

**THE ROLE OF MOBILE PHONE TECHNOLOGY IN THE EMPOWERMENT OF
RURAL COMMUNITIES IN WESTERN KENYA**

BY

JUMA, IDDI WEBUKHA

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**THE ROLE OF MOBILE PHONE TECHNOLOGY IN THE EMPOWERMENT
OF RURAL COMMUNITIES IN WESTERN KENYA**

IDDI WEB UKHA JUMA

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DECLARATIONS

Declaration by the Candidate

This research is my original work and has not been presented for a degree in any other university. No part of this may be reproduced without the permission of the author and/or Moi University.

Candidate: Iddi Webukha Juma
Reg. No.: IS/DP/07/10
School of Information Sciences
Moi University, Eldoret, Kenya
Signature _____ Date _____

Declaration by Supervisors

This thesis has been submitted for examination with our approval as the university supervisors.

Name of Supervisor: Dr. D. Odero
Department of Library, Records Management and Information
Studies
School of Information Sciences
Moi University, Eldoret, Kenya
Signature _____ Date _____

Name of Supervisor: Prof. D. Gichoya
Department of Information Technology
School of Information Sciences
Moi University, Eldoret, Kenya
Signature _____ Date _____

DEDICATION

I dedicate this thesis to my mother Rukiya Isalu and my father the late Juma Shitseswa as well as to my family members: Warda, Razia, Farid, Juma, Leyla, Naima, Nabil and Kawthar.

ABSTRACT

Mobile phone technology is one of the greatest developments of the modern society. The technology has immense potential of turning around the lives of people and communities all over the world. However, despite the rural communities constituting 80% of Kenya's population and hence being the customer base of mobile communication in the country, their needs have not been given adequate attention by mobile industry players. This is evidenced by the more sophisticated mobile network installations and support services concentrated in urban centres. This study aimed at investigating the contribution that the use of mobile phone technology had made towards enabling rural communities improve their lives and explore ways of maximising its development and application for a more empowered society. The objectives of the study were to: examine the extent to which current trends and developments in the mobile phone technology met the needs of rural communities; investigate the modes of empowerment of rural communities by mobile phone technology; identify key factors affecting access, development and use of mobile phone technology; determine the untapped potential of mobile phone technology that could spur higher levels of information sharing and empowerment and; explore measures to foster development and more innovative application of mobile phone technology. The study's conceptual framework was based on a model drawn mainly from the knowledge-gap hypothesis and the media-system dependency theories both viewed in the context of Schramm's model of communication. The study adopted a descriptive case study design using both qualitative and quantitative data collection techniques including interviews, questionnaires and documentary analysis. Based on the Kenya 2009 Population and Housing Census, a multistage sample of 400 rural households from selected districts of Western Province of Kenya was selected using randomly generated Global Positioning System (GPS) coordinates via the Google Earth Satellite System as the key respondents. A systematic random sample of 90 mobile phone dealers within the Province and a census of the managers of the provincial customer care shops of the 4 service providers (Safaricom, Airtel, Orange and Yu) were selected as informants. Descriptive and inferential data analysis techniques were used. Data presentation and interpretation was by descriptive methods using both qualitative and quantitative features including tables, charts, bars and graphs. The study found that the positive trends responsible for a 72% satisfaction rate in mobile phone technology were efficiency and cost effectiveness mainly associated with the internet, m-banking and money transfer, increased multimedia functionalities as well as reducing cost of airtime. The negative trends were increasing mobile crime, negative behaviour change and poor infrastructure. The modes of information sharing and empowerment which helped to improve the lives of people were communication, entertainment, internet and social media, mobile banking and money transfer, education and research. Factors affecting access, development and use of mobile phone technology were network failure, electrical power and charging problems, maintenance issues, e-waste disposal problems, long term cost of phones and airtime, insufficient user education, lack of proper user control guidelines, and theft. Unexploited areas that could spur more innovative and higher levels of information sharing and empowerment were greater use of mobile phone technology in human security and safety, integrating more computing and research functionalities in phones, integrating money transfer on the handsets, production of remote controlled handsets and increasing local content. The study concluded that, the rural communities had not attained maximum empowerment due to inadequate support given to them by mobile phone industry players including researchers who had failed to generate substantive knowledge resources to solve ensuing problems. The study recommends that users should form support groups to gain bargaining powers to demand for service as well as invest more in literacy initiatives to boost their knowledge and capacity to use the technology. Mobile industry players should indiscriminately conduct more user needs assessments especially in the rural areas to ensure that their products and services are more responsive and also develop communication infrastructure and more relevant services in the areas. The Government should lower mobile phone related taxes to reduce the cost of communication, invest more in rural electrification and research as well as provide incentives to promote the use of mobile technology in rural areas to foster empowerment and accelerate development.

