

The Effects of Mobile Money Agents on the Performance of SMEs: A Case Study of Morogoro Municipality

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Abstract: *SMEs in the developing world are increasingly deploying the use of mobile payment systems to enhance the quality of their services and increase growth. This study intended to investigate the effects of mobile money agents on the performance of SMEs, a case study of Morogoro Municipality. The study employed a mixed method research approach involving 90 respondents, of whom 85 were from SMEs and 5 from Mobile Money Operators (MNOs) in Morogoro Municipality. Questionnaires, interviews and documentary reviews were used as the tools of data collection. Qualitative data were analyzed by the use of a mixed method approach and content analysis of qualitative data and quantitative data were analyzed by descriptive statistics and regression analysis. Findings of the study showed only savings are statistically significant at 1% level of significance, while money transfer and receiving of payments are statistically significant at 5% level of significance. The study, thus, found that mobile money agents have significant impact on the performance of SMEs in Morogoro Municipality. It is recommended that more SMEs should be encouraged to adopt the use of mobile money agents. Mobile money operators should engage in educating the public on the advantages of mobile money services and the Government should create a more conducive environment for SMEs to increase the use of mobile money services by reducing levies on the services.*

Keyword: Mobile Money Services and SMEs

1. Introduction

Tanzania has made great progress towards developing the financial sector. The country has witnessed the increase in the number of micro and macro financial institutions. However, access to finance among marginalized communities especially SMEs remains challenging. In the past 15 years the country has witnessed the proliferation of commercial banks and Micro financial institutions targeted at increasing financial penetration in the community (BOT, 2013). This has led to technological innovations in provision of financial services.

Currently, the modern world is faced with a rapid development in technological advancement that has introduced a number of new systems in all aspects of life and the economy in general. Electronic banking is defined as a modern fully automatic service which delivers traditional banking products to customers with the help of information technology platforms and interactive communication channels (Daniela, et. al., 2010).

In Tanzania, mobile money services in 2008 were considered the key solution that can help SMEs across the country to increase their productivity and earning through mobile marketing (Lichtenstein, 2018). Mobile money is considered as the best way to provide SMEs with reliable ways of saving and investing their money as well as to access other range of financial services including digital money (Ozili, 2018). Statistics show that, mobile money has helped SMEs in Tanzania with an opportunity to grow. It helped small SMEs to manage their cash flows more effectively, build their capital through mobile saving and can help them secure loan from mobile company basing on their daily transaction. In short mobile money

was considered as a key to financial inclusion and prosperity of SMEs (InterMedia, 2018).

Furthermore, mobile money agents in Tanzania have made life much easier and banking much faster for customers (BOT, 2013). It serves time and, thus, it is attractive to many customers, consequently, the use of mobile money transfer has increased (Munyanyi, 2014). Moreover, the services of mobile money agents are the best way which provides security and privacy to customers using state-of-art encryption and security technologies, and it is preferred by many SMEs in Tanzania. Although the services of mobile money agents have many advantages but also it has its challenges.

The SMEs sector is considered very important economically because it provides jobs, pays taxes, innovative and very instrumental in countries participating in the global market. Since the introduction of mobile money agents' services in Tanzania in 2008, there has been tremendous increase in usage of mobile money services by individuals and businesses including SMEs (Chale & Mbamba, 2014). It has been perceived as critical in harnessing business opportunities and achieving high performance and growth among SMEs (Sekere, 2016).

Recently, SMEs use of mobile money services has been the subject of numerous studies in developing countries such as India, Zimbabwe, Kenya, and Tanzania as documented by Muciimi and Ngumo, (2014); Higgins, et al., (2012); Perekwa et al., (2016); and Lubua, et al., (2017). These studies focused on the effectiveness of mobile money payment services among SMEs.

However, the main literature gaps exist in revealing whether services of mobile money agents have contributed to SMEs performance through increased sales, increased

profits, loans accessibility and savings. More research is clearly needed to further expand the understanding of how SMEs use services of mobile money agents, the level of service quality of mobile money services and challenges faced by SMEs in using mobile money agents for their performance. In such perspective, this study sought to address such gap by investigating the effects of mobile money agents on the performance of SMEs in Morogoro Municipality.

2. Theoretical Literature Reviews

A theory is an interrelated idea about various concepts, processes, relationship or events (Adam & Kamuzora, 2008). A collection of theories that are made from a collection of ideas form a theoretical framework. This study was guided by Diffusion of Innovation Theory. This theory was developed by Rogers in 1962. Innovation is defined as an idea, practice or object that is perceived as new by an individual or another unit of adoption while diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1962). By these definitions, innovation diffusion is achieved by how a social system accepts and begins to use (adopt) an idea or a technology.

The Diffusion of Innovation Theory aims at explaining how and why new technologies and ideas are being developed and at what rate do they spread among the users/community. Furthermore, Diffusion of Innovation Theory attempts to explain and describe the mechanisms of how new inventions is adopted and becomes successful.

