

## Chapter 30

# Structural Equation Modelling of the Factors Influencing the Adoption of E-Commerce in Saudi Arabia: Study on Online Shoppers

**Abdullah Saleh Alqahtani**

*Deanship of Common First Year, Self-development Skills Department, King Saud University, Riyadh,  
Saudi Arabia*

**Robert Goodwin**

*School of Computer Science, Engineering and Mathematics, Flinders University, Adelaide, Australia*

**Denise de Vries**

*Flinders University, Adelaide, Australia*

### ABSTRACT

*This article presents findings from a study examining the diffusion and adoption of e-commerce in Saudi Arabia. Although the country has the largest and fastest growing information and communication technologies (ICT) sector in the Arab region, growth in e-commerce activities has not progressed at a commensurate rate. In general, e-commerce online shopping has not kept pace with the global growth of online retailing. The authors have conducted research to identify and explore key issues that influence e-commerce in Saudi Arabia in deciding whether or not to adopt online channels. As part of a larger research project using mixed methods, this article focuses on a quantitative analysis of responses obtained from a survey of the online shopping users in Saudi Arabia.*

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## **INTRODUCTION**

The current era is often referred to as the Information Age, the Digital Revolution or the New Technological Revolution, depending on the commentator's perspective. These descriptors share the common characteristic of being based on the widespread adoption of computing and computer networking. The arrival of the internet and its rapid development into a globally ubiquitous resource has not only accelerated earlier computer driven change in business and society, but has also introduced additional major changes, including the use of the internet to facilitate, execute, and process business transactions (Delone & McLean, 2004). E-commerce allows businesses to share information, undertake transactions across networks and computer platforms, and work together over geographic boundaries (Berners-Lee et al., 1994; Kalakota & Whinston, 1997). It encompasses business-to-consumer, business-to-business, commerce-to-administration, customer-to-customer, and consumer-to-business (Goel, 2007) activities.

Online shopping is a form of business-to-consumer e-commerce (Nosrati, 2011; Nemat, 2011). It is more limited and exclusively describes the activity of selling and purchasing goods and services online via an e-store (Islam, 2012; Sharma, 2013). Xu (2012) noted that online shopping describes a single aspect of e-commerce; whereas e-commerce can represent any and all business activity conducted using an electronic medium (Ren, 2009).

In 2014 global e-commerce sales increased at a rate greater than 20% per year, influenced by four key factors: internationalization; the renewed popularity of e-commerce IPOs internationally; the rise of the continuously connected consumer; and consumers' ongoing desire to look, touch, and immerse themselves in brand experiences (AT Kearney, 2015). Developed countries have already produced sophisticated online shopping malls and e-stores like Amazon and eBay, while the booming marketplace of China offers Ali-baba and Tencent. E-stores such as these are at the top of a list of global online sellers who are either already global brands or rapidly evolving in that direction.

## **BACKGROUND**

As part of a very robust global market space, the Middle East is also experiencing rapid growth in e-commerce (MasterCard Online Shopping, 2014; Ecommerce Show, 2016). Online sales in the Middle East hit US\$7 billion in 2014, the largest single share being in the UAE at \$2.3 billion, followed by Saudi Arabia at \$1.5 billion, and Egypt at \$1.4 billion (Payfort, 2014). Some issues known to be particular challenges for e-commerce companies in the Middle East are: fear from users on loss of control; the desire to pay cash on delivery (C.O.D.); high returns and the negative impacts on cash-flow of C.O.D.; the unwillingness or inability of women to answer the door to unrelated male delivery men (PayPal, 2013; Quartz, 2015; The Economic Times, 2015). Setup costs, deployment issues to remote locations, and natural human resistance to change (Aladwani, 2003; Albadr, 2003; MCIT, 2014) are also slowing e-commerce provision and uptake.

Various researchers have sought to understand more fully the factors influencing technology adoption. They have considered factors at the individual level (Klopping & McKinney, 2004; Pantano & Di Pietro, 2012; Susanto, 2012), the firm level (Al-Qirim, 2008; Grandon & Pearson, 2004; Wymer & Regan, 2005) and the country level (Kevin Zhu, Kraemer, & Xu, 2003; Kevin Zhu & Kraemer, 2005). Several studies have concluded that cultural conditions in a nation are important influencers. In a comparison of the organisational cultures of 40 independent nations, Hofstede (Hofstede, 1980) argues that many of the

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