

CROSS-CULTURAL MANAGEMENT: AN EMPIRICAL STUDY ON CULTURAL IDENTITY AND KNOWLEDGE MANAGEMENT OF INDIAN SOFTWARE ENGINEERS

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ABSTRACT

With ever increasing scope of globalisation, managers need to live with more than one culture. Under these dynamic business environments, whether Indian software engineers are losing their cultural identity in a globalised working environment is an important research question. The review on cross-cultural management is based on two fold; one is to assess the cultural influence with regard to organizational behavioural pattern in a multinational company's working environment and the other is to find out the linkage between knowledge management and cultural values. This is an empirical study tries to explore bicultural/multicultural behavior of Indian software engineers, if any. Implications of the findings are discussed.

Keywords: Cross-Cultural Management, Cultural Identity, Cultural Values, Bicultural, Multicultural, Cultural Influence, Traditional Culture, National Culture and Knowledge Management.

INTRODUCTION

Cross-cultural management is a phenomena having greater impact in global business practice. With ever increasing scope of globalisation, managers need to live with more than one culture. The new economic policy of Government of India 1991 paved way for liberalisation, privatisation and globalisation of Indian businesses. The substantial increase in the quantum of Foreign Direct Investment (FDI) in many of the business field is further incentive to boost global business in a more cross-cultural environment in the country. Due to its concentration on outsourced and offshore software and Information Technology (IT) enabled services, the Indian IT industry developed to a large level; its' operation extends across different cultures, i.e. regional, national, trans-national and global. So, strengthening the human force with more domestic and global business skills and knowledge in a cross-cultural environment is one among the emerging needs of the fast developing economy.

The broad field of the study is strategic human resource management and the specific area is cross-cultural management in a multinational companies working environment. Cross-cultural management is a process of transferring modern management knowledge to a cross-cultural environment. Though much cultural research has already been taken, until recently,

most of these studies have been based on western management philosophies and theories (Hofstede, 1980). Most of the cultural studies associated with western management were concerned with cultural differences encountered in non-western markets. India is one among the non-western markets for which the researcher wants to conduct a cross cultural study for the MNCs operating in India. While working in a cross-cultural environment, the important barriers identified by many researchers are cultural differences, assumptions, language, mistrust, different styles etc. This study emphasises on national cultural values and adaption of different cultural values without losing traditional/national culture in a cross-cultural environment. There is very limited empirical research in the area of cross-cultural management in India. Hence, the strategic human resource management will gain importance in a cross-cultural organizational environment. With a view to assess the cultural influence in organizational behavior pattern of software engineers in MNCs environment, the important research questions raised are,

1. Whether Indian software engineers are losing or retaining their cultural identity in a MNCs' working environment?
2. Do the Indian software engineers having cultural influence in their behavioural pattern?
3. Are the Indian software engineers interested to adapt bicultural/multi-cultural behaviour on their expatriate assignment?
4. Whether the Indian software engineers are able to gain their "knowledge management" without losing or compromising their cultural values?
5. Is there any implication in the study on strategic human resource management?

Different Concepts of Culture

Culture is the sum total of ideas, beliefs, values, material cultural equipments and non-material aspects which man makes as a member of society (E.B.Taylor, 1980). No one knows how the 'culture' got rooted through, but, people some time, started damaging the same within no time. They, often, misunderstand traditional culture with cross-cultural management practice. Work-life is a part of life but not life as a whole. One involves in work-life by virtue of one's own education, knowledge and experience. But life is severely tied with our own cultures and customary laws, taught by our predecessors and expected be followed by our future generations. As certain practices are antique by nature, which encompass validity of our traditional culture in which most of our community men, say, national or regional started sailing along with the culture. Though the meaning of culture is improperly understood by many, they used to feel comfort and convenience being with the fellow community men. People working in the organizations is very few per cent, the remainders are major portion in which follower of the traditional culture is at a larger level.

