



# **Sudanese microfinance providers mobile banking adoption intention**

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**Third International Diaspora Conference,  
24-25 July, London, UK**

# Research Background

**Microfinance** as expressed in the IPRSP is one of the tools which is given due priority by the government of Sudan to address the challenges of high poverty (poverty rate is 46.5%) and unemployment (16.8%) particularly in marginalized and conflict areas (Mapping 2012, Impact Evaluation 2013).

The Sudanese experience showed that microfinance has a positive impact on income generating activities, poverty reduction, women's empowerment, and better access to education and health services.

# Research Background

However late statistics showed that the total number of clients is 970,000 i.e. 8% coverage of the total potential clients estimated at 7.2 million (Ibrahim, 2014). This is because microfinance in Sudan is hampered by the challenges of high rural operations costs, lacking in access to public infrastructure and services, need for innovative and diversified products, profitability, stability, limited management capacity of microfinance services providers (MFPs), microfinance in Sudan is still an urban and semi-urban phenomenon- more than half of bank branches are concentrated in the regions of Khartoum State and Central States

# Research Background

While microfinance in Sudan is still in its infancy stage and not accessible to more than 6 million potential clients, mobile estimated penetration rate (2015) is 77% (BuddeComm 2015). Mobile technology was successfully used in other countries of similar situation to Sudan (e.g. MPESA in Kenya and WIZIT in South Africa.)

M-banking has the potential to greatly accelerate financial inclusion by enabling microfinance providers, and mobile network operators to reach large numbers of previously un-served people. Based on this many studies suggest m-banking as a solution to microfinance problems (Situational Analysis , 2006 , Mapping 2012, Impact Evaluation 2013)

# Problems Facing M Bank

## Implementation and Adaption

With all opportunities that m-banking has to offer the Sudanese MF sector, there are a number of challenges that it would first have to overcome:

1. Technology could be useful to expand outreach, but for this to be successful, strong institutions and reliable ICT infrastructure have to be in place.
2. Existing model cannot provide required range of financial services needed by poor. Thus, there is a need for business model innovation which can reach microfinance customers with a broader range of financial products at lower costs.
3. Understanding the mechanism that drives Sudanese MF clients intention to use m-banking services is of vital importance when developing m-banking services.
4. Providing m-banking service requires collaboration between different stakeholders from different sectors: financial, MNOs, regulatory etc.
5. Enabling regulatory environment is essential factor for the success of m-banking in Sudan.

# Significance of the Study

The findings from this research work are expected to contribute to the adoption literature in the area of mobile banking and in the Sudan and developing nations. More specifically, to bridge the gap that exists for Sudan by serving as a starting point for further research. The findings from this research can be used by microfinance providers to improve mobile banking facilities and to identify those factors that can either contribute to the failure or success of the mobile banking services and this could be further used for decision making. To academia, the research would serve as a source of academic reference for further studies

