# THE IMPACT OF LEADERSHIP ON ECOMMERCE SYSTEM SUCCESS IN SMALL AND MEDIUM ENTERPRISES CONTEXT

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## ABSTRACT

The purpose of this paper is to explore the role of leadership as contributing factors for eCommerce systems (ECS) success in small and medium enterprises (SMEs). Based on the eCommerce in SMEs literature, this conceptual research postulates that leadership influence the success of ECS in SMEs.

While ECS can be regarded as one form of Information systems (IS) the concept of success is recognized as one of the problematic issues that can interpreted in many ways. Attempts to measure the success of information system with single or multiple variables has been the focus of many researchers. Very few SMEs actually undertake any formal measure of their ECS performance. In fact the literature does not present any concept of ECS success developed specifically for SMEs. DeLone and McLean (1992) conducted a comprehensive review of IS literature and proposed the concept of an IS success model which has been argued and validated by many researchers. This paper uses this model to identify the dimensions of ECS success when applied to New Zealand SMES. There appears to be no such study conducted to examine the applicability of this model in a SME setting. The present study seeks to extend DeLone and McLean IS success model and adapt it for the SMEs setting by identifying and incorporating dimensions of success relevant to SMEs.

At issue, the isolation between what is part of success and what is causing it and measure the possible interaction among them. The literature has referred to these as dependent and independent variables.

Many researchers have suggested a variety of factors influence the success of eCommerce in SMEs, yet few studies have addressed ones that are correlated with the success of ECS in SMEs. The purpose of this paper is to explore the role of one organisational factor, namely leadership for ECS success in SMEs. Thus, the research question can be articulated as " What is the contribution of leadership for ECS success in SMEs". The output result of this paper is a conceptual model identifying the relevant dimensions and the resultant hypotheses that require empirical research to validate the proposed model. This would help manager/owners assess their eCommerce initiatives by focusing on the dimensions of success for their ECS as identified in this study.

# INTRODUCTION

Small and medium enterprises (SMEs) are increasingly utilizing the Internet for their business activities. This vast and rapidly growing number of engagement has lead to the provision of eCommerce system (ECS) were specifically designed for SMEs. It is not clear what level of success is being experienced by SMEs owner/managers in utilizing ECS and how success is perceived and what benefits have been gained. ECS however is an information system (IS) which incorporates eCommerce functionality, which has a vast number of users who are not confined by the organizational context and for whom the web use is volitional. The concept of success is recognized as one of the problematic issues that can be interpreted in many ways. Attempts to measure the success of information system with single or multiple variables have been the focus of many researchers. Very few SMEs actually undertake any formal measure of their ECS performance. In fact the literature does not present any concept of ECS success developed specifically for SMEs. DeLone and McLean (1992) conducted a comprehensive review of IS literature and proposed the concept of an IS success model which has been argued and validated by many researchers. The present study seeks to extend DeLone and McLean IS success model and adapt it for the SMEs setting by identifying and incorporating dimensions of success relevant to SMEs. There appears to be no such study conducted to examine the applicability of this model in an SME setting.

While the literature reveals organizational factors to influence the success of eCommerce when implemented by a firm, few studies have yet addressed the specific topic of what leadership is related with the success of the ECS when implemented by SMEs.

The purpose of this paper is to explore the role of one organizational factor, namely leadership for ECS success in SMEs. Thus, a research question can be articulated as "What is the contribution of leadership for ECS success in SMEs"? This would help manager/owners assess their eCommerce initiatives by focusing on the dimensions of success for their ECS as identified in this study. Also modifying their skills and understanding their roles to facilitate the successful implementation of ECS in their venture.

**ECS SUCCESS MODEL**

In attempting to structure the myriad of variables associated with the diversity of information systems. DeLone and McLean (1992) conducted a comprehensive review of IS literature in attempting to structure the myriad of variables associated with the diversity of information systems and proposed the concept of the IS success model (DeLone and McLean 1992). Their work is still contributing toward a universal model, which many have employed when looking at information system performance (Ballantine et al. 1996; Rai et al. 2002; Seddon 1997). Pitt et al. (1995) proposed a modification of this model to include a service quality component; Myers et al. (1998) suggested additional IS impact measures; Seddon, (1997) argued to exclude the usage from the model and used 'net benefit' in his characterization of the outcome. These modifications were endorsed by Delone and McLean in 2002 with an updated IS success model (DeLone and McLean 2003) and adapted the updated model to the measurement of eCommerce systems (DeLone and McLean 2004).

While the DeLone and Mclean framework is flexible the dynamics make it very difficult to operationalize its constructs. However, choice of the appropriate dimensions of the success constructs to be able better to realize benefits is a context dependent and "contingent on the objectives of the empirical investigation". It is also "a function of the independent variable under investigation" (DeLone and McLean 2004). That, makes it applicable for different domains. However for the purpose of this study we look at the profit based SME as the stakeholder of the ECS and the benefit accrued to that SME invested in the system from the perspective of owners /managers whom they ultimately determine the success of their venture.

