

**CONSUMER ADOPTION OF MOBILE FINANCIAL SERVICES: A COMMENTARY**

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**Abstract**

Mobile financial services avail a distinct opportunity for consumers. The potential is extraordinary. There are numerous factors that consumers assess to determine if they will adopt a mobile financial service. In Kenya, mobile financial services have made considerable progress as individuals continue to adopt them at varying rates. Hence, there is a need to evaluate the factors that influence consumer adoption of mobile financial services. Mobile financial services comprise several sub-groups such as mobile banking, money transfer, and mobile payment. Further, they constitute an ecosystem that involves a regulator, MNOs, banks, agents, merchants, and the customer. Consumers contemplate the probability of risks before adopting a mobile financial service. Thus, the perceived risk hugely influences the adoption of these services. The perceived ease of use and the usefulness also play a vital role in the adoption of mobile financial services. Consumers gauge how is it is to use a platform as well as how useful it is. Moreover, consumers assess their awareness of a platform before adopting it. Thus, this commentary assesses the influence these factors impose on consumer adoption of mobile financial services in the country.

**Key Words: Mobile Financial Services, Adoption, Perceived Risk, Perceived Ease of Use, Perceived Usefulness, Perceived Awareness, Kenya**

### **Consumer Adoption of Mobile Financial Services: A Commentary**

The continued evolution of mobile technology in information technology has spurred multiple services and products. New devices such as tablets and smart phones have allowed development of novel applications that add value to the life of consumers and allowed institutions to provide new financial services. Consequently, it can be propositioned that technology is significantly altering how services are created, advanced, and availed to the consumer. In this context, mobile financial services are the primary constituents of existing self-service technologies. Primarily, mobile financial services refer to the utilization of mobile phones to access financial services (Kim et al. 2018, p. e12044). Mobile financial services have broadened the banking sectors by permitting customers affiliated to specific banks to perform financial undertakings even when they are not new a financial service provider through their mobile gadgets. Some of the financial services customers perform include transferring money from one account to another, payment of bills, application of loans, monitoring account history, and balance inquiries. Therefore, mobile financial services comprise sub-groups that include mobile money transfer, mobile ticketing, mobile payments, and mobile banking. Under mobile money transfer, customers send money from one device to another in a way similar to bank transfers. Mobile ticketing involves payments from mobile phones with a stored ticket. Mobile payments comprise the payment of services and goods using mobile phones. Mobile banking includes payment for services and goods, transferring money into another account, topping-up airtime, scrutinising account details, and paying bills (Netsizen.d., p. 222). Hence, mobile banking involves several services that were traditionally provided by banks. In the Kenyan context, Mobile money transfer is the most popular component of mobile financial services. Besides, the Kenyan case is an illustration of the trend in many developing countries where the accessibility to bank accounts is minimal. Hence, consumers tend to have a big demand for receiving and sending money using their mobile phones. Recent statistics show that globally, mobile financial services have picked up immensely. For example, a 2014 report by the International Finance Corporation shows that there were around 28 nations with more mobile money agents than bank branches and 6 services that had more than a million consumer accounts (International Finance Corporation 2014, p. 9). Moreover, in Kenya, the number of bank accounts is less

than that of mobile money accounts. Besides, according to the report, the cumulative value of transactions involving mobile money in Kenya in 2012 was equal to approximately 60 % of the gross domestic product (International Finance Corporation 2014, p. 9). It is important to note that based on these numbers, the use, and adoption of mobile financial services differs from one nation to another. It could be because of the approaches applied by providers or the technological status of the operators. Either way, consumer factors such as resistance or comfort significantly influence the adoption of mobile financial services.

### **Commentary Justification**

When a company is determining whether to deploy a mobile financial service, it has to solve the dilemma of pinpointing an appropriate service, which consumers will adopt. Thus, it is important that a firm utilise the most suitable service and product creation approach to attract and retain new and existing customers respectively<sup>1</sup>. Primarily, many existing mobile financial services are adapted forms of the normal online banking services. Thus, they necessitate customers to simply move their banking platforms from the bank to their mobile devices. Essentially, this means that banks have to use suitable information strategies to inform the customers about the available mobile financial services. Therefore, this means that financial firms must try to convince existing and new customers to adopt their mobile financial services. The value provided by mobile financial services is key in persuading customers to adopt these services. Last year, the GSM association (GSMA) compiled a report that illustrated people have increasingly adopted smartphones around the world. Hence, this creates a chance for financial companies to obtain more customers from their respective markets. There are 866 million registered mobile money accounts around the world, which implies that a large number of adults are yet to adopt mobile financial services (Pasti 2018, p. 7). Hence, this is an opportunity for these institutions to obtain new customers in adopting the various kinds of mobile financial services. Internationally, 143 customers were added in the mobile money industry (Pasti 2018, p. 9). In Sub-Saharan Africa, more than 60 % of adults have a mobile money account (Pasti 2018, p. 11). It means that there is a

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<sup>1</sup>Flaming, M., Mitha, A., Hanouch, M., Zetterli, P. & Bull, G. 2013, *Partnerships in mobile financial services: Factors for success*, Available from: <https://www.ifc.org/wps/wcm/connect/113c8880418993f38c15bf8d8e2dafd4/Partnerships+in+Mobile+Financial+Services+PDF.pdf?MOD=AJPERES>. [07 July 2019].

