

FACTORS AFFECTING ADOPTION OF DIGITAL BUSINESS: EVIDENCE FROM AUSTRALIA

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ABSTRACT

Small and medium-size enterprises are a significant part of the Australian economy. Understanding how Small and medium-size enterprises can effectively adopt digital strategies to facilitate their growth will have positive implications for the national economy. Research has found that Small and medium-size enterprises with a high level of digital engagement are more profitable, survive longer and grow larger (Deloitte Access Economics, 2013). However, a recent research survey shows only 16% of Australian Small and medium-size enterprises with a high level of digital engagement and the vast majority of Small and medium-size enterprises are not fully engaging with digital strategies (Deloitte Access Economics, 2013). Small businesses are at risk of missing opportunities that the digital economy opens up. While there are considerable studies on small business going online in the research literature, few studies have focused on the adoption of digital business in Greater Western Sydney. This paper attempts to address this lack by examining the level of digital engagement in Small and medium-size enterprises in Greater Western Sydney using a qualitative approach. This research analyses and identifies factors affecting adoption of digital business in Small and medium-size enterprises. The findings of this research suggest that the current state of local digital businesses in Greater Western Sydney can be best viewed as little more than using emails or providing basic information and services online. The factors affecting digital business adoption include lack of understanding of relevance of digital business to their organisations, absence of digital strategies, lack of skills and perceived cost and risk of change. Most local small businesses in Greater Western Sydney appear to be slow to advance their efforts to engage in the digital economy. This research recommends that Small and medium-size enterprises in Greater Western Sydney need a proactive approach to developing effective digital strategies.

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KEYWORDS: SME, Digital Business

INTRODUCTION

Small and medium-size enterprises (SMEs) are a significant part of the Australian economy as they make up the majority of Australian businesses. In Australia the Commonwealth Scientific and Industrial Research Organisation (CSIRO) defines the SMEs business category by the number of full-time employees. This definition includes: micro enterprise have 1-4 employees, small enterprises have 5-19 employees, and medium enterprises have 20-200 employees (CSIRO, 2008). As of 2014 there are over 2 million active SMEs with a contribution of about 48% to national economy. SMEs play a vital role in the Australian economy because they are employing 70% of the Australian workforce and remain the key players in making the Australian economy more competitive in the global marketplace (Kapurubandara, Hol & Ginige, 2010). Understanding how SMEs can effectively adopt digital strategies to facilitate their growth will have positive implications for the national economy. Research has found that SMEs with a high level of digital engagement are more profitable, survive longer and grow larger (Deloitte Access Economics, 2013). However, a recent research survey shows only 16% of Australian SMEs with a high level of digital engagement and the vast majority of SMEs are not fully engaging with

digital strategies (Deloitte Access Economics, 2013). Small businesses are at risk of missing opportunities that the digital economy opens up. While there are considerable studies on small business going online in the research literature, few studies have focused on the adoption of digital business in Greater Western Sydney (GWS). This paper aims to address this lack by analysing and identifying the factors affecting adoption of digital business in SMEs in GWS using a qualitative approach.

For the purpose of this research, digital business is defined as the use of digital technologies to enable major business improvements such as enhancing customer experience, streamlining operations or creating new business models (Chaffey, 2015). Digital business is an opportunity that no organisation regardless of size should ignore. It is crucially important for small businesses to understand the potential and impact of advanced digital business as digitally engaged businesses are more likely to grow and remain competitive in the future.

The rest of the paper is organized as follows: Firstly, I give an overview of digital business adoption among SMEs through the literature review section. Then I describe the research methodology that I used to address the research problem. I then discuss the relevant issues and present the findings of this research. I conclude the paper and discuss directions for future research in the final section.

LITERATURE REVIEW

There have been a number of studies concerned with SMEs digital business adoption (Rosli & Noor Azizi, 2009; Damaskopoulos & Evgeniou, 2003; Drew, 2003; Pearson & Grandon, 2005; Jeona, Han & Lee, 2006; Molla, Heeks & Balcells, 2006; Al-Qirim, 2006; Johnston & Wright, 2004; Saffu, Walker & Hinson, 2008). These studies showed how different factors affect digital adoption amongst SMEs in different settings.

Grandon & Pearson (2004a) found that the commitment of top management, the level of IT knowledge they have, and their attitude to innovation greatly influenced the adoption of e-commerce. In a study of Korean SMEs by Jeona, Han & Lee (2006), they suggested that the CEO's knowledge of IT/e-business and positive attitudes toward innovation were one of the major determining factors of digital business adoption.

Al-Qirim (2006) indicates that business size and the necessary capital and resources appear to limit SMEs' ability to adopt digital technologies while Johnston & Wright (2004) argue that smaller size allow SMEs to be more flexible to change. Molla, Heeks & Balcells (2006) suggest that SMEs are more ready to make internal changes to processes and structures that are needed to deliver the benefits of e-commerce. The studies by Grandon & Pearson (2004b) on the adoption factors of US SMEs and Sutanonpaiboon & Pearson (2006) on e-commerce adoption of Thailand SMEs show that SMEs that are ready to adopt do have the necessary financial and technological resources to support the implementation of e-commerce.

Johnston & Wright (2004) in a study of the e-business capability of SMEs in various countries found that customer pressures are one of the most significant drivers. The reason for this is because SMEs were forced to adopt e-business in order for their system to become compatible with that of their customers. In another study by Drew (2003) of e-commerce adoption by SMEs in England, the key factors identified were customers demanding to deal on the internet, pressures from suppliers, and the need to keep up with existing competitors. However the results of this study contrast that of Ching & Ellis (2004). Ching & Ellis (2004) surveyed 84 SMEs in Hong Kong and found that pressure from customers motivated Hong Kong SMEs to adopt e-commerce, but pressure from suppliers and competitor rivalry had little impact on the adoption decision.

