

# **Hindrances to the exploitation of ICTs by Tourism SME Service Providers in South Africa: The Case of Tourism SMEs in the City of Tshwane**

**Blessing Mbatha**

**Communication Science, University of South Africa**

**Pretoria, 0003, South Africa**

## **ABSTRACT**

The Web has become the prime driver of modern e-commerce. The main focus of this paper is to identify specific barriers to the exploitation of ICTs by tourism SME service providers in the City of Tshwane in South Africa. The PITs model of ICT adoption by SMEs was found useful as the study sought to understand the diffusion and use of modern ICTs by SME service providers. The study adopts a qualitative method with interviews as the data collection procedure. The data collected were grouped in thematic categories and analyzed. The analysis involved

examination of data under each theme for recurring relationships and correlations. Results reveal that high cost, limited funds and lack of technical know-how are barriers in the diffusion of ICTs among the tourism SME service providers. The Internet era is unfolding and anybody can now log on to their computers and take care of their financial business online in the comfort of their own homes.

**Key words:** E-commerce, barriers to ICTs, innovation adoption, ICTs, SMEs,

## **1. INTRODUCTION**

The web together with other ICT enabling technologies offer a platform in the way organisations arrange their business processes, address their marketplaces, and partner with other enterprises. A study by United Nation Development Programme (2001) indicates that in today's global economy Information and Communication Technologies (ICTs) are credited with their transformative capacity for national economies, organisations and the global economy. For nations, ICTs are assumed to offer significant potential benefits for socioeconomic development and thus represent a promising way to lead developing countries on a path of more rapid development (El Sayed & Westrup, 2003). In strengthening the latter views, Montealegre (1999) opines that ICTs have been portrayed "as a kind of panacea for a multitude of the world's problems" and as an important

catalyst that will strengthen developing countries' position in the new world economy. Similarly, for organisations they are viewed as providing companies with a means of competitive advantage needed to face the challenges of the new emerging global economy. While at the global level ICTs are intimately involved in the changes that are taking place through their ability to overcome temporal and spatial limits, thus setting up new modes of work, and facilitating communication and organisation across time and space, hence creating one global space (Castells, 2000 & Walsham, 2001). The main focus of this paper was to identify specific barriers to the exploitation of ICTs by tourism SME service providers in the City of Tshwane in South Africa. In order to achieve the stated aim, the following specific objectives were formulated namely, to determine the attitudes of staff towards ICTs; to find out the level of ICT usage by

staff in the SMEs; and to identify barriers to electronic commerce tools adoption.

## **2. LITERATURE REVIEW**

Today the Internet provides, at modest cost, an unprecedented level of connectivity and the ability to communicate efficiently and effectively directly with customers. According to Yao (2004), the emergence of the Internet has led to the rapid growth of electronic commerce (e-commerce), and this had an effect on the nature of business. Its potential to generate more revenue is no longer a matter of debate, but is acknowledged as something the tourism industry in developing countries need (United Nations, 2001). In many developing countries, and in Africa in particular, tourism is now perceived as a potential saviour for their ailing economies, held back only by a lack of development resources such as finance and expertise (Dieke, 2000). Ecommerce and tourism complement each other. The tourism industry is an information-intensive industry in which e-commerce is already playing a significant role by allowing information to flow through the Internet on a worldwide basis with virtually no entry barriers. With an estimated 360,985,492 million users in the world (Internet World Stats, 2009), the Internet is a means for African countries to reach their target market in Europe and America and promote their ailing tourism industries, which have been severely damaged by political, social and economic problems. For the purpose of this article, e-commerce is broadly defined as executing business processes electronically and utilising technologies such as electronic mail (e-mail), the Internet and the Web (Stansfield & Grant, 2003). Evidence from the literature surveyed shows that most of the research work on e-commerce in Africa is concentrated in the Republic of South Africa (Moodley, 2003; & Pather et al., 2003). Governments are besotted with ICTs and e-business. Simplistically, they see them as the keys to the knowledge-based economy and the assured competitive advantage of their economies. In order to meet this goal, there is mounting pressure for SMEs to more fully

embrace ICT and electronic business techniques because, in aggregate, they are big buyers, big sellers, big innovators and, most important politically, big employers.