Culture has been defined in many ways. The culture is also named as 'national culture', 'regional culture', 'family culture' and 'traditional culture'. 'Organizational culture' is a modern concept in which the influence of individual's culture is reflected in the organizational work behaviour. The meaning of culture as used in literature about information systems and organisations is often contested (Myers and Tan, 2002). The concepts of 'negotiated culture' (Gregory et.al. 2009) and 'working culture' (Krishna et.al. 2004) are developed to compromise norms, values and systems which provide cross-cultural working environments in IT dominated organizations. The concept of 'ethnicity' is often

referred to expatriate citizens. The term "ethnic" is commonly used to refer to a group that differs from others in terms of culture (either immigrant and/or non-immigrant), nationality, race or even religion.

Cultural Values and Beliefs

According to Hofstede (1980), values of employees vary across culture; employees from different countries want different things from work. The differences shall be of individual based performance matrices, desire to autonomy, merit-based hiring, and nepotistic hiring etc. There are also debates and arguments in deciding the cultural values on conceptual framework. Kitayama (2002) rejected the search for culture in values on conceptual grounds, arguing that culture is to us like water is to fish- an aspect of the environment that enables and structures our behavior without us being aware of it. Cohen (2007) also witnessed that fact by declared that cross-cultural analysis should be grounded in peoples' actual social behaviour, rather than in the abstract values that people used to talk about themselves.

There has always been a coexistence of beliefs in India. Virtually all religious and cultural traditions incorporate some notion of high powers which motivates good deeds such as pro-social behavior (Johnson and Kruger, 2004). When commented on belief systems in the organisations, Tripathi (1990) categorized some myriad factors, which are, level of professional education, family's exposure to organizational work, peer leadership, organization expectation of universalism, participation in decision making, support from boss, team work and control. There are strong evidences by the researchers that cultural values and religious and other belief systems are tied with one another.

Cultural Influence across Borders

The present Indian culture is not only the unified system of our ancient and modern Indian culture, but also the synthesis of western and eastern culture. During 1960s, management researchers have shown interest in the concept of culture because it was believed that culture has an influence on managerial behavior and performance (Sekaran 1983). From that onwards, many problems have been arising among the researchers in predicting and prepositioning the concept of culture and its influence in management of organizations. The term "cross-culture" must be understood with right spirit. It is quit common for the modern organizations to assimilate culturally-different people to work together for common objectives. Many social scientists tried their understanding through theories and empirical studies to explain the relationship between culture and management. As it is the era of globalization and exchange of human skills and knowledge are getting advanced across the countries, the complexity of the understanding the cultural influence is again bewildering one. During 1970s, culture was criticized that much of the claim about culture being the most significant variable in management comparisons rest more on '*speculation*' than on '*facts*' (Ajiferuke and Boddewyn, 1970). The national identity of many rigid (culturally) nationals and *neo-national* concepts such as 'American Indian', 'American Chinese', 'Chinese American', 'Japanese American', 'American Japanese', 'European Indian', 'Indian European' etc. gave birth. The problems are necessitated to find cultural solutions to modern organizational problems. To gain competitive advantage for their parent organization, managers need to involve in executing the science and technological solutions across borders where they have to deal with a different culture.

The problems faced are accompanied by an increasing necessity to find cultural solutions to organizational problems in a world that has begun to resemble a 'global village' (Doktor et al. 1991). The heightened pace of global integration, brought about by technological and economical forces, suggests that managers will increasingly have to deal with counterparts from cultures quite unlike their own. It is believed that substantial competitive advantages will be derived by those managers who are able to tackle these cultural issues appropriately.

The Concept of Bi-culture and Multi-culture

Biculturals are individuals who identify strongly with two cultures. The globalization process witnessed a steadily growing concept of individuals with bicultural or multicultural behaviour. From the multinational and trans-national organizational point of view, the companies may encourage those employees with rewards and awards for adjusting cultural norms. But, there are aggressive oppositions from the anthropologists' and sociologists' point of view that compromising or losing one's cultural identity is a serious damage to the society. Bicultural individuals organize their cultural identities in different ways. Some represent their cultural identities as integrated or interconnected, whereas others represent the two as divided or separated (Benet-Martinez, Leu, Lee, & Morris, 2002). It was reviewed by Miramontez et.al (2008) that the degree to which individual integrates two cultural identities has implications for cognition and behavior. For example, integrated heritage and host culture identities foster self-perceived similarity to members of those cultures in personality. It was also advocated that more integrated bicultural identities are associated with more culturally diverse friendship networks (Mok, Morris, Benet-Martinez, & Karakitapoglu-Aygun, 2007).