# Literature Review

## Microfinance:

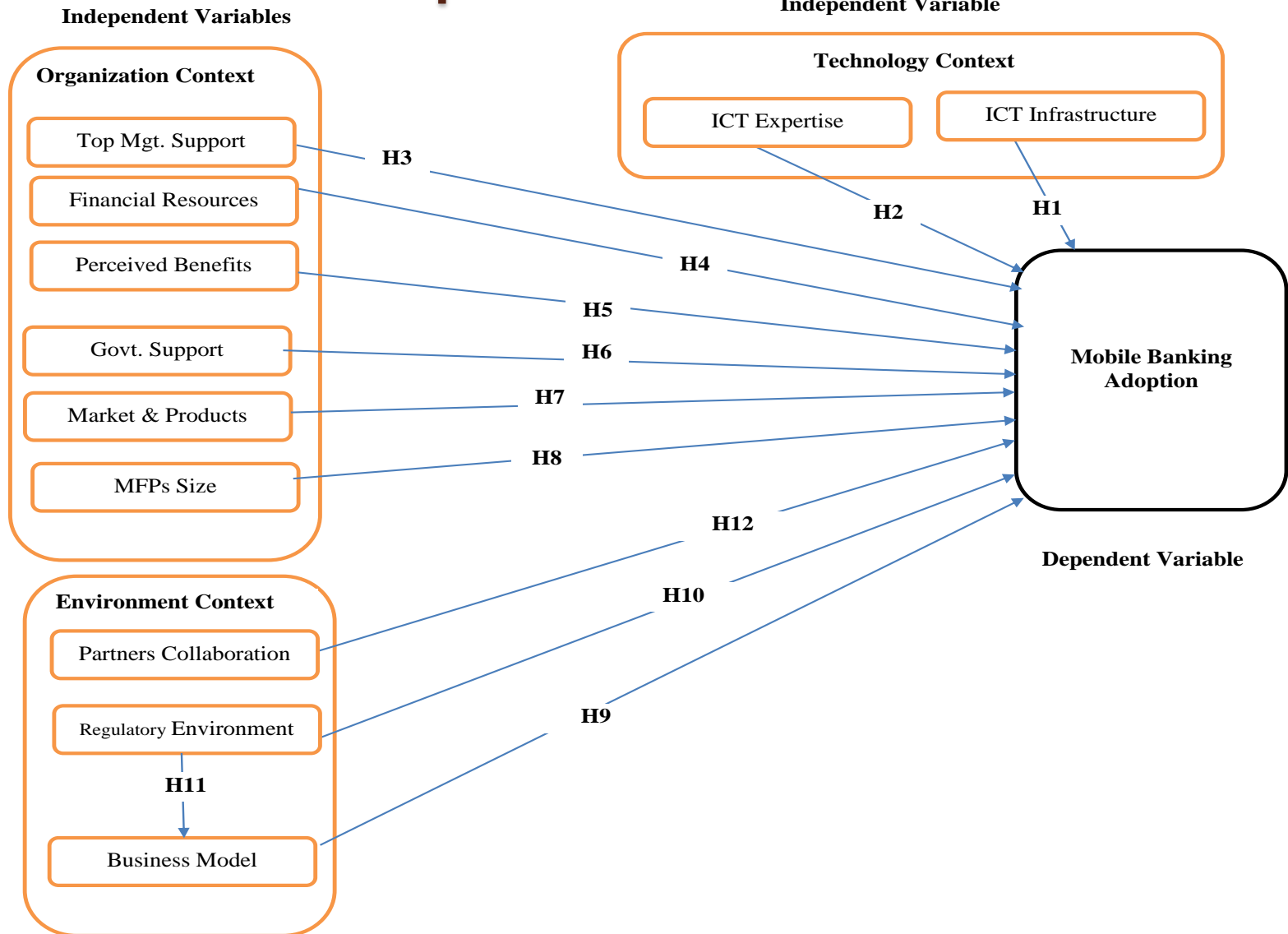
1. Hartarska et al. (2013) describe microfinance as the financial service supplied for poor people and micro-scaled companies. Their aim is to increase the outreach and to keep microfinance institutions MFIs as sustainable.
2. The Sudanese experience showed that microfinance has a positive impact on income generating activities, women's empowerment, improvement in education, access to financial services, poverty alleviation, and better health services. [Amira (2013, Impact Evaluation (2013) , Maruod et al (2014)]
3. MFIs face two important barriers achieving scale: operational inefficiencies and high operational costs, both of which contributed to keeping interest rate high. (Yousif et al, (2013)
4. With the appearance and development of m-banking come the promises for many MFIs to address these barriers.

## **Research Framework and Methodology**

The literature review revealed that the Technology-organization-Environment (TOE) can guide the study to investigate factors influencing intention to use M-banking by microfinance customers and implementation by microfinance services providers in Sudan. The proposed framework is depicted in figure 1 below.



# Proposed Framework



# Main Findings

- Mobile banking promises to increase the efficiency and outreach of microfinance services in developing countries. Mobile banking could mean deeper outreach to poorer and more rural people, efficiency in operation that allows for lowering the cost of loans, and higher repayment rates. To assess the determinants that influence the adoption of mobile banking by MFPs in Sudan, a modified model based on technology-organization-environment (TOE) framework was developed. A mixed method approach that combines both qualitative and quantitative approaches is used. Data collected from 30 MFPs are used to test the related hypotheses. The empirical results are based on Partial Least Squares (PLS) analysis. The findings presented in this paper reveal that ICT infrastructure, top management, market and products, MFP size, effect of regulation on the business model , and partners' collaboration are the major factors affecting adoption of m-banking by MFPs.

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# Conclusion and Implications

The significance of this study includes the fact that its findings could provide guidance to policy-makers, donor agencies and other development partners as a guide in the formulation and direction of policies aimed at financial inclusion. In addition, the results of this research are significant to the MFIs, banks, MNOs in Sudan. It contributes greatly to the understanding of how to deliver financial services for microfinance clients in Sudan using m-banking. Besides, the qualitative approach through interviewing the experts concerning M-banking adaption from different related sectors that must be involved in adapting M-banking in Sudanese microfinance has been implementing. By doing so the study has filled the gaps in past studies in this research area. In this note, using PLS as new phenomena tool to analyses the primary data of quantitative approach providers' data has added mew empirical value to the literature in this research area.

# Contribution

- Furthermore, the stud findings are expected to contribute to the adoption literature in the area of M-banking in the Sudan and developing nations as well around the globe. More specifically, to bridge the gap that exists for Sudan by serving as a starting point for further research. The findings of this research can be used by microfinance providers to improve M-banking facilities and to identify those factors that can either contribute to the failure or success of the M-banking services and this could be further used for decision making. To academia, the research would serve as a source of academic reference for further studies.
- However, the paper also contributes to the body of knowledge by introducing five new factors on the intention to adopt m-banking namely the impact of regulation on the business model, products and markets, Perceived Benefits, firm size, and top management support. These factors are rarely mentioned in prior Sudanese studies.

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- Thanks for your attention
    - Q&A