

THE EFFECTIVENESS OF E-LEARNING AND THE IMPACT OF CULTURE: EARLY FINDINGS

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Abstract

Culture has been identified as the most important but less studied aspect impacting implementation of new ICT (Information-Computer technologies). Understanding differences between regional and national cultures as well as their business implications are also invaluable to any service organization operating internationally. This paper will report on a field study using content analysis to identify the effect of local (national and regional) culture on the effectiveness of e-learning in the context of customer service. The context of the study is a multinational service organization. The focus of this research is on understanding the role that the national and regional culture and the culture of the end user might have on the effectiveness of e-learning of the ICT user. The specific training module used for this research focuses on service excellence (“perfect customer service”). Service quality’s perception is significantly affected by a customer’s values and beliefs that might vary from one national culture to another. The training effectiveness is measured by a test grade. A number of control variables will be used (e.g., tenure on the job, etc.). Culture is measured by Hofstede’s (1980; 1993) and Hall’s (1976) typologies as operationalized by Singh et al. (2005) and modified to accommodate the specifics of the field study.

Key words: national culture, e-learning, training effectiveness

1 INTRODUCTION

Culture has been identified as the most important but less studied aspect impacting implementation of new ICT technologies (Murdock, 2005). Understanding differences between national cultures and their business implications are also invaluable to any service organization operating internationally (Kogut and Singh, 1988; Furer et al., 2000; Jabnoun and Khalifa, 2005). For example, Imrie, Cadogan and McNaughton (2002) found that national culture has an impact on the perception of hierarchy of service quality dimensions as well as on the scope of some of those dimensions, specifically, the

interpersonal relations dimension. Also, national culture was found to have an impact on the demonstrability of e-commerce as well as on the association between the use intentions and the perceptions of e-commerce (Van Slyke et al., 2005). On the other hand, national culture might have a stronger impact on managerial issues and levels than on technical issues and project level (Heales et al., 2004). National culture might also have an impact on the preferred mode and on the effectiveness of the training approach because of distinctive learning preferences (Rodrigues et. al., 2000). The need to develop new multidisciplinary tools in order to understand the interplay of cultural and technological aspects in the Internet/Intranet context has been recently identified as well (di Gennaro, 2005). The lack of access to field data for empirical analysis in this area at the global comparative level is seen as a major obstacle for such a study (Maier-Rabler et al., 2005). To respond to this need, collaboration between social and computer scientists is badly needed but difficult to accomplish due to gaps in methodological differences (Dutton, 2005). This study is designed to respond to the above mentioned needs and challenges.

2 CULTURE, SERVICE AND E-LEARNING

2.1 Customer service and e-training

Call centers seem to take on a growing role in the service industry and account for significant employment in the US and the UK (3% and 2 %, respectively, in 1999), (Batt and Moynihan, 2002). India's call center industry will account for a quarter of all software and services exports from the country, and Indian call centers employ 160,000 professionals (2008), (NASSCOM, 2005). Training intensity of call center representatives will depend on company strategy as well as on the industry the company is in (Hutchison et al., 2000; Batt and Moynihan, 2002). Developing and instilling a service culture within customer service representatives seems to have an impact on customer loyalty and directly effects company profitability and growth (Deshpande and Webster 1993; Heskett et al., 1995). Internal marketing, which includes training and motivating employees for servicing customers well (Kotler, 1991), can support in developing such a customer conscious organizational culture (Cahill, 1995). Intranets were found to be the most effective channel in communicating such culture and aligning the goals of individual employees with those of the organization (De Bussy et al., 2003). This paper will report on a field study using content analysis to identify the effect of local (national and regional) culture on the effectiveness of e-learning in the context of customer service. The intent is for this to be the first stage of using memetics (see another example in Kuwabara, 2000) in a study of ICT user learning and performing. The context of the study is a multinational service organization. The focus of this research is on understanding the role that the national/regional culture of the service provider might have on the effectiveness of e-learning.

