Exploring the Influence of Indian Cultural Diversity on ERP Implementation Outcomes

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ABSTRACT

ERP is a real time integrating software that integrates all facets of the business, including planning, manufacturing, logistics, sales and marketing. ERP systems originated to serve the information needs of manufacturing companies. Over time though, they have grown to serve other industries, including financial services, consumer goods sector, supply chain management and the human resources sector. Though ERP has numerous benefits to the organization, its implementation involves streamlining business process & customization of software configuration for better compatibility. Implementation of Enterprise Resource Planning poses major challenges to organizations, as many of them fail in their early stages or substantially exceed the project cost. This is a descriptive paper which explores the impact of Indian culture in the implementation of Enterprise Resource Planning (ERP) systems in an organization based on a literature review.

INTRODUCTION

ERP systems is a pillar of business intelligence which offer seamless integration of processes across functional areas with better-quality workflow, standardization of several business practices and access to real-time up-to-date data (Ehie and Madsen, 2005; Mottaghi and Akhtardanesh, 2010). As a result, companies invest large sums of money on ERP packages and their implementation process (Mottaghi and Akhtardanesh, 2010). Nevertheless, there is extensive confirmation that organizations experience significant problems during the implementation of these ERP systems. According to Peng and Nunes (2009) the implementation of ERP is often faced with challenges, difficulties and problems even when the system is implemented successfully. Esteves et al. (2003) pointed out that the implementation of an ERP system is comprehensive, prolonged and expensive process, This view is also supported by Sarker and Lee (2003) who stated that three quarters of the ERP projects are considered failures and many ERP projects end-up catastrophically.

Several studies have identified critical success factors relevant to ERPs, however cultural fit is a particularly neglected factor in assessing ERP implementation success (Willis and Chiasson, 2007). The critical success factors consistently identified in the literature include top management support, the presence of a champion, good communication with all stakeholders, effective project management, reengineering of business processes, an understanding of corporate cultural change, and the use of business analysts on the project team (Bancroft et al., 1998). From the previous studies conducted the critical success factors affecting ERP implementation are identified as

- Change Management
- Top Management Support
- Project Management
- User Training
- Business Plan & Vision
- Stable Legacy System
- Business Process Reengineering
- Effective Communication & Reporting
- System T0esting & Trouble Shooting
- Consultant Selection
- Theoretical Framework

The environment in which an ERP system is developed, selected, implemented and used constitutes a "social context" (Skokie and Legged, 2002). This ecosystem includes several stakeholders, from the developers of the system, to vendors, the consultants, the project team, and the eventual users. Each one of these holds a certain cultural assumption towards the ERP implementation and use process (Rasmyet al., 2005). Particularly, the developers' and consultants' cultural assumptions are embedded in the very roots of the software itself. If cultures of producers and users are different, it results in a cultural clash (Otieno, 2010).

The history of organizational culture can be traced to Hofstede's cultural dimensions theory. Hofstede (1980) with four independent cultural dimensions –Power Distance Individualism, Masculinity and Uncertainty Avoidance. Later on, Hofstede introduced a fifth dimension referred to as Confucian Dynamismalso known as Long/Short

Term orientation(Hofstede, 1991)in order to improve the theory's fit to Asian cultures (Jones, 2007)This additional dimension was heavily criticized and considered "fatally flawed" (Fang, 2003). Due to its high questionability and low added value, this study will not rely on the fifth dimension suggested by Hofstede (1991). More recently, Hofstede et al. (2010) added a sixth dimension to the author's model: the Indulgencedimension.

Several elements point out that Hofstede's theory is mature and accepted. Hofstede's research has had a deep effect on academia and practice (Jones, 2007). His work is well cited in the subject within IS literature (McCoy, 2003). The theory is extensively used to describe cultural differences in organizations and how they effectively influence IS (Shanks et al., 2000). Hofstede's research has also served as a starting point for development of alternative methods for characterization of cultures, such as the work of Dorfman and Howell (1988). However, Hofstede's theory has been the target of a considerable amount of criticism (Jones, 2007). Authors such as Wu (2006) specifically criticize the data, which they consider to be out of date. Hofstede (1998) replied to this apparent flaw, stating that culture will not change overnight. Additionally, many replication studies verified Hofstede's findings. Søndergaard (1994) compiled 61 replication studies of Hofstede's theory, later stating that the analysis showed that the differences predicted by Hofstede's dimensions were largely confirmed.

