Perception of Barriers to E-Commerce Adoption in SMEs in a Developed and Developing Country: A Comparison Between Australia and Indonesia

Robert C. MacGregor, University of Wollongong, Australia
Mira Kartiwi, University of Wollongong, Australia

ABSTRACT

Despite the proven potential of e-commerce in the small business sector, studies have shown that larger businesses have reaped the benefits, with SME adoption remaining relatively low by comparison. This slow growth of e-commerce adoption in SMEs has been attributed to various adoption barriers that are faced by small business owners/managers. These barriers have been well documented in numerous research studies. While these studies have gone some ways to determine the nature and role of barriers to e-commerce adoption, there is a suggestion that as most have been conducted in developed economies, their value for developing economies remains in question. This article compares the perception of barriers to e-commerce adoption in a developed and a developing economy. Two hundred forty-seven non-adopters in Australia are compared to 96 non-adopters in Indonesia. The data shows that the perception of importance of barriers to e-commerce adoption differs across the two locations.

Keywords: Australia, Barriers, Developed Country, Developing Country, E-commerce, Indonesia, Small Business, SME

INTRODUCTION

Despite the proven potential of e-commerce and the continued growth of the technology, studies (Riquelme, 2002, Magnusson, 2001; MacGregor & Vrazalic, 2005) have shown that it is the larger businesses that have reaped the benefits, with SME adoption remaining relatively low by comparison. This is particularly the case in many developing economies (Kapurubandara & Lawson, 2006). Studies over the past decade have shown that the slower...
growth of e-commerce adoption in SMEs can been attributed to various adoption barriers that are faced by small business owners/managers. These barriers have been well documented in numerous research studies (Lockett & Brown, 2006; MacGregor & Vrazalic, 2007; Al Qirim, 2007; Quayle, 2002). While most of these studies (see Beatty et al., 2001; Mehrtens et al., 2001) have been carried out in developed countries, a number of recent studies (Kapurubandara & Lawson, 2006; Kartiwi, 2006; Hermana et al., 2006) have begun to look at developing economies. The differences between developed and developing countries (such as available infrastructure, social and cultural issues) invariably leads to the conclusion that findings derived from developed countries cannot be generalised to developing countries. Indeed, recent studies (Kaynak et al., 2007; Molla & Heeks, 2007) suggest that simply transplanting findings from developed to developing countries results in a final product that is little more than conceptual without any rigorous empirical base.

The aim of this article is to compare the perception of barriers to e-commerce adoption in a developed economy (Australia) and a developing economy (Indonesia). The study is part of two separate larger studies (one conducted in Australia and the other in Indonesia) that have used an identical survey instrument. The article begins by examining the nature of SMEs and identifying features that are unique to SMEs. This is followed by an examination of features found in SMEs in developing countries, particularly those features that may effect that adoption of e-commerce. As the study involves SMEs in Indonesia and Australia, a brief overview of SMEs in those countries is provided. A discussion of barriers to e-commerce adoption based on previous research is then presented. An examination of barriers to e-commerce adoption in developing countries is then presented and a number of hypotheses are developed. A series of two-tailed t-tests is then applied to the rating of importance of barriers in Indonesia and Australia to test the hypotheses. A discussion of similarities and differences is then presented. Finally, the limitations of the study are presented and conclusions drawn.

THE NATURE OF SMES

The nature of SMEs can be understood from the perspectives of how they are formally defined and the characteristics that are unique to this sector.

Defining an SME

There are a number of definitions of what constitutes an SME. Some of these definitions are based on quantitative measures, while others employ a qualitative approach. Meredith (1994) suggests that any definition of an SME must include a quantitative component that takes into account staff levels, turnover and assets together with financial and non-financial measurements, but that the description must also include a qualitative component that reflects how the business is organised and how it operates.

The lack of a formal means of defining an SME has lead to diverse approaches by governments and other organisations in different countries. In Australia in the 1960s, the Federal Government commissioned a report from a committee known as the Wiltshire Committee. This report suggested a flexible definition of an SME as (Meredith, 1994, p. 31) “one in which one or two persons are required to make all of the critical decisions (such as finance, accounting, personnel, inventory, production, servicing, marketing and selling decisions) without the aid of internal (employed) specialists and with owners only having specific knowledge in one or two functional areas of management”. The Wiltshire Committee concluded that this definition could normally be expected to apply to the majority of enterprises in Australia with fewer than 100 employees. This recommendation has remained in use to the present day with the Australian Bureau of Statistics (ABS) defining a small business as an enterprise employing up to 99 people. A medium enterprise employs between 100 and 199 individuals and organisations with
Related Content

Benefits and Limitations of Technology in MFIs: Come to Save (CTS)
Experience from Rural Bangladesh
Abu Saleh Mohammad Musa and Mostafa Saidur Rahim Khan (2010). *Journal of Electronic Commerce in Organizations* (pp. 54-65).
[www.irma-international.org/article/benefits-limitations-technology-mfis/42982/](www.irma-international.org/article/benefits-limitations-technology-mfis/42982/)

High Availability and Data Consistency for Three-Tier Enterprise Applications
[www.irma-international.org/chapter/high-availability-data-consistency-three/12593/](www.irma-international.org/chapter/high-availability-data-consistency-three/12593/)

Hardwarezone: A Singaporean Success Story
[www.irma-international.org/article/hardwarezone-singaporean-success-story/1483/](www.irma-international.org/article/hardwarezone-singaporean-success-story/1483/)

Critical Success Factors of Web-Based E-Service: The Case of E-Insurance
[www.irma-international.org/chapter/critical-success-factors-web-based/9604/](www.irma-international.org/chapter/critical-success-factors-web-based/9604/)

New Forms of Collaboration and Information Sharing in Grocery Retailing:
The PCSO Pilot at Veropoulos
[www.irma-international.org/article/new-forms-collaboration-information-sharing/1525/](www.irma-international.org/article/new-forms-collaboration-information-sharing/1525/)