2.2 Culture and National Culture

Culture can be defined as a cohesive array of socially accepted structures of meaning (Ott, 1989), or more specifically, as a stable set of assumptions, values, and beliefs that

the members of the organization share (Schein, 1992). National culture was defined by Hofstede as (1980, p.25) “ .. the collective programming of the mind which distinguishes the inhabitants of one country from another.” The typology most commonly used to study national cultures is the one developed by Hofstede (1980) that originally included four dimensions (uncertainty avoidance, power distance, masculinity-femininity, and individualism-collectivism) and was later extended to include the time horizon (Hofstede and Bond, 1988). A complementary characteristic of national culture was proposed by Hall (1976) who suggested that cultures can be seen as either having high-context or low-context dimensions. Regional culture is rarely considered in marketing or information systems (IS) studies (Deshpande and Farley, 2004) even though, one should expect some differences, at least, in a large country, such as the US or India (see rare example in Deshpande and Farley, 2002).

2.3 Culture and Customer Service

We mentioned earlier that national culture seems to have an impact on the perception of service quality by customers. More specifically, academic research identified that customers in a culture that have lower individualism and higher uncertainty avoidance characteristics seemed to be more willing to praise superior service and avoid negative expressions when faced with poor service. The reverse is true for the counter cultures (Liu et al., 2001). Research also suggests that in a highly individualistic culture, customers are more self-centered, more independent, more distant from the service provider, and expect less assurance than in a collectivist culture (Furrer et al., 2000). Research also found that in long-term oriented cultures, long-term relationships, reliability, responsiveness and empathy are more valued than in the counter cultures (Furrer et al., 2000).

2.4 The Context

“Humana is one of the US's largest (Fortune 500 Ranking: 150; Revenue: \$14.4 billion; Net income: \$308 million; Total assets: \$6.9 billion; Number of employees: 18,500) publicly traded health benefits companies, with approximately 9 million medical members.... Humana offers coordinated health insurance coverage and related services to employer groups, government-sponsored plans, and individuals,” (Humana web site-http://www.humana.com/visitors/PDF/Humana_our_vision.pdf and <http://www.humana.com/visitors/about.asp>). Humana operates in a number of countries (e.g., the Philippines, Puerto Rico, and India).

2.5 Culture, Customer Service and e-learning

The specific training module used for this research focuses on service excellence (“customer perfect service”). This is seen as a fruitful context for such a study due to the complexity (intangibility, inseparability, heterogeneity, and perishability) of measuring service quality. Service quality’s (specifically: tangibles, reliability, responsiveness, assurance and empathy) perception is significantly affected by a customer’s values and beliefs, that might vary from one national or regional culture to another (Liu et al., 2001;

Furrer et al., 2000). Individualistic culture will tend to enhance the perception of usefulness of new Information Technology (IT) and training will be seen as easier to use by the most successful users. While in collectivist cultures, it will be seen as such by the least successful users. On the other hand, it was suggested that in cultures that are high on uncertainty avoidance, the rate of learning will be slower. But if the implementation tactics will be designed to increase the perception of the new system as established and verified, the result will be the perception of increased levels of apparent usefulness. Also, it seems that in the context of long-term orientation, lower levels of usefulness will be associated with an IT that is a poor fit with existing and preferred work practice. But, in the context of a short-term oriented culture, long term planning will fail and lack of alignment of new IT with this strategy will be related to perceptions of lower usefulness. Finally, a top down approach of implementing new IT will be more accepted and perceived as useful in a culture that is high on power distance, while in a culture that is low on power distance, higher acceptance will result from more involvement of the users in the process (Veiga et al., 2001). The above mentioned is suggesting that:

H1: National and regional culture has a direct impact on training effectiveness.

H2: National and regional culture also has a moderating effect on the training effectiveness.

