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### **Chapter XIV**

# National Environment and Internet Banking Adoption: Comparing Singapore and South Africa

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#### **ABSTRACT**

The widespread diffusion of the Internet globally has prompted most retail banks to offer Internet banking services. A recent study in Singapore identified attitudinal and perceived behavioral control factors as having an influence on consumer adoption of Internet banking. It is expected that the national environment will also impact this process. The aim of this study, therefore, was to replicate the Singapore study in South Africa, compare the results between the two countries, and explain differences in adoption process in terms of the national environment. The results confirm that attitudinal and perceived behavioral control factors influence adoption in South Africa as in Singapore, but with differences in the number of determinants and the degree of influence of certain determinants. These differences were explained in terms of three environmental dimensions: socio-economic conditions, the state of Internet diffusion, and government information and communication technology (ICT) policies, respectively.

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#### INTRODUCTION

The Internet and the World Wide Web (Web) have had a big influence on retail banks, with many now providing products and services via the Internet (Aladwani, 2001). A brief perusal through several bank web sites reveals that consumer services available via Internet banking include the ability to access accounts in order to check balances; view, download, or print statements; transfer funds; and pay bills. Additional services include facilities for loan applications, share trading, and secure online shopping, among others. Many of the services offered are also available via other channels; thus, the primary benefit of this channel may be its convenience (Leonard, 2002).

The success of Internet banking depends to a large extent on consumer acceptance of this technology, and, to this end, Tan and Teo (2000) identified several factors that influence the adoption of Internet banking in Singapore; namely, attitudinal and perceived behavioral control factors. Characteristics of the national environment may also influence the adoption process, giving rise to differences between countries. The objectives of the study are, therefore, to:

- 1. examine factors influencing the adoption of Internet banking in South Africa;
- 2. compare these findings with Singapore; and
- 3. explain differences in the Internet banking adoption process in terms of national environmental characteristics.

It is important to capture the influence of the national environment. Contrary to early popular opinion, the Internet and electronic commerce have not leveled the playing field between developed and developing nations. Instead, those countries with well-developed infrastructures, resources, and skills have gained the initial advantage, giving rise to a digital divide between developed and developing nations (Licker & Motts, 2000; Mbarika, 2002). It is pertinent to note also that "to what a user has access to, and why depends on the specific legal, economic, political, and social conditions that surround that user (Wolcott et al., 2001, p. 3). In terms of social conditions, the influence of national culture has gained widespread attention in studies of technology adoption (Anandarajan et al., 2002; Straub et al., 1997). However, it is clear that national culture is but one element of a complex, multi-faceted phenomenon. The contribution of this study, therefore, is to seek other descriptors of national environment apart from culture and use these to explain differences in the adoption of Internet banking between Singapore and South Africa.

Singapore and South Africa are of interest, as they lead their respective regions in terms of technological advancement, while also having significant geographic and socioeconomic differences. Important lessons may be learned, particularly for South Africa, since Singapore already has a successful, highly developed economy with a sophisticated ICT infrastructure. In contrast, South Africa is a middle-income developing country, striving to bridge the economic, social, and digital divide between different societal groups (Licker & Motts, 2000).

In the next section, the environmental factors likely to impact Internet banking adoption processes in Singapore and South Africa are compared. This is followed by a brief description of the Internet banking framework employed by Tan and Teo (2000) before the research framework and hypotheses for this study are outlined. The results of the South African study are reported and compared with Singapore, leading to a

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