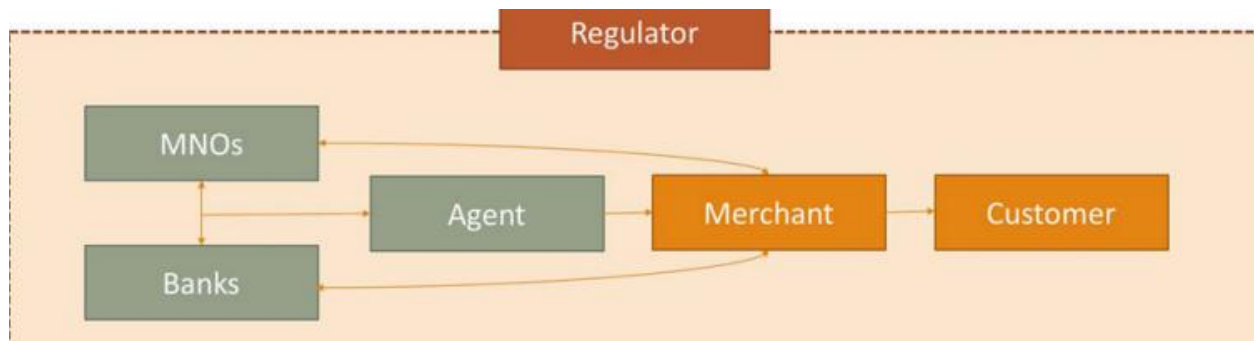
big chance to obtain new customer from the remaining 40 % of the population in Sub-Saharan Africa of which Kenya is one of the countries in the region. Nevertheless, financial institutions face a challenge in not only rolling out existing mobile financial services to existing customers, but also convincing new clients to adopt their services. In essence, numerous factors influence the adoption of mobile financial services not only around the world but also in Kenya. Thus, it is important to not only identify, but also to explain the factors, which influence the adoption of mobile financial services.

### **Mobile Financial Services Ecosystem**

The mobile financial services ecosystem constitutes of the regulator, Mobile Network Operators (MNOs), banks, agents, merchants, and the customers<sup>2</sup>. The customers are the primary constituents. They undertake transactions using their mobile phones through applications availed by the MNOs or the mobile financial operators (Kim et al. 2018, p. e12044). Regulators are key as they create the policies and rules, which cater for the efficiency, innovation, and value creation of mobile financial services. Moreover, they supervise providers of mobile financial services to ensure that they comply with existing guidelines. The banks are vital as they change the virtual money in the mobile gadgets into physical money (Kim et al. 2018, p. e12044). Besides, the banks avail trust accounts to clients, which they use to deposit the mobile money balance. The MNOs are vital as it is through the association with banks that mobile financial services are provided to customers. The agents function as over-the-counter service people who provide withdrawals and savings for the clients. The merchants act as receivers of money transfers, which originate from business or consumer payments for sales purposes (Kim et al. 2018, p. e12044). Therefore, they are subject to charges that are remitted to banks. Diagram 1 below illustrates the connection between the 6 actors.

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<sup>2</sup>Also, Payment Service Providers avail the necessary IT platforms and the necessary payment infrastructure (International Finance Corporation 2014, p. 4).



**Diagram 1:** Link between the 6 mobile financial services actors (Kim et al. 2018, p. e12044).

### **Adoption of Mobile Financial Services**

Mobile financial services adoption depends on various factors such as the socio-economic setting, the consumer lifestyle, and developing appropriate technology. For example, the increasing robustness of mobile communication and gadgets implies that financial companies can take advantage to build more refined solutions to meet the needs of their customers<sup>3</sup>. An examination of recent and available literature concerning the adoption of mobile financial services shows that most of the studies focus on mobile money and banking services. As noted earlier, mobile money and banking are components of mobile financial services. Thus, most of the cited literature on factors affecting the adoption of mobile financial services will majorly include the two. Primarily, Kenya leads in mobile financial services adoption. For instance, M-Pesa is largely regarded as the most fruitful mobile money innovation the developing countries. It is explained that regardless of the social status, Kenyans have adopted M-Pesa and it is now intricately fused into their daily lives. Interestingly, it is impossible to get a Kenyan who is unfamiliar with M-Pesa. Approximately, two-thirds of adult Kenyans, which is about 18 million individuals, use this service (Bwemelo 2018, p. 52). Based on its growth and numbers such as transactions that equate to about 40 % of Kenya's GDP, it is clear that such a mobile financial service has changed economic interaction in the country. Besides, the success of M-Pesa transformed the telecom and banking sector in Kenya. Currently, around 20 million citizens are said to be

<sup>3</sup>Mobile technologies have fuelled the fast spread of mobile financial services. Currently, Kenya leads in mobile financial services adoption (Bwemelo 2018, p. 51).

financially included because of M-Pesa (Bwemelo 2018, p. 52). Essentially, M-Pesa is a benchmark for fruitful mobile financial services. Nonetheless, based on these statistics, it appears that there is a gap that needs to be filled in spite of the growth of such mobile financial services in the country. Research notes that despite the rising rate of the adoption of mobile financial services, it is still not fully widespread.

## **Influencing Factors**

### **Perceived Risk**

Majority of the obtained studies allude to perceived risk as a factor that influences the adoption of mobile financial services. In this case, most of these investigations focus on mobile banking, which is a sub-group of mobile financial services. Under the perceived risk, there is time risk, security or privacy risk, risk of performance, social and financial risks. Time risk is the potential of losing time because of challenges faced when navigating the financial service or because of payment delays. Security risk is the likely loss emanating from a hack or fraud, which interfere with the security of the customer while risk of performance is the loss arising from faulty mobile services (Wamai & Kandiri 2015, p. 2281). Social risk is the probability of being condemned by friends or family while financial risk is the possibility of losing money because of transaction faults or misuse of bank accounts. Therefore, it is clear that perceived risk encompasses a multitude of risk aspects, which consumers have to contemplate before adopting a mobile financial service