3 THE METHODOLOGY

3.1 Training

A short e-learning module was developed to train a service provider in the understanding of the concept of customer service excellence. The training was built with the goal of providing critical knowledge to a broad and diverse audience. The key concepts of the training included: 1) How Humana was defining “Perfect Service,” 2) Why it was critical to Humana that they achieve perfect service, 3) Why it was critical to the individual that they work toward perfect service, and 4) Key terms of perfect service. The training was highly interactive and required the learner to interact, on average, with every other screen. The training was provided to claim processors, call center representatives, and other professionals (about 13,000) located in four countries: the Philippines, Puerto Rico, India (two regions) and the US (three regions). This research studies the three US regions (four locations) and one region in India. The company is serving customers in the US that may speak English or Spanish. The company provides a single type of training (using the unidimensional paradigm-see Wentling et al., 2000; p. 44) for all service providers. Intranets were found to be an effective tool in aligning employees’ personal goals with organizational goals. The training effectiveness is measured by an intermediate and final test grade (level II evaluation-see Kirkpatrick, 1979 and Strother, 2002), corresponding to the first (cognitive response) stage of Technology Acceptance Model (TAM; Davis, 1993).

3.2 Control variables

Three control variables (due to relevance and availability) will be used: position, gender and tenure

(measured in months) on the job, based on earlier research for the test grade results (see for example Chauhan et. al., 2005; Karuppan, 2001; and Mital and Luthra, 2006). The positions were identified as: Calls, Claims and Other:

- **Calls (Role-A)** – includes all call center operations associates in all areas (medical calls, billing and enrollment, agent support, etc.). All areas involve handling inbound calls. The associates in this area were in Louisville, Tampa Bay, Cincinnati and Green Bay.
- **Claims (Role B)** – All claims processing associates in support of all areas. The associates in this area were in Bangalore, Louisville, Tampa Bay, Cincinnati and Green Bay.
- **Other** – Blanket category that includes (but is not limited to) administrative, managerial, executive and IT roles. The associates in this area were in Bangalore, Louisville, Tampa Bay, Cincinnati and Green Bay.

3.3 Culture measure

3.3.1 The tool

Culture, in this research, is measured by using Hofstede's (1980; 1993) and Hall's (1976) typologies as operationalized by Singh (2003) and Singh et al., (2005) and modified to accommodate the specifics of the field study. Hofstede's typology is still the most commonly used framework, even though his original findings (country scores) have recently come under scrutiny and the use of a homogenous approach was discouraged. A recommendation was made to replace the homogenous approach by a more individualistic approach (McCoy, Galletta, and King, 2005). Singh et al., (2005) offered coding categories for seven dimensions of which we used five dimensions. We updated the categories by using a cursory literature review. The following sources were used for the update: Robertson, 2000; Overby, 2005; Ford et al., 2003; Steinwachs, 1999; Sama and Papamarcos, 2000; McCoy et al., 2005; Veiga et al., 2001; Van Slyke, et al., 2005; Jabnoun and Khalifa, 2005; and Yang and Fang, 2004. We arrived at seven dimensions: Individualism, Collectivism, Uncertainty Avoidance, High Context, Low Context, Long-Time Horizon and Short-Time Horizon (the last two are our additions; all are modified to our context).

3.3.2 The code development

Content analysis was used for this stage. This research method was used extensively in international consumer marketing and customer service areas (see example in Rajaratnam et al., 1995). We developed a spreadsheet-based content analysis similar to those proposed by Bourdon, 2002; Kantner et al., 2005; Woodfield, 2006 and Holton, 2006 (the coding is available from the second author per request).

A sample of responses (191) to the open question was used to create the thematic units by the first author in accordance with the operationalization identified above. The code was then discussed by the two authors and mutually agreed upon. This sample was eliminated from future analysis. Once we had the coding in place, an Excel spreadsheet was developed by the team led by the second author that coded the survey results. Then,

another random sample of 212 responses was read and codified by the first author independently and compared with the one using the key words search. The interjudge reliability of this procedure (comparison of the spreadsheet coding and the first author coding) was about 96% (higher than 85% recommended by Kassirjian, 1977). The final code used is available from the first author upon request.