The Impact of Culture and Knowledge Management

Management of knowledge itself it is a crucial task in the present society. Once, the scientific temper was detained due to stringent culture and good old custodial practice, where the growth of knowledge was restrained to a regional level with retrospective effects. But the present society is being witnessed with 'neo-culture' by continuous inventions, innovations and creativity in all spheres of human life. Hence the present society is in great demand of managing the knowledge, which must be suitable to the betterment and existence of the society. Culture brings knowledge to the society which means culture is a process of creating new ideas by reviewing the past experiences of our good old customs. This process is also molding the society with perfect understanding to an invisible bondage, which in turn, paves way for better understanding and adaptability of social, political and other economic obligations. Cohen (1998) explained that the clear context for knowledge is not one clear theory, but a "fabric of ideas" each enriched and textured by its contrast and connection with others, that bring different pattern of understanding and approaches to light. Following the Cohen's notion, Zhichang Zhu (2004) developed a cross-cultural and cross-institutional statement of different dimensions of knowledge management as follow:

Table 1. US and Japanese Contrast on Knowledge Management

Western	Eastern
Focus on Explicit Knowledge	Focus on Tacit Knowledge
Re-Use	Creation
Knowledge Projects	Knowledge Cultures
Knowledge Markets	Knowledge communities
Management and Measurement	Nurturing and Love
Near-Term Gains	Long-Term Advantage

Source: Zhichang Zhu (2004)

National and traditional cultures have contributed extensively to the modern society with unique styles and values at different stages at different regions, which must be properly assessed and understood for a very fair and optimistic role of human behavior in the organizations. There may be lapses in different styles, but, it should be perceived with good intension to learn new things in a different business environment.

The different perceptions of ideal-type of knowledge management has been classified by Zhichang Zhu (2004) are; *knowledge as resource* by Americans, *knowledge as relationship* by Japanese, *knowledge as power* by Europeans and *knowledge as virtue* by Chinese. As the modern knowledge is perceived differently by different regions, the reason for these diversities is culture and culture alone. Knowledge is an integral part of any culture i.e. national and traditional through which learning process of human being continues. For all this knowledge management process, a silver lined strategic vision is rooted through their organizational life. For example, the westernized culture aims for leverage business life whereas Japanese business strategy is continuous innovation and creativity since their fundamental objective is “*love the job*”. While most of this knowledge about innovations and creativity is politicized in European countries and the Chinese have a strong business strategy in assimilating and integrating the knowledge. When the business focus of Western and European companies is on premium products and niche markets, the business strategy of Chinese firms is to thrive and sustain in mass markets and gross root levels.

METHODOLOGY

There about 27 Indian software engineers who were working for at least five years in the US and European countries were surveyed. All the professionals were born in India and for the purpose of employment they were sponsored to foreign countries. Convenient samples, picked from the MNCs of Chennai and Bangalore and some of the samples collected from European and Western countries were administered for the study. Age of the participants ranged from 28 years to 35 years (M = 33.07 and SD = 1.82). Both women (37%) and men (63%) software engineers were considered for the study. The qualifications of the respondents were graduates and post graduates in engineering/technology stream. All the respondents were Hindus and their native place is the State Tamil Nadu.

Research Tool and Measurements

Semi-Structured questionnaire is the tool for the study. The open-ended questions were conveyed to the respondents through e-mails and telephones. The respondents were from both currently working and returned from the foreign countries after having completed at least five years of assignment. Initially, the questions were asked to get the background

information like education, experience, nativity, sponsored company etc. The important questions raised for the purpose of the study were on cultural identity at expatriate country, continuance of cultural influence, cross-cultural management in MNCs working environment, opinion of bicultural and multicultural behavior, knowledge management practice and cultural influence. The open ended questionnaire was classified into the domain of four categories namely cultural identity, cultural influence, bicultural / multi-cultural behaviour and knowledge management. The questionnaire also consists of many numbers of criteria which are perceived as suitable for this cross-cultural study. Five points-scale (SS=Strongly Supported; MS=Moderately Supported; NL=Neutral; PS=Poorly Supported; and NS=Not Supported) was used to measure the cross-cultural behavior of the Indian software engineers. Only engineers with Hindu religion were allowed to answer for the study.

