CULTURAL UNIVERSALITY VERSUS PARTICULARITY WITHIN eCRM SYSTEMS: A SPECIAL CASE OF INFORMATION SYSTEMS

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ABSTRACT

Cultural factors are often identified as a crucial influence on the success or failure of Information Systems in general and Electronic Customer Relationship Management Systems (eCRM) in particular. Several researchers have suggested ways in which management can accommodate these factors or solve the problem they pose. This paper attempts to go one step beyond management measures and ask whether there is a theoretical foundation on which one can base the mutual influence of culture on eCRM. There is a lack of pervious literature on the impact of culture differences on eCRM systems. A normative literature review on the impact of culture on different types of Information Systems has been done to explore different cultural factors that might influence eCRM systems as an application of Information Systems. The authors highlight the cultures factors in macro and micro level that have been investigated in the literature of Information systems. At the macro level, it is necessary to consider the differences at a national level. The differentiating characteristics will include: organizational structures, function and process oriented views, supervisory control mechanisms etc. Micro level considerations will be at the individual level and will include human responses to organizational change, cultural acceptability of different organizational structures etc. The authors propose a framework of cultural concerns for management of eCRM systems within multinational environment organizations. This framework will be tested in future research and will be modified according to the results.

KEYWORDS: eCRM, Culture, Cross-Culture, Macro Culture, National Culture, Micro Culture, Organizational Culture, Subculture, Global Culture

1. INTRODUCTION

Over the last decade there has been a dramatic growth in the acquisition of Customer Relationship Management (CRM) Systems. Understanding and responding to customer needs and improving customer service have become important elements of corporate strategy. IT based customer relationship management (CRM) applications are being used by companies to support these strategies.

However, more recently there has been an increase in reported CRM failures, suggesting that the implementation issues are not just technical, but encompass wider

behavior factors. 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 all of customer centric approach (Simpson, 2002).

To build a relationship with customer is a socio-technical objective. The most important factor in that objective is to understand, how that customer values, norms, thoughts, perceptions, etc., are alike. Multinational organization is dealing with customers from different cultures. eCRM systems in multinational organizations are built to attract new customers, increase customers value and retain customers, different customers from different cultures.

The structure of this paper follows the logical sequence. The paper starts, in section two by a background about culture definitions, culture different levels and culture dimensions. In section three, the authors propose the background literature about culture and IS. Structuration theory and IS, in section four, highlight Structuration theory as a different perspectives of looking to social and cultural phenomena in IS discipline. In section five, the authors propose a framework of cultural issues that eCRM management should look at before implementing an eCRM system in multinational environment. At last but not least, in section six the authors conclude by summary and future research.

2. CULTURE BACKGROUND

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).

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.

There are three identified types of culture that are of relevance (Ali & Alshawi, 2004). 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, 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 influences the customer behavior even towards opposite direction of the society culture, does.

2.1 Different 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.

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 weather 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).

2.2 Culture Dimensions

A normative literature review has been done to collect different culture dimensions that have been introduced in pervious research. A summary of these cultural dimensions and its definitions have been proposed in Table 1.

Table 1. Culture Dimensions (Hofstede, 1980,1983,1994a,1994b; Trompenaars, 1993; Schwartz, 1994)

Culture Dimension	Definition
Uncertainty avoidance (UA)	Degree to which people in a country prefer structured over
(Hofstede, 1980, 1983, 1994a;	unstructured situations: from relatively flexible to extremely
Trompenaars, 1993)	rigid.
Power Distance (PD)	Degree of inequality among people, which the population of
(Hofstede, 1980, 1983, 1994a)	a country considers as normal: from relatively equal to
	extremely unequal.
Masculinity/femininity (MF)	Degree to which "masculine" values like assertiveness,
(Hofstede, 1980, 1983, 1994a)	performance, success and competition prevail over
	"feminine" values like the quality of life, maintaining warm
	personal relationships, service, caring, and solidarity: from
	tender to tough.
Individualism/collectivism (IC)	Degree to which people in a country have learned to act as

