## ICT Adoption Implications for SME Innovation and Augmentation

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#### **ABSTRACT**

The adoption of information communication technology (ICT) by small and medium enterprises (SMEs) plays a critical role in their development, growth, and expansion. To achieve a competitive advantage, an enterprise needs to have the resources and capabilities to operate efficiently. The fast improvement of ICT is rapidly shifting the conventional way of performance in all facets of SMEs. Today, all kinds of establishments are accepting the implementation and usage of ICT to advance administrative efficiency, outputs, and improved communication for strengthening their competitiveness. SMEs need to opt speedily for the adoption of ICT to support their strategy, performance, and development. Adopting a mixed research approach, with an exploratory sequential mixed design, the study focus is on the factors influencing ICT acceptance and adoption implications for SME augmentation. Findings reveal that SMEs face challenges in ICT adoption due to a lack of resources. Hence, there is a need for investing in advanced technology to augment SME innovation and growth through ICT adoption.

#### **KEYWORDS**

Communication, Competitiveness, Development, Enterprises, Information, Resource, Technology

#### INTRODUCTION

Information communication and technology (ICT) has received recognition and is admired because of its ability to transformation processes within the business community globally, thus becoming a contemporary tool for current business operations. ICT has changed and created connections between businesses and individuals globally. Of late, business activities globally are heavily predisposed by the application of ICT. Due to ICT, the manner in which assembly works, industry approaches, and trade and consumption patterns have changed and this affects consumer decisions. Despite the advantages of ICT within business setups, studies have shown the existence of the digital divide phenomena between SMEs and large corporations with regard to the use and implementation of ICT (Arendt, 2008).

The digital divide phenomenon that exists between SMEs compared to already existing, established large corporations regarding the use of ICT prompted the need to measure, and evaluate the impact of ICT adoption and usage by SMEs. Though a number of related studies exist globally including Western Europe, some countries in Africa (Chiware & Dick, 2008) and (Nyandoro 2014), regarding ICT and SMEs, the implications of ICT adoption remains uncovered especially in the context of Namibia. About SME growth, there are numerous factors, which link to SMEs growth, and these include managerial skills, marketing skills, communication skills, leadership skills, financial skills and technical skills (Iguna & Sazita, 2018). The creation, absorption and integration of SMEs within the mainstream of the economy is critical for a developing nation such as Namibia where there is a

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known inequality challenge in the distribution of wealth among the well-offs and the less privileged, together with the challenge of joblessness among the citizens (The Villager, 2018). For this reason, governments around the globe invest more of their time and financial budgets in improving the SMEs segment to foster the country's developmental agendas (Travica, 2002). SMEs contribute on average 12 percent annually to the national growth and the development of the economy. In a study conducted by the Bank of Namibia (2004), the official figures indicated that a projected 33 700 SMEs in Namibia have created opportunities for locals to secure jobs and to pay salaries to an average 160 000 citizens, and this threshold is an estimated one third of the national labour force. Thus, SME sector is one of important constituent of the economy as they help to reduce the inequalities. Moreover, SMEs add directly and often significantly to aggregate savings and investment, and they are involved in the development of appropriate technology. It is an undisputed fact that the presence of ICTs within an enterprise moves telecommunications and the Internet forward thereby driving the rate of ICT adoption. ICT may also aid to bring a platform for discussions and solution-oriented approaches that advocate for feedback on a win-win outcome.

The Namibian Government's Vision 2030 stipulates that by 2030, Namibia should be a knowledge-based economy and the Government of the Republic of Namibia (GRN) recognises the desire to be part of an international information culture and the significant part of information and communication (ICT) in the national expansion and growth of the country (Republic of Namibia, 2009). In pursuit of the order of promoting ICT nationally for industrial and economic growth, the GRN formulated the Information Technology Policy in 2008 and implemented it in 2009. The purpose of the policy is to simplify and enable the expansion and progression of ICT within Namibia for growing the country, industrialisation, indigence, equivalent prospects and provincial organisation (Republic of Namibia, 2009). According to Hallberg (2000), the SMEs segment is recognised as playing a critical part in the development of the economy, a reduction of poverty and the creation of employment in developing economies. Within the Namibian ICT policy, the GRN acknowledges the recognition of entrepreneurship and SMEs as vital providers to cost-effective expansion, progression and the establishment of employment opportunities within the nation (Republic of Namibia, 2009). Despite their contribution to national economies and the support they receive from the national governments, the effectiveness of SMEs reduces due to digital divide that exists between SMEs and large corporations concerning the use of ICT (Arendt, 2008). However, SMEs are not capable of gaining prospective rewards of ICT as bigger businesses are inclined to capitalise on additional resources and the integration of ICT in more forward-thinking methods (Parida, Johansson, Ylinenpää & Braunerhjelm Parida et al., 2010). Iguna & Sazita (2018) have identified ICT skills as "technical skills" of which the technology change poses a big challenge to the growth of SMEs in Namibia, as most of the enterprises are not able to adopt new technology due to its high initial and installation costs. SMEs also lack strategic positioning to compete with large enterprises due to lack of ICTs adoption (Ongori, 2008). According to Rufai (2014), the impact of communication technologies on the local economy seems to be more prominent and significant concerning the performance of firms operating in the affluent districts compared to the performance of firms operating in disadvantaged districts. Further, ICT has an impact on the improvement of external and internal communication and for best performances, it is important to align ICT investments with internal capabilities and organisational processes (Tarutė & Gatautis, 2014). However, the systems theory posits that a system creation and determination is by interactions between ICT and other organisational resources (Nevo & Wade, 2010). The diffusion of innovations theory which is a reflection of the "technology acceptance model" deals with the factors affecting the diffusion of innovations and predicting the attitude of potential users towards a new technology by focusing on individual perceptions (Olise, Anigbogu, Edoko & Okoli, 2014). Therefore, adopting a mixed research approach, with an exploratory sequential mixed design, based on the diffusion of innovation theory (Rogers, 1995; 2003), the research examines the implication of ICT adoption to augment SMEs growth in Windhoek, the major economic hub and host to large number of SMEs in Namibia.

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