

## Effect of Mobile Money Transfer on the Financial Performance of Small and Medium Enterprises in Mogadishu

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### ARTICLE INFO

#### Article history:

Received: 21 April 2016;

Received in revised form:

19 May 2016;

Accepted: 24 May 2016;

#### Keywords

Mobile transaction,  
Financial literacy,  
Small and medium  
enterprises,  
Money Transfer,  
Unbanked population.

### ABSTRACT

Business practices in Somalia have gone through many innovations. One of the most dynamic of these innovations has been mobile money. Different telecom companies provide different brands of mobile money. However, amongst EVC plus offered by Hormuud telecom is the most popular mobile money that people depend on their daily transactions in south and central Somalia. However, without effective functioning of central bank, limited education of business owners, unfavorable domestic environment, lack of business information; wide spread of mobile money adaptation by SMEs is likely to affect their financial performance. However the study sought to investigate the effects of mobile transfer on the financial performance of Small and Medium Enterprises (SMEs) in Mogadishu, Somalia. More specifically, the study sought to achieve the following objectives; to assess the extent to which mobile money transaction cost, number of mobile money transactions, financial literacy and mobile money transfer regulations affect the financial performance of SMEs in Mogadishu, Somalia. The study adopted a descriptive survey method which was conducted through administration of questionnaires. Data was collected from a sample of 146 SMEs in Bakara market using purposive sampling technique. Both descriptive and inferential statistics were then used to analyze data with the help of statistical package for social sciences (SPSS) version 21.0. The results of this study revealed that there was a relationship between mobile money transfer and financial performance of small and medium enterprises. On the basis of the findings of this study, it was concluded that mobile money transfer had positive effect on financial performance of small and medium enterprises. The study found that mobile money transaction costs, financial literacy and mobile transfer regulation, affected financial performance of small and medium enterprises. It was recommended that due to the effect of financial literacy and mobile transfer regulation, managers should ensure they build capacity in terms of financial knowledge and also liaise with the regulator on the various regulations to be adopted. It is suggested that the Central Bank of Somalia needs to come up with a complex regulatory framework on how mobile platforms can transact effectively in the financial system. The Central Bank of Somalia needs to build capacity amongst its employees so as to be prepared for mobile innovations especially where money transfers are involved.

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### 1. Introduction

Business practices in Somalia have gone through many innovations, the most important being the introduction of information communication and technology (ICT). Mobile phones have been a key ICT product that has affected business practices in many ways such as advertising, marketing, emergence of new products and new methods of payments (Mbogo, 2010b). As the primary means of communication for most Africans, mobile phones have become a source of significant economic growth and platform for innovation. One of the most dynamic of these innovations has been mobile money, the use of mobile phones to purchase goods or services through funds connected to the user's account (Harris, 2013). Other researchers defined mobile money transfer as a service that refers to the transferring of money from one person to another through use of mobile phone. Mobile money, also referred to as mobile payment, mobile money transfer, and mobile wallet, generally refers to the services operated and performed from a mobile device

such as mobile phone, credit or debit cards (Agnes N Mutinda, 2014).

While mobile money is playing a complementary role in developed countries, in the developing world, Africa in particular, it is an alternative to the lacking formal financial systems, however there has been a high demand for mobile phones in the Continent. In the sub-Saharan Africa, for instance, only 1.7 out of 100 people had access to mobile phones in 2000. By 2009, things had changed since 37.3 out of 100 people were then using mobile phones. In 2011, mobile phone penetration in Africa was estimated at 52%, about one mobile phone per adult (Chibango, 2014). Telecommunication is a major area of success in Somalia and it is considered as one of the most important industries in Somalia's economy. Many telecommunication organizations in Mogadishu brought new services to the market by enhancing their business performance, growth, and innovation strategies to succeed their competitors (Abdi & Ali, 2013).

Before the advent of mobile money transfer service (MMT) which is sometimes referred to as mobile banking, money transfer services (MTs) globally were through formal means that include commercial banks, that has been serving mainly businesses that operate across borders and continents; within and between the developed countries, electronic transfer of funds through the internet and instruments such as credit cards have been in use (Wanyonyi & Bwisa, 2013). However in countries like Somalia, where international banking services are relatively very low was very challenging to send or receive funds to and from families and friends or business purposes, which led to the emergence of informal ways of money transfer known as Hawala system by Somalia Community, however before the emergence of mobile money in Somalia back in 2010 most small and medium business managers or owners had to travel or use public transport systems to access banking services or even transact their payments, or send or receive documents, however this is not the case today, as one can pay for goods and service through mobile money transfer, email the documents it is now possible to carry out the required tasks at any time and any place.

In Somalia six main companies provide telecommunication services in the country. These include Hormuud Telecom, Telecom Somalia, Somafone, Nation-link and Golis Telecom. Mobile money transfer (MMT) is one of the services that telecommunication industries provide to its customers. These service providers offer MMT with different brands, for instance Telecom Somaliland in northern regions provide ZAAD service; Golis Telecom in east northern regions provide SAHAL service, while Nation link and Hormuud Telecom in Southern and central regions provide E-MAAL and Electronic Voucher Card (EVC plus) respectively. Hormuud telecom was the first to introduce MMT service in the country. EVC plus not only allows the customers to send and receive money through their mobile phones but it also has other user friendly interactive features, for example users can recharge airtime for their own mobile phones or their friends, can refund and re-cash their balance for free of charge. EVC Plus had become one of the services that people depend on their daily transactions in south and central Somalia. Most businesses use this service as payment method including water and electricity bills, while most of the family and daily business transactions occur through this service. More than 70% of the total 2.5 million Hormuud Mobile subscribers are currently using EVC Plus for daily transactions since its inauguration (Ali & Dhaha).

The term small and medium enterprises cover a wide range and reasons, that changes from one country to another because their classification into small and medium is quite subjective and qualitative judgment based on number of employees, values of Assets, value of sales and size of capital and turnover. The most common definitional basis used is employees because of comparability. In Kenya SMEs refers to the full range of enterprises employing between 1-50 works in all sectors (Bernard Ngaruiya, Mary Bosire, & Simon M Kamau, 2014a). Small scale enterprise is a privately owned and operated business, characterized by small number of employees and low turnover (Siyad, 2013). In African Nations, a business is considered to be small scale if it employs less than 30 people. In Asian countries, it is between 30 and 100, while in the United States it is any number below 50.

