## Financial Innovation, Entrepreneurial Orientation and Business Financial Performance: The Case of Micro Businesses in Tanzania

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## Abstract

Business use of mobile money services has significantly increased in Tanzania. However, few of micro businesses perform well financially. Hence, the researchers investigated influence of mobile money services on micro business financial performance in Tanzania. Basing on the structural equation model (SEM) results, findings revealed that use of business to business (B2B) mobile money services significantly improved micro business sales and reduce business costs. Customer-to-Business (C2B) mobile money services were found to have significant positive influence on business sales only. Entrepreneurial orientation fully mediated the relationship between B2B mobile money services as well as micro business sales and partially mediated the relationship between B2B mobile money services and business costs. Entrepreneurial orientation fully mediated influence of C2B mobile money services on micro business sales. Hence, among others, this article recommends that there must be supportive environment that may potentially promote business use of mobile money services by micro businesses.

Keyword: Financial Innovation, Mobile Money Services, Business Financial Performance and Micro Businesses

# Introduction

The business structure in Africa is dominated by micro business sector that is expected to be an engine of economic development (Benzing & Chu, 2012; Diyamett, 2012; Liedholm, 2002). Scarborough and Zimmerer (2008) argue that micro business sector is one of key sectors in terms of job creation, economic growth, poverty alleviation and industrial development in developing countries. Tanzania's economy is still one of the poorest countries in the world (CIA, 2012 cited in Mashimba & Kühl, 2014). It is of great interest to researchers on identifying economic interventions that Tanzania can use to reduce poverty to majority of its people. One of the suggested economic interventions is to promote development of micro businesses. This was supported by Liedholm (2002) who held that there is strong association between better performance of micro businesses and national economic performance.

In order for Tanzania to take significant step in its economic development, development of micro business is inevitable. This is because micro businesses promote an equitable distribution of

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income and reduce income poverty to majority of Tanzanians (Nkya, 2003). However, performance of micro businesses in Tanzania is not promising (Olomi, 2005, 2009; Mashimba & Kühl, 2014). An insignificant contribution of micro businesses in the economy may be contributed by failure to perform well financially. For instance, Kirui and Onyuma (2015) argue that financial performance of a micro business is an important managerial aspect because revenues generated by micro businesses determine the micro business sustainability. Micro businesses face significant financing challenges resulted from applied business practices and environment (Marwa, 2014). This is because they face several challenges including low sales and high costs of doing business that significantly hamper their financial performance.

Furthermore, other studies (e.g., Mnemwa & Maliti, 2009; FSDT, 2012) also mention factors that influence on micro business performance. Mfaume and Leonard (2004) argue that legal requirements in force, security and safety reliability in business area, customer's attitude towards the merchandise and environment, pricing and capitalization structure including management competence of the business owner are factors, which influence on business performance. Mnemwa and Maliti (2009) identified several factors that influence on business performance such as tax incentives, loans, grants, market information, regulatory framework, financial services apart from mobile money services, marketing services and technical as well as management training services.

Even though several challenges facing micro businesses in Tanzania have been mentioned, there are other micro businesses that perform well (Olomi, 2009). That may be contributed by use of financial innovations and entrepreneurial orientation of the micro business owner or operator. Financial innovation has been defined differently by various authors. For instance, Tufano (2002) contends that financial innovation is an act of creating and popularizing new financial technologies. Beaver (2002) argues that financial innovation is the process of designing, developing and applying innovative financial instrument to provide solutions to business challenges. Lumpkin and Dess (1996), referring to contingency perspective, argued that financial innovation is an effective way of improving a firm's productivity despite the resource constraints facing the firm. For the sake of this article, financial innovation is defined as the process of designing, developing and applying innovative financial innovation is defined as the process of designing, developing and applying innovative financial innovation is defined as the process of designing, developing and applying innovative financial innovation is defined as the process of designing, developing and applying innovative financial innovation is defined as the process of designing, developing and applying innovative financial innovation is defined as the process of designing.