Rogers (1962) stated that not all innovations are adopted even if they are good it may take a long time for an innovation to be adopted. He further stated that resistance to change may be a hindrance to diffusion of innovation although it might not stop the innovation it will slow it down. Rogers (1962) identified five critical attributes that greatly influence the rate of adoption. These include relative advantage, compatibility, complexity, triability and observability.

Relative Advantage is the degree to which the innovation is perceived as being better than the practice it supersedes; Compatibility is the extent to which adopting the

innovation is compatible with what people do; Complexity is the degree to which an innovation is perceived as relatively difficult to understand and use; Trial ability is the degree to which an innovation may be experimented with on a limited basis before making an adoption (or rejection) decision; and Observability is the degree to which the results of an innovation are visible to others (Rogers, 1962).

This theory is relevant to this study since not all innovation of mobile money services have been adopted among SMEs even if they are good. In this perspective, it may take a long time for an innovation to be adopted and the resistance to change may be hindrance to innovation although it might not stop but it will slow it down. If SMEs observe the benefits of mobile money services, they will adopt these innovations.

3. Research Methodology

This section presents the methodology that guided the study. This study was carried out in Morogoro Municipality. The study employed cross-sectional research design. The study employed a mixed method research approach. The targeted population comprised SMEs and Mobile Money Operators (MNOs) from Morogoro Municipality. Sample size includes 90 respondents whereby 85 were SMEs and 5 were MNOs. Quantitative data was collected using five-point Likert-type scales. This was analyzed using descriptive statistics and regression analysis. Interviews and documentary reviews were used to collect qualitative data whose content was analyzed.

4. Research Findings and Discussion

This section focuses on presenting the effects of mobile money agents on the performance of SMEs in Morogoro Municipality.

The study sought investigates the effects of mobile money agents on the performance of SMEs. In this regard users' responses were tapped on how often they used mobile money agents' services for money transfer, payment of goods and services, for savings, and for collection of receipts from customers. Responses were as follows:

Table 1

	Always	Very often	Sometimes	Rarely	Never	Total
How often do you use mobile money agents' services for money transfer?	20 (23.5%)	33 (38.8%)	12 (14.1%)	11 (12.9%)	9 (10.6%)	85 (100%)
How often do you use mobile money agents' services for payment of goods and services?	15 (17.6%)	26 (30.8%)	29 (34.1%)	5 (5.5%)	10 (12.1%)	85 (100%)
How often do you use mobile money agents' services for savings?	30 (35.2%)	22 (25.3%)	18 (20.9%)	7 (8.8%)	8 (9.9%)	85 (100%)
How often do you use mobile money agents' services for collection from your customers?	22 (26.4%)	27 (31.9%)	25 (29.7%)	7 (7.7%)	4 (4.3%)	85 (100%)

Source: Feld Data (2022)

Table 1 reveals the findings of the study that, majority of SMEs (62.3%) agreed that they had often or always transferred their money through mobile money; these results imply that mobile money services help SMEs in transferring money domestically.

Also 60.5% of SMEs who always or often made savings through mobile money; these results imply that, some mobile money services allow SMEs in the study area to save their funds through their mobile money account.

Furthermore, 58.3% of respondents always or often received payments through mobile money. These results

imply that majority of SMEs prefer to being paid through mobile money.

And 48.4% of SMEs always or often payments of goods or services through mobile money; these results imply that mobile payments are used by SMEs in payments of goods such as stocks from suppliers.

Respondents were also asked to provide their perceptions (using a scale of 1-strongly agree to 5-strongly disagree) on the SMEs performance upon accepting use of mobile money agents with respect to sales growth, customer base expansion, and profitability.

Table 2

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Use of mobile money agents' services has led to sales growth.	42 (49.4%)	36 (42.4%)	7 (8.2%)	0 (0%)	0 (0%)	85 (100%)
Use of mobile money agents' services has resulted in the expansion of the customer base.	26 (30.6%)	35 (41.2%)	4 (4.7%)	13 (15.3%)	7 (8.2%)	85 (100%)
Use of mobile money agents' services has led to increased profitability.	21 (24.7%)	36 (42.4%)	9 (10.6%)	11 (12.9%)	8 (9.4%)	85 (100%)

Source: Feld Data (2022)

Table 2 reveals the findings of the study that, 91.8% of SMEs agreed that their sales in business has been improved; these results imply that SMEs who use mobile money services for selling goods and services have probably increased their sales than those who not use the services.

Also 71.8% of SMEs have agreed that their customer base has grown after accepting the use of mobile money; these results imply that the availability of mobile money

transactions broaden the customer base of SMEs given the fact that majority of the customers in Morogoro Municipality currently has access to a mobile phone.

While 67.1% agreed that their profitability has grown after accepting the use of mobile money; these results imply that through using mobile money services sales of SMEs increased because flexibility of customers in making payment is made easy.