A Medium scale enterprise is a privately owned and operated business characterized by a medium number of employees and low turnover. Although there is no proper

universally accepted definition of medium scale enterprise yet in African nations, a business is considered to be medium scale enterprise if it employs 30 to 50. Small and medium enterprises in Somalia are indigenously owned and family run; less than five years old and rarely grow beyond medium scale level due to lack of access to markets and finance, limited skills and enterprise to enterprise linkages that would provide opportunities for growth. Other challenges facing SMEs in Somalia include poor infrastructure, lack of capital inputs, lack of private sector development strategy, limited education of business owners, unfavorable domestic environment and finally lack of business information; instead they use and are proud of family and clan networks to get information (Hadley & Farah, 2014).

Financial performance basically refers to the measure of how well a firm can utilize assets from its primary mode of business and generate revenues. Performance measurement is all about indicating how efficient and effective a particular firm is (Agnes N Mutinda, 2014). Performance measurement refers to the use of multi-dimensional set of performance measures which include both financial and non-financial measures; it also includes internal and external measures of performance and it often includes both measures which quantify what has been achieved as well as measures which are used to help predict the future (Ali & Dhaha).

To measure the efficiency and the effectiveness of any particular firm performance measures should be chosen, implemented and monitored. SMEs financial performance refer to sale, business transactional activities that reflect on sales like purchases through mobile money services as showed by the research findings of Mutinda the financial performance measures include profits, revenues, returns on investments (ROI), returns on sales and returns on equity. However as per the topic of the study this research will investigate the effects of mobile money on financial performance of SMEs in Somalia, Mogadishu. The study will focus on the effects of mobile money on the financial performance of SMEs positively or negatively as almost all SMEs use mobile for daily business transactions in Somalia in general and in Mogadishu particularly. Although there are two main telecommunication companies in Mogadishu that Offer Mobile money services, Nation-link which provides E-MAAL and Hormuud Telecom, which provides EVC this study will mainly Focus on the EVC of Hormuud which is more common and available in almost everywhere and every Business right from street sellers to SMEs.

Africa is already leading the world in the use of mobile money, and its growth is accelerating. In countries such as Kenya, Tanzania and Uganda, mobile-money accounts have become much more widespread than bank accounts. More than 17 million Kenyans (two-thirds of the adult population) are using mobile-money services, mainly to transfer money to family members or business partners in distant locations, but increasingly for bill payments and small loans. (York, 2013). Mobile money service, designed to help microfinance institutions streamline their operations has received overwhelming uptake in Kenya since its introduction in 2007. This success is attributed to the service being affordable and accessible including low income earners. The technological invention is considered easy to use yet efficient and reliable with the potential to extend financial services to the unbanked or those preferring cheaper financial services. It is an appropriate technological invention for SMEs that continue to face challenges related to limited affordable and accessible

financial services to support business operations. SME's needs for payment and transactional services are not always well served by conventional banks since they do not always find it easy or cost effective to adopt a full-feature package for banking services (Oloko).

In Somalia the leading telecommunication company Hormuud in the capital city, Mogadishu, launched Electronic Voucher Card plus (EVC plus), a mobile application technology for money transfer. People and SMEs widely adopted EVC plus for transferring, selling/buying, sharing and receiving money to family members, friends and businesses (Ali & Dhaha; Wardhere & Dhaha, 2013). This technological innovation has given many low income families and small businesses a chance to access financial services to both banked and unbanked members as they can access from their mobile phones and it is also more convenient as one can avoid queuing in banks. As a result, majority of micro business operators in Somalia especially in the capital city Mogadishu have embraced its use in their daily business operations such as paying suppliers for goods and services, paying bills, sending money to friends and relatives, withdrawing cash and topping up airtime accounts.

As statistics shows More than 70% of the total 2.5 million Hormuud Mobile subscribers are currently using EVC Plus for daily transactions since its inauguration, (Ali & Dhaha; Wardhere & Dhaha, 2013). However with the absence of strong central bank and regulation of financial sector in Somalia since 1991 the wide spread of Mobile Money transfer Among low educational background community is a double sword in the sense that it could affect the performance of their businesses either positively such as reduction of costs as individuals, businesses and non for profit organizations can avoid cash handling and securing costs (Orozco & Yansura, 2014).

However despite the ease of use and the convenience for payment some people argue that the Use of Mobile money has negative effect on cash disbursement in the sense that it speeds up the use of cash for unnecessary things or unplanned events, fear for losing the mobile and the existing infrastructure to support mobile money technology is still limited in some ways (K. M. Nyaga, 2013). however even though a preliminary survey shows that mobile phone coverage and adoption has a positive impact on risk reduction, market improvement, coordination amongst firms and labor market (Oloko). Yet there is no previous research conducted in Somalia regarding the contribution of mobile money on the financial performance of SMEs in Somalia and this is what this study aimed to establish.

### Research Objectives

1. To determine the effects of Mobile transaction cost on the financial performance of SMEs in Mogadishu, Somalia.
2. To determine the effects of number of mobile money transactions on the financial performance of SMEs in Mogadishu, Somalia.
3. To establish the effect of financial literacy on the financial performance of SMEs in Mogadishu, Somalia.
4. To identify the effect of mobile transfer regulation on the financial performance of SMEs in Mogadishu, Somalia.

## 2. Related Literature

### 2.1 Technological Acceptance Model (TAM)

Mobile payment procedures are essentially information technology (IT) procedures and channels through which users make various payment transactions. Studies show that the acceptance to use the mobile payments varies with the context

in which users are able to use a mobile payment procedure (Oloko). Since this study focuses on effects of Mobile money payments on the financial performance of small and medium enterprises in Mogadishu hence it applies the theory of technology acceptance Model (TAM). Technology Acceptance Model (TAM) is widely adopted theory for examining the behavioral intention of using computers by the users. According to (Ali & Dhaha), TAM was first introduced by Davis (1989) and cited that the perceived usefulness and perceived ease of use were major determinants for using computers. Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance", while perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort" and further declared that these two beliefs determine the majority of variance in an adoption of a new technology.

According to (Agnes N Mutinda, 2014), TAM has received praises from earlier researchers on its contribution towards our understanding into consumer behavior and further stated that "It has proven to be a useful theoretical model in helping to understand and explain user behavior in information system implementation". Many researchers, however conducted numerous researches of TAM model for example, according to (Porte & Naveen, 2006), the researcher asserting the work of other researchers e.g. (Bruner & Kumar, 2005), stated that "TAM has been applied in the context of online consumer behavior and received empirical support via numerous studies (Venkatesh & Davis, 2000). TAM was chosen as the appropriate model and was extended to include other factors such as perceived ease of accessibility of the mobile payment services, perceived low cost of the mobile payment services, perceived convenience, perceived security, perceived support from the mobile services provider and from the government, perceived satisfaction and actual usage of the mobile payments (Oloko).