It is recognised that there are several financial innovations that have been introduced but the article focused on mobile money services. Mobile money services are said to have the potential for improving contribution of micro businesses in the economy and influence on almost every operation as well as structural characteristics of the micro businesses (Onyango *et. al.*, 2014). For instance, several proponents (e.g., Otiso *et. al.*, 2013; Wanyoni and Bwisa, 2013; Chale and Mbamba, 2014; Ngaruiya *et. al.*, 2014) argue that mobile money services influence on business sales and costs. Mobile money services are grouped into four major forms, namely, Person-to-Person (P2P), Business-to-Business (B2B), Customer-to-Business (C2B) and Business-to-Customer (B2C) (Mbogo, 2010; Wanyoni & Bwisa, 2013) and mobile banking (Okiro & Ndungu, 2013). The study focuses on two forms of mobile money services, namely, B2B and C2B since they are directly involved in business transactions. The study does not involve P2P mobile money services, B2C mobile money services and mobile banking. Wanyoni and Bwisa (2013) argue that B2C occurs when microfinance institutions disburse funds to customers. Hence, B2C was not part of this article since it did not involve microfinance institutions.

P2P mobile money services mainly focuses on mobile transfer of money to relatives, friends and family members (Wanyoni & Bwisa, 2013). In this case, P2P mobile money services are not part of this study since the study includes only business mobile transactions. Mobile banking is explained as mobile transfer and money payments by a business [or a person] through mobile telecommunication devices (Okiro & Ndungu, 2013). The mobile banking is the least to be used by micro enterprises (Bångens & Söderberg, 2011). In Tanzania, adoption of mobile money services for business use is high (Bångens & Söderberg, 2011) and mobile money services are continuously expanding. Mobile money services were introduced in 2007 whereby M-pesa was the first to be introduced followed by TigoPesa, Easy Pesa and Airtel Money. During the introduction stage, mobile money services focused on facilitating P2P transactions and later on, C2B and B2B were also included [Bank of Tanzania (BOT), 2012]. Despite an increased business use of mobile money services in Tanzania, micro businesses' financial performance is continuing to worsen (Mashimba & Kühl, 2014) and few of them perform well (Olomi, 2009).

This is when the C2B and B2B mobile money services were started to be used in facilitating mobile money payments. Despite such development of mobile money services in Tanzania, Bångens and Söderberg (2011) argue that micro businesses should mature and develop first before they adopt the mobile money technology as well as fully benefit from its services. This may imply that mobile money services may not have significant contribution on financial performance of micro businesses that are at the introduction stage. However, authors mainly focus on adoption of mobile technology and not its influence on business financial performance. The mentioned prior studies (e.g., Mahmood & Hanafi, 2013; Syed, Muzaffar & Minaa, 2017) consider entrepreneurial orientation as the resource and assessed its influence on business performance basing on Resource-Based View (RBV). Influence of entrepreneurial orientation on business performance, however, may be determined with the fit between entrepreneurial orientation and the environment in which the business is operating (Lumpkin & Dess, 2001). With this fact, influence of entrepreneurial orientations on relationship between mobile money services and micro business financial performance may depend on the way entrepreneurial orientation matches with the micro business environment. Prior studies (e.g., Kraus et. al., 2012; Lumpkin & Dess, 2001; Ndubis & Iftikhar, 2012) examined influence of entrepreneurial orientation on business financial performance based on the contingency perspective. However, these studies were conducted in developed countries where the context can be different from that of developing countries.

The reviewed studies on mobile money services (such as Chale & Mbamba, 2014; Ngaruiya, Basire & Kamau, 2014; Otiso *et. al.*, 2013; Wanyoni & Bwisa, 2014) did not include influence of entrepreneurial orientation on micro business performance. Proponents (such as Lumpkin & Dess, 2001; Ndubis & Iftikhar, 2012) have shown that entrepreneurial orientation plays a significant role in improving micro business financial performance. It is expected that micro businesses managed by business owners/operators who have an entrepreneurial orientation perform higher than those managed by business owners/operators with no entrepreneurial orientation. By considering the aforementioned limitations of existing studies and wider acceptance of mobile money services, it is important to investigate influence of mobile money services in Tanzania. Hence, this article examines the

influence of B2B and C2B mobile money services on micro business financial performance and the mediating effect of entrepreneurial orientations.

## **Literature Review**

This article used Resource-Based View (RBV) and Contingency Theory. RBV focused mainly on influence of mobile money services on micro business financial performance, while Contingency Theory was used to explain the mediation effect of entrepreneurial orientations. RBV is the theory that emphasises on influence of resources on firms' performance. The theory contends that resources owned by a firm are primary determinants of its performance (Hofer and Schendel, 1978; Wenerfelt, 1984; Ting-Peng *et. al.*, 2010). However, the theory argues that a resource should be rare and valuable (Akio, 2005).

