Chapter 6
Infrastructural Drivers of Online Shopping:
An International Perspective

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ABSTRACT

While online shopping expenditures have been increasing in both developed and developing economies, they still account for a small share of total retail sales. Significant differences also exist across countries in the amount of money consumers spend on a per capita basis on online purchases. The authors utilize the conceptual foundations of infrastructural framework to examine the effects of infrastructural drivers on online shopping expenditures in 43 countries. Findings show that per capita telecommunications investments and per capita gross national income are significantly associated with per capita online shopping expenditures. Privacy protection, Internet penetration, and credit card penetration were not significant.

1. INTRODUCTION

The Internet has significantly transformed consumers' shopping experiences by expediting product search, facilitating price comparisons, and reducing transaction costs. Taking advantage of these conveniences, consumers have shifted some of their purchases to the online channel. However, while consumers' preference for the online channel has resulted in increasing online sales, data show that online sales across countries still account for a small share of total retail sales. In the U.S., for example, after more than four decades of the commercial launch of the Internet, e-commerce sales were about 5.8% of total retail sales in 2013, increasing from 5.2% in 2012 (U.S. Census, 2014). And in China, where the compound annual growth rate from 2003 to 2011 was 120%, the highest growth rate in the world, the share of e-commerce sales to total retail sales was only between 5 to 6 percent (McKinsey, 2013).

To explain online shopping activities, existing research has mostly focused on demographic characteristics (Akhter, 2003; Chang and Samuel, 2004) and attitudinal and motivational determinants such as beliefs, risk averseness, norms, intentions, and perceived value (Brashear et al., 2009; George, 2004;

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Lim, 2015). In contrast to the large body of research on demographic and psychological determinants, the literature on infrastructural drivers of online shopping is still in the early phase of development (Travica, 2002; Sheth and Sharma, 2005; Alqahtani et al., 2012). A review of the literature also shows a dearth of empirical studies on the effects of infrastructural drivers on online shopping expenditures across countries.

This study attempts to fill the above-mentioned gaps and contribute to the literature in three significant ways. First, it builds on the infrastructural frameworks developed in existing studies to formulate the hypotheses. Second, it tests the effects of three key infrastructural drivers (telecommunications, financial, and regulatory) on online shopping expenditures across countries. Third, it draws theoretical and strategic implications of the findings, adds to the existing knowledge on infrastructural drivers and online shopping, and guides strategic decision making.

To accomplish the research goals, the rest of the paper is organized into the following four sections. In Section 2, we discuss the theoretical frameworks and, in Section 3, we present the hypotheses. In Section 4, we discuss issues related to the sample and variables and present the results, and, in Section 5, we draw theoretical and managerial implications, discuss the limitations of the study, and suggest questions for future research.

2. THEORETICAL FRAMEWORKS

Existing research has delineated the linkages between infrastructural conditions and online transactions. Travica (2002), for example, conducted a field investigation to determine how infrastructural factors affect the diffusion of e-commerce. Interview and observation data showed that economic, telecommunications, and cultural factors favorably affect the potential for e-commerce. Simon (2004) also identified communication infrastructure and legal and societal factors such as privacy protection as critical success factors for facilitating electronic commerce in developing countries. Das et al. (2014) explored the effects of economic, legal/regulatory, and technological factors on music piracy and found that the primary factors that affect online piracy in a country are its economic status and regulatory status.

Sheth and Sharma (2005) classified countries based on their infrastructural development and proposed that the level of development in telecommunications and legislative bodies would affect e-marketing activities as well as consumer behavior. And Lawrence and Tar (2010) noted that underdeveloped states of telecommunications infrastructure, credit systems, and income would act as barriers to e-commerce activities in developing countries. In a recent report, the Euromonitor also emphasized the importance of developing adequate telecommunications and financial infrastructures to promote online shopping (Euromonitor International, 2012).

In addition to the roles of telecommunications and financial infrastructures, existing research provides meaningful insights into the role of privacy in influencing online shopping. A key conclusion from the current body of research is that while consumers appreciate the convenience of online shopping they remain apprehensive about the threat to privacy it poses. Privacy concern among consumers has been shown to be a significant determinant of online shopping and research shows that it negatively affects online purchases (Dubelaar et al., 2003; Zorotheos and Kafeza, 2009). What, however, is important to note about the privacy literature is that much of the scholarly attention has been applied to understanding the antecedents and consequences of privacy concern and not to examining the effects of the regulatory infrastructure that protects privacy.

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