### 2.2 Innovation Diffusion Theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product, acquire and perform a new behavior, etc.) (Nartei, 2014). 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 (K. M. Nyaga, 2013). According to Drucker (2002), Innovation is a specific Function of entrepreneurship, the means by which the entrepreneur either creates new wealth producing resources or endows existing resources with enhanced potential for creating wealth (Abdi & Ali, 2013).

A review of the literature on innovation and diffusion revealed that there were several distinct schools of thoughts as to what an innovation is. Barnett and Schumpeter define innovation as the carrying out of new combinations. The concept of innovation is an essential component of commercial entrepreneurship. Innovation can therefore be defined as all the scientific, technological, organizational, financial, and commercial activities necessary to create,

implement, and market new or improved products or processes (Maina, Bwisa, & Kihoro).

Furthermore this theory has the following characteristics just like other innovations: Relative Advantage: the degree to which the innovation is perceived as being better than the practice it supersedes; Compatibility: the extent to which adopting the innovation is compatible with what people do; Complexity: the degree to which an innovation is perceived as relatively difficult to understand and use; Trial ability: the degree to which an innovation may be experimented with on a limited basis before making an adoption (or rejection) decision; and observability: the degree to which the results of an innovation are visible to others (Agnes N Mutinda, 2014). The final important issue with regard to Rogers' theory, according to (Ghazizadeh, 2012), is the categorization of the individuals among the member of social systems. Rogers classified the individuals into five groups: Innovators: who are the first to adopt a new innovation, Early adopters: who are the second largest group of the individuals mainly youth, with high education and income, Early majority: who are required a long time to adopt a new innovation, individuals who have above average social status, Late majority: who usually adopt an innovation after when the average of the members in a social system adopted the innovation, Laggards: Is the last group of member in a social system who adopts a new innovation. The individuals belong to this group are usually concern with traditions.

### 2.3 Task-Technology Fit Theory

Task-Technology Fit (TTF) has emerged as a concept to explain the extent to which technologies support tasks across varying contexts (Goodhue 1998; Dishaw & Strong 1998; Teo & men 2008), and implications of this 'Fit' for system use and user performance. TTF is based on the rational choice theory and assumes users will adopt technology provided it has the features necessary to support their tasks. TTF thus refers to the extent to which technological capacity supports tasks in the sense that technology will be used well only if its functions adequately support user activities thus the best technology is the 'fittest' because adequate capacity sufficiently meets user need (Gatara & Cohen, 2014a, 2014b). Goodhue (1995) developed and tested a model that determined task-technology fit based on task needs and system characteristics. Task-technology fit was viewed as the extent to which technology functionality matched task requirements and individual abilities. It was assumed that users can successfully evaluate task-technology fit and that a higher fit would eventually result in better performance. Goodhue (1995) also hoped to show that user perceived task-technology fit was a better indicator of the value of an information system than other forms of user evaluation, such as satisfaction and usefulness (Agnes N Mutinda, 2014)

#### 2.4.1 Mobile transaction costs

This is a factor that has been added to the existing technology adoption theories in order to sufficiently explain the adoption of mobile based financial services. The cost associated with using a service is one of the key drivers of a user's intention to adopt mobile money. Individuals are likely to adopt mobile money services if they perceive that the cost is acceptable compared to other existing alternatives of the service (Bosire, 2012). The transaction costs of sending money through the mobile payment technology are lower than those of banks and money transfer companies (Omwansa, 2009). The cost of a payment transaction has a direct effect on

consumer adoption if the cost is passed on to customers (Mallat, 2007).

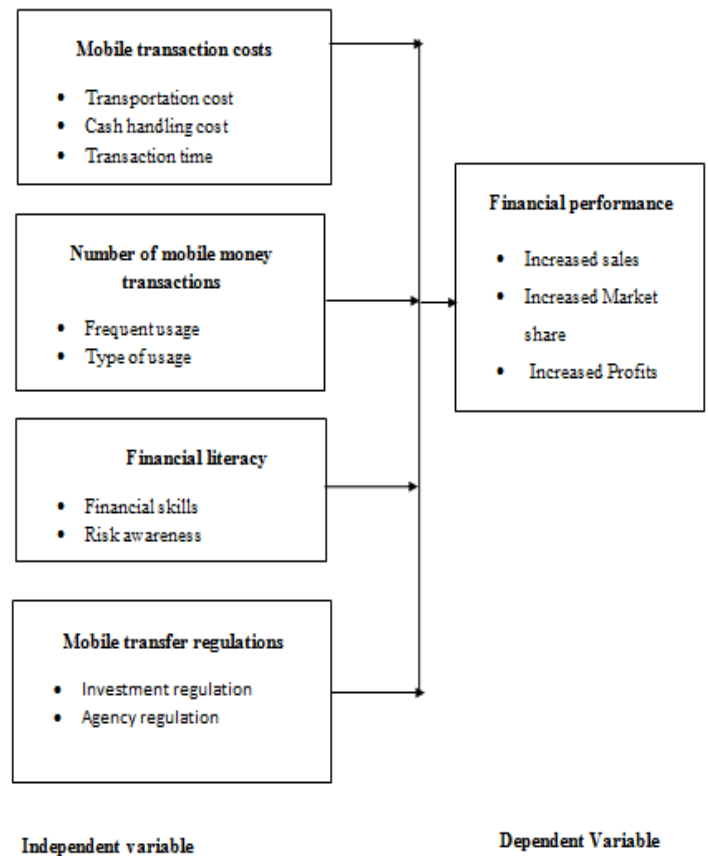


Figure 2.1. Conceptual Framework.

Transaction costs should be low to make the total cost of the transaction competitive. The cost of the mobile payments should be affordable to most of the micro business operators and far below what the banks normally charge for their bank transactions. There are many different mobile handsets which are easy to operate and have the functionalities required for the mobile payment technology (Mbogo, 2010b). The use of mobile money for business transactions has many benefits for SMEs as they can avoid the cost of Transportation to geographic outreach and facilitating payments, deposits, receive insurance payments, withdrawals, or loan disbursements more cheaply. Other benefits include reduced Cash handling costs (Kendall, Maurer, Machoka, & Veniard, 2011, 2012).

The Objective of Mobile Money transactions is to improve the efficiency of SMEs by using Mobile technology to make transactions faster, cheaper and more secure (Guagraw, 2007). It involves account transactions, balance checks and payments. Accordingly, (B. Ngaruiya, Bosire, et al., 2014a) note that mobile phone technology has made it easier for SMEs to conduct their financial transactions. This is because mobile phone financial transactions saves time and provides a safer means of handling money transfer. Additionally mobile technology can be used to reach more customers and facilitate exchange of information and decision making. Therefore, Mobile financial transactions provide SMEs with means through which they can reduce their costs as well as increase their ability to extend their business networks thus enabling them to increase their performance (Bernard Ngaruiya, Mary Bosire, & Simon M. Kamau, 2014b). According to (K. M. Nyaga, 2013), Mobile money services are considerably much cheaper than other

money transfer options such as Western Money Union (Omwansa, 2009). Mobile money is considered up to 19% cheaper than banks by international standards (World Bank, 2012), with low transaction costs favoring formal and informal money transfer. When transfer cost is low, the saving is either passed on to the customers, or translates to money that can be kept by SMEs and contribute to profits.