Due to its ability to explain influence of resources on the firms' performance, RBV has emerged as the key perspective guiding inquiry into determinants of firms' performance (Crook *et. al.*, 2008). Furthermore, there is an increased attention on influence of firms' resources by researchers on exploitation of business opportunities to enhance their performance (Akio, 2005). Therefore, RBV became a widely used theory in explaining influence of resources on firms' performance. Hence, this study applied RBV to examine influence of mobile money services on micro business financial performance. This study argued that C2B and B2B mobile money services are technological resources that may determine micro business financial performance. However, with reference to Akio's (2005) argument, RBV cannot capture well influence of entrepreneurship on business financial performance. Hence, the Contingency theory was adopted.

Under Contingency framework, focus of entrepreneurship orientation-performance relationship is mainly on financial performance (Rauch *et. al.*, 2004). Contingency Theory was used to examine influence of entrepreneurial orientation on relationship between mobile money services and micro business financial performance. There is significant attention by entrepreneurship researchers in examining entrepreneurship behaviours-performance relationship basing on the contingency approach (Lumpkin and Dess, 2001). In due regard, it is important to examine the mediation effect of entrepreneurial orientation on the relationship between mobile money services and micro business financial performance by considering the contingency view.

## **Mobile Money Services and Business Performance**

Mobile money services have an influence on micro business financial performance. The reviewed literature from Anuragi*et* and colleagues (2009), Mbogo (2010), Bångens and Söderberg (2011) as well as Wanyoni and Bwisa (2013) suggest that mobile money services contribute to better performance of micro businesses. Hence, mobile money services, may influence on micro business financial performance. B2B mobile money services, as a form of mobile money services, may have a positive influence on business sales revenue. It means that use of B2B mobile money services may enable micro businesses increase their sales volume and hence, increase revenues. Wanyoni and Bwisa (2013) attest that B2B mobile money services positively increase micro business performance, which was measured by sales revenue. Also B2B mobile money services reduce business operating costs. This is supported by Chale and Mbamba (2014) who argued that mobile money services improve efficiency in purchasing stock.

In addition, Otiso and colleagues (2013) contend that mobile money services reduce business costs. Hence, the following hypothesis was developed: -

## *H*<sub>1</sub>: B2B mobile money services positively influence on business micro financial performance

C2B mobile money services may also have an influence on micro business sales revenue. Kirui and Onyuma (2015) affirm that mobile money services increase business sales turnover. Likewise, Nyaga (2013) argues for the significant positive relationship between mobile money services and business performance. Ngaraiya and co-authors (2014) also came up with similar findings that mobile money services significantly and positively influence on sales revenue. Wanyoni and Bwisa (2013) argue that C2B mobile money services improve business sales revenue. Ngaruiya and co-workers (2014) also found a positive relationship between mobile money services and business sales revenue. In due regard, mobile money services are said to have significant and positive influence on business financial performance because they influence on business sales revenue and costs (Kirui and Onyuma, 2015). C2B mobile money services also influence on micro business financial performance by reducing business operating costs. It is argued that use of C2B mobile money services reduces transaction costs (Nyaga, 2013; Kirui and Onyuma, 2015). In this vein, the following hypothesis was developed: -

# H<sub>2</sub>: C2B mobile money services positively influence on micro business financial performance

On the other hand, entrepreneurial orientation is also said to influence on business performance (Lumpkin and Dess, 2001; Wiklund and Shepherd, 2004). It means that entrepreneurial orientation may potentially influence on financial performance of micro businesses. Business led by the business owner/operator with entrepreneurial mindset is expected to perform higher financially. Businesses that have entrepreneurial orientation perform better than others (Semrau, Ambos & Kraus, 2016). More importantly, entrepreneurial orientation may enable micro businesses to address environmental challenges that influence on business financial performance. This is supported by prior studies (for example, Lumpkin & Dess, 2001; Redipere, 2014; Wales, Gupta & Mousa, 2013) that held regardless of unfavorable business conditions, the entrepreneurially oriented business performs well. This may not be surprising in Tanzania that despite the mentioned business challenges, there are few businesses that perform well, a pattern, which might also be contributed by entrepreneurial orientation.

