# Inhibitors to Internet Use by Sub-Saharan African SMEs

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## INTRODUCTION

The Internet is a global network of interconnected computers. Increasingly, the Internet is being used to enhance business operations by both small and medium-sized enterprises (SMEs) and large organizations around the world (Bunker and MacGregor, 2002; Turban et al., 2010; Ifinedo, 2012). The Internet when used to facilitate e-commerce and e-business offers several benefits for the adopting organizations and an even nations (Wade et al., 2004; Turban et al., 2010; Weisberg et al., 2011; Awa et al. 2011; Ofose, 2013; Azeez, 2013; Aminu; 2013). Such benefits include the following: 1) reducing distance barrier, 2) the development of new products and services, 3) opening direct links between customer and suppliers, 4) enhancing communication efficiency. In brief, the Internet permits the emergence of new business models including business to business (B2B) and business to consumer (B2C).

Relevant literature has revealed that the diffusion of the Internet in Sub-Sahara Africa (SSA) is the lowest in the world (ITU, 2013). Accordingly, the use of such technologies by both large and SMEs on the African continent is marginal, to say the least (African e-Index, 2006; Ongori, 2009; Ifinedo, 2006; EIU, 2012). A prior report showed that the whole of Africa has only 1% of the total international Internet bandwidth (UNCTAD, 2005). The statistic has shown some improvement. According to Internetworldstats (2013), Africa's Internet usage is about 7% of the world's data. McKinsey Global Institute (2013) 16% of the continent's one billion people are online. It is to be expected that the population and businesses in SSA because of such poor connectivity and usage data will be unable to fully reap the benefits of such technology (Ifinedo, 2005; Awa et al., 2011; Adekunle & Tella, 2008; Aminu, 2013; Okechi & Kepeghom, 2013; Aminu, 2013). Against such unfavorable situations, it would seem reasonable for research efforts to uncover why such unfavorable conditions prevail in the region. Sadly, very few studies exist that have investigated such issues. Little is known about the perceptions of the Internet use or the factors inhibiting its spread among SMEs in SSA. More empirical data from the region may be beneficial to policy makers and academic researchers.

To fill this gap in the relevant literature, this article aims at adding to knowledge by presenting a summary of the findings of a preliminary study designed to investigate the perceptions of the Internet use as well as barriers confronting SMEs in SSA with regard to adopting the Internet in their operations. This study used SMEs in Nigeria, a SSA country. The country was chosen for illustration proposes as it is the most populous country in Africa and has favorable indicators for the use of information and communication technologies (ICT) and related technologies compared to other SSA countries (Ifinedo, 2005). It is worth noting that Ojukwu (2006), Olatokun and Bankole (2011) and Apulu and Ige (2011) have discussed use of ICT by Nigerian SMEs and other researchers (de Klerk & Kroon, 2005; Saffu et al., 2007; Ongori, 2009; Olatokun & Kebonye, 2010; Awa et al., 2011; Aminu, 2013; Oreku et al., 2013) had also offered insights from other parts of SSA. It is hoped that this present study will complement these previous research that focused on SMEs' use of emerging technologies such as the Internet in a developing part of the world.

# BACKGROUND

# SMEs and Economies

Small and medium size enterprises (SMEs) can be described in several ways, for example, the European Parliament's definition of SMEs refers to a business

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with up to 250 employees; de Klerk and Kroon (2005) writing from the perspectives of the Republic of South Africa divided SMEs into three main subcategories: micro (< 5 people), small (between 5-50 people) and medium-sized (51-200 people). In the context of the specific country i.e. Nigeria used in this study, Udechukwu (2003) noted that SMEs in Nigeria are described by the information provided in Table 1.