3.3.3 Outcome measures

As important as it was to provide the training, it was equally important to determine if the key concepts and terms had been assimilated during the course of the module. While the training itself carried an assessment (“Final score” - with an 80% passing standard) it was deemed prudent to measure growth of knowledge pre and post training. This was achieved through “unscored” exercises and games presented over the first third (15 screens) of the training itself. Software was developed to send an average score that included all scorable objects in a book – in this case, that included the hidden questions we wished to compare to the final grade. This inclusive score is what we refer to when we say “Interaction score.” Similar questions were embedded in the final assessment (“Final score”), and the results of the two sets of scores were to be compared.

3.3.4 The sample

The final sample used included 3,349 participants (out of 4,909), representing a 68.22% response rate, and was received between November 6, 2006 and March 6, 2007.

4 FINDINGS

4.1 Initial Findings - Statistics

Traditionally, age, gender, education, job tenure and job type are the control variables used in this type of research. Due to company policies, we had no permission to use age and education. We also coded the location of the participant as a region and a country. The following (see Table 1) reports the basic descriptive statistics of the study participants and the correlations of the variables measured:

Variable	1	2	3	Variable	Mean
1. Job Tenure (Month)					
2. Interaction Score		.038*		Gender (male=1)	0.248
3. Final Score		-0.024	0.047**	Collectivism [C] (yes=1)	0.158
				Individualism [I] (yes=1)	0.456
N		3349	3349	Uncertainty Avoidance [UA] (yes=1)	0.220
Mean		46.68	76.78	High Context [HC] (yes=1)	0.227
S.D.		62.29	10.36	Low Context [LC] (yes=1)	0.111
Min.		4.0	18.18	Long Time Horizon [LTH] (yes=1)	0.098
Max.		314	90.91	Short Time Horizon [STH] (yes=1)	0.086

Significance (⁺ p < 10% ; *p < 5% ; ** p < 1% ; ***p < 0.1%)

Location:	Country	Number	Percent	Role:	Number	Percent
MSA	Country	Number	Percent	Calls	1,624	48.50%
Cincinnati, OH	USA	258	7.70%	Claims	444	13.25%
Green Bay, WI	USA	950	28.40%	Others	1,281	38.25%
Louisville, KY	USA	1,470	43.90%	Total	3,349	100.00%
Tampa Bay, FL	USA	477	14.20%			
Bangalore	India	194	5.80%			
Total		3,349	100.00%			

Table 1 Descriptive Statistics

Before testing the study's hypotheses, we tested if there were any statistically significant differences between the two countries and/or five regions on the eight culture aspects tested in this research. Table 2 (see below) reports the results, by region and country. We tested the differences using one-way Anova and Tukey-Kramer's multiple comparison tests (see Neter, Wasserman and Kutner, 1990; pp. 580-585).

Location*Culture:

MSA	Collectivism	Individualism	UA	UA [#]
Cincinnati, OH	0.194	A	0.516	AB
Green Bay, WI	0.179	A	0.508	A
Louisville, KY	0.148	A	0.426	BC
Tampa Bay, FL	0.147	A	0.394	C
Bangalore	0.108	A	0.490	ABC
F Ratio	2.69		6.95***	50.21***

USA	0.161	A	0.456	A	0.198	A
India	0.108	A	0.490	A	0.587	B
t Ratio	1.96		0.98		13.05***	