Entrepreneurial orientations, namely, proactive behaviour and risk taking have an influence on business financial performance because they influence on business sales growth (Lumpkin and Dess, 2001). In due regard, a business led by entrepreneurially oriented business owner/operator may perform better financially than others. Hence, it is likely that entrepreneurial orientation has mediating effect on the relationship between mobile money services and micro business financial performance, which resulted to development of the following hypothesis: -

 $H_3$ : Entrepreneurial orientation mediates the relationship between mobile money services and micro business financial performance

# Methodology

The researchers applied cross-sectional research design because it enables the researcher(s) have greater control over precision of estimates in subgroups/stratified sampling (Thisted, 2006). The

study involved respondents from micro businesses that were dealing with trade, services and manufacturing. Mobile money services were operationalized as B2B and C2B mobile money services (Wanyoni and Bwisa, 2013). Entrepreneurial orientations were categorised into two groups - Proactiveness and Risk Taking (Ahlin *et. al.*, 2012; Gray & Wert-Gray, 2012; Haynie & Godesiabos, 2007; Semrau *et. al.*, 2016; Syed *et. al.*, 2017; Wiklund & Shepherd, 2004). Data were collected from four (4) regions, namely, Dar es Salaam, Mbeya, Morogoro and Manyara. Dar es Salaam and Mbeya regions have relatively high micro business densities, while Manyara has relatively low micro business density (FSDT, 2012). Morogoro has a moderate micro business density, however, its business structure is dominated by micro businesses (Adahl, 2007). A questionnaire was used to collect quantitative data and structural equation model (SEM) as well as percentages were used as data analysis techniques.

# **Research Results**

## **Respondents' Demographic Characteristics**

In data collection process, 400 self-administered questionnaires were distributed to respondents throughout the four regions, namely, Dar es Salaam, Manyara, Mbeya and Morogoro. However, 388 (97%) questionnaires out of 400 questionnaires were collected. Also 224 questionnaires were distributed to respondents from micro businesses dealing with trade and 214 (96%) questionnaires were actually collected. In the service sector, 121 (98%) questionnaires out of 123 questionnaires were collected. In the manufacturing sector, 53 questionnaires were distributed and all (100%) were collected from the respondents.

Out of the 388 business owners/operators, 315 (81.2%) respondents were micro business owners and 73 (18.8%) respondents were micro business operators. Also, 209 (53.9%) respondents were females and 179 (46.1%) were males. Pertaining to respondents' distribution by marital status, 188 (48.5%) respondents were married and 109 (28.1%) respondents were single. Respondents who were divorced were 20 (5.2%), widows/widowers were 63 (16.2%) and others were 8 (2%). Others included those who were separated or living together but not yet married. In terms of age, respondents, whose age was between 20 and 25 years were 143 (36.9%). Moreover, respondents, whose age interval was between 46 and 55 were 107 (27.6%) and 26 – 45 years old were 105 (27.1%). Only 33 (8.5%) respondents had been engaged into the business for the period from 2 to 4 years. In addition, 140 (36.1%) had business experience that ranged from 5 to 9 years and only 8 (2%) respondents had business experience of at least 9 years. Based on respondents' distribution by education level, 196 (50.5%) respondents had primary school education while in the higher end, 7 (1.8%) of the respondents had postgraduate qualifications.

# **Enterprise Characteristics**

The research involved 388 micro businesses from Dar es Salaam, Mbeya, Morogoro and Manyara. Out of 388 micro businesses, 150 (38.7%) micro businesses were from Dar es Salaam, 155 (39.9%) from Mbeya, 42 (10.8%) from Morogoro and 41 (10.6%) were from Manyara. Majority of contacted micro businesses dealt with trade followed by those dealing with services. The descriptive statistics showed that 214 (55%) micro businesses were in trade, 121 (31%) dealt with services provision and 53 (14%) were manufacturing businesses. In terms of ownership, 327 (84.3%) micro businesses were sole proprietorship businesses, while 61 (15.7%) were partnership businesses. In the case of partnership, the contacted micro businesses were established

in the past 2 to 4 years, while 85 (22%) had 5 to 7 years since their establishment. Only 8 (0.8%) micro businesses were established at least 8 years before study period.

