CULTURAL FITS & MISFITS: ARE STANDARDIZED ERP CONFIGURATIONS & CSF-BASED APPROACHES UNIVERSAL SOLUTIONS?

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ABSTRACT

Most firms use “one size fits all” ERP configurations and CSF-based approaches while rolling out systems across worldwide operations. This research study examines whether such standard ERP configurations and CSF-based approaches facilitate successful deployments.

INTRODUCTION

Over the past decade, firms have struggled to meet global competitive pressures amidst dynamic and uncertain business environments. To successfully face these challenges, firms need to effectively manage their supply chains by using best industry practices, streamlining sourcing arrangements, and managing myriad logistics channels. The effective coordination and integration of activities across supply chains requires 24x7 access to accurate information. Firms are investing heavily in enterprise resource planning (ERP) systems to meet their supply chain information needs as well as shape the way they conduct business (Mabert et al., 2000; 2003). The evolvement of ERP systems into “a necessity for doing business” has generated interest in ERP configurations and their impact on performance and the use of critical success factors (CSFs) to facilitate the implementation process.

NEED FOR RESEARCH

Studies indicate that nearly 50 to 70 percent of all global ERP deployments worldwide are problematic ones (Buckhout et al. 1999; Umble and Umble, 2002; Mabert et al., 2003). This high incidence of problematic implementations is attributed to firms failing to proactively manage their organizational transformation needs in tandem with the technical implementation of their
standard ERP systems (Scott and Vessey, 2000; Koch, 2001; Gowigati & Grenier, 2001; Rebolledo, 2003). Typically firms initially deploy standard modules such as financial accounting, personnel administration, general logistics, materials management, production planning, and sales and distribution (Hernandez, 1998; Appelrath & Ritter, 2000). Firms after stabilizing their initial deployments then web-enable their implementations by implementing modules such as SCM, CRM, EDI, E-Commerce (Shields, 2001; Gould, 2002). The findings from studies (Willis and Willis-Brown, 2002; Satyan, 2003), however, suggest that performance benefits vary with the number and type of modules implemented and the usage of the ERP system over time.

Researchers such as Al Mashari et al. (2003) and Kumar et al. (2003) indicate that firms that emphasize CSFs throughout their ERP deployment process achieve smoother implementations and consequently quicker obtainment of performance benefits. Most firms use a standard CSF-based approach while implementing their ERP systems. Researchers such as Ives and Jarvenpaa (1991), Perez et. al. (2000), and Krumholz and Maiden (2001), however, indicate that the “not invented here” and “unsuitable for our environment” are common barriers that hamper information system deployments such as ERP. Their studies suggest that national and organizational culture characteristics underlie these barriers and influence the success of the implementation process.

**MODEL**

In this research study we develop a theory-based model that can be used by firms to assess the cultural adaptability of their CSFs and examine their impact on the relationship between the implementation of ERP systems and business performance. The systemic concept that underlies ERP system deployments suggests that as firms that implement more and more modules of the ERP system their business performance increases. Moreover, firms that incorporate culturally relevant CSFs into their implementation model, achieve superior business performance.

**METHODOLOGY**

The study’s methodology consists of a four step process. First, a synthesis of studies helped identify CSFs that firms in the US and Mexico use to facilitate their ERP implementation process. These two countries were chosen as they are in different stages of the ERP adoption maturity cycle and are representative of different national cultures. Second, a cross-study comparison of CSFs across different methodological studies yielded a set of CSFs that were common across the two countries. Third, the CSF set was investigated using Hofstede’s (1980; 1997) studies on national culture dimensions. This helped us understand the national culture differences that underlie the application of the common CSF set in the US and Mexico. The final step involves empirical validation of the model. This consists of a two-stage field test to collect data from similar apex professional associations in the US and Mexico. The first stage involves development of a questionnaire (currently under validation) to assess the model relationships in...
the US ERP market. The questionnaire items to measure each of the key model variables – ERP system implementation, CSFs, performance – were developed from literature. The wordings of the items to measure the CSFs in the questionnaire reflect the national culture differences of the US. Besides collecting data on the three key model variables, the questionnaire also gathers data on the demographic profile of the firms’ as well respondent characteristics. The second stage involves using repeating the questionnaire development process to address the model relationships in the Mexican ERP market.

DISCUSSION

This research study attempts to evaluate the varying performance benefits flowing from different ERP system deployments as well as investigate the impact of culturally adaptable CSFs on the ERP implementation process. Researchers such as Johnson (2000) and Poston and Grabski (2001) suggest that ERP deployments provide differential benefits to firms. Hofstede’s (1980; 1997) studies reveal that national culture values, represented by the above five dimensions, manifest themselves broadly as organizational culture practices. The above suggests that ERP implementers can successfully fine-tune configurations and initiate organizational change programs by fine-tuning their CSFs, according to their national culture orientations, to achieve implementation success and hence superior business performance. The validation of this research study’s model would be useful to ERP implementing firms, vendors, and consultants. The emergence of an integrative model that addresses the impact of different ERP deployments on performance and national culture on CSFs would enable ERP implementing firms to tailor their implementations and achieve successful global rollouts.

REFERENCES


