

## Chapter 7.3

# A Disconnect in Stakeholders' Perceptions from Emerging Realities of Teledensity Growth in Africa's Least Developed Countries

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### ABSTRACT

With the dynamic and meteoric rise in teledensity diffusion across Sub Saharan Africa, one would expect a departure in the perceptions of stakeholders as they relate to the Bernt and Weiss framework that identifies organizational, financial, technological, and geographical factors as the key impediments to teledensity growth. The findings of this research show that there is disconnect between current happenings and perception of stakeholders. Specifically, there is no change

in stakeholders' perceptions with respect to the framework mentioned above. However, historical and recent teledensity data from Africa's Least Developed Countries illustrate that the model is inconsistent with the emerging realities in these countries, and that it may be getting obsolete. This leads us to conjecture that in this new dispensation, there may be some emerging factors, issues, constraints, and opportunities that may be of greater importance to understanding telecommunications capabilities in these countries and the world at large.

## INTRODUCTION

Recent world growth in network infrastructure and tele-accessibility reflects the important role telecommunications plays in social and economic growth. The global diffusion of mobile Information and Communication Technologies (ICTs) has been unprecedented in the past three to four years, expanding from fifty million to over one billion by the end of 2002 (UNCTAD, 2002; ITU, 2002). This has especially been the case in the least developed countries (LDCs) where, for decades, consumers have experienced limited access to ICTs for a myriad of reasons (de Vreede et al., 1998; Meso and Duncan, 2000; ITU, 2002). In these countries, mobile ICTs have increased telephone access by a factor of above six in less than three years and by the end of 2001, 28 out of 49 LDCs had more mobile than fixed subscribers (UNCTAD, 2002; ITU, 2002).

It should be pointed out that fixed-line teledensity in most of Sub-Saharan Africa remains below one (Uneca, 2003). Conversely, the growth rate in mobile telephony in Africa has been accelerating and was the highest of all continents in 2001 (UNECA, 2003). Africa now has more than 25 million mobile ICT users (see appendix 1). By the end of 2001, 28 of Africa's 54 countries had more mobile-phone than fixed-line subscribers, a higher percentage than any other continent (ITU, 2002; Mbarika et al., 2002c). Not only is mobile telephony quickly overcoming the diffusion gaps endeared by fixed line phone networks, but that the rising mobile phone teledensities are showing positive signs of influence on the indices of economic and social development (UNECA, 2003).

Teledensity remains a key factor of interest in the developmental potential of Sub-Saharan Africa. First, the telephone infrastructure is the core backbone upon which the region can implement and develop information-age services such as e-commerce, m-commerce, telemedicine and e-government. Second, it enables and empowers vast numbers of users to access telephone and

in Internet-based communication services such as email, web browsing, instant messaging, and text messaging among others. Adequate communications infrastructure enables citizens to access the global resource pools of knowledge, information, finances and markets that empower them to effectively engage in capacity building, income generation and skills-acquisition activities beneficial to the local communities in which they belong. Third, enhanced teledensity provides the means by which many more citizens can become actively involved in the governance process and contribute effectively to governance issues of the day. As such, enhanced teledensity has the potential for leveraging the quality of governance, long acknowledged as lacking or being very poor in most counties of this region (World Bank, UNDP, etc.). Fourth, growing teledensity holds the promise of enabling Sub-Saharan countries to effectively and significantly participate in the global financial, securities, and commodities markets. Presently, participation in these highly digitized markets requires extensive levels of high-bandwidth teledensity.

While there has been a growing interest in researching ICTs and teledensity in Sub-Saharan Africa, most of the published research has concentrated on the economics and regulation of telecommunications (Alleman et al., 1994; Kenny, 2000; Wallsten, 2001; Mureithi, 2003; Makhaya and Robberts, 2003; McCormick, 2003; Cogburn, 2003; Wilson and Wong, 2003; Kibati and Kraijit, 1999). Few studies have studied ICTs in Sub-Saharan areas from the context of management information systems (Adam and Wood, 1999; Adam, 1996; Mbarika et al, 2002; Darley, 2001; Kenny, 2000; Nidumolu, 1996; de Vreede et al., 1998). Even among these, most have focused on the diffusion of Internet technologies and have largely adopted a quantitative analysis approach to measuring the extent of diffusion and the impacts of these diffusions on economic indices (examples Mbarika et al., 2002; Darley, 2001; Kenny, 2000). Studies on stakeholder perceptions remain few.

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