Factors Affecting E-Commerce Adoption by Handicraft SMEs of India

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ABSTRACT

This study empirically investigates the factors affecting e-commerce adoption by small and medium-size enterprises producing handicrafts in India. The study is motivated by the fact, that even though the handicraft sector plays a vital role in the Indian economy in terms of exports and employment, it has not adopted e-commerce as one of the prominent sales channels. Survival in this new economy requires handicraft organizations to learn and adopt new technologies. Those who cannot or do not adopt this new business practice will become obsolete and will be left behind. This study proposes and utilizes technological, organizational, environmental and strategy model based on TOE (Technology, Organization and Environment) model. From a survey of 163 Indian small and medium-size enterprises, findings reveal that awareness, human resources, strategy and market forces e-readiness are the prime influencing constructs towards adoption of e-commerce by Indian small and medium-size enterprises.

KEYWORDS

Adoption, E-Commerce, Electronic Commerce, Organization and Environment, Small and Medium Size Enterprises, Technology

INTRODUCTION

India holds vast cultural diversity with enormous collection of handicraft items. Handicraft items are a representation of Indian beauty, style and vast culture. These handicraft items are carved crafts out of stones, wood, ivory, bones and artifacts of jewellery, metalware, leather, and textiles etc. utilizing skills of artisans. Handicraft sector uses conventional manual methods to make various items as per its name handicraft (items made by hand). It is a pivotal segment of Indian economy and its importance lays in employment potential and export earnings. As Indian artwork is representative of rural India, this sector gives employment to above 6.57 million artisans (NSDC, 2017). Indian handicrafts export has shown surge of 11.07% i.e. 3.66 billion USD (United States Dollar) from 2016-17 (EPCH, 2017) and handloom and handicraft sector is likely to employ 17.99 million people by 2022 (NSDC, 2017). The strength of this sector comprises of low investment, availability of cheap labor and unique craftsmanship (Hashmi, 2012).

Internet penetration has reached 34.8% with 462 million users as of July 2016, e-commerce has a readymade pathway to unparalleled growth (Kulkarni, 2016). India along with China, is proving to be the fastest rising e-commerce marketplace in the whole Asia-Pacific (The Hindu, 2015) with expected growth of USD 80 billion by 2020 (KPMG, 2016). Industry experts deem that worldwide trade is more dependent on e-commerce alongside traditional means. Consequently, e-commerce is capable of being a prospective sales channel for handicraft markets. Subsequently, Indian government

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is anxiously promoting handicraft items through various initiatives by e-commerce, like a recent tie up with Flipkart.com to encourage sales of handicraft items (Ministry of Textiles, 2014).

In spite of numerous initiatives and efforts by governments, e-commerce adoption by SMEs still lies in its nascent stage and far away from its successors i.e. large companies (Chiliya, Chikandiwa, & Afolabi, 2011; Pham & Nguyen, 2011; Alam et al., 2011). Current condition of SMEs raises an important question - what exact factors influence SMEs e-commerce adoption. Answer to this question is crucial as it is extensively recognized that SMEs of any country around world are important to its economic development. SMEs around the world offer significant economic development, employment and progress to the country, and are known as drivers of innovation and economic growth (Kotelnikov, 2007; Zhang, Fu, Zhao, Pratap & Huang, 2018). They also work towards welfare of country and grow household income; empowerment and self-confidence of stakeholders; political stability of country and social changes (Liedholm & Mead, 2013). Due to capabilities of SMEs to bring positive change in economic development, reduction of unemployment and poverty makes them more lucrative for developing countries (Kotelnikov, 2007).

Many studies have been conducted to find out the factors affecting e-commerce adoption by SMEs in developed countries, but these findings cannot be generalized for a developing country like India. This is attributed to the fact that developing countries have different culture, business philosophy and IT development. Besides experience of every countries’ SME is different according to its unique challenges (Taylor, Dorothy, & Owusu, 2012) and also due to managerial, organizational and environmental limitations (Motwani, Mirchandani, Madan, & Gunasekaran, 2002). But, still not much research has been done to study the factors affecting e-commerce adoption by SMEs in specific sector of India.

Therefore, to address the issue and identify key factors for e-commerce adoption by SMEs of specific sector in India, the study is conducted on wooden handicraft SMEs of Saharanpur (SRE), India. SRE wooden handicraft industry provides employment and support to nearly 50,000 artisans with annual revenue of Rs. 400 crore (Yadav & Mahara, 2016). Saharanpur (SRE) is a city in the state of Uttar Pradesh (northern India). On the basis of 2011 census by government, SRE district holds 3,464,228 as population size (MSME, 2011) where population-density is 939 citizens in square kilometre. SRE is famous for wooden handicraft market with other local agricultural foods like basmati rice and mangoes. This study considers its wooden handicraft market as base for this study. With the help of wooden carving various final products are sold in SRE like furnitures, home furnishings, children toys and gifts for people of all ages. These finished products are liked and imported from people of various countries such as United States of America, Germany, Spain, France, United Kingdom and Canada. Therefore, for the promotion and upliftment of commerce of SRE, it is crucial to identify different sources of sales and their adoption pattern. Hence this study assesses different e-commerce factors and their adoption at different levels by SMEs engaged in wooden handicraft at Saharanpur, India.

PROPOSED FRAMEWORK FOR E-COMMERCE ADOPTION

Technology Acceptance Model (TAM) (Davis, 1989), Theory of Planned Behaviour (Ajzen, 1985), TOE (Technology, Organization and Environment) framework (Tornatzky & Fleischer, 1990) are the most commonly used theories for technology adoption. The research adopts the TOE framework as it deals with technology adoption at firm level in contrast to TAM and TPB as they deal with adoption at individual level (Stephen & Toubia, 2010). Secondly numerous authors have used TOE to understand different IT adoption especially e-commerce (Alshamaila, Papagiannidis, & Li, 2013; Awa, Ukoha, Emecheta, & Liu, 2016; Gangwar, Date, & Ramaswamy, 2015; Oliveira, Thomas, & Espadanal, 2014) adoption in SMEs. Figure 1 depicts the proposed framework of e-commerce adoption.

The model is based on the TOE framework, but to check the feasibility of this model in Indian SMEs context for e-commerce adoption, preliminary qualitative research was undertaken. After
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