In terms of usage of mobile money services, 205 (52.8%) businesses were registered to two mobile networks, 89 (22.9%) micro businesses were registered to one mobile network. Only 41 (10.6%) micro businesses were registered to three mobile networks, while 53 (13.7%) micro businesses were not registered to any of the mobile network providers. For micro businesses, which were not using mobile money services, it was argued that lack of mobile agents with adequate cash; low usage of mobile money services in their business areas and long distance for accessing mobile money services were major reasons for not using mobile money services. Furthermore, 286 (73.7%) micro businesses had been using mobile money services for the period that ranged from 2 to 4 years and 45 (11.6%) micro businesses were mobile money users for 5 to7 years. Only 4 (1%) of them were using mobile money services for more than 7 years. In addition, 53 (13.7%) micro businesses did not use mobile money services at all.

## Mobile Money Services and Micro Business Financial Performance

## The Direct Relationship between Mobile Money Services and Financial Performance

Under this section, there were two major hypotheses, namely,  $H_1$  and  $H_2$ .  $H_1$  states that 'B2B mobile money services influence on micro business financial performance.'  $H_1$  was divided into two sub-hypotheses,  $H_1a$  and  $H_{1b}$ .  $H_{1a}$  states that 'B2B mobile money services positively influence on business sales revenue.'  $H_{1b}$  hypothesized that 'there is a negative relationship between B2B mobile money service and business costs.' On the other hand,  $H_2$  states that 'C2B mobile money services influence on micro business financial performance.' The second hypothesis ( $H_2$ ) was divided into two sub-hypotheses,  $H_{2a}$  and  $H_{2b}$ .  $H_{2a}$  states that 'C2B mobile money services positively influence on business costs.'

Path analysis results showed that there was a significant relationship between B2B mobile money services and business sales revenue ( $\beta = 0.527$ , Significant at 0.001). Moreover, the results showed that there was a significant negative relationship between B2B mobile money service and business costs ( $\beta = -0.682$ , Significant at 0.001). Hence, each hypothesis, H<sub>1a</sub> and H<sub>1b</sub>, was supported and H<sub>1</sub> was fully supported.

The path analysis results also showed that there was a significant positive relationship between C2B mobile money service and business sales revenue ( $\beta = 0.121$ , Significant at 0.001). Furthermore, results showed that C2B mobile money services had insignificant negative influence on business costs ( $\beta = -0.062$ , P = 0.417). H<sub>2a</sub> was supported, while H<sub>2b</sub> was not supported. Hence, H<sub>2</sub> was partially supported. It was also revealed that B2B mobile money services had comparatively higher influence on both business sales revenue ( $\beta = 0.527$ , Significant at 0.001) and costs ( $\beta = -0.682$ , Significant at 0.001) than C2B mobile money services (i.e.  $\beta = 0.121$ , Significant at 0.001) for business sales revenue and ( $\beta = -0.062$ , insignificant at P = 0.417) for business costs. However, both B2B and C2B mobile money services significantly influence on business sales revenue and business costs. Table 1 provides the regression weights and significance levels. -

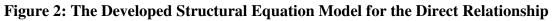
Path	Estimate	S.E.	C.R.	P Label
Costs < B2BT	682	.104	-6.533	*** par_1
Sales < B2BT	.527	.058	9.116	*** par_2
Sales < C2BT	.121	.038	3.193	.001 par_3
Costs < C2BT	062	.076	812	.417 par_4

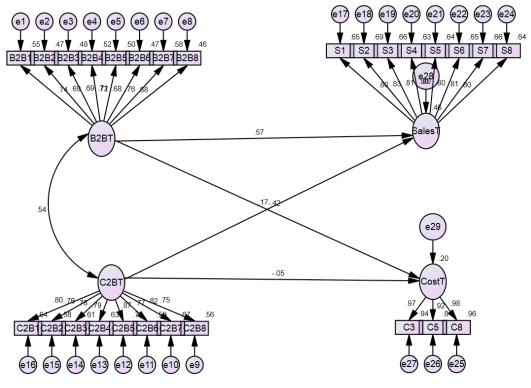
 Table 1: The Regression Weights for the Direct Relationship

Source: Field Data (2017).