## **3. THEORETICAL FRAMEWORK**

The publish, interact and transform (PIT) model of ICT adoption by SMEs was found useful as the study sought to understand the diffusion and use of modern ICTs by SME service providers. This model has been used as the theoretical basis for a number of information systems projects. Also, this model better accommodates the diversity of application and adoption of ICT and e-business approaches amongst SMEs. The model has two elements, namely: what functions ICT can be used for in the firm, and what activities it can be applied to. First, ICT and the Internet can be used by SMEs for three increasingly sophisticated activities, which give the model its name: to publish and publicise information on a website, such as product and contact details and other "brochureware", plus terms and conditions or delivery schedules; to interact with customers and suppliers through automated communications systems that are more than the simple exchange of emails and, for example, verify credit cards or recognise returning customers; and to transform the way a business undertakes its activities, allowing customers to specify delivery times and places or enabling real time tracking of deliveries (Foley and Ram, 2002). Second, this progressive electronic business sophistication can be applied to some, or even all, of a number of areas of business activity within an SME. In the finance area, for example, it might be introduced for account reconciliation with customers and suppliers, online access to banking, and to communicate and transact with accountants and statutory bodies on tax matters. Foley and Ram (2002) recognise six of these areas of activity in SMEs namely, logistics and delivery; finance; purchasing and procurement; operations, processing and assembly; marketing and sales; and after-sales service.

#### 4. METHODOLOGY

The study applied qualitative method with interviews as the data collection procedure. The study population was an urban-based tourism SME service providers located in the City of Tshwane in South Africa. This city was chosen for its diverse tourism business activities that include bed and breakfast, hotels, travel agencies and transport, to name a few. The sampling frame consisted of 200 registered tourism SME service providers at the Gauteng Tourism Authority. The sample size consisted of 100 respondents, selected through stratified and random sampling. These sampling techniques helped to control biasness in the selection process. The respondents sampled included: Bed and Breakfast 40(40%); Guest Houses 40(40%); and Tour Operators 20(20%). The use of the interviews provided a unique opportunity to consult far and wide amongst tourism SME service providers in the city of Tshwane. The data collected were grouped in thematic categories and analyzed. The analysis involved examination of data under each theme for recurring relationships and correlations. Key themes emerging are discussed below.

#### 5. FINDINGS AND DISCUSSIONS

##### Attitudes of staff towards ICTs

One of the objectives of the study was to establish the attitude of staff towards the use of ICTs in their enterprises. Discussions revealed that within small-scale enterprises, attitudes towards ICTs were largely mixed. This was what some respondents had to say about attitude towards ICTs:

- The attitude of our staff towards ICT is not very encouraging;
- Our staff's motivation is low due to the lack of opportunities for promotion;
- The attitude of the staff is positive and encouraging;
- It is difficult to tell whether the attitude of staff towards use of ICT is positive or

not because our staff use ICTs in their work;

- Our staff are trained in ICT so they have no problem with its use;
- Some of the staff are not well motivated towards ICTs while others are.

Rogers (1995) observes that staff inclinations towards ICT use is a critical component of ICT diffusion in organizations. The mixed reactions amongst staff about attitude towards ICT could arise from the fact that within business enterprises, not all staff needed to have ICT skills because the core ICT chores were largely integrated with non ICT-based activities. On the other hand, in cases where most focus was on ICT, most staff was either IT professionals or they had competencies and an understanding of ICT issues. Yao (2004) in a case study of a nationwide system for training small business enterprises for ICT innovation in Greece found that the employees in many cases did not have positive attitudes towards ICT. They noted that the particular characteristics of enterprises and also of the staff had an effect on the attitudes towards ICTs, especially the necessary knowledge to deal with a variety of situations that they could encounter in the various enterprises.