Table 3.1: ANOVA

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73.901	4	18.475	145.671	.000 ^b
	Residual	10.146	80	.127		
	Total	84.047	84			
a. Dependent Variable: Y						
b. Predictors: (Constant), X ₁ , X ₂ , X ₃ , X ₄						

Source: Feld Data (2022)

Table 3.1 shows that at 1% the critical value is 3.56311. Since the calculated F value is 145.671, we can conclude that there is a relationship between the dependent and independent variables. Furthermore, the p-value is lower

than 1% which confirms that there is a significant relationship between the dependent and independent variables.

Table 3.2: Multiple Regression Analysis

Coefficients ^a						
	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.026	.132		.199	.843
	X ₁	.361	.162	.320	2.229	.029
	X ₂	.131	.128	.135	1.019	.311
	X ₃	.312	.100	.352	3.109	.003
	X ₄	.290	.132	.185	2.193	.031
a. Dependent Variable: Y						

Source: Feld Data (2022)

The multiple regression equation developed from Table 3.2 is presented below:

$$Y = 0.026 + 0.361X_1 + 0.131X_2 + 0.312X_3 + 0.290X_4$$

Where:-

Y = Performance of SMEs (Monthly average sales)

X₁ = Money transfer

X₂ = Payment of goods and services

X₃ = Savings

X₄ = Receive payment

Findings in Table 3.2 indicate that money transfer, savings, and receive payment are significant at 5% while savings is significant at 1%. These results indicate that, the use of mobile money agents has impact on the performance of SMEs.

5. Conclusion and Recommendations

The regression model showed only savings are statistically significant at 1% while money transfer and receiving of payments are statistically significant at 5%. This means money transfer, savings, and receiving of payments influence performance of SMEs. In other case payment of goods and services was found to be statistically insignificant, and thus it does not have any influence on performance of SMEs. These results complement the main study assumption that, business performance among SMEs in Tanzania is affected by mobile money services in place including direct money transfer, savings and receiving payments. Since that is the case, measures must be instituted to enable the services to be friendly and assisting SMEs.

On the basis of the research findings and discussions, the following recommendations are made to various stakeholders; The Government needs to intervene by reducing the charges levied on mobile money transactions so that it may be able to stimulate economic growth. The Mobile money operators need to engage in more extensive education of SMEs so that they may a mutually beneficial outcome of increasing their profits and contributing to SMEs' growth. Education may also encourage SMEs that are not currently using MNOs services to start using them.

However the results of this study cannot be generalized due to the fact that this is a case study. The future study could be nation-wide the results could be generalized.

References

- [1] Adam, J., & Kamuzora, F. (2008). *Research Methods for Business and Social Studies*. Morogoro: Mzumbe Book Project Tanzania.
- [2] BOT. (2013). *Financial Stability Report-March 2013*. Dar es Salaam: BOT.
- [3] Chale, P. R., & Mbamba, U. (2014). The Role of Mobile Money Services on Growth of Small and Medium Enterprises in Tanzania: Evidence From Kinondoni District in Dar es Salaam Region. *Business Management Review*, 1 (2014), 81-96.
- [4] Daniela, B., Simona, M. & Drago, P. (2010). *Electronic Banking: Advantages for Financial Services Delivery*. *Annals of the University of Oradea: Economic*, 1 (2010), 672-677.
- [5] Higgins, D., Kendall, J., & Lyon, B. (2012). Mobile Money Usage Patterns of Kenyan Small and Medium Enterprises. *Innovations*, 7 (2), 67-81.
- [6] InterMedia. (2013). *Mobile Money in Tanzania*. Dar es Salaam: Intermedia.
- [7] Lichtenstein, J. (2018). *Financial Inclusion in Rwanda: Examining Policy Implementation And Impact On Community And Household Lives*. Doctoral Dissertation. University of Cambridge.
- [8] Lubua, E. W., & Pretorius, P. (2018). *Determinants of a Sustainable Use of the Health Information System in the Sub-Saharan Africa Context*. Conference: 11th IADIS International Conference Information Systems.
- [9] Muciimi, E., & Ngumo, E. (2014) *Factors that Determine Customer Loyalty to Cloth Retailing Stores in Nairobi Central Business District (CBD)*, Kenya. Nairobi University.
- [10] Munyanyi, W. (2014). *Banking the Unbanked: Is financial Inclusion Powered by Ecocasha Veracity in Rural Zimbabwe*. *Greener Journal of Banking and Finance*, 1 (1), 1-9.
- [11] Ozili, P. K. (2018). *Impact of Digital Finance on Financial Inclusion and Stability*. *Borsa Istanbul Review*, 18 (4), 329-340.
- [12] Perekwa, G. B., Prinsloo, T., & Van Deventer, J. P. (2016). *The Impact of Mobile Technology on Micro and Small Enterprises in Zimbabwe in the Post-Hyperinflation Economic Era*. *The African Journal of Information Systems*, 8 (3), 3-16.
- [13] Rogers, E. M. (1962). *Diffusion of Innovations*, New York: Free Press.
- [14] Sekere, E. K. (2016). *Impact of Mobile Phone Communication On SMEs Performance: A Case Of Selected Units*. Master Dissertation. United States International University