\*\*\* means it is significant at 0.001

The developed model shows a direct relationship between mobile money services and micro business financial performance. The model demonstrates influence of B2B mobile money services on business sales revenue and costs. Also the model shows the relationship between C2B mobile money services and business sales revenue and costs. Figure 1 presents the model on the direct relationship between mobile money services and micro business financial performance:





The model was assessed to see whether or not it fits the data well by examining the model fit indices. The model fit indices included CMIN/df, GFI, AGFI, CFI and RMSEA. The indices indicated that the model fits well the data because they were all within the recommended values. The chi-square was 422.162 and p-value of 0.069, while the degree of freedom was 319. The Chi-square value was insignificant, which indicated that there was no statistically significant difference between the default model and saturated model.

## The Mediating Effect of Entrepreneurial Orientation

The researchers examined the mediating effect of entrepreneurial orientation on the relationship between mobile money services and micro business financial performance. In this case, there was one major hypothesis,  $H_3$ .  $H_3$  stated that 'entrepreneurial orientation mediates the relationship between mobile money services and micro business financial performance.' The hypothesis was further divided into two sub-hypotheses, which were  $H_{3a}$  and  $H_{3b}$ .  $H_{3a}$  stated that 'entrepreneurial orientation mediates the relationship between B2B mobile money services and business micro business financial performance.'  $H_{3b}$  stated that 'entrepreneurial orientation mediates the relationship between C2B mobile money services and micro business financial performance.'

There are several conditions that must be met in order to test the mediating effect. Baron and Kenny (1986) mention three conditions that should be fulfilled in order to examine the mediation effect of a given variable. The first condition states that there must be a significant relationship between independent variables and dependent variables (*ibid*.). The second condition explains that there must be a significant correlation between independent variables and mediating variable (*ibid*.). Finally, there must be a significant relationship between the mediating variable and dependent variable (*ibid*.).

The direct relationship between B2B mobile money services and business sales revenue in the direct model was significant ( $\beta = 0.527$ , Significant at 0.001) and likewise, in the micro business costs ( $\beta = -0.682$ , Significant at 0.001). Moreover, the relationship between C2B mobile money services on business sales revenue was also significant ( $\beta = 0.121$ , Significant at 0.001), but insignificant in business costs ( $\beta = -0.062$ , P = 0.417). Then, the first condition on the significant relationship between independent variable and dependent variable was fulfilled except on influence of C2B mobile money services on micro business costs, which was insignificant.

Furthermore, the relationship between B2B mobile money services and entrepreneurial orientation was positive and significant (i.e.,  $\beta = 0.528$ , Significant at 0.001) as well as in the relationship between C2B mobile money services and entrepreneurial orientation ( $\beta = 0.171$ , Significant at 0.001). In due regard, the second condition on the significant relationship between independent variable and mediating variable was met. The results also revealed both a significant relationship between entrepreneurial orientation and business sales revenue ( $\beta = 0.833$ , Significant at 0.001) and between entrepreneurial orientation and business costs ( $\beta = -0.324$ , P<0.05). Hence, the third condition on the significant relationship between mediating variable and dependent variable was also fulfilled.

The variable has the mediating effect when the path coefficient on direct relationship among independent and dependent variables is reduced (Baron and Kenny, 1986; Hair *et. al.*, 2005, 2010). The mediation effect can be full or partial, depending on significance level of the path coefficients. If the direct influence of independent variables on dependent variable changed from being significant to insignificant, then the full mediation occurs. But when the relationship between independent and dependent variables is reduced but it is still significant, when the mediating variable is introduced, then the partial mediation occurs.

The results showed that entrepreneurial orientation fully mediated the relationship between B2B mobile money services and business sales revenue. The direct path estimate was reduced from  $\beta = 0.527$  to  $\beta = 0.085$  when the mediator was introduced. In addition, the direct relationship between B2B mobile money service and business sales revenue in the indirect model was insignificant at 0.091 (i.e. P > 0.05). Hence, it was fully supported because the path estimate was reduced and changed from being significant to insignificant when the mediator was introduced. Moreover, the results showed that entrepreneurial orientation partially mediated the relationship between B2B mobile money services and business costs. The direct path coefficient was reduced from  $\beta = -0.682$  to  $\beta = -0.486$  when the mediator was introduced. However, the relationship remained significant at 0.001 (i.e. P<0.05) when the entrepreneurial orientation was introduced in the model. Hence, it was partially supported because the path estimate was reduced and remained significant.