#### 2.4.2 Number of Mobile Money Transactions

Higgins (2012) conducted a study to determine mobile money usage patterns of Kenyan SMEs; however the study showed that 99.5% of the SMEs used mobile money. Moreover, the study results indicated that the use of mobile money enabled SMEs to improve their performance (B. Ngaruiya, Bosire, & Kamua, 2014). The study further indicated that 58.3% of the respondents frequently use mobile money to receive payments, 48.4% of the respondents use mobile money to make payments. Only few respondents reported that they use mobile money for borrowing or lending purposes. This means SMEs mostly use this service to save, receive and make payments. The majority of mobile money transactions are sent and received by customers within their own deployment, but allowing mobile money to flow between multiple deployments would likely increase the number and the frequency of transactions across networks (J. K. Nyaga, 2014b).

In early 2012, the Bill & Melinda Gates Foundation, the World Bank, and the Gallup World Poll found that one-third of adults in Somalia had used mobile money in the past 12 months. Furthermore MMU (Mobile Money for the Unbanked) Global Mobile Money Adoption Survey revealed that Somalia had one of the highest rates of customer uptake. It appears that most mobile money activity in Somalia has been in the Somaliland region via a service called Telesom Zaad Mobile Financial Services. Zaad is a mobile money service launched by Telesom in Somaliland in June 2009. Since then, the service has gained significant traction: in June 2012, almost 40% of Telesom GSM subscribers were active users of Zaad. But what is most striking about Zaad is the degree of activity on its mobile money platform. The average number of transactions per customer is extremely high and well above global averages: in June 2012, 8.3 million transactions were performed by just 240,000 active mobile money customers, adding up to more than 34 transactions per customer every month (Davidson & Pénicaud, 2012).

The Somali Economic Forum states that mobile money transfer service providers receive a high volume of transactions averaging around 34 transactions per customer on a regular weekly basis. Sources report that MMT technology is utilized by businesses and merchants in Somalia according to (UNHCR, 2015). The source further stated that EVC Plus has become one of the services that people depend on when conducting their daily transactions in south and central Somalia. Most business activities now use this service as payment method including water and electricity bills, while most of the family daily business transactions occur through this service. According to the same source mobile money transfer service is catching on fast and moving into other traditional every day activities such as paying electricity bills and booking domestic flights. In simple terms in Somalia, almost every merchant will accept payment through mobile devices. However, the more the number of mobile money Transactions that SMEs do, the more it will affect their performance.

#### 2.4.3 Financial literacy

In the context of a small business, the Banking Association of South Africa defines a Financially-literate SME as one “which has an adequate level of personal entrepreneurial competencies, personal finance skills, and business management skills; has an appropriate level of understanding of functional financial management systems, an appropriate level of understanding of SME life-cycle funding and other financial services needs and options and knows where and how to source and negotiate those funding and service requirements, understands and can manage financial risks or seek relevant advice to manage such risks; understands legal, regulatory and tax issues as they relate to financial matters; understands the range of legal recourses it can resort to when necessary, and namely, in case of bankruptcy or other situations of financial distress.” (Fatoki, 2014b).

Financial literacy can be defined as 'ability to obtain, understand and evaluate the relevant information necessary to make decision with an awareness of the likely financial consequences. Financial literacy should be linked to the concept of financial intelligence. This is a set of skills that must be held by all those who want to run their business successfully and to be able to follow and understand the financial world. They must be able to read balance sheets and financial statements of companies and financial institutions and to understand their mutual relations and influences (Plakalović).

According to (Chibango, 2014). “Low level of financial literacy and education in general, can impede the economic development of a country in the current rapidly changing, technology-driven world” (CIA, 2013). Faye and Triki (2013) considered low level of financial literacy in Africa as one of the challenges to the development of technology based services such as mobile money. Full exploitation of mobile money services requires some level of financial literacy. This is difficult to achieve in countries where the majority of adults cannot read and write. Cole and Fernando (2008) assert that there is a strong association between financial literacy, the ability to make good financial decisions and household well-being and business survival (Fatoki, 2014a). Financial literacy was found significant in explaining financial services utilization by SMEs in the sense that firms whose owners are financially literate are more likely to utilize financial services - take micro credit, thereby increasing their chances of being sustainable according to (Nunoo & Andoh, 2012).

However according to the study findings of (Robert M Njoroge, 2013), in Kenya, he found that all the SMEs interviewed were found to have some level of financial literacy and on average most entrepreneurs scored well above average in financial literacy. Highly successful entrepreneurs scored highly in financial literacy and demonstrated high understanding of finance. In contrast, less successful entrepreneurs exhibited stagnant growth, and low level of financial literacy majority of who were found to be in informal sector. This study concluded that there is a positive relationship between financial literacy and entrepreneurial success. Nunoo et al (2012) in a study to examine how financial literacy influences SMEs in Ghana found that financial literacy is crucial in stimulating the SME sectors. Financial literate SMEs may save more, and better manage risk, by purchasing insurance contracts. The results of the study proved that financial literacy has a positive effect on SMEs performance (Robert M. Njoroge, 2012).

However that implies those entrepreneurs who are financially literate will be able to make more use of mobile banking services and that will affect their business performance.

#### 2.4.4 Mobile Transfer Regulations

Mobile money transfer like other financial products has to be regulated by central bank to mitigate risks prone to all types of money, electronic money or deposit in a bank so that money should be managed with proper controls and accountability. In neighboring countries, such as Kenya, Uganda and Rwanda who have implemented mobile money services, issued certain guidelines that are required mobile money service providers to adhere. Following are among the requirements: to have adequate financial, managerial and technical capacity, be organized as limited liability company, to protect the privacy of customers, to be licensed by the central bank, to adhere regulations of money laundry and terrorist financing, to promote a system enabling service providers to become interoperable with each other and to encourage competition and avoid anti-competitive practices (Dalmar, 2015). Although mobile money needs more oversight of the central bank since it is new. However, at the present, the Central Bank of Somalia is not in position to regulate mobile money services.