##### Level of ICT usage by staff in the SMEs

The respondents were asked to discuss the level of ICT usage by staff in their respective enterprises. The main aim behind this question was to establish the extent to which SME service providers interact with ICT tools and services in their businesses. Discussions revealed that ICT usage was generally high. This was what some owners said about ICT usage by their staff:

- *"The usage of ICTs by our staff is very high because this is our core business and we have no complaints."*
- *"We use ICTs every day, like checking emails"*
- *"The level of ICT usage is poor because most of the don't have enough skills, they only use Microsoft office suite".*

- “ We are happy with the level of ICT usage, most of our staff is always on the internet “
- “I am happy with the level of usage because that is how we do business”
- “The level is good because we do not have any choice, that how we do business here”.

The findings indicate that the level of ICT usage in the SMEs under was good. This high usage of ICT could probably be attributed to the fact that ICT was their tool of work. Department of Enterprise, Trade and Employment (Ireland) (2005) in Ireland found that while, larger companies tended to make more sophisticated use of ICT than smaller companies, poor integration of IT systems throughout business also appeared to be an issue for large companies. For example, relatively low levels of ICT usage by European companies, was found to be a contributing factor to the failure of Europe to catch up with productivity growth rates of the USA.

### **Barriers to e-commerce tools adoption**

The respondents were asked to reflect to the barriers that impede the effective use of ICT tools and service in their SMEs. The respondents generally noted that:

- Lack of ICT skills among staff,
- ICTs are too expensive,
- Lack of ICT infrastructure
- Staff’s attitude towards ICTs,
- Lack of technical expertise,
- Lacking of clear focus and objectives regarding the use of ICTs,
- Resistance of staff to the use of ICTs,
- Limited funds,
- Lack of access to ICTs,
- “E-commerce doesn’t fit our business/services”,
- “E-commerce doesn’t fit the way we do business,
- “Not sure what to adopt”, and
- Lack of information about, and perceived benefit of ICTs

The findings show that the most important barrier inhibiting enterprises from adopting ICT tools was high costs. The findings further indicate that limited funds and lack of technical know-how were also barriers. These findings concur with the study conducted by Migiro, et al. (2005) who established that one of the barriers that impede the effective and adequate adoption of ICTs by SMEs is high costs and limited funds. The developed world is increasingly leveraging ICT in small business enterprises for socio-economic development. However, shortage of ICT skills is causing great concern. Similar sentiments are shared by Lawson et al. (2003) who point out that low levels of appropriate ICT skills have been identified as a significant barrier to ICT adoption amongst SMEs. Awareness about the importance of ICT skills for empowering small businesses in developing nations among governments is growing. The findings of this study concur with the study done by Bhatnagar (1992) who observes that existing research on IT transfer to developing countries has recognised the need to develop a skilled workforce to learn from the mistakes of other countries. The latter author argues that ICT skills problems in developing countries like in developed countries are more severe in small-scale enterprises than in large corporations. Thus, the importance of developing necessary ICT skills for the digital economy need not be over-emphasised.

## **6. CONCLUSION**

The main purpose of this study was to identify specific barriers to the exploitation of ICTs by tourism SME service providers in the City of Tshwane in South Africa. South African government is considering putting in place an ICT policy that will amongst other things address issues of critical skills shortage in South Africa. It is hoped that once the ICT policy is promulgated, it will address issues of skills shortage that have been raised in this article. However, a lot still remains to be done to empower SMEs in South Africa to effectively apply ICTs. A number of steps are therefore needed to equip

SMEs in South Africa with the ICT capacity for them to play a competitive role in the global internet commerce. Firms need to put in place explicit staff development policies that focus on ICT capacity building in the area of content development, software, hardware and communication support.

This article has explored the adoption ladder and PITs interpretations of this process. What is clear, given the diversity of SMEs, is that we need a better understanding of how these firms recognise and develop business opportunities in general, and not just those that might or might not be associated with a particular set of technologies. Indeed, given the relatively recent dot.com bust, it is hardly surprising that small firms might be reluctant to engage with e-commerce and e-business any further than is necessary. The importance of education in support of any national development and ICT agenda cannot be over-emphasized. A sustainable ICT programme that contributes significantly to a country's development stands to be achieved if the workforce is suitably trained and the educational system is able to continually supply skilled, innovative and entrepreneurial professionals. Empirical work is required to investigate the extent to which SMEs are adapting to the challenges posed by ICT.