(Hofstede, 1980, 1983,, 1994a)	U 1
	collectivist to individualist.
Confucian Dynamism	Degree to which people in a country promote collective
(Hofstede, 1994b)	welfare and harmony, resulting in psychological
	collectivism.
Universalism-Particularism	Degree to which people in a country compare generalist rule
(Trompenaars, 1993)	about what is right with more situation-specific relationship
	obligations and unique circumstances
Neutral vs. Emotional	Degree to which people in a country compare 'objective' and
Relationship Orientations	'detached' interactions with interactions where emotions is
(Trompenairs, 1993)	more readily expressed.
Specific vs. Diffuse	Degree to which people in a country have been involved in a
Orientations	business relationships with in which private and work
(Trompenaars, 1993)	encounters are demarcated and 'segregated-out'
Achievement vs. Ascription	Degree to which people in a country compare cultural group
(Trompenaars, 1993)	which make their judgments of others on actual individual
(accomplishments (achievement oriented societies) with those
	where a person is ascribed status on grounds of birth, group
	membership or similar criteria.
Conservatism vs.	Degree to which people in a country emphasis maintenance
Affective/intellectual autonomy	of status quo (Conservatism), or emphasis creativity or
(Schwartz, 1994)	affective autonomy emphasis the desire for pleasure and an
(Senwartz, 1991)	exiting life.
Hierarchy vs. Egalitarian	Degree to which people in a country believe in freedom and
(Schwartz, 1994)	equality and a concern for others (Egalitarian), vs. emphasis
	the legitimacy of fixed roles and resources (Hierarchy)
Harmony vs. Mastery	Degree to which people in a country concerned with
(Schwartz, 1994)	overcoming obstacles in the social environment (Mastery) v
	concern beliefs about unity with nature and fitting
	harmoniously into the environment.
Communal Sharing	Degree to which people in a country see the members of a
Relationships	particular group as equivalent and undifferentiated. Group
(Fiske, 1992)	members favour their own group, and can be highly hostile
(,,	to those outside that group (this concept is so close to
	Hofstede's notion of Collectivism).
Authority Ranking	Degree to which people in a country involve a linear orderin
Relationships	of relations, with people high in rank having not only
(Fiske, 1992)	prestige, privileges and decision-making rights, but also
(possibly some responsibility for those lower down the
	hierarchy(this concept has an overlap with Hofstede's notio
	of power distance).
Equality Matching	Degree to which people in a country stress equality in social
Relationships	relations. People here are aware of where imbalances occur
(Fiske, 1992)	and, operating under the norm of reciprocity.
Market Pricing Relationships	Degree to which people in a country think in terms of prices
Market Freing Relationships	Degree to which people in a country units in terms of prices

(Fiske, 1992)	and investment.
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2.3 Culture and IS

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).

The authors argue that studying the potential impact of culture on the eCRM systems implementation process require differentiate between these three levels of culture and look at each actor and study their behavior to understand how different cultural level may influence his/her attitude. 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 Structurational theory by Giddens (1979, 1984) to explore the impact of culture on the eCRM implementation process. Walsham (2002) stated that Structurational analysis could be used to analyze differences in cultural sub-groups and even individuals.

3. STRUCTURATION THEORY

The theoretical basis for this paper draws on Structuration theory by Giddens (1979,1984). Walsham (2002) stated that this theory has been highly influential in

sociology and the social sciences generally. In addition, the theory has received considerable attention in the IS field (for a comprehensive review, see Jones 1998). The focus for this paper however, will be on how Structuration theory can offer a new way of looking at cross-cultural working and information systems. A summery of key points as Walsham (2002) proposed it, is provided in Table 2.

Table 2. Structuration Theory, Culture, and ICTs: Some Key Concepts (Giddens, 1979, 1984; Walsham, 2002)

Structure	Structure as memory traces in the human mind
	Action draws on rules of behavior and ability to deploy resources and, in so doing,
	produces and reproduces structure
	Three dimensions of action/structure: systems of meaning, forms of power relations
	sets of norms
	IS embody systems of meaning, provide resources, and encapsulate norms, and are
	thus deeply involved in the modalities linking action and structure
Culture	Conceptualized as shared symbols, norms, and values in a social collectivity such a
	a country
	Meaning systems, power relations, behavioral norms not merely in the mind of one
	person, but often display enough system ness to speak of them being shared
	But need to recognize intra-cultural variety
Cross-cultura	Conflict is actual struggle between actors and groups
contradiction	Contradiction is potential basis for conflict arising from divisions of interest, e.g.
and conflict	divergent forms of life
	Conflicts may occur in cross-cultural working if differences affect actors negatively
	and they are able to act
Reflexivity	Reproduction through processes of reutilization
and change	But human beings reflexively monitor actions and consequences, creating a basis
	for social change

4. CONCLUSION

Cultural factors are often identified as a crucial influence on the success or failure of Information Systems in general and Electronic Customer Relationship Management Systems (eCRM) in particular. The authors identified different cultural levels and different cultural dimensions. The authors argue that Hofstede's cultural dimensions as the most cited study used in IS discipline is not appropriate for studying the potential cultural impact on eCRM implementation. The authors propose Structuration Theory as another perspective to study culture issues in IS discipline. In the future research, the authors are going to conduct a comparative case study using Structurational analysis to study the cultural potential impact on eCRM systems implementation in multinational environment.

REFERENCES

Book

- Author, year. *Title (in italics)*. Publisher, location of publisher.
- Abiteboul, S. et al, 2000. Data on the Web: From Relations to Semistructured Data and XML. Morgan Kaufmann Publishers, San Francisco, USA.