According to (Dalmar,2015),The constitution of Somalia clearly indicates the role of the central bank under the Article 23 stating that “The Federal Central Bank of the Federal Republic of Somalia shall be responsible for formulating and implementing financial policies and monetary policies and all the banks shall abide by the regulations set by the Federal Central Bank”. The act of the CBS also indicates that the bank is responsible to license, regulate and supervise all banks and financial institutions, formulate and implement such policies as to best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems so as to foster the liquidity, solvency and proper functioning of stable financial system.

In Uganda mobile money service provider is required as far as the regulations of the Central Bank of Uganda are concerned, to select and manage mobile money agents. And its dealings with mobile money agents, a mobile money service provider must meet the following requirements: to Enter into an agreement with the agent stipulating the responsibilities of both parties. The said agreement should not provide for exclusivity and should clearly state that the mobile money service provider shall be liable for the actions of its agents as regards to the provision of mobile money Services, Put in place an effective agent selection process and carry out due diligence on its agents, Assign each agent a unique identification number and keep up-to-date records of its agents, Ensure that agents receive appropriate training, Put in place mechanisms for supervising the mobile money agents to ensure agents conduct business in accordance with these Guidelines and any other relevant regulatory provisions (Bank of Uganda,2013).

Mobile money sits at the intersection of a number of important policy issues. These include interoperability in relation to ICT networks, interconnection issues among ICT service providers, lack of legislative and regulatory harmonization and convergence of ICT and financial sectors. Each issue is complex in its own right, and is often associated with a different regulatory domain. As many as four regulators (bank supervisor, payment regulator, telecommunication regulator and competition regulator) may be involved in

crafting policies and regulations that affect this sector (Nyaga, 2014).As mobile money markets evolve, the previously distinct regulatory sectors of telecommunications and finance will continue to intersect, thus changing the regulatory landscape and potentially raising new issues for regulators to address. For example, jurisdictional and dispute resolution questions may arise. When mobile money disputes arise either on a consumer or industry level, which sector and corresponding regulatory agency will have jurisdiction over the claim or dispute, and how will dispute resolution procedures be determined? Additionally, as mobile money services extend across borders, national jurisdictional issues may also arise (UN, 2012).

However, as the involvement of the Central bank of Somalia in financial sector is almost zero and the telecommunication industry is privatized, mobile money in Somalia will be most likely unregulated which means consumers of this financial product are not protected against many risks that will come in. therefore this uncertainty may hinder the performance of SMEs. Field studies have shown that in the absence of active governing bodies the implications such as insecurity, depleted infrastructure, unregulated market, and lack of government support have duplicated negative influence on business performances. Small business enterprises in the informal sector may therefore be more prone to failure, if there is no active government intervention which creates supportive climate where they can operate under the legal boundaries stipulated (Nogsane, 2013).

#### 2.4.5 Financial performance

Use of mobile money for business transactions by SMEs in Somalia, as it means a faster and cheaper geographic outreach, reduced cash handling costs, safer and easier mechanism for money transfer, Therefore, Mobile financial transactions provide SMEs with means through which they can reduce their costs as well as increase their ability to extend their business networks thus enabling them to increase their performance(Ngaruiya, Bosire, & Kamua, 2014). Almost after six years since the introduction of EVC Plus by Hormuud telecom in south and central Somalia, almost hundred percent of SMEs use this service for business purposes, to receive and send small Transactions to the extent that in a particular small business one account of ECV plus is not enough for daily transactions due to the limit set by the company that Customers can only have \$300 in their account at any given time(Mohamed, 2013). Therefore, the frequent use of mobile money by SMEs for the purpose of doing business will affect financial performance of SMEs directly.

All the literature reviewed reveals that financial literacy is an important determinant of financial performance of SMEs by saying that only those entrepreneurs who are financially literate are more likely to utilize the financial services such as mobile money. Empirical evidence also supports and indicates that there is a positive relationship between financial literacy and entrepreneurial success. Yet in Somalia, the facts unfortunately points out that small business nearly die out per day as much as they are born due to lack of skills necessary to manage risks and proper financial management and consultancy(Haraf, 2013). Therefore this implies that to investigate how financial literacy affects the financial performance of SMEs in Somalia will be of special interest as it will bring out more useful information clearly such as the rate of financial literacy in Somalia. Finally, lack of the Supervisory role of the central bank will trigger the long term

fear of negative impact of mobile money on the financial performance of SMEs in Somalia.

### 2.5 Empirical Review

Simiyu (2015) conducted a study to determine the effect of mobile money transfer on the growth of small and medium sized enterprises in Kisumu city, Kenya. He used a questionnaire to collect primary data. The result of his study indicated that mobile money had made a significant contribution to the SME sector. Majority of the traders rely on it as opposed to the formal banking sector for their day to day transactions. Furthermore, the results of the study indicated that mobile money transactional costs, convenience and financial accessibility have all been shown to affect SMEs growth through the service leading to increased enrolment in mobile money services, increased financial transactions resulting in increased sales and therefore perceivable contribution.

Wambari (2009) also did a case study in Kenya to determine the impact of mobile banking in developing countries. He used a semi-structured questionnaire to collect data from a sample of 20 SMEs. The results of his study indicated that the adoption of mobile banking had a positive impact of financial transactions of SMEs. Furthermore, the results of the study indicated that the adoption of mobile banking had enabled SMEs to increase their sales thereby leading to improved financial performance (Ngaruiya, 2014). Mbogo (2010) also conducted a study to determine the impact of mobile payments on the success and growth of Micro-business in Kenya. The study was based on survey conducted through administration of questionnaires and collected data from a sample of 409 micro-business entrepreneurs in Nairobi, Kenya. The study applied the theory of Technology Acceptance Model (TAM) and revealed that convenience of money transfer technology plus its accessibility, cost, support and security factors were related to the behavioral intention to use and actual usage of mobile money services by micro businesses to enhance their success and growth (Mbogo, 2010a).

Moreover, Mutinda (2014) did a study to find out the effect of mobile phone based money transfer on the financial performance of SMEs in Nairobi County, Kenya his study adopted a descriptive survey method. He collected data from a sample of 460 respondents using self-administered questionnaires and interview guide. The findings of the study revealed that there is a positive correlation between SMEs financial performance and business growth, efficiency in service delivery, access to information and convenience and reliability (Agnes Nthenya Mutinda, 2014).

### 3. Methodology

The study adopted a descriptive survey method. (Mugenda), described descriptive research design as a systematic, empirical inquiring into which the researcher does not have a direct control of independent variable as their manifestation has already occurred or because the inherently cannot be manipulated. Descriptive studies are concerned with what, where and how of a phenomenon hence more placed to build a profile on that phenomenon (Mutua, 2010). Descriptive research is more appropriate because the study seeks to build a profile about the effect of mobile money transfer on the financial performance of SMEs in Mogadishu. The study targeted all 973 registered small and medium sized enterprises in Bakara market according to Somali Chamber of Commerce and Industry (SCCI, 2015).