MSA	HC	HC	LC	LC	LTH	LTH	STH	STH
Cincinnati, OH	0.174	C	0.070	C	0.093	AB	0.062	A
Green Bay, WI	0.232	BC	0.080	C	0.105	A	0.105	A
Louisville, KY	0.207	BC	0.086	C	0.107	A	0.079	A
Tampa Bay, FL	0.266	AB	0.136	B	0.082	AB	0.084	A
Bangalore	0.345	A	0.454	A	0.036	B	0.082	A
F Ratio	6.84***		69.28***		3.00*		1.79	

USA	0.220	A	0.090	A	0.102	A	0.086	A
India	0.345	B	0.454	B	0.036	B	0.082	A
t Ratio	4.04***		16.21***		2.99**		0.19	

Significance (⁺ p < 10% ; *p < 5% ; ** p < 1% ; ***p < 0.1%)

[#] Different letters indicate different cultural type using Tukey-Kramer's multiple comparisons test at 5% confidence (see Neter, Wasserman and Kutner, 1990; pp. 580-585).

Table 2 Cultural differences, by region and country

4.2 Findings – Hypothesis testing

The **first** hypothesis suggested that culture has a direct impact on training effectiveness. After controlling for region, role, gender and tenure, culture was found as not having a direct impact on training effectiveness. Table 3 (see below) reports the results for Interaction Score and for the final score. The **second** hypothesis suggested that culture has a moderating impact on training effectiveness. After controlling for region, role, gender and tenure, culture was found to have a limited moderating impact on training effectiveness. Only significant results are reported here. Table 4 (see below) reports the results for the scores.

5 CONCLUSIONS

Overall, the findings do not support hypothesis 1 and only marginally support hypothesis 2. We found that culture has a moderating effect with the role the individual has (calls or claims) on the performance.

Independent Variables	Interaction score	Interaction score	Interaction score	Final score	Final score	Final score
Louisville	-0.044	-0.078	-0.006	0.864***	0.847**	0.849**
Cincinnati	-0.921	-0.893	-0.834	0.836+	0.831+	0.823+
Tampa Bay	0.535	0.693	0.725	0.518	0.556	0.574
Bangalore	0.066	-0.274	-0.296	6.413***	6.145***	6.163***
Male		0.251	0.289		0.196	0.184
Job Tenure		0.0064*	0.007		0	0
Role A		-0.317	-0.304		-0.104	-0.087
Role B		0.198	0.156		0.06	0.072
Collectivism			0.588			0.05
Individualism			0.234			0.054
UA			-0.015			-0.08
HC			0.503			-0.317
LC			0.145			0.208
LTH			-0.052			0.198
STH			1.121+			0.118
Adj. R ²	0	0.00046	0.00023	0.05	0.049	0.048
F ¹ for Delta R ²	NS	NS	NS	45.05***	NS	NS

Significance (+ p<10% ; *p < 5%; ** p < 1%; *** p < 0.1%)

¹ See Cohen and Cohen, 1983

Table 3 Outcomes-Scores and Culture direct impact

Independent Variables	Interaction score	Interaction score	Independent Variables	Final score	Final score
Louisville			Louisville		
Cincinnati			Cincinnati		
Tampa Bay			Tampa Bay		
Bangalore			Bangalore		
Male			Male		
Job Tenure			Job Tenure		
Role A			Role A		
Role B			Role B		
STH	1.088	0.866	Individualism	0.047	-0.221
Male*STH		3.025+	Male*I		-0.769
Tenure*STH		0.017	Tenure*I		-0.003
Role A*STH		-1.623	Role A*I		1.037*
Role B*STH		-3.219+	Role B*I		-0.861
Adjusted R ²	0.00103	0.0024		0.0488	0.05
F ¹ for Delta R ²	NS	2.13+		NS	2.06+

Significance (⁺p<10% ; *p < 5%; ** p < 1%; *** p < 0.1%)

¹ See Cohen and Cohen, 1983

Table 4 Outcomes-Scores and Culture as moderator

Specifically, we found that short-time horizon culture and the claims role has a negative impact on the performance as measured by the interaction score while individualistic culture and a calls role have a positive impact on the performance as measured by the final score. Over all, these findings suggest a limited role of national culture in this specific context (one company, single culture – US culture of the end user). On the other hand, we found that location has a significant (even though small, *R-Square* of about 5%) impact on the score. We also found that the locations differed by culture quite significantly. This may suggest a number of interesting explanations. It is quite possible that our measures of culture are not valid. Secondly, we may not have captured some of the control variables that make a difference, for example, education. Anecdotal data suggests that the level of higher education, number of years of higher education, etc. are quite different between localities. Also, it is possible that the tool we developed is not appropriate for this type of training and testing.

