User Satisfaction as the Foundation of the Success Following an ERP Adoption: An Empirical Study from Latin America

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ABSTRACT

Enterprise Resource Planning (ERP) adoptions keep consolidating as a critical IT initiative in developing regions. Although Latin America has exhibited lately the largest growth in terms of ERP adoption rate worldwide, there is a gap in the literature focused in examining the success and underlying causes of such adoptions there. This study develops and tests a theoretical model proposing factors that determine the success of ERP Latin American adoptions. A qualitative exploration proposes a model which is corroborated empirically with data from 49 firms using Structural Equations Modeling. The results suggest that User Satisfaction is the foundation for the success and its key role as a mediator between ERP Ease of Use capacities, Formal Communication Program, Project Implementation Success and the Success of the Adoption is also introduced. These results are compared with existing studies and the implications of the findings for research and practice are discussed.

Keywords: Business Improvement, Communication, Ease of Use, Enterprise Resource Planning (ERP), ERP Adoptions, ERP Success, Latin America, Partial Least Square Modeling (PLS), Project Implementation, Success Factors, User Satisfaction

INTRODUCTION

Theoretical Background: Motivation

Enterprise Resource Planning system (ERP) is a business management platform that encompasses several software components aimed at managing, integrating and optimizing all business processes within an organization. Given its relevance, Ross et al. (2000) have called the global trend to adopting ERP as a true “ERP Revolution”, and numerous researches have estimated investments in ERP implementations at around US$ 300 billion in the last decade. These facts provide a strong reference point about the importance that current business environments attach to adopting ERPs as a substantial strategic initiative rather than a pure IT solution (Sumner, 2009).

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Why are researchers and practitioners increasingly interested in analyzing ERP adoptions? One such reason may be the series of contradictory success and failure outcomes experienced so far. When ERP is properly implemented and assimilated, the incremental benefits accrued can be extremely relevant, leveraging most of the key strategic drivers and business results in organizations (Folinas et al., 2012; Beheshti et al., 2010; Chen, 2007; Shang et al., 2000). But even though implementing ERP may have leveraged the competitive advantages of many organizations, in other cases, the underlying implementations have led to dramatic failures causing irreversible business effects (Hanafizadeh et al., 2011; Beheshti et al., 2010). Gargeya et al. (2005) refer that 70 percent of all ERP projects are never implemented, even after efforts lasting longer than 3 years. Inexorably, as held by Palanisamy (2008), there is still needed more research to consolidate the knowledge aimed at understanding the success of ERP adoptions, particularly in developing nations where there exist very limited studies seeking to examine such initiatives.

Despite the significant investments in ERP initiatives made by organizations around the world, formal efforts to find out their success as well as its underlying causes have been very limited (Gable et al., 2003). Even though some organizations begin to realize and expand the benefits from these systems, in many other cases, ERP success has been very limited and has not resulted in significant organizational improvements (Kamhawi, 2007). There is no consensus either on how to realize the benefits that an ERP can bring to an organization or on the underlying reasons that control such edge of ERP success (Ifinedo, 2007). Finney et al. (2007) underline the existing gap in the literature about the scrutiny of critical causes involved in ERP success. They also stress the significance of assessing such ERP success by the business value created through its adoption.

Because of that, this study intends to identify causes that determine the success of ERP adoptions, but this last measured by the improvement in business value caused in the organization as an outcome of such adoption. This edge of ERP Success is also supported by Finney et al. (2007), who underscore the importance of conducting empirical studies in companies that have completed their ERP implementation to evaluate the tangible business effects inherent to such adoption, instead of focusing merely on the success of the ERP technical implementation.

This analysis is confined to the Latin America context. There are several reasons for that decision: First, ERP’s adoption trend will continue a strong upward course in this region. Jacobson et al. (2007) sustain that Latin America holds the largest compound annual growth rate in ERP spending (21%) at least until 2011. Second, the few existing research pieces addressing the ERP topic in developing regions, such as Nah et al. (2007), Kamhawi (2007) and Koh et al. (2006), affirm that there exist differences in critical success factors not only among regions, but also among established and recognized factors. For instance, in the Malaysian context, Nah et al. (2007) verified that team communication is a significant factor contributing to ERP success but technical implementation success was not. On the other side, in the Bahrain context, Kamhawi (2007) found the opposite result: technical implementation success is a significant contributor to ERP Success but this is not the case of team communication. So, as Cui et al. (2008) and also Srite et al. (2008) suggest, it is imperative to evaluate IT adoptions in every local context and not merely adopt previous findings from other regions. Third, at the moment this study was being conducted, no research was found addressing explicitly the Latin America experience. So, this analysis will also contribute to meaningfully identify the causes that have an effect on ERP Success explicitly in this context. Such findings will also allow establishing comparisons with other developing regions.

There are also several tendencies that make Latin America case peculiar. One of the most important distinctive trends is that small and medium enterprises (SMEs) are the drivers of
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