The exact number of all SMEs in this area is believed to be more than that number since most businesses is either unregistered or operate informally.

### 4. Research Findings

#### 4.1 Effect of mobile transaction costs on financial performance of small and medium enterprises

**Table 4.1 Mobile transaction costs on financial performance of small and medium enterprises**

	Frequency %						Mean	S.D
	N	1	2	3	4	5		
Transactions through mobile money save costs.	146	28.8	45.2	13.7	7.5	4.8	2.14	1.070
Time taken to transact business with mobile money is shorter than other forms of payment.	146	32.2	50.7	12.3	4.8	-	1.90	0.794
Mobile Money service is convenient for transactions.	146	17.8	39.7	28.1	10.3	4.1	2.43	1.030
Mobile money reduces cash handling costs.	146	15.1	32.2	27.4	15.8	9.6	2.73	1.183

The study sought to determine the effects of mobile money transfer on the financial performance of small and medium enterprises in Mogadishu. Table 4.1 summarizes respondents' level of agreement on how mobile transaction costs affect financial performance of small and medium enterprises. Respondents rated their level of agreement using five point liker scale where 1 = Strongly agree, 2 = agree, 3 = Neutral, 4 = disagree and 5 = strongly disagree, however, a mean value near the lower part of the scale (1 and 2) means respondents has agreed, a mean value near the center of the scale indicates that respondents were not sure the effect or they were indifferent, while a mean value of near the upper part of the scale (4 and 5) indicates that respondents has disagreed. Standard deviation shows how far were the rate of the respondents clustered around the mean, the smaller the value, the closer the responses to the mean. Therefore, that implies that 74% of the respondents agreed that transactions through mobile money reduce transaction costs as indicated by a mean of 2.1 with a standard deviation of 1.070. It indicates with the application of mobile money people are no longer incurring transportation costs to send money to suppliers or collect money from customers as well as remittance fees. This supports the study findings of (Omwansa, 2009) which revealed that transaction costs of sending money through the mobile payment technology are lower than those of banks and money transfer companies. Moreover, the largest mobile money provider in Mogadishu, Hormud Telecom does not charge their customers for using the mobile money service. The only charge so far is a small amount of 0.20\$ per transaction for reverting wrong transactions when money is sent to an intended client unlike other mobile money providers like MPesa those who charge their clients per transactions.

The study also revealed that 82.9% of the respondents either agreed or strongly agreed that time taken to transact with mobile money is shorter than other forms payment as

indicated by a mean of 1.90 with a standard deviation of 0.794. This supports the research findings of (B. Ngaruiya, Bosire, et al., 2014a), that mobile phone technology has made it easier for SMEs to conduct their financial transactions. This is because mobile phone financial transactions saves time and provides a safer means of handling money transfer. 57.5% of the respondents either strongly agreed or agreed that mobile money is convenient for transactions as indicated by a mean of 2.43 with the standard deviation of 1.030. This is in line with research findings of Simiyu (2015), who sought to find out the perception of the respondents on the convenience of mobile money use. Most of them indicated that they strongly agreed that mobile money is convenient for various transactions. Although a mean of 2.43 falls in the agree region of the scale but it is also close to the middle of the scale, however, it implies that a significant number of respondents were not sure or some sort disagreed that mobile money is convenient for transactions due to the fact that it sometimes inconveniences transactions such as transferring funds to wrong client and hence reverting such transactions may take time. Sometimes transactions using mobile money may take time due to the system overload. This also supports the study findings of (Nyaga, 2013), he sought to find out the cause of these inconveniences and he discovered that there were three major causes, these were; delays, (66%) no float (22%) and loss of money (18%).

A relatively moderate number of respondents (47.3%) had somewhat agreed that mobile money reduces cash handling costs. This supports the findings of (Orozco & Yansura, 2014), who stated that businesses and non for profit organizations can avoid cash handling and securing costs. However, a reasonable number of respondents, 52.7% were either not sure whether mobile money reduces cash handling costs or somewhat disagreed that mobile money reduces cash handling costs as indicated by a mean of 2.73 with a standard deviation of 1.183.

#### 4.2 Effect of number of Mobile Money Transactions of the financial performance of SMEs

**Table 4.2 Number of mobile money transactions on the financial performance of SMEs**

	Frequency %					Mean	S.D
	N	1	2	3	4		
Withdraw cash from the bank.	146	46.6	24	11.6	17.8	2.01	1.142
Deposit Money in the Bank account.	146	49.3	18.5	13.7	18.5	2.01	1.174
Make a transfer.	146	58.9	30.1	8.2	2.7	1.55	0.762
Buy airtime.	146	66.4	19.9	9.6	4.1	1.51	0.832
Pay bills.	146	67.1	26.7	3.4	2.7	1.42	0.692

The study sought to investigate the effects of mobile money transactions on financial performance of small and medium enterprises. Table 4.2 summarizes respondents' level of agreement on how mobile money transactions affect financial performance of small and medium enterprises. From the table 4.8 it is clear that 70.5% of the respondents used mobile to withdraw money from their bank accounts as indicated by a mean of 2.01 with a standard deviation of 1.142. This supports the study findings of (Nyaga, 2013) who asserted that 62% of the respondents used mobile money to withdraw money from bank accounts daily or weekly. It implies that 70% of the SMEs in Mogadishu were banked.

49.3% of the respondents used mobile money for deposit many times, 18.5% of the respondents used few times or

once. 13.7% of the respondents never used mobile money for deposit while 18.5% of the respondents did not know or refused. This is relatively more than compared to the study findings of (Nyaga, 2013) who asserted that 31% of the respondents in the urban town in Kenya used mobile money to deposit money daily or weekly. This is because the mobile money in Mogadishu, EVC has an option of connecting your mobile to your bank account if you have your account in Salam Somali Bank which is partnering with the mobile money provider, Hormud telecom, therefore SMEs are in position to send or receive huge amount of money using mobile at his/her workplace. As a result of that, SMEs no longer channel their funds to remittance companies which imply avoiding remittance fees, which was a great amount for bigger transactions since both banks and mobile money provider do not charge anything to the clients in Somalia. 58.9% of the respondents used mobile money many times to transfer money. 30.1% of the respondents also used mobile money few times or once to transfer money. 8.2% of the respondents never used mobile money to transfer money while only 2.7% of the respondents don't know or refused as indicated by a mean of 1.55 with a standard deviation of 0.762. This is because World Bank stated that Mobile money is considered up to 19% cheaper than banks by international standards (World Bank, 2012), in that notion SMEs and individuals prefer transferring money to geographical outreaches using mobile money. The table above shows that a total of 86.3% of the respondents either used mobile money to buy air time many times or few times or once because of its perceived ease of use and perceived convenience as one can top up the credit from his/her EVC balance at any time as indicated by a mean of 1.51 with a standard deviation of 0.832. However, it implies that it affected small businesses that used to sell air time credits negatively in the sense that only 13.7% of respondents used to buy credits and this is one of the negative effects of mobile money. A total of 93.8% of the respondents used mobile money to pay bills as indicated by a mean of 1.42 with a standard deviation of 0.692. This is the same as the research findings of (Ngaruiya, Bosire, & Kamua, 2014) who stated that 58.3% of the respondents frequently use mobile money to receive payments, 48.4% of the respondents use mobile money to make payments.