Hofstede's (1980) theory has been chosen because of its multidimensional approach and its high level of maturity; permitting easy decomposition of cultural specificities in highly differentiated dimensions, using a proven framework. Since Hofstede's theory is based on the independence of its cultural dimensions, any extension to the author's model may threaten its consistency. Additionally, extending this model would not allow us to benefit from the proven replicability of Hofstede's modelPower Distance (PD) is the degree of inequality that exists between a more powerful and a less powerful person. This dimension refers to; up to which point power and wealth inequality is tolerated, and is reflected in organizational hierarchy (Hofstede, 1980). Hofstede's model also implies that individuals from high Power Distance countries would be more task-oriented than people-oriented (Bochner and Hesketh, 1994). Individualism refers to which degree persons are perceived as a separate entity within a society (Hofstede, 1980). In one extreme, the individual exists as a clearly distinct entity, while in the other extreme of the continuum the distinction between the individual and the group is blurred and the individuals' perception on themselves considers their cultural surroundings (Bochner and Hesketh, 1994)Collectivism has an inverse relationship with individualism –the lower the individualism is, the higher the collectivism is–and thereforeshould be addressed as a single dimension (Hofstede et al., 2010)Masculinity indicates to which extent "masculine" (tough) values such as performance and competition prevail over "feminine" (tender) values such as personal relationships and quality of life (Hofstede, 1980). Vitell et al. (1993) suggest that a more masculine society may contribute to the engagement in unethical behaviour. In a similar fashion to individualism and collectivism, masculinity and femininity maintain an inverse relationship –the lower the masculinity is, the higher the femininity is (Hofstede et al., 2010). Uncertainty Avoidance refers to which degree people avoid a lack of structure or uncertain events (Hofstede, 1980) a high score on Uncertainty Avoidance translates to stronger needs for structure and clear rules and guidelines, while a low Uncertainty Avoidance score translates into a higher acceptance of uncertain events and lax structures. Kluckhohnand Strodtbeck (1961) put forth the concept of national value orientations and their influence on organizational systems. National culture has the potentiality to influence the relation between the organizational culture and the individual outcomes (Agarwal et al., 1999; Thus organisational culture or Work culture mirrors is formed by a set of values and beliefs, carried forward from long time and has substantial impact in the behaviour, quality, and quantity of work done by the employee in an organization. In short work culture is a subset of the cultural practices existing in the country of companies operations. Deal and Kennedy (1982) and Peters and Waterman (1982) suggest that organizational culture can exert considerable influence inorganizations particularly in areas such as performance and commitment.

RESEARCH METHODOLOGY

A systematic literature review was conducted on relevant journal papers, conference papers, and books on culture, ERP implementation, technology management, and information system management particularly focusing on key themes such as culture, and ERP implementation. These themes were used as key words is searching for related journal articles, conference papers and books from electronic online repositories. The review first examined literature on ERP implementation in various cultures, the focus being to discover the culture factors that affect the ERP implementation.

WORK CULTURE IN INDIA

India is one of the fast growing economies in Asia.Indian work culture indicates that high-power distance, collectivism and affective reciprocity are major cultural values of Indian managers (Chhokar, 2000). Singh and Krishnan's (2007) study suggests that transformational leadership does not manifest in the same set of behaviours in the Indian cultural context as it does in the Western world. In India, Companies follow the hierarchical system and decision making is usually from the top to bottom. The notion of time, time management, punctuality is still

an anathema in India. It is more to do with the mindset and ingrained in the Indian culture. Rescheduling & postponing happens at short notices. India being a large country having 102 billion population with diverse cultural & linguistic background adds to the complexity. Pearson and Chatterjee (1999) have commented that "Within the context of organizations, Indian employees can embrace global work values while retaining deep connection to their societal culture". Sinha and Kanungo (1997) tried to provide a sociological explanation and the coexistence of the 'global' and 'local' in Indian'sorganizationalbehavior. Pillania (2006) studies on organisationalculture for Knowledge Management in the Indian industry especially software, pharmaceuticals and petroleum marketing companies reveals that there is a lack of organisational culture forknowledge creation, sharing and dissemination which could affect the competitiveness ofthese firms, the industry and the country as a whole. Rakesh Aggarwal (2010) , in International Journal of Indian Culture and Business Management proves that Authenticity and autonomy are more valued in consulting as compared to the manufacturing and services industriesand that Openness and confrontation are higher in the IT/ITES sectors, while collaboration is higher in the manufacturing sector. Private sectors have an open and a trusting culture as compared to the public sector. In addition this study proves that authenticity and autonomy higher than those who are not professionally qualified. However, no significant difference exists between males and females in their evaluation of organisational culture.

IMPACT OF INDIAN CULTURE ON ERP IMPLEMENTATION

Diversity of India & fragmented cultural & belief system has a profoundimpact on ERP implementation in Indian organizations. When globally used technologies are adapted into local cultures & to the prevailing norms, the chances of mismatch between cultures embedded in the ERP package & with the company's culture becomes higher.) According to Molla and Loukis (2005), ERP success depends on congruence between the host culture and the ERP system culture. When a Western developed ERP system is implemented in India where the culture differs greatly from that of the developer, implementation may require localization in order to be successful. In doing so, strategic benefits of ERP systems may be reduced (Srivastava and Gips, 2009). Presence of Subculture Diversity because of differences between tasks, expertise and activities accomplished by different organizational groups impede cross-functional collaboration and the implementation of corporate-wide initiatives. India being a high context culture in which people are more tightly attached to each other and, because of this strong relationship, a social hierarchy exist that expect individuals to keep their expressions within their control and to communicate information in a simple way but with profound meanings. When dealing with new technology, high context cultures may adopt it only if they fully understood its technical aspects in depth and are assured that there are no risks attached, hence if change management is not wisely introduced in the Indian organization before ERP implementation, employees can resist the new technology & business process reengineering iniatves.