A study of 100 Ghana SMEs by Saffu, Walker & Hinson (2008) suggested that e-commerce adoption was higher when the business practices are compatible with the infrastructure of e-commerce. On the other

hand, Maguire, Koh & Magrys (2007) in a study of e-business adoption in SMEs, found that the lack of skilled personnel was a major barrier for the low level of e-commerce adoption in the business sectors researched. Other barriers to SMEs digital business adoption include security and privacy concerns, cost of digital business implementation and lack of digital strategy and relevant resources and skilled staff to implement digital business (MacGregor & Vrazalic, 2008, Maguire, Koh & Magrys, 2007).

METHODOLOGY

This research is based on a study of four small businesses employing people between 6 and 25 in GWS. To identify the factors affecting digital business adoption in SMEs in GWS, a qualitative case study approach is employed in this research. Drawing on a publicly available database of the SMEs located in GWS, businesses were initially approached with an invitation to participate in the study. The four businesses were selected due to its size, geographic location and their willingness to participate in the study. For this qualitative study, data was collected through face-to-face interviews of business owners or managers and unstructured observation. The topics discussed at the interview included drivers and barriers to digital business adoption and business strategy to adopt digital technology or overcome their barriers.

In-depth semi-structured interviewing of 4 business owners or managers was carried out in 2013. The semi-structured interviews lasting about 50 minutes each session were digitally recorded and transcribed. Semi-structured interviewing is a fairly flexible structure that allows some probing to be done. The researcher can ask additional follow up questions for further explanation and clarification. Semi-structured interviews increases the comparability of the data collected due to the use of a semi-structured interview guide, which helps show relationships and common reoccurring themes between the answers (Flick, 2002). In addition to semi-structured interviews, unstructured observations were used to gather additional data on participant behaviour and the workplace environment in which they operate concerning the usage of digital technologies. A research diary or field notes were used to carry out unstructured observations.

The data from the interviews and the field notes were analyzed and interpreted using categorizing, coding, and contextualization techniques to look for patterns and themes both within and across the businesses. The research presents its data analysis through a combination of the literature and themes emerging from the in-depth interviews and the unstructured observation during the interviews.

RESULTS AND DISCUSSIONS

This research reveals that adoption of digital business is rather limited in the participating organisations. The level of digital business adoption can be best viewed as using emails or providing basic information and services online according to the managers or business owners interviewed. During the interviews different aspects were often mentioned by the interviewees as having a significant impact on their ability to adopt digital business. Based on the analysis of the data, the aspects perceived as important include perceived costs and risk and benefits. Business adoption tends to be driven by benefits and restricted by perceived costs and risk of change (Chaffey, 2015). The managers or business owners interviewed were uncertain about the financial returns from investments in digital systems. This uncertainty was exacerbated by a lack of cost and benefits analysis on their investment and reasonable knowledge about digital system setup and running costs. Lack of understanding of relevance of digital business to their organisations has been identified as a major barrier by the managers interviewed. Their limited understanding of the business implications of digital business and digital business models make them reluctant to take further actions. Therefore, they often take a 'Wait and See' approach in digital business adoption for their organisations.

Security, privacy and legal issues were commonly perceived barriers. The perception of these risks resulted in limited adoption of digital business in these companies.

Lack of skilled staff and confidence in digital business adoption has also become a major issue for these companies interviewed. The current low level of digital engagement further highlights these concerns.

The four business owners and managers interviewed reported that their business has yet to adopt strategic use of digital technologies to enhance business processes. It appeared that they were unaware that competitive advantages came not from technology but from how it is integrated into business processes and practices. Digital business adoption is clearly a strategic business issue rather than a technical issue. As observed by Porter 15 years ago, 'the key question is not whether to deploy Internet technology – companies have no choice if they want to stay competitive – but how to deploy it.' (Porter, 2001). It is noted that this view still remains relevant today to many SMEs for adopting digital business. It is important for SMEs to take a strategic approach to be ready for the digital future.

CONCLUSION

SMEs are a major and important part of the Australian economy in terms of making contribution to Gross Domestic Product (GDP) and employment. However, SMEs have been slow in the uptake of digital business despite its benefits, due to various barriers. The aim of this research is to investigate the key factors affecting digital business adoption among SMEs in GWS using a qualitative approach. The data obtained from the interviews were analysed inductively. The findings of this research suggest that the current state of digital businesses adoption in SMEs in GWS can be best viewed as little more than using emails or providing basic information and services online. The factors affecting digital business adoption identified from this research include lack of understanding of benefits to their business, absence of digital strategy to bring transformative change to business, lack of skills and perceived cost and risk of change. These results are consistent with the factors identified in the previous studies presented in the literature review section. The research findings indicate that the local small businesses in GWS appear to be slow to advance their efforts to engage in the digital economy. This research recommends that SMEs in GWS need to take a proactive approach to developing effective digital strategies as companies that do not have a coherent digital business strategy with clearly defined objectives are less likely to engage more efficiently with suppliers and expand and better serve their customer base in a fast changing digital environment. Future studies could investigate further on strategic issues regarding digital adoption in SMEs. This study intended to lay the groundwork for a future research on the topic. Once the factors have been established, how to overcome barriers to digital business adoption in SMEs needs further investigation in a future study.

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BIOGRAPHY

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