#### 4.3 Financial literacy on financial performance of small and medium enterprises

The study sought to investigate the effects of financial literacy on financial performance of small and medium enterprises. Table 4.3 summarizes respondents' level of agreement on how financial literacy affects financial performance of small and medium enterprises. The researcher wanted to know if respondents believe mobile money as money and the results of the study revealed that 58.9% of the respondents had enough awareness that mobile money is a new financial innovation. Yet 41.1% of the respondents were still reluctant to believe or not aware that mobile money is a financial product as indicated by a mean of 2.67 with a standard deviation of 1.227. Further more, in regard to the potential risk inherent with the application mobile money, 78.1% of the respondents perceived the potential risk of mobile money application such as possible system failure, theft or loss of money as well as replacing the local currency were among adverse factors threatening clients as indicated by the mean of 2.05 and a standard deviation of 0.942.



**Table 4.3 Financial literacy on financial performance of small and medium enterprises**

	Frequency %						Mean	S.D
	N	1	2	3	4	5		
Mobile money transfer is a financial product.	146	13	45.9	13.7	15.8	11.6	2.67	1.227
Application of mobile money is prone to certain financial risks.	146	28.1	50.0	13.7	5.5	2.7	2.05	0.942
Small and medium enterprise owners need to be insured against mobile money potential risks ( loss of phone, failure from the service provider )	146	43.2	34.9	8.9	9.6	3.4	1.95	1.104
Mobile money transfer speeds up cash disbursement for non-value adding activities.	146	39.0	25.3	19.9	12.3	3.4	2.16	1.173
Financial system of Somalia supports mobile money transfer.	146	13.7	27.4	17.8	24.0	17.1	3.03	1.326

Table 4.9 also indicates that a total of 78.1% of the respondents agreed that they need for insurance as indicated by a mean of 1.95 and a standard deviation of 1.104. This is almost the same number of respondents who reported that there is a possibility of certain financial risks in using mobile money.

The study further indicated that 64.3% of the respondents agreed that Mobile money transfer speeds up cash disbursement for non-value adding activities affected the performance of SMEs by a mean of 2.16 and a standard deviation of 1.173. This indicates SMEs as well as individuals are likely to spend money on their phone more than they would spend by cash. Finally, 58.9 % of the respondents were either not sure, disagreed or strongly disagreed that the financial system of Somalia supports mobile money as indicated by a mean of 3.03 with the standard deviation of 1.326 due to the following reasons: the financial system of Somalia is devolved competing commercial banks and dysfunctional central bank, therefore, Mobile money in Mogadishu lacks overall cooperation with other financial institutions and the financial system at large except its provider and Salam Somali bank which is partnering with Hormuud telecom. Despite this, the EVC in Mogadishu had penetrated the market and won the trust of the people in south and central Somalia due to the fact that the mobile money provider is the leading telecommunication company in Somalia and people and people trusted due its success in the telecommunication sector.

#### **4.4 Mobile transfer regulation on financial performance of small and medium enterprises**

The study sought to investigate the effects of mobile transfer regulation on financial performance of small and medium enterprises. Table 4.4 summarizes respondents' level of agreement on how mobile transfer regulation affects financial performance of small and medium enterprises. Most

of the respondents were indifferent that cash in cash out branches of mobile available any time anywhere, mobile money providers putting reliable mechanisms in place to mitigate the risk of people losing money, mobile money providers investing the net difference of deposits and withdrawals in different projects for their own interests and mobile money providers having a percentage of the total amount of mobile money in circulation in a trusted bank account as a reserve influenced financial performance of small and medium enterprises as shown by a mean of 2.68, 2.58, 2.57, 3.38 and standard deviations of 1.175, 1.237, 1.173, 1.291 respectively.

While others disagreed that mobile money providers regulated by the Central Bank of Somalia with a mean of 3.71 and standard deviation of 1.434 influenced financial performances of small and medium enterprises.

Descriptive statistics revealed that 65.8% of the respondents either disagreed or strongly disagreed the mobile money provider were regulated by the central bank of Somalia. That reflects the fact that not only the financial sector but all businesses were not regulated since the collapse of the central government in 1991. Moreover, half of the respondents agreed while 32.2 disagreed that cash in cash out branches of mobile money are available at any time anywhere. In fact the only official branches for loading or unloading EVC are branches owned by the service provider. They are almost available but not anywhere in the sense that, centers are far apart from district to another or within one district and they are not also available anytime since the time they are open is always between 8:00am to 4:00pm for six days, from Saturday to Thursday. However, all businesses in Mogadishu also accept EVC payments; therefore, even if branches are not available one can easily get the amount of EVC he or she wants from neighboring businesses.

**Table 4.4. Mobile transfer regulation on financial performance of small and medium enterprises**

	Frequency %						Mean	S.D
	N	1	2	3	4	5		
Mobile money providers are regulated by the central bank of Somalia.	146	4.1	16.4	13.7	36.3	29.5	3.17	1.175
The cash in cash out branches of mobile money are available at any time any where.	146	20.5	29.5	17.8	26.0	6.2	2.68	1.237
Mobile money providers put reliable mechanisms in place to mitigate the risk of losing people's Money.	146	17.1	41.1	15.1	20.5	6.2	2.58	1.173
Mobile money providers invest the net difference of deposits and withdrawals in different projects for their own interests.	146	29.5	19.9	20.5	24.7	5.5	2.57	1.291
Mobile money providers have a percentage of the total amount of mobile money in the circulation in a trusted bank account as a reserve.	146	12.3	21.9	13.0	21.2	31.5	3.38	1.434

In regard to the level of confidence of respondents to the service provider the study revealed. that 58.2% of the respondents had confidence with the service provider due to the efforts of the service provider to ensure that people's money should remain safe; such as reverting wrong transactions immediately, alerting clients in attempts of stealing money for fake transactions as well as improving the efficiency of the system to avoid inconveniencing clients in transactions. Furthermore, almost half of the respondents disagreed that mobile money providers invest the net difference of deposits and withdrawals in different projects for their own interests or they are not sure. That implies the mobile money provider recognizes the amount of money they have for EVC exchange as short time liability or on demand deposit for which clients can demand at any time. Finally, from table 4.4 it is clear from the table that 65.7% of the respondents were not either sure or disagreed that mobile money providers have a percentage of the total amount in circulation in a trusted bank account as a reserve. It implies that since the central bank of Somalia is not well established the sector is not regulated.