6 FUTURE RESEARCH

In the next few months, we intend to continue the collection of data from additional locations as well as re-approaching the participants of the training and validating the cultural aspects of this study by using a different instrument. We also intend to extend this research by incorporating actual performances in order to validate the value of the training as well as our measures.

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References

- Batt, R. and Moynihan, L. 2002. 'The viability of alternative call centre production models'. *Human Resource Management Journal*, 12(4): 14-34.
- Bourdon, S. 2002. 'The integration of qualitative data analysis software in research strategies: resistance and possibilities'. *Forum: Qualitative Social Research*, 3(2). Retrieved on April 8, 2007 from <http://www.qualitative-research.net/fqs-texte/2-02/2-02bourdon-e.pdf>.
- Cahill, D. 1995. 'The managerial implications of the new learning organization: a new tool for internal marketing'. *Journal of Services Marketing* 9(4): 43-51.
- Chauhan V. S., Dhar, U. and Pathak, R. D. 2005. 'Factorial constitution of managerial effectiveness: re-examining an instrument in Indian context'. *Journal of Managerial Psychology*, 20(2): 164-177.
- Cohen, J. and Cohen, P. 1983. *Applied Multiple Regression/Correlation Analysis for Behavioral Sciences*, 2nd ed., Hillsdale, NJ: Lawrence Erlbaum Associate, Publishers.
- Davis, F. D. 1993. 'User acceptance of information technology: System characteristics, user perceptions and behavioral impacts'. *International Journal of Man Machine Studies*, 38(3): 475-487.
- De Bussy N. M., Ewing M. T. and Pitt L. F. 2003. 'Stakeholder theory and internal marketing communications : a framework for analyzing the influence of new media'. *Journal of Marketing Communication*, 9: 147-161.
- Deshpande, R. and Webster, F.E. 1993. 'Corporate culture, customer orientation and innovativeness in Japanese firms: a quadrad analysis'. *Journal of Marketing*, 57(1): 23-27.
- Deshpande, R. and Farley, J. U. 2002. 'High performance firms in a complex new China: A tale of six cities'. *Journal of Global Marketing*, 17(1/2): 207-229.
- Deshpande, R. and Farley, J. U. 2004. 'Organizational culture, market orientation, innovativeness, and firm performance: An international research odyssey'. *International Journal of Research in Marketing*, 21: 3-22.
- di Gennaro, C. 2005; Survey Research and the Future of Internet Diffusion. *New Approaches to Research on the Social Implications of Emerging Technologies*, draft positions papers for MIT-OII Joint Workshop, 15-16 April 2005. Oxford Internet Institute, The University of Oxford, 37-38.
- Dutton, B. 2005. Notes on Pitfalls and Challenges for Research on Emerging Information and Communication Technologies: Lessons Learned. *New Approaches to Research on the Social Implications of Emerging Technologies*, draft positions papers for MIT-OII Joint Workshop, 15-16 April 2005. Oxford Internet Institute, The University of Oxford, 39-42.
- Ford, D. P., Connelly, C.E., and Meister D.B. 2003. 'Information systems research and Hofstede's *Culture's Consequences*: an uneasy and incomplete partnership'. *IEEE Transactions on Engineering Management*, 50(1): 8-25.
- Furrer, O., Liu, B. S., and Sudharshan, D. 2000. 'The relationship between culture and service quality perceptions'. *Journal of Service Research*, 2(4): 355-370.