Journal

- Author, year. Paper title. *Journal name (in italics)*, volume and issue numbers, inclusive pages.
- Bodorik P. et al, 1991. Deciding to Correct Distributed Query Processing. *In IEEE Transactions on Data and Knowledge Engineering*, Vol. 4, No. 3,pp 253-265.

Conference paper or contributed volume

- Author, year, paper title. *Proceedings title (in italics)*. City, country, inclusive pages.
- Beck, K. and Ralph, J., 1994. Patterns Generates Architectures. *Proceedings of European Conference of Object-Oriented Programming*. Bologna, Italy, pp. 139-149.
- Adler, N. (1997). International dimensions of Organizational Behavior. ITP.
- Ali, M. and Alshawi, S. (2004), A Cultural Approach to Study Customer Relationship Management (CRM) Systems, *CISTM* 2004, Alexandria, Egypt.
- Bagchi, K. and R. Cerveny (2003). The Influence of National Culture in Information Technology Product Adoption. Ninth Americas Conference on Information Systems, USA.
- Dorfman, W. P. and J. P. Howell (1988). Dimensions of National Culture and Effective Leadership Patterns: Hofstede Revisited. Advances in International Comparative Management, 3, 127-150.
- Fiske, A. P. (1992).' The four elementry forms of sociality: Framework for a unified theory of social relations', in R., Goodwin (eds) Personal Relationships Across Cultures (pp. 22-36) Routledge, London.
- Giddens, A. Central Problems in Social Theory, Macmillan, Basingstock, UK, 1979.
- Giddens, A. The Constitution of Society, Polity, Cambridge, UK, 1984.
- Hofstede, G. (1980). "Culture's Consequences: International Differences in Work-Related Values." Beverly Hills, California: SAGE Publications.
- Hofstede, G. (1983). 'Dimensions of national cultures in fifty cult ures and three regions' in R., Goodwin (eds) Personal Relationships Across Cultures (pp. 22-36) Routledge, London.
- Hofstede, G. (1994a)'Individualism and collectivism: theory, method and applications', in R., Goodwin (eds) Personal Relationships Across Cultures (pp. 22-36) Routledge, London.
- Hofstede, G. (1994b) 'Cultures and Organizations: Software of the Mind', in R., Goodwin (eds) Personal Relationships Across Cultures (pp. 22-36) Routledge, London.
- Hofstede, G. (2001). "Culture's Consequences." Thousand Oaks: Sage Publications Second edition.
- Levy, P. (1997). Cyber culture. Paris.

- McCoy, S. (2003). Integrating National Cultural Into Individual IS Adoption Research: The Need for Individual Level Measures. Ninth Americas Conference on Information Systems, USA.
- Raboy, M. (1997). Cultural Sovereignty, Public Participation, and Democratization of the Public Sphere: the Canadian Debate on the New Information Infrastructure. National Information Infrastructure Initiatives Vision and Policy Design. Cambridge, Massachusetts and London, England, MIT Press: 190-216.
- Riis, M. A. (1997). The Information Welfare Society: An Assessment of Danish Governmental Initiatives Preparing for the Information Age. *National Information Infrastructure Initiatives Vision and Policy Design*. Cambridge, Massachusetts, and London England, MIT Press: 424-456.
- Schwartz, S. (1994). 'Beyond Individualism-Collectivism: New Cultural dimensions of values', in R., Goodwin (eds) Personal Relationships Across Cultures (pp. 22-36) Routledge, London.
- Skok, W. and M. Legge (2001). Evaluating Enterprise Resource Planning (EPR) Systems using an Interpretive Approach. *SIGCOPR2001*, San Diego, USA.
- Simpson, L. (2002). The Real Reason why CRM Initiatives Fail, *Training*, May, 50-56.
- Stahl, B. C. (2003). Cultural Universality Versus Particularity In CMC. *Proceedings of the Ninth Americas Conference on Information Systems*, USA.
- Straub, D. (1994). The Effect of Culture on IT Diffusion: E-Mail and Fax in Japan and the U.S. Information Systems Research, 5,1,: 23-47.
- Straub, D., M. Keil, et al. (1997). Testing the technology acceptance model across cultures: A three country study. Information & Management, 33,1, 1-11.
- Trompenaars, F. (1993). 'Riding the waves of culture: Understanding culture diversity in business', in R., Goodwin (eds) Personal Relationships Across Cultures (pp. 22-36) Routledge, London.
- Walsham, G. (2002). Cross-Cultural Software Production And Use: A Structurational Analysis. *MIS Quarterly*, 26(4), 359-380.
- Weckert, J. (2000). What is New or Unique about Internet activities? *Internet Ethics*. London, McMillan: 47-63