#### 4.5 Multiple Regression Analysis

Multiple regression analysis was performed to assess the relationship between the dependent variable (financial performance of small and medium enterprises) and the independent variables (mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation), and to test the research questions on the effects of effects of mobile money transfer on the financial performance of small and medium enterprises in Mogadishu. Standard multiple regression analysis was conducted to test the research questions (Cooper & Schindler, 2013; Sekaran, 2008).

**Table 4.5. Standard Multiple Regression Analysis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.418 <sup>a</sup>	.174	.151	.55932

a. Predictors: (Constant), Financial regulation, Transaction cost, Financial literacy, Number of Transactions

b. Dependent variable: Financial performance of SMEs

In order to test research questions, a standard multiple regression analysis was conducted using financial performance of small and medium enterprises as the dependent variable and the four effects of mobile money transfer on the financial performance of small and medium enterprises: mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation as the predicting variables. Tables 4.5, 4.6 and 4.7 present the regression results. From the model summary in table 4.5, Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (SMEs Financial performance), that is explained by all the 4 independent variables (mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation). It is clear that the adjusted  $R^2$  was 0.151 indicating that the combination of mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation explained a 15.1% of variation in financial performance of small and medium enterprises in Mogadishu. This therefore means that other factors not studied in this research contribute 85.2% of variance in the dependent

variable. Therefore, further research should be undertaken to find out the effect of Mobile Money Services on SME's financial performance in Mogadishu.

**Table 4.6 Analysis of Variance**

ANOVA <sup>a</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	9.324	4	2.331	7.451	.000 <sup>b</sup>
Residual	44.110	141	.313		
Total	53.434	145			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Financial regulation, Transaction cost, Financial literacy, Number of Transactions

From the ANOVA table 4.6, it is clear that the overall standard multiple regression model (the model involving mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation) is significant in predicting how mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation determine financial performance of small and medium enterprises in Mogadishu. The regression model achieves a low degree of fit as reflected by an  $R^2$  of 0.174 ( $F = 7.451$ ;  $P = 0.000 < 0.05$ ). Our  $F$  calculated  $F = 7.451$  compared to  $F$  tabulated which is 2.44 explains that the model parameters are significant indicators of the financial performance of SMEs

**Table 4.7 Regression Coefficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.947	.266		3.562	.001
	Transaction cost	.253	.085	.253	2.968	.004
	Number of Transactions	-.283	.094	-.261	-3.019	.003
	Financial literacy	.208	.076	.230	2.718	.007
	Financial regulation	.148	.077	.159	1.925	.009

a. Dependent Variable: Financial Performance

Table 4.7 presents the regression results on how mobile transaction cost, number of mobile money transactions, financial literacy and mobile transfer regulation influence financial performance of small and medium enterprises in Mogadishu. The multiple regression equation was that:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_i$  and the multiple regression equation became:  $Y = 0.947 + 0.253 X_1 - 0.283 X_2 + 0.208 X_3 + 0.148 X_4 + \epsilon_i$ . As depicted in table 4.7, there was a positive and significant effect of transaction cost on financial performance of small and medium enterprises ( $\beta = 0.25$ ;  $t = 2.968$ ;  $p < 0.05$ ). There was negative and significant effect of number of transactions on financial performance of small and medium enterprises ( $\beta = -.283$ ;  $t = -3.019$ ;  $p < 0.05$ ). There was a positive and significant effect of financial literacy on financial performance of small and medium enterprises ( $\beta = 0.208$ ;  $t = 2.718$ ;  $p < 0.05$ ). There was also a positive and significant effect of mobile transfer regulation on financial performance of small and medium enterprises ( $\beta = 0.148$ ;  $t = 1.925$ ;  $p < 0.05$ ). Holding Mobile money Transaction cost, number of mobile money transactions, Financial literacy and Mobile money transfer regulations, Financial performance of SMES would be at 0.947, a unit increase in mobile money

transactions would lead to increase in financial performance of SMEs by a factor of 0.253, a unit increase in the number of mobile money transactions would lead to a decrease of Financial performance of SMEs by a factor of 0.283, a unit increase in the financial literacy would lead to an increase of the financial performance of SMEs by a factor of 0.208, a unit increase in mobile money transfer regulations would lead to an increase in the financial performance of SMEs by a factor of 0.148.

### 5. Conclusion

This study has investigated the effect of mobile money transfer on the financial performance of small and medium enterprises in Mogadishu. The results of this study revealed that there is a relationship between mobile money transfer and financial performance of small and medium enterprises. On the basis of the findings of this study, it can be concluded that mobile money transfer has positive effect on financial performance of small and medium enterprises. The study found that mobile money transaction cost, financial literacy and mobile transfer regulation, affects financial performance of small and medium enterprises. It is concluded that mobile money transaction costs, financial literacy and mobile transfer regulation are the best predictors of financial performance of small and medium enterprises in Mogadishu.

### 6. Recommendation

Based on the findings of this study and the conclusions drawn, the following recommendations were made:

1. Due to the effect of financial literacy and mobile transfer regulation, it is suggested that managers should ensure that they build capacity in terms of financial knowledge and also liaise with the regulator on the various regulations to be adopted.
2. It is suggested that the Central Bank of Somalia needs to come up with a complex regulatory framework on how mobile platforms can transact effectively in the financial system
3. The Central Bank of Somalia needs to build capacity amongst its employees so as to be prepared for mobile innovations especially where money transfers are involved.
4. The government of Somalia should come up with the policy that minimizes the adverse effects of Mobile money to the citizens
5. Mobile money providers in Somalia should anticipate the potential effect of the regulation requirements and comply with the international financial regulations before it is too late.
6. further research should be conducted to find out the effect of Mobile Money transfer on SME's financial performance in Mogadishu by examining different predictors

### 7. Suggestion for Further Research

The study recommends further study on some of the other predictors that affect SMEs financial performance apart from the one the study concentrated on; Mobile money transaction costs, number of mobile money transactions, financial literacy and mobile money transfer regulations. The study recommends further study on effects of mobile phone based services on SMEs financial performance using secondary data to accurately predict the relationship among the variables. The research recommends further study on the effect of mobile phone on the financial performance of its provider in Mogadishu specifically Hormuud.

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