The results also showed that entrepreneurial orientation fully mediated the relationship between C2B mobile money service and business sales revenue. The direct path estimate was reduced from  $\beta = 0.121$  to  $\beta = -0.018$  and became insignificant at 0.541 (i.e. P>0.05) when the entrepreneurial orientation was introduced in the model. Therefore, it was fully supported because the path estimate was reduced and became insignificant. In addition, results also showed no evidence of entrepreneurial orientation on the relationship between C2B mobile money services and business costs. It is because the first condition that requires C2B mobile money services to have significant influence on business costs was not fulfilled and hence, it was not supported. Figure 2 is the model that was developed to demonstrate the mediation effect of entrepreneurial orientation on influence of mobile money services on micro business financial performance. Goodness-of-fit indices were also examined in order to explain an ability of the model to fit the data well.

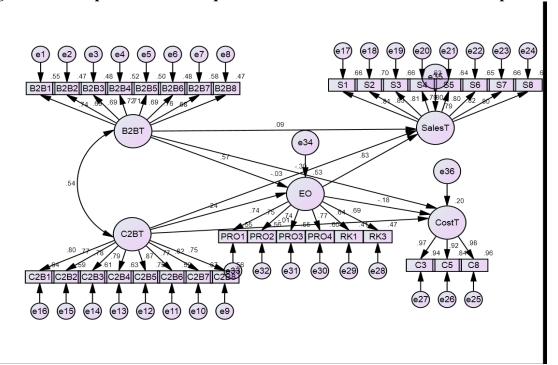


Figure 2: Developed Structural Equation Model for the Indirect Relationship

Figure 2 shows the mediation effect of entrepreneurial orientation on influence of mobile money services on micro business financial performance. The model fit indices, namely, CMIN/df, GFI, AGFI, CFI and RMSEA, were calculated in order to examine the goodness of fit of the model in the study data. The indices demonstrated that the model fits well the data of the study because they were all within the recommended values. The Chi-square was 619.779, while P-value was 0.063. The Chi-square value was insignificant, which indicated that there was no statistically significant difference between the default model and saturated model. Table 2 presents the model fit indices:

<b>Goodness of Fit</b>	Calculated	Recommended	Author
Measure	Index*	Value	
CMIN/df	1.275	<5	Bollen (1989); Ullman (1996)
GFI	0.911	<u>&gt;</u> 0.90	Byrne (2010)
AGFI	0.897	<u>&gt;</u> 0.80	Chau and Hu (2001)
CFI	0.985	<u>&gt;</u> 0.90	Hair et al. (2010)
RMSEA	0.027	< 0.08	Hoe (2008); Steiger (2007)
			cited by Hooper, Coughlan &
			Mullen (2008)

Table 2: Goodness of Fit Indices for Business Cost Model

## **Discussion of Findings**

Findings from this study revealed that B2B mobile money services had positive significant influence on micro business financial performance but C2B mobile money services had positive significant influence on business sales only. It was revealed that B2B mobile money services had significant positive influence on business sales and significant negative influence on business costs. The findings are in line with prior studies such as Chale and Mbamba (2014); Otiso and colleagues (2013) as well as Wanyoni and Bwisa (2013). Wanyoni and Bwisa (2013) argue that B2B mobile money services increase business sales and reduce purchase costs. Chale and Mbamba (2014) argue that mobile money services promote efficiency in the purchase of stock. Otiso and colleagues (2013) argue that use of mobile money services to purchase goods from suppliers reduce business costs because they provides more time to micro business owners/operators to run and monitor their businesses. However, it was revealed that B2B mobile money services did not have the same influence on business sales and costs with C2B mobile money services.