- Hall, E.T. 1976. *Beyond Culture*, Doubleday & Company, Garden City, NY.
- Heales, J, Cockcroft, S., and Radulescu, C. 2004. 'The influence of national culture on the level and outcome of IS development decisions'. *Journal of Global Information Technology Management*, 7(4): 3-28.
- Heskett, J., Jones, T., Loveman, G., Sasser, E., and Schlesinger, L. 1995. 'Putting the service-profit chain to work'. In J. Bateson (ed.), *Managing Services Marketing*. Fort Worth: Dryden Press, 419-428.
- Hofstede, G. 1980. *Culture's Consequences : International Differences in Work-Related Values*. Beverly Hills, CA: Sage Publications.
- Hofstede, G. 1993. Cultural constraint in management theories. *Academy of Management Executive*, 7(1):81-94.
- Hofstede, G. and Bond, M. 1988. 'The Confucius connection : From cultural roots to economic growth'. *Organizational Dynamics*, 16: 4-21.
- Holton, C. 2006. *Sophisticated Spreadsheet Features for Qualitative Data Analysis*. Paper presented at the ICIS 2006, International Symposium Research Methods, Marquette University, Milwaukee, WI, USA December 9, 2006.
- Hutchison, S., Purcell, J., and Kinnie, N. 2000. 'Evolving high commitment management and the experience of the RAC call centre'. *Human Resource Management Journal*, 10(1): 63-78.
- Imrie, BC, Cadogan JW, and McNaughton R. 2002. 'The service quality construct on a global stage'. *Managing Service Quality*, 12(1): 10-18.
- Jabnoun, N and Khalifa, A. 2005. 'A customized measure of service quality in the UAE'. *Managing Service Quality*, 15(4): 374-388.
- Kantner, L., Sova, D. and Anschuetz, L. 2005. *Organizing qualitative data from lab and field: challenges and methods*. Paper presented at the UPA 2005. Retrieved on April 8, 2007 from http://www.teced.com/PDFs/upa2005_lk.pdf.
- Karuppan, C. M. 2001. 'Web-based teaching materials: a user's profile'. *Internet Research: Electronic Networking Applications and Policy*, 11(2): 138-148.
- Kassarjian, H. 1977. 'Content analysis in consumer research'. *Journal of Consumer Research*, 4(1): 8-18.
- Kirkpatrick, D. 1979. 'Techniques for evaluating training programs'. *Training and Development Journal*. 33(6): 78-92.
- Kogut, B. and Singh, H. 1988. 'The effect of national culture on the choice of entry mode'. *Journal of International Business Studies*, 19(3): 411-432.
- Kotler, P. (1991) *Marketing Management: Analysis, Planning and Control*, Englewood Cliffs, NJ: Prentice-Hall.
- Kuwabara K (2000) Linux : A Bazaar at the edge of Chaos, *First Monday* 5(3). Retrieved on October 6, 2006 from http://www.firstmonday.org/issues/issue5_3/kuwabara/.
- Liu, B. S., Furrer, O. and Sudharshan, D. 2001. 'The relationship between culture and behavioral intentions toward services'. *Journal of Service Research*, 4(2): 118-129.
- Maier-Rabler U., Hofkirchner, W. Raffl, C., and Hartwig, C. 2005. New Approaches on the Social Implications of Emerging Technologies. *New Approaches to Research on the Social Implications of Emerging Technologies*, draft positions papers for MIT-OII Joint Workshop, 15-16 April 2005. Oxford Internet Institute, The University of Oxford, 83-85.
- McCoy, S., Galletta, D.F., and King, W.R. 2005. 'Integrating National Culture into IS research: the need for current individual-level measures'. *Communications of the Association for Information Systems*, 18: 211-224.
- Mital, M and Luthra, R. 2006. 'No age correlation in the effectiveness of corporate E-learning in India'. *Asian Journal of Distance Education*, 4(1): 85-89.
- Murdock, G. 2005. Interrogating the e-Society: reflections on Research. *New Approaches to Research on the Social Implications of Emerging Technologies*, draft positions papers for MIT-OII Joint Workshop, 15-16 April 2005. Oxford Internet Institute, The University of Oxford, 58-62.
- NASSCOM. 2005. National Association of Software and Services Companies, *The IT in India: Strategic Review*, NASSCOM: New Delhi.
- Neter, J., Wasserman, W. and Kutner, M. H. 1990. *Applied Linear Statistical Models: Regression, Analysis of Variance, and Experimental Designs*, 3rd Ed., Homewood, IL: Irwin.
- Ott, J., (1989). *The Organizational Culture Perspective*. Pacific Grove, CA: Brooks/Cole.