Customization or localization helps to solve this cultural mismatch to some extent. But even then to achieve success, the communication between the ERP Vendor & companymanagement has to be clear without ambiguity. Leadership culture is a key to the success of IS adoption and effective leadership is the means by which the culture is created and managed (Talet and Al-Wahaishi, 2011). Transformative leader who communicates well to the employees helps in success of ERP adoption.

Prominence of Individualism as against collectivism act as a major hindrance in implementation of ERP.Indian state-owned firms are more tolerant of unclear information, and top managers tend to rely on personal experience and intuition in making decisions. Managers and employees incline to treat data gathered from their work activities as their own, rather than company assets. This belief may adversely affect the attitude towards information sharing, and business process re-engineering (Ngai et al., 2008).

The Towers Perrin 2005 Global Workforce Study reported that, among the global workforce, Indian employees feel the least engaged by their firms. The hierarchical structure of most Indian firms, many of which are risk-averse, family-run entities donot encourage innovativeness & become a bottle necks for ERP IMPLEMENTATION. Fluidity in time management & punctuality also adversely the time taken for IMPLEMENTATION OF ERP MODULES in entire business which in-turn affect the success rate of ERP PERFORMANCE.

CONCLUSION

This tentative reflection suggests that cultural impact on ERP system adoption and use cannot be ignored. Hence it is essential that Indian companies wanting to successfully implement ERP & attain global competitiveness should maintain an open flexible democratic work culture avoiding beauracracies & large organisational hierarchy. The companies should encourage Cross functional teams, employee initiatives & innovations the work culture should emphasis on proper time management & speedy executions. Since India has the benefit of demographic dividend where majority of our work force is below 30years of age, a collaborative corporate culture

with flatter organisational chart that promotes bottom up decision making can be inculcated in organizations for attaining better business integration & business agility.

REFERENCE

1. Arunthari, S. (2005) Information technology adoption by companies in Thailand: a study of enterprise resource planning system usage.
2. Baloğlu, A. (2004) Effects of the Local Culture on ERP (Enterprise Resource Planning) Implementation and A Turkish Project Case ERP. Business Process Management Journal, 11(2), pp.123-136.
3. Davenport, T.H. (1998) Putting the enterprise into the enterprise system. Harvard Business Review, 76, (4), (121-131).
4. De Long, D.W. and Fahey, L. (2000) Diagnosing cultural barriers to knowledge management. Executive- Ada Then Briercliff-, 14(4), pp.113-127.
5. Ehie, I.C. and Madsen, M. (2005) Identifying critical issues in enterprise resource planning (ERP) implementation. Computers in Industry, 56(6), pp.545-557.
6. Esteves, J., Pastor, J. and Carvalho, J. (2003) Organizational and National issues of an ERP Implementation in a Portuguese Company. 8, pp. 139-154.
7. Gargeya, V.B. and Brady, C. (2005) Success and failure factors of adopting SAP in ERP system implementation. Business Process Management Journal, 11(5), pp.501-516.
8. Grabski, S.V., Leech, S.A. and Lu, B. (2001) Risks and controls in the implementation of ERP systems.
9. Agarwal, S., De Carlo, T.E. and Vyas, S.B. (1999) 'Leadership behavior and organizationalcommitment: a comparative study of American and Indian salespersons', Journal ofInternational Business Studies, Vol. 30, and pp.727–743.
10. Alphonsa Sr., V.K. (2000) 'HRD climate in a private hospital in Hyderabad – an empirical study'.
11. Indian Journal of Training and Development, Vol. 30, pp.81–94.
12. Bhardwaj, G. and Mishra, P. (2002) 'HRD climate: an empirical study among private sectormanagers', Int. J. Industrial Relation, Vol. 38, pp.64–80
13. Bhatnagar, D. (2008) 'Women in leadership roles: an agenda for change', NHRD Network Journal,Vol. 2, pp.6–10.
14. Bigoness, W.J. (1988). 'Sex differences in job attribute preferences', Journal of OrganizationalBehavior, Vol. 9, pp.139–147.
15. Bluedorn, A.C and Lundgren, E.F. (1993) 'A culture-match perspective for strategic change',Research in Organizational Change and Development, Vol. 7, pp.137–139.
16. Bozeman, B. (1979) Public Management and Policy. New York: St Martin's Press.
17. Business Today (2008) 'The state of innovation in India', by Team Monitor, April, pp.56–62.
18. Calori, R. and Sarnin, P. (1991) 'Corporate culture and economic performance: a French study',Organization Studies, Vol. 12, pp.49–74.
19. Cameron, K. and Quinn, R.E. (1999) Diagnosing and Changing Organizational Culture: Based onthe Competing Values Framework. Reading, MA: Addison-Wesley.
20. Chatman, J.A. and Jehn, K.A. (1994) 'assessing the relationship between industry characteristicsand organizational cultures: how different can you be?' Academy of Management Journal,Vol. 37, pp.522–553.