

EXPLORATION OF THE UTILITY OF MOBILE TECHNOLOGY IN
MONITORING AND EVALUATION SYSTEMS IN THE KENYA HEALTH
SECTOR: A CASE OF AMREF MOBILE JAMII AFYA LINK IN MAKUENI
COUNTY, KENYA

by

Belinda J.N. Muya

A thesis presented to the School of Human and Social Sciences

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APPROVAL

EXPLORATION OF THE UTILITY OF MOBILE TECHNOLOGY IN
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In accordance with Daystar University policies, this thesis is accepted in partial
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DECLARATION

EXPLORATION OF THE UTILITY OF MOBILE TECHNOLOGY IN MONITORING AND
EVALUATION SYSTEMS IN THE KENYA HEALTH SECTOR: A CASE OF AMREF
MOBILE JAMII AFYA LINK IN MAKUENI COUNTY, KENYA

I declare that this thesis is my original work and has not been submitted to any other college or
university for academic credit.

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Signed: _____

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LIST OF ABBREVIATIONS AND ACRONYMS

Amref	Amref Health Africa
AVNS	Amref Health Africa Virtual Nursing School
CBHIS	Community Based Health Information System
CBHMIS	Community Based Health Management Information Systems
CHEW	Community Health Extension Workers
CHU	Community Health Units
CHV	Community Health Volunteer
CHS	Community Health Strategy
CIDP	County Integrated Development Plan
CU	Community units
DAAD	German Academic Exchange Service
DHIS2	District Health Information Software
EHealth	Electronic health
FGD	Focus group discussion
FTP	File Transfer Protocol
GIS	Geographic Information System
GoK	Government of Kenya
GPRS	General Packet Radio Service
GPS	Global positioning system
HELP	Health Enablement and Learning Platform
HIMS	Health Information Management System
HIS	Health Information System

HIV	Human Immunodeficiency Virus
ICT	Information Communication Technology
KHSSP	Kenya Health Strategic Plan
KIHBS	Kenya Integrated and Household Budget Survey
M&E	Monitoring and Evaluation
MES	Monitoring and evaluation system
mHealth	Mobile health
MIS	Management information system
M-Jali	Mobile-Jamii Afya Link
MoH	Ministry of Health
NACOSTI	National Commission for Science, Technology, and Innovation
NGO	Non-Governmental Organization
PHO	Public Health Officer
SMS	Short Message Service
SPSS	Statistical Package for the Social Sciences
SQL	Structured Query Language
USAID	United States Agency for International Development
WHO	World Health Organization

ABSTRACT

This study explored the utility of mobile technologies in the Kenyan health Monitoring and Evaluation (M&E) system, focusing on m-Jali by Amref Health Africa (Amref) in Kenya to identify the application's competitive advantage and best practices for replication. It was anchored on the system theory, and adopted a descriptive research design. The study targeted seven (7) community units (CUs) and connected health facilities under m-Jali implementation in Makueni County. A total of 128 respondents were sampled. These included Community Health Volunteers (CHVs) and officials from the Ministry of health (MoH). Data was collected using questionnaires and interview guides and analyzed using the Statistical Package for Social Sciences (SPSS), version 23.0. According to the findings, there is a need for efficiency and convenience as these are the principal drivers for the adoption of mobile technologies in health M&E. The findings also showed that 20% of health M&E systems' effectiveness and efficiency can be explained by the utility of m-Jali and similar mobile technologies as indicated by $R^2 = 0.198$. Additionally, the findings revealed that most users experienced challenges in using m-Jali, which made them stop using it. The study concluded that there is inadequate financing to build, implement, and maintain adequate health M&E mobile technologies. Another conclusion was that there is lack of ownership and impetus by the MoH in the development of mobile technologies for M&E. Therefore, the study recommends that MoH invests financially in mobile technologies for M&E and takes strategic ownership of the process to design, implement, and maintain the technologies. Further, the study recommends a review of the Kenyan health M&E system to accommodate mobile-based approaches.