## 7. REFERENCES

- [1] S.C Bhatnagar, **Information Technology Manpower: Key Issues for Developing Countries**. New Delhi: Tata McGraw-Hill., 1992.
- [2] M. Castells, **The Rise of the Network Society, Vol. 1 of The Information Age: Economy, Society and Culture**. London: Blackwell., 2000.
- [3] Department of Enterprise, Trade and Employment (Ireland) 2005. E-Business Strategy. [Online] [www.entemp.ie/enterprise/support/ebusin\\_essstrategy.htm](http://www.entemp.ie/enterprise/support/ebusin_essstrategy.htm) [Accessed 12 September 2009].
- [4] P.U.C. Dieke, 2000. Developing tourism in Africa: issues for policy consideration. [Online] <http://www.dpmf.org/developing-tourismpeter.html> [Accessed 24 September 2009].
- [5] H. El Sayed, and C. Westrup, Egypt and ICTs, How ICTs bring national initiatives, global organizations and local companies together. **Journal of Information Technology & People**, Vol.16, No. 1, 2003, pp. 76-92.
- [6] P. Foley and M. Ram, 2002. "The use of online technology by ethnic minority businesses: a comparative study of the West Midlands and UK", monograph, De Montfort University, Leicester, [Online] [www.sbs.gov.uk/content/research/EMB\\_IT.pdf](http://www.sbs.gov.uk/content/research/EMB_IT.pdf) [Accessed 12 September 2009].
- [7] Internet World Stats, 2009. Internet usage statistics, The Internet big picture World Internet Users and Population Stats [Online] <http://www.internetworldstats.com/stats.htm> [Accessed 10 February 2010].
- [8] R. Lawson, C. Alcock, J. Cooper, and L. Burgess, "Factors affecting adoption of electronic commerce technologies by SMEs: an Australian study", **Journal of Small Business and Enterprise Development**, Vol. 10, No. 3, 2003, pp. 265-276.
- [9] S.O. Migiroy, M.O. Adigun and R.M. Peters, "E-commerce adoption by tourism SME service providers with reference to World Wide Web enabling technologies" **Proceedings of the 7th Annual Conference on World Wide Web Applications**. 29-31 August 2005, Cape Town, pp. 21-32.
- [10] R. Montealegre, "A case for more case study research in the implementation of information technology in less-developed countries" **Information Technology for Development** Vol. 8, No. 1, 1999, pp. 199-207.
- [11] S. Moodley, "The challenge of e-business for the South African apparel sector" **Technovation**, Vol. 23, No. 1, 2003, pp. 557-570.
- [12] S. Pather, G. Erwin and D. Remenyi, "Measuring e-commerce effectiveness: a conceptual model" **Proceedings of South African Institute of Computer Scientists**

- and Information Technologists.** 6-8  
September 2003, pp143–152.
- [13] E.M. Rogers, **“Diffusion of Innovations”** New York: Free Press. 1995.
- [14] M. Stansfield and K. Grant, An investigation into issues influencing the use of the internet and electronic commerce among small medium sized enterprises. **Journal of Electronic Commerce Research**, Vol. 4. No. 1, 2003, pp. 15-33.
- [15] UNDP 2001. Preparing for the Global Knowledge Society, Info21, UNDP, [Online]  
[www.undp.org/info21/brochure.html](http://www.undp.org/info21/brochure.html)  
[Accessed 10 February 2009].
- [16] United Nations, 2001. E-commerce and development report 2001. [Online]  
[http://r0.unctad.org/ecommerce/docs/edr01\\_en/edr01\\_en.pdf](http://r0.unctad.org/ecommerce/docs/edr01_en/edr01_en.pdf) [Accessed 22 May 2009].
- [17] G. Walsham, **Making a World of Difference: IT in a Global Context.** John Wiley: Chichester. 2001.
- [18] J.T. Yao, “E-commerce adoption of insurance companies in New Zealand” **Journal of Electronic Commerce Research**, Vol. 5, No. 1, 2004, pp. 54-61.