

# ICT – Penetration and Trends in the Third World

## The Case of Uganda

Richard Adongu

*Uganda Telecom*

*Network Planning Department  
P.O. Box 7171, Kampala, Uganda*

[adongurichard@gmail.com](mailto:adongurichard@gmail.com) or [Richard.adongu@utl.co.ug](mailto:Richard.adongu@utl.co.ug)

### *Abstract*

Global explosion of Internet and Mobile Communications have made knowledge about ICT technologies and their developments ubiquitous. It is now ICT technologies and services adoption, levels of penetration, ability to buy and roll out infrastructure, skill levels, regulation or government controls that separate the developed and developing world.

This paper gives a comparative overview of ICT penetration and trends in the world with specific reference to Uganda; an example of a developing country. Demographic data, ICT licensing, types of network/service providers, available technologies, and mobile, fixed, internet, broadband and other emerging mobile applications penetration trends, broadcasting (Radio and TV) are analyzed and discussed.

After analyzing ICT penetration trends, the paper gives the factors responsible, and goes to propose actions that could be used to improve ICT penetration.

**Keywords** — ICT – Information and Communications Technologies, Penetration; Trends.



**Richard ADONGU** is currently working as a Network Planning Engineer with Uganda Telecom, the 1<sup>st</sup> National Telecom Operator (NTO), in Uganda. He has over twenty years' work experience in the ICT and telecommunications industry. He started with Uganda Posts and Telecommunications Corporation (1989), later transitioning to one of its successors; Uganda Telecom in 1998. His specialty and areas of interest include; project management, planning, development and management of ICT systems, in particular telecom and data switching networks. He piloted the introduction of several technologies like, ISDN, Leased line/Frame relay, xDSL, NGN, xPON and WiMAX among others, in Uganda. As a Project Manager, he oversaw the development and expansion of these networks.

**Richard** has Master of Information Technology (2010) and Bachelor of Science in Physics and Maths (1989), degrees and a Post Graduate Diploma in Computer Science (1998) from Makerere University in Kampala Uganda; and a Chartered Diploma in Management from the Chartered Management Institute, UK (2006).