RESULTS AND DISCUSSION

The open-ended questions were circulated to 39 software engineers and 34 were responded. Out of 34 responses, 27 questions were considered for the study based on the quality of responses. The whole study gave valid information regarding cross-cultural management. As it is opinion survey of software engineers, almost all the respondents were actively engaged in the process. The investigation is made from several points of judgements. Most of the respondents recognized that *knowledge management* is need of the hour for the present “knowledge society”, but refuse to accept “cultural compromise”. Most of the respondents gave their opinion that traditional/national culture can’t be over-ruled for the sake of foreign assignment. The results were classified into four categories. Only 2 engineers have shown interest for bicultural behavior. Both of them wanted to follow the Western culture as well as Indian culture. They also anticipated settling at the repatriate countries if work permits were extended permanently. The remaining participants were strong in predicting and following cultural identity. The mean and standard deviation of the positive responses are $M=18.81818$, and $SD=3.59413$ respectively. The positive and negative responses are as shown in Table 2:

Table 2. Cross Tabulation of different responses

Domain	Criteria	Positive	Neutral/ Negative	Total
Cultural Identity	Inner conscious as Indian	23	8	27
	Cultural practice at home	21	6	27
	Cultural practice at office	16	11	27
	Adoption of traditional/national values	17	10	27
	Demonstration of traditional/national values	14	13	27
	Family tie as Indian nuclear family	19	8	27
	Religious values	17	10	27
	Spirituality as in the home country	18	9	27
	Rejection of perceived Western / European values	13	14	27

Table 2. Cross Tabulation of different responses (Contd....)

Domain	Criteria	Positive	Neutral/ Negative	Total
Cultural Influence	Organisational behavior pattern	18	9	27
	Leadership styles and qualities	15	12	27
	Continuous learning and adoptability	18	9	27
	Management of change	16	11	27
	Perseverance & tolerance	23	6	27
Bicultural or Multi-cultural Behaviour	Disagree to adapt as bicultural / multicultural	25	2	27
	Disagree to conversion of family members as bi-cultural/multi-cultural	23	4	27
	Willingness to cultural compromise	25	2	27
Knowledge Management	Maintaining traditional, cultural and religious knowledge	18	9	27
	Tacit knowledge	19	8	27
	Adoption of new knowledge with right spirit of Scientific and technological advancement	23	4	27
	Rejection of <i>westernized</i> knowledge	14	13	27
	Rejection of <i>westernized</i> knowledge	19	8	27
	Adoption of knowledge communities			

Source: Developed for the study

Among the 27 respondents, the results of the majority of the respondents' view and the correlation coefficient of the cross-cultural management are tabulated in the Table 3.

Table 3. Test Report

Domain	Criteria	Result	Correl. Coeffi.
Cultural Identity	Inner conscious as Indian	SS	.956
	Cultural practice at home	SS	-
	Cultural practice at office	MS	.960
	Adoption of traditional/national values	MS	.961
	Demonstration of traditional/national values	NL	.952
	Family tie as Indian nuclear family	MS	.931
	Religious values	MS	.930
	Spirituality as in the home country	MS	.928
	Rejection of perceived Western / European values	NL	.949
	Cultural Influence	Organisational behavior pattern	MS
Leadership styles and qualities		MS	-
Continuous learning and adoptability		MS	-
Management of change		MS	-
Perseverance & tolerance		SS	.906

Table 3. Test Report (Contd...)

Domain	Criteria	Result	Correl. Coeffi.
Bicultural or Multi-cultural Behaviour	Disagree to adapt as bicultural / multicultural	MS	-1
	Disagree to conversion of family members as bi-cultural/multi-cultural	(except 2)	-1
	Unwillingness to cultural compromise	SS	-1
		(except 2)	
Knowledge Management	Maintaining traditional, cultural and religious knowledge	MS	.987
	Tacit knowledge	MS	-
	Adoption of new knowledge with right sprit of Scientific and technological advancement	SS	.982
	Rejection of <i>westernized</i> knowledge	NL	.993
	Adoption of knowledge communities	MS	.991

Note: SS = Strongly Supported; MS = Moderately Supported; NL = Neutral;

