Chapter 4.2

A Case Study of Information Technology Education and Economic Development in Rural Nigeria

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ABSTRACT

This essay presents a case study of Information Technology (IT) education as a contributor to economic and human development in rural Nigeria. The case of Summit Computers suggests that for developing countries to benefit from advances in IT, the following factors are of great importance and can be enhanced by IT education initiatives: convenience, affordability, emphasis on participation and empowerment of local users, encouragement of entrepreneurship, and building awareness among potential users. Additionally, careful attention should be given to how IT training can meet local employment and other needs are important factors in rural communities in developing countries such as Nigeria.

INTRODUCTION

It is widely recognized that IT has great potential to increase efficiency and productivity, thus providing a positive force for economic growth in developing countries (UNDP, 2008). Often, rural areas present some of the greatest challenges for economic and human development in general, and for the extension of IT in particular (Tiwari, 2008; Ramirez, 2007). This essay presents a case study of Information Technology (IT) education as a contributor to economic and human development in rural Nigeria. The case of Summit Computers, in rural Osun State, Nigeria, summarized below, suggests that for rural areas in developing countries to benefit from advances in IT, a number of factors of great importance can be enhanced by IT education initiatives. These factors include convenience and affordability of IT, emphasis on participation and empowerment of local users, encouragement of entrepreneurship, and awareness building and skill development of potential users. Additionally, the case emphasizes the need for careful attention to the relationship of IT training to local employment in rural communities in developing countries such as Nigeria.

Many scholars have investigated how IT can contribute to economic and human development in the developing world (UNDP, 2008). Far fewer have focused on how to provide IT solutions to socio-economic development problems in rural areas (Richards, 2004; Avgerou, 1998; Kuriyan, Ray, & Toyama, 2008; Madon, 2000; Hollifield & Donnermeyer, 2003). Even fewer have discussed the role of empowerment in this context (Dawson & Newman 2002; Strover, Chapman, & Waters 2004). Most scholars emphasize that information technologies is crucial in the efforts of rural communities to attract and retain business and adapt to the new realities of a globalized world economy. For example, some African universities, such the University of Botswana, have focused on developing eLearning programs as a solution to educating both urban and rural populations in order to achieve an educated population and workforce that is digitally literate and prepared for a global economy (Ulys et al, 2004). Finally, the issue of IT education in rural areas of developing countries has received little attention from researchers, who have focused more on IT content and access to IT infrastructure (Grabill, 2003; O'Neil, 2002; Warschauer, 2003).

While the use of information and communication technology (ICT) is now worldwide, it is far from evenly distributed across the globe (WDI, 2008). The digital divide is not only between western industrialized countries and developing countries, but is present within many countries such as Nigeria, between rural and urban dwellers, and even within areas in urban centers (Mulama, 2009; Comfort et. al., 2003; Kvasny & Keil, 2002; Kvasny & Truex, 2001). The divide within countries between educated, employed, successful urban dwellers and the rest of the population can create tension and a "culture of discontent" that governments and other policy makers find difficult to ameliorate (Abraham 2009).

Many organizations seek to create and support local entities aimed at making ICT more accessible, for applications ranging from business to consumer to citizen (Roman & Colle, 2003). In seeking to explain the speed and pattern of Internet technology adoption, scholars have pointed to a decline in the importance of having a high proportion of English speakers, noting that economic and social factors are now the keys to understanding Internet technology diffusion. A cross-country study involving 21 countries found that both economic ability to access the Internet, and social factors including human capital/literacy, political stability, urbanization, and usage of other electronic media were important in explaining diffusion of Internet technology (Liu and San, 2006). Other research that has focused on efforts to successfully bring IT access to rural locations has also identified a number of relevant social and economic factors, including participation by local people in the design of such projects (Puri and Sahay, 2007).

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