The findings are also in line with the Resource-Based View, which argues that a resource has an influence on business performance. It is argued that information technological resource has an influence on business performance (Lal & Sachdev, 2015; Pham & Jordan, 2009, Ting Peng *et. al.*, 2010). However, it was revealed that B2B and C2B mobile money services did not have the same influence on micro business financial performance. In relation to the Contingency theory, the findings further revealed that entrepreneurial orientation fully mediated the relationship between B2B mobile money services and micro business sales. Entrepreneurial orientation was also found to have partial mediation effect on the relationship between B2B mobile money services on micro business costs. On the other hand, entrepreneurial orientation fully mediated the influence of C2B mobile money services on micro business sales revenue. However, entrepreneurial orientations were found to be highly applied in addressing different business

challenges in order to influence on micro business financial performance. It implies that entrepreneurial orientation influences on micro business financial performance, which was in line with the contingency approach (Kraus et al. 2012; Lumpkin & Dess, 2001). The mediating effect of entrepreneurial orientation largely depends on the fit between entrepreneurial orientations with the micro business operating environment. However, this article revealed that entrepreneurial orientation did not have the same mediating effect across the relationship between different forms of mobile money services (i.e., B2B and C2B) and micro business financial performance.

# Conclusion and Recommendations Conclusion

The article investigated influence of mobile money services on micro business financial performance considering the mediating effect of entrepreneurial orientation. The article concludes that B2B mobile money services significantly influence on micro business financial performance but C2B mobile money services had significant positive influence on business sales revenue only. Comparatively, B2B mobile money services. B2B mobile money services was found to have influence on purchase costs and transport costs. In addition, B2B mobile money services influence of sales as a result of business closure in order to purchase inventories. C2B mobile money services have significant positive influence on micro business costs and sales closure in order to purchase inventories. C2B mobile money services have significant positive influence on micro business closure in order to purchase inventories. C2B mobile money services have significant positive influence on micro business sales revenue.

Entrepreneurial orientation fully mediated the relationship between B2B mobile money services and micro business sales revenue and partially mediated the relationship between B2B mobile money services and micro business costs. This was contributed by the fact that both entrepreneurial orientation and mobile money services largely influenced on purchase costs, which form the major part of micro business costs. Furthermore, entrepreneurial orientation fully mediated the relationship between C2B mobile money services and micro business sales. Entrepreneurial orientation enabled micro businesses to identify and exploit new as well as emerging market opportunities. In addition, entrepreneurial orientation enabled micro businesses to examine market characteristics, which enhanced ability of micro businesses to determine purchasing behaviour of the target market.

## Recommendations

The results revealed that mobile money services significantly influenced on micro business financial performance. In due regard, if a country wants to enhance financial performance of micro businesses, it has to create conducive legal, fiscal and monetary environment that will encourage use of mobile money services.

Entrepreneurial orientation was found to have a mediation effect on the relationship between mobile money services and micro business financial performance except in the relationship between C2B mobile money services and business costs. It was revealed that mobile money services largely influence on micro business financial performance when a micro business owner/operator is entrepreneurially oriented. In addition, entrepreneurial orientation was found to have significant influence on micro business financial performance. It implies that businesses that are led by business owners/operators who are entrepreneurially oriented perform better financially. In due regard, it is important to promote development of entrepreneurial orientations among micro business owners/operators in order to improve micro business financial performance.

Specifically, it was found that B2B mobile money services had significant positive influence on micro business sales and significant negative influence on micro business costs. On the other hand, C2B mobile money services had significant influence on business sales only. Then businesses can use B2B mobile money services to maximise business sales and reduce business costs while C2B mobile money services can only be used to increase business costs. But influence of C2B mobile money services on business costs cannot be ignored despite being insignificant, particularly on reduction of transaction costs and physical follow-up costs.

In addition, mobile money services may not have the same influence on business financial performance across micro business sectors. In Tanzania, micro businesses have been categorised into three groups. There are micro businesses that are dealing with trade, services and manufacturing (FSDT, 2012). The mentioned micro business sectors differ in terms of business characteristics, which may result to a different influence of mobile money services on micro business financial performance. This article did not consider influence of mobile money services on micro business financial performance across their sectors. However, it does not dispute the fact that mobile money services influence on micro business financial performance. Focusing on micro business sectors, the findings would explain whether or not mobile money services have different influence on micro business financial performance across their sectors.

Hence, other scholars may focus on influence of mobile money services on business financial performance across micro business sectors. They may examine whether or not influence of mobile money services on business financial performance differ across micro business sectors, namely, trade, services and manufacturing. That may potentially contribute to the existing body of knowledge particularly contribution to RBV. Mobile money services may not have the same influence on business financial performance across micro businesses sectors. For instance, business operations of service-oriented micro businesses may not be similar to those of manufacturing micro businesses.

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