- Overby, J.W. 2005. 'An integrative review of customer value management and national culture: France and the United States'. *International Journal of Management*, 22(2): 166-175.
- Rajaratnam, D., Hunt, J.B., and Madden, C.S. 1995. 'Content analysis of U.S. and Indian magazine advertising'. *Journal of International Consumer Marketing*, 8(1): 93-109.
- Robertson, C. J. 2000. 'The global dispersion of Chinese values: a three-country study of Confucian dynamism'. *Management International Review*, 40(3): 253-268.
- Rodrigues, C.A., Bu, N., and Min, B. 2000. 'Learners' training approach: national culture as a determinant'. *Cross Cultural Management – An International Journal*, 7(1):23-32.
- Sama, L.M. and Papamarcos, S.D. '2000. Hofstede's I-C dimension as predictive of allocation behaviors: a meta analysis'. *International Journal of Value-Based Management*, 13: 173-188.
- Schein, E. H., (1992). *Organizational Culture and Leadership*. San Francisco, CA : Jossey Bass.
- Singh, N. 2003. 'Culture and the world wide web: a cross-cultural analysis of web sites from France, Germany and USA'. *American Marketing Association*, 14: 30-31.
- Singh, N. Zhao, H. and Hu X. 2005. 'Analyzing the cultural content of web sites : A cross national comparison of China, India, Japan, and US'. *International Marketing Review*, 22(2): 129-146.
- Steinwachs, K. 1999. 'Information and culture – the impact of national culture on information processes'. *Journal of Information Sciences*, 25(3): 193-204.
- Strother, J. 2002. 'An assessment of the effectiveness of e-learning in corporate training programs'. *International Review of Research in Open and Distance Learning*, 3(1): 1-17.
- Van Slyke C., Belanger F. and Sridhar V. 2005. 'A Comparison of American and Indian Consumers Perceptions of Electronic Commerce'. *Information Resources Management Journal*, 18(2): 24-40.
- Veiga, JF, Floyd S and Dechant K. 2001. 'Toward Modeling the Effects of national culture on IT implementation and acceptance'. *Journal of Information technology*, 16: 145-158.
- Wentling T. L., Waight, C., Gallaher, J., La Fleur, J., Wang., C, and Kanfer A., 2000. *e-learnig – A review of Literature*, NCSA, University of Illinois Urbana-Champaign. Retrieved on March 12, 2007 from <http://learning.ncsa.uiuc.edu/papers/elearnlit.pdf>.
- Woodfield, K. 2006. *Introducing Framework: Increasing quality and Transparency in QDA*. Paper presented at the 3rd Mid-Term Conference Advances in Qualitative Research Practice, Cardiff University, September 4-6, 2006. Retrieved on April 8, 2007 from <http://www.ccsr.ac.uk/methods/festival/programme/saq/documents/woodfield.ppt>.
- Yang, Z and Fang, X. 2004. 'Online service quality dimensions and their relationships with satisfaction'. *International Journal of Service Industry Management*, 15(3): 302-326