# Leadership

Adopting eCommerce in an organization brings about change which requires developing a strategic outlook and the ability to cope with these changes. The management of these organizations when successful focused on leadership that facilitate the appropriate change and establish a conducive eCommerce environment. The particular characteristics that required to lead an eCommerce transition are visionary, inclusive, risk taking, approachable, forward thinking, open to change, committed, determined, and the ability to communicate (Cope and Waddell 2004).

Epstien, (2005) is conceptualizing leadership in terms of commitment at the top; thorough analysis of a company's eCommerce position where the company must evaluate its position regarding eCommerce; significant financial investment which must make resources available and cultural transformation which must make sure the firm culture adapts. With those firm begins developing and implementing eCommerce initiative.

In SMEs, it is the owner/manager who initiates, participates in eCommerce project and establishes a clear goal for their ventures. To move forward owner/managers need to be a enthusiastic, passionate and a firm believer of the benefits of eCommerce and must be committed to considering eCommerce as playing a significant role in the organization. Such a project can only be successful if owner/manager are committed to fully support the costs and champions the project (Umble 2003). Chatterji et al (2002) relates those managerial beliefs about web initiatives and participation in those initiatives as top management championship. Through their beliefs and participation, Owners/managers expend the time and energy to shape vision and strategies for the use of the web technologies; exploring ways in which technology's functionality could be leveraged into the business processes and activities (Chatterjee et al. 2002). Therefore the following proposition is hypothesized:

***Owner/managers Championship is positively associated with the ECS success dimensions.***

In addition, Owner/manager in SMEs needs to combine elements of both leadership and management in their role during the entire implementation cycle of implementing ECS in their ventures. They are usually challenged to oversee all activities including constructing and maintaining Web back-end systems and ensuring the currency, quality, and integrity, as well as setting up and maintaining customer profiles. This simultaneous double role of leadership championship and management support require a committed and skilled person to make decision at all times. Only dynamic and strong management can represent the advantage of ECS (Jingting and Huang 2004) and improves implementation. However, business manager need to be aware of the different management roles that they should be carrying out. Mintzberg (1980) identified three types of management roles that managers do during their workday (Mintzberg 1980). Within these roles Mintzberg identified ten more roles of managers. These are as follows:

- Interpersonal roles: Developing and maintaining positive relationships with others. These include figurehead, leader and liaison.
- Informational roles: receiving and transmitting of information effectively. Including monitor, disseminator and spokesperson.
- Decisional roles: these involve making significant decisions that affect the business. These include entrepreneur, disturbance handler, resource allocator and negotiator.

Management support has also been discussed in a variety of studies relating to eCommerce success factors ( Jinghua et al 2005); eBusiness success factors (Jingting and Huang 2004); in which they all indicated the significance of the management support to improve resource utilization and assure the efficiency of eCommerce implementation.

Jarvenpaa & Ives, (1991) have conceptualized top management support as the involvement and participation of the executive of the organization in IT activities (Jarvenpaa and Ives 1991). Also commitment by owner/mangers towards recognizing the opportunities and challenges of the web can play a major role in the success of an eCommerce initiative (Venkatraman 2000). Igbaria et al (1997) found that the support of management positively affected the perceived ease of use and the perceived usefulness of information technology within the small businesses (Igbaria et al. 1997)

Therefore the following proposition is hypothesized:

***Management roles and support is positively associated with the ECS success dimensions.***

Moreover and due to the limited IT capabilities within SMEs, it is a standard practice to engage the service of IT provider and by default outsourcing their eCommerce strategies. In many instances, IT providers do not understand the SMEs business market which requires clear roles, responsibilities, accountability, and even a plan for all activities to be established and communicated carefully and efficiently to IT specialist which must always be connected with the SME's business goals. For those to occur, owners/managers should have a basic understanding of the technologies associated with eCommerce and IT as they need to explain the business implication to IT provider and to determine the level of investment to devote to the eCommerce initiative (Epstein 2005).

Careful selection of IT provider is therefore vital to successful ECS implementation. Igbaria et al (1997) have found that technical support, training and a harmonious working relationship with IT provider can reduce the risk of IT failure in small businesses and lead to successful ECS implementation

Therefore the following proposition is hypothesized:

***Outsourcing management is positively associated with the ECS success dimensions.***


## CONCEPTUAL MODEL

To create a theoretical structure for the objective of this study, along with what is noted in previous research (DeLone and McLean 2004) regarding to what causes success rather than being part of it. Dependent and independent variable model is created. While ECS success is the dependent variable which represent what is part of success i.e. surrogate measures for success, leadership is the independent variable which represent what cause success. However, this is not a cause effect relationship but will demonstrate the contribution of the leadership to the ECS success. This will fulfill the objective of this study.

