success factors in eCRM implementation are usability and resistance. In this paper the authors argue that Fjermestad and Nicholas framework assumes that there is no cultural conflict between people who use eCRM inside the organization and people who use eCRM outside the organization. This could be true in case of the eCRM systems working locally. In other words the people inside the organization (eCRM managers, developers, sales representatives, etc.) and people outside the organization (online customers) are sharing the same culture. This could be the case for small and medium size organizations but in case of the multinational organizations, which deal with different culture context this is not true. Multinational organizations, in the process of eCRM implementation, have two options. First, it assumes that there are no cultural differences between different nations and it develops its eCRM systems the same in each nation. So in pre-design phase they are concerned with knowing the user in general and not taking into consideration any cultural differences. In this case Fjermestad and Romano framework is valid. Secondly it assumes that there are cultural difference between individuals, groups, organizations, societies, and nations, in this case there is cultural resistance which would minimize usability of eCRM systems.

In this paper the authors argue that, Fjermestad and Romano, (2003) implementation framework has missed two important issues. Firstly, the framework is displayed by people resistances from inside the organization, ignoring customer resistance which could not be avoided by just training and educating the users as shown in the framework. Secondly, the framework assumes that there are no cultural conflicts between organizational culture (eCRM users inside the organization) and national culture (eCRM users outside the organization: customers).

In our opinion, usability and resistance are two dimensions of eCRM systems implementation. But Fjermestad and Romano, (2003) framework has proposed people, systems and interactions as the determined issues in user resistance. In this paper we argue that in eCRM systems Cultural Determined is another issue in user resistance, as shown in the proposed framework for eCRM systems implementation process in table (1).

The authors argue that this framework will help managers of eCRM to understand the reasons that eCRM is not working as effectively in the home country of the organization as in overseas countries. The proposed framework highlights the question of how far the universality of culture through different cultural context. We argue that it is the starting point of the thinking of cultural impact on eCRM implementation to know how far the culture differ between nations.. The proposed framework highlights the issues of individual levels of culture and its relationship with customer behavior in eCRM. Also, the

framework highlights the issue of changing organizational culture to be customer-centric. Last but not least, the framework highlights the importance of managing the culture conflict, if any, to gain maximizing usability.

Resistance/Usability Principle	Pre-design	Design	Post-design
Cultural determined	<ul style="list-style-type: none"> -Identify universality and particularity of culture -Identify individual culture level -Identify organizational culture -Identify national culture 	<ul style="list-style-type: none"> -Avoid cultural conflict with customers from different cultures -Build customer-centric organizational culture - Build the eCRM according to individual level of culture 	<ul style="list-style-type: none"> -Collect feedback from users in different culture contexts--Create credibility with society -Develop long term plans for the society
People determined	<ul style="list-style-type: none"> -Know the user -Competitive analysis -Setting usability goals -Change people -Job rotation -Educate users -Train users -Coerce users -User participation to gain commitment -System champion -Restructure incentives for users 	<ul style="list-style-type: none"> -Participatory design -Coordinated design -Guidelines and heuristic analysis -Prototyping and empirical testing -Iterative design -Add users and modules slowly -Pilot projects -Work closely with teams 	<ul style="list-style-type: none"> -Collect feedback from users -Create credibility -Develop long term plans
Systems determined	<ul style="list-style-type: none"> -Understand the technology 	<ul style="list-style-type: none"> -Improve systems efficiency -Improve data entry -Improve human factors -Understand and simplify organizational procedures and processes 	<ul style="list-style-type: none"> -Iterative, incremental implementations
Interaction Theory	<ul style="list-style-type: none"> -Integrate with existing technology 	<ul style="list-style-type: none"> -Use cross functional teams (organizational culture) -Use Positive users in pilots (individual culture) 	<ul style="list-style-type: none"> -Build systems for valid business reasons -Fix organizational problems -Restructure relationships -Assign a systems champion

Table 1: A Proposed eCRM Systems Implementation Framework

RESEARCH METHODOLOGY

This paper is a conceptual paper that the proposed framework has been developed according to theoretical analysis and literature review. In the future research authors are going to validate the framework and will employ a mixed research design. The researcher will use quantitative and qualitative approaches to accomplish this research. Firstly the researcher will try to validate the preliminary framework done through theoretical analysis by large-scale surveys. In this stage the researcher tries to examine the completeness of the cultural variables that it may effect in eCRM implementation. Data will be collected and analyzed and the primarily framework will be revised. Secondly the researcher will use a comparative case study as a qualitative research methodology in order to deeply analyze why and how cross-culture affects eCRM implementation process. The researcher will conduct three case studies in three different countries. These cases will be in the same organization but in different countries, so processes and technology are same but people, relationships and business culture are different.

Multiple case analysis approach was considered to be appropriate for the research (Yin, 1989). A set of selection criteria was developed which would ensure the cases selected were homogeneous in nature to facilitate cross-case analysis and to enhance external validity. The criteria for selection of cases are as follows:

- - The implementation of eCRM system project should be complete.
- - The initial assessment of outcomes related to eCRM system project should be clear.
- - The eCRM system project should have major organizational implications and breakthrough performance expectations associated with it.
- - ECRM different cases must be in the same organization.
- ECRM different cases must be developed by the same technologies.

Yin (1989) recommends selecting sites that will allow measurement of a phenomenon. The selection of sites across the ranges of success and failures allows us to measure the role of any construct and its relationship to CRM system effectiveness. Three case studies will be conducted one was classified as a developed country culture (UK); one was classified as developing country culture with high growth rate (UAE) and the last one as developing culture with lower growth rate (Egypt). Different data collection techniques e.g. interviews, observations, will be done to collect data. Data will be analyzed and according to results the framework will be revised.

CONCLUSION AND FUTURE RESEARCH

In this paper the authors highlight the cultural issues as a new trend in studying CRM. The authors differentiate between three different levels of culture: individual, organizational, and national cultures. Also, the authors highlight the interaction between these different levels of culture in the context of eCRM systems. The authors highlight the universality versus culture and the effects of that on eCRM implementation process.

The paper also presents a framework, which proposes a set of best practices and guidelines for management of eCRM systems within a multinational environment. This framework will be validated in future research and will be modified according to the results.

The authors argue that the proposed framework is a starting point to highlight the potential impact of culture on the eCRM systems implementation process. Using concepts from Structuration Theory by Giddens, (1979,1984) the authors are going to explore culture dimensions and describe its potential impact on eCRM systems implementation process. The authors will use the practice lens for studying technology in organizations by Orlikowski, (2000) to develop the detailed framework of cultural impact on eCRM systems implementation. Multiple case studies will be conducted to explore the detailed framework in different cultural contexts

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