In general SMEs are characterized by informal planning, strong owner's influence, lack of specialists, small management teams, heavy reliance on few customers, and limited knowledge, amongst others (Bunker & MacGregor, 2002; Ifinedo, 2006, 2011; Awa et al., 2011; Aminu, 2013; Oreku, et al., 2013). It is generally accepted that SMEs are the engine of growth of all economies: developed or developing (Bunker & MacGregor, 2002; Ongori, 2009; Ifinedo, 2011), including those in Africa (McKinsey Global Institute, 2013). SMEs in Nigeria provide employment for the majority of country's citizens; they also serve as avenues for acquisition of entrepreneurial skills and managerial competencies needed for socio-economic development (African e-Index, 2006; Apulu & Ige, 2011). Ojukwu (2006) noted that 97% of all businesses in Nigeria employ less than 100 employees, and the same holds for many African countries (Ongori, 2009; Olatokun & Kebonye, 2010).

SMEs in developed parts of the world have been able to use ICT products such as the Internet in establishing e-commerce and e-business initiatives (e.g., Bunker & MacGregor, 2002; Wade et al., 2004; Turban et al., 2010) and have subsequently benefited from such engagements. On the contrary, little or no progress has been made on such fronts in many developing countries, including SSA. A variety of reasons,

## *Table 1. Definition of SMEs in one SSA country: Nigeria*

A micro enterprise is one whose labor size does not exceed 10 employees or whose total cost (including working capital but excluding land cost) is not more than 1,500,000 naira (N1).

A small-scale enterprise is one whose labor size between 11 and 100 employees; its working capital total excluding cost of land is N50 million.

Medium scale enterprises labor size exceeds 100 employees but is not more than 300 employees; its total cost (including working capital but excluding cost of land) lies between N50 million and N200 million. including inadequate know-how, poor infrastructure, lack of resources, among others have been identified as factors militating against SSA's progress in that regard (Ojo, 1996; Okoli, 2003; Ojukwu, 2006; Ifinedo, 2005, 2006; Ongori, 2009; Olatokun & Kebonye, 2010; Apulu & Ige, 2011; Awa et al., 2011; Aminu, 2013; Oreku et al., 2013).

### SSA and Internet Commerce

Africa, with its population of slightly more than 1 billion people, is the poorest continent in the world (World Bank, 2013). In terms of geography, Africa tends to be described as being comprised of two regions - North Africa and SSA. The northern part is comparable to the Middle East economically and culturally (Ifinedo, 2005). Further, South Africa (also known as the Republic of South Africa [RSA]) tends to be excluded from the rest of SSA because of its relatively high socio-economic indicators (World Bank, 2013). The conditions in SSA are different from those in the excluded regions, and the region of SSA typifies perceptions of Africa more than do the excluded regions. According to the latest World Bank (2013) reports, Africa continues to be the only continent with worsening socio-economic indicators. In particular, SSA lags behind on the adoption and use of ICT products such as the Internet (African e-Index, 2006; EIU, 2012; Internetworldstats, 2013). Africa has the lowest diffusion rates for ICT products (e.g., computers and telephones) (UNCTAD, 2005; ITU, 2013; McKinsey Global Institute, 2013). The latest ITU (2013) report showed that Internet use per 1,000 people in Africa is the lowest in the world. Past research has shown that Internet use in Nigerian businesses and other organizations is low (Osuagwu, 2003; Oyelaran-Oyeyinka & Lal, 2006; Ofose, 2013; Azeez, 2013).

When ICT products are lacking, it is not surprising that Internet commerce (also known as e-commerce) is relatively low on the African continent compared to the rest of the world (EIU, 2012; Gateway, 2003; UNCTAD, 2005; Ifinedo, 2005, 2006; African e-Index, 2006; EIU, 2012; McKinsey Global Institute, 2013). Reports by Gateway (2003) states that "E-commerce is concentrated in South Africa and Egypt [regions not considered in this article], while B2B [business-tobusiness] outside South Africa remains negligible. As noted above, few have investigated why the penetration

<sup>&</sup>lt;sup>1</sup>The exchange rate in 2012/2013 is N160 = 1 US dollar.

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