It is generally accepted that the many aspect of success with respect of ECS are complex. In essence multiple, interrelated success dimensions are likely to capture changes in performance than one single item or even a set of financial measures (Segars and Grover 1998).This study frames theoretical dimensions of ECS success within the paradigm DeLone and MacLean model.

Empirical research on assessing leadership contribution to the success of ECS across SMEs is sparse. Igbaria et al (1997) found that the support of management positively affected the perceived ease of use and the perceived usefulness of information technology within the small businesses. Others (Yap and Thong 1997; Zinatelli et al. 1996) identified the involvement of owner/managers is one of the key factors leading to successful implementation of IT in small businesses. Summing up the leadership variables along with success factors of ECS would depict the framework shown in Fig.1 portraying all relevant constructs. Whether such a relationship would lead to benefits would depict an output construct "net benefit" the result of which on the long run is the ultimate outcome, profit.

**FIG.1 CONCEPTUAL MODEL**
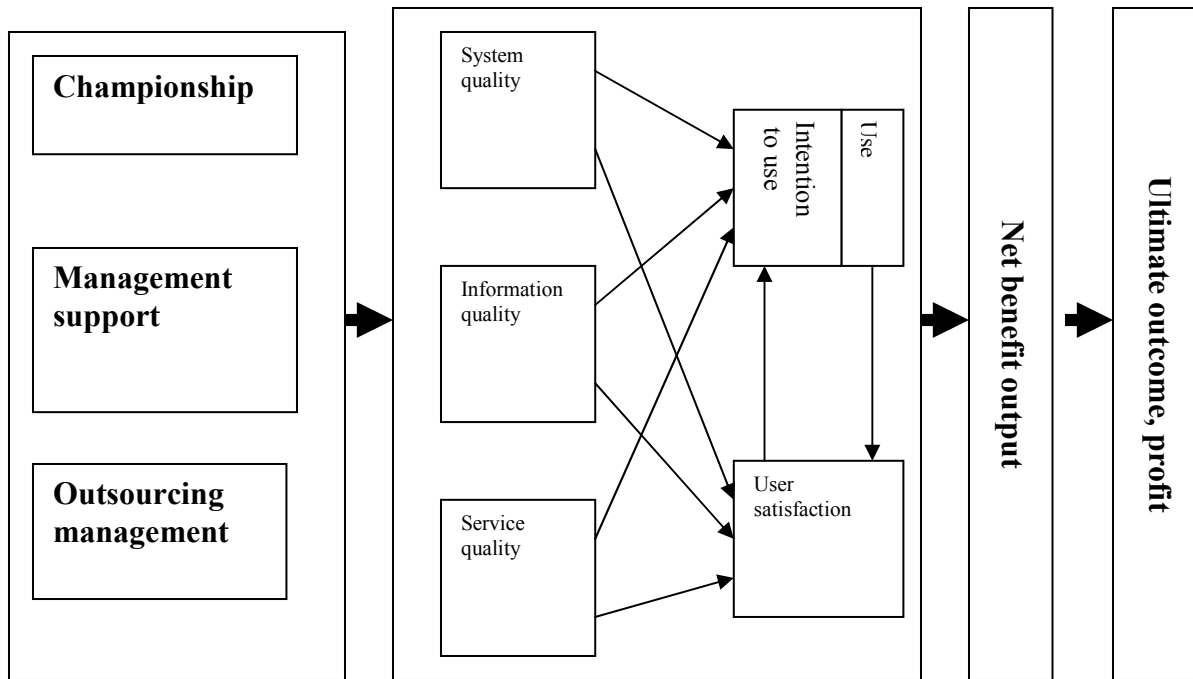


The research model proposes that the success of ECS in SMEs is influenced by championship, top management support and outsourcing management

**CONCLUSION**

To better realize benefits from web based presence among SMEs Owners/Managers must make important choices regarding their eCommerce initiative in relation to ECS characteristics in terms of the quality of the user's experience and the customer's usage of, and satisfaction with, the system. Also they should expend time, effort, commitment, involvement to improve performance of their eCommerce initiative. Successful ECS in SMEs have emphasized the decisive role of their owner/managers   leadership, which is also termed visionary, strategic leadership and change leaders. They are involved in a specific behaviors, action, and strategies that are required to initiate and survive ECS in SMEs. The consequences of these actions lead to successful integration of ECS into their ventures

Empirical research will be required to validate the proposed framework. Such a study will strengthen or refute claims of other related studies. Hence, this will be both a theoretical and practical contribution to the field of eCommerce systems when implemented in SMEs.

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