* The value of correlation coefficients is less than 1

Source: Developed for the study

The findings of the study allowed the provision of answers to some of the fundamental questions the study has posed. Though work related attitudes and values are universal, the work is being influenced by the individual’s cultural norms. At the same time, losing of one’s individuality with reference to cultural identity was inadmissible for most of the engineers. Many theorists of international studies strongly advocated that adaption of bicultural or multicultural behaviour of employees will give positive results to the multinational organizations. But most of the Indian software engineers are interested to avoid cultural compromise. A meager percentage (7.4%) of respondents though not interested to show their cultural identity, they also denied for cultural compromise. As explained in the review, cross-cultural study is still being explored by many researchers. The field of management of MNCs poses several challenges and the cross-cultural management of human resources is one among the challenges. This study is a valid attempt and significant contribution with regard to cross-cultural management to the professionals and stake holders who are involved in the MNCs working environment. Though the study is focused on cultural identity of Indian software engineers, as per the findings, the MNCs of European and Western countries are not so ethnocentric. The findings of the study are also an indication that the MNCs’ organizational climate is more conducive to the Indian software engineers. With a view to further assess the software engineers’ cultural identity, it is decided to validate through weighted average method, which is explained as follow:

Weighted Average Method**Table 4.** Software Engineers' Positive Attitude of Cultural Identity

Attribute	X	Rank	W	XW
Strongly supported	44	1	5	220
Moderately supported	87	2	4	348
Neutral	27	3	3	81
Poorly Supported	-	4	2	-
Not supported	-	5	1	-
Total	158			649

Source: Developed for the study

Weighted Average = $\sum xw/n$

$$= 649/158$$

Weighted Average = 4.107

Inference: This study proves that the respondents are having positive attitude in adopting cultural identity.

From the findings, it is observed that there is no significant difference among the four domain variables (cultural identity, cultural influence, disagree to adapt bicultural/multicultural behaviour and knowledge management) except 2 biculturals identified. The detailed cross tabulation of cross cultural management variables is given below:

Table 5. Cross Tabulation of Cross-Cultural Management Variables

S.N.	Variables	Chi Square	df	P value
1.	Cultural Identity	316	16	0.000
2.	Cultural Influence	90	4	0.000
3.	Disagree to adaption of bicultural/multicultural	73	2	0.000
4.	Knowledge Management	186	8	0.000

Source: Survey data compiled

Strategies to Manage Human Resources in MNCs Working Environment

Many numbers of strategic issues involved in management of MNCs. Cross-cultural management is one among the issues. The mid of 20th century witnessed the peak of interest among professionals in India to get expatriate to Western and European countries. Though there is tremendous scope for the software engineers in these countries, the present decade witnesses that people often hesitate for assignments for which the reasons are many. The impulsive situation arises due to equal job opportunity in domestic companies, the recent economic recession and frequent terrorist attack on the civilians. Under these circumstances, MNCs have to learn lesson to create a very conducive organizational climate by providing adequate value addition to cross-cultural management.

LIMITATIONS

Semi-structured interview schedule is most suitable for this kind of socio-psychological research. Due to time and resource constraints, questionnaire is used in the survey. As it is mailed survey and some of the software engineers are still working in the foreign countries, personal observation and face-to-face interview was not possible.

CONCLUSION

The ancient India society has been rooted through stringent rules and cultural norms. But, modern India is molded with the fast track of economic development based on the western model of development which consists of high dose of science and technology. Indian companies has already started practicing westernized management style with cut through competitions, merit and quality considerations and a no-nonsense approach to work ethics. Hence, this study is conducted on Western and European MNCs working environment. This study focused on cultural identity and knowledge management to identify the cultural influence of organisational behavior pattern of Indian software engineers. More research is needed to validate the various issues of cross-cultural management of Indian expatriates to European and Western countries. Obtaining larger number of samples from different industries will ensure more reliability and validity for the study.

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APPENDIX

Table6. Gender Analysis of Respondents

S.No.	Men	Women	Total
28	1		1
29	-	1	1
30	-	-	-
31	2	-	2
32	2	2	4
33	4	3	7
34	4	1	5
35	4	3	7
Total	17	10	27

Note: * M = 33.07 and SD = 1.82