

# Managing E-Commerce Adoption Challenges for SMEs in Developing Countries



**Rajmohan Panneerselvam**  
*Annamalai University, India*

## 1. INTRODUCTION

Despite the growing economic potential associated with e-Commerce practices, lack of e-Commerce adoption among the potential enterprises particularly of those categorized as Small and Medium Scale Enterprises (SMEs) is quite visible in Developing countries of the world (UNCTAD, 2001). The scenarios leading to non-adoption of e-Commerce strategies by SMEs in Developing countries are attributed to varieties of reasons like the digital divide factor, lack of expertise in computer usage and lack of idea regarding the business benefits of e-Commerce. This is considered quite contrasting to the practices of the SMEs in some of the Developed countries, where Internet based selling and buying are more predominant. Although large number of SMEs in the developing countries use Internet as means of communications, the adoption of e-Commerce strategies by these enterprises still remains insignificant due to internal and external challenges. While lack of organizational readiness acts as major source of internal challenges; insufficiencies on the availability of Infrastructure ensuring quality Internet access characterises the major external challenges resulting poor Internet penetration in most of the Developing countries. Thus, the lack of threshold virtual market place hampers growth prospects in the e-Commerce models of the type B2C and it adds up to the list of challenges that SMEs have to encounter for successful e-Commerce adoption in Developing countries. While few studies (Grandon & Pearson, 2004; Tarafdar & Vaidya, 2006; Molla & Licker, 2005; Panneerselvam, 2014a) have reported the exact nature of e-commerce adoption challenges in different regional settings, Ricupero (2004) reports lack of clarity in Developing countries on e-commerce practices to the extent that many people tend to be excessively aware of the e-business possibilities and they overestimate its impact and have unrealistic expectations. Thus, a need is felt to design a solutions set towards managing successful adoption of e-Commerce practices among the potential SMEs in Developing countries of the world.

## 2. CHALLENGES IN E-COMMERCE ADOPTION

Based on the well-established studies (Bingi et al., 2000; Ndyali, 2013; Shemi & Procter, 2013) on e-commerce adoption among SMEs in developing countries context, the challenges in the adoption process have been classified into three major categories such as:

1. Human Centric Challenges,
2. Technology Centric Challenges, and
3. Organization Centric Challenges.

DOI: 10.4018/978-1-4666-9787-4.ch089

These challenges have been observed to be hampering the adoption process resulting in either non-adoption or inappropriate adoption of e-Commerce practices among the potential SMEs. While non-adoption of e-Commerce practice is not a potential challenge in short run operations of the SMEs, the inappropriate adoption of e-commerce practices will lead to serious challenges for the enterprises in short run operations; leaving unsatisfied customers and agitated partners.

## **2.1 Human Centric Challenges**

In an effort to understand the user acceptance of Computer technology, Davis et al. (1989) proposed a widely acknowledged Technology Acceptance Model (TAM), which focuses on two aspects of behavioural intentions of the user such as perceived usefulness and perceived ease of use. While perceived usefulness describe the benefits associated with the system usage, perceived ease of use describes seamless usability of the systems by the end users. Thus, TAM predicts the user acceptance for the computer technology in terms of the above two dimensions of the behavioural intentions. While establishing a high degree of validity on predicting user acceptance of the technology, TAM is focused more on the end users of the computing technology in the organizations rather than the actual organizations that can adopt those technologies and hence, observed to be with limitations on applicability in organization adopting e-Commerce practices. However, the adoption willingness of the entrepreneur which is critical to the actual adoption decision is viewed as the function of perceived usefulness of the e-Commerce practices. In this regard, Shemi and Procter (2013) report the managerial fear on the perceived complexity of e-Commerce system and the lack of skilled manpower to deal with such systems within the organization as a major challenge in adoption decision process. While the availability of IT manpower in the organization is crucial to the design, development and maintenance of e-Commerce systems, it becomes equally important for non IT employees of the organization to orient themselves into the e-Commerce enable processes of the enterprises for successful post e-Commerce adoption Scenario. Further, the willingness of the potential customers of the enterprise to accept the Internet offerings of an enterprise is crucial to the e-commerce adoption decision of an enterprise. Also, lack of entrepreneurial awareness on potential benefits of the e-commerce is seen as major human centric challenges in e-commerce adoption among SMEs in Developing countries. (Panneerselvam, 2014b)

## **2.2 Technology Centric Challenges**

The major technological challenges that enterprises have to encounter while adopting e-Commerce practices include availability and the efficiency of the existing Internet Infrastructure and the related technologies. Further, the availability of technical manpower to design, develop, implement and possibly manage Internet technology in the specific regional settings of the enterprise is seen as a major technology centric challenge towards adopting e-Commerce practices among SMEs (Tarafdar & Vaidya, 2005; Abdalslam et al., 2013). While conceptualizing these issues in terms of Perceived Organizational e-Readiness(POER) and Perceived External e-Readiness(PEER), Molla and Licker (2005) have listed general e-Commerce awareness in the enterprise, IT capabilities of the human resource, Existing business Resource, Existing technological resource, Organizational commitment towards e-Commerce and organizational governance on e-Commerce as factors causing challenges in 'POER'. Further, PEER is

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/managing-e-commerce-adoption-challenges-for-smes-in-developing-countries/149039](http://www.igi-global.com/chapter/managing-e-commerce-adoption-challenges-for-smes-in-developing-countries/149039)

## Related Content

---

### E-Business Adoption in SME-Models and Determinants: A Comparative Review of UK and KSA

Mark Xu, Maher Alhindi, Alessio Ishizaka and Martin Read (2016). *Encyclopedia of E-Commerce Development, Implementation, and Management* (pp. 453-469).

[www.irma-international.org/chapter/e-business-adoption-in-sme-models-and-determinants/148978](http://www.irma-international.org/chapter/e-business-adoption-in-sme-models-and-determinants/148978)

### The Analysis of the Logistics Mode Decision to E-Commerce

Xiao Xiao, Yu Liu and Zhenji Zhang (2012). *Journal of Electronic Commerce in Organizations* (pp. 57-70).

[www.irma-international.org/article/analysis-logistics-mode-decision-commerce/73000](http://www.irma-international.org/article/analysis-logistics-mode-decision-commerce/73000)

### Security Issues in E-Commerce

Arram Sriram and Adiraju Prashantha Rao (2021). *Research Anthology on E-Commerce Adoption, Models, and Applications for Modern Business* (pp. 53-81).

[www.irma-international.org/chapter/security-issues-in-e-commerce/281496](http://www.irma-international.org/chapter/security-issues-in-e-commerce/281496)

### Ontology for E-Government Public Services

Costas Vassilakis and George Lepouras (2006). *Encyclopedia of E-Commerce, E-Government, and Mobile Commerce* (pp. 865-870).

[www.irma-international.org/chapter/ontology-government-public-services/12643](http://www.irma-international.org/chapter/ontology-government-public-services/12643)

### mVine Ltd: A Case Study of a New Digital Music Label from Conception to Launch

Joanna Berry (2005). *International Journal of Cases on Electronic Commerce* (pp. 1-20).

[www.irma-international.org/article/mvine-ltd-case-study-new/1481](http://www.irma-international.org/article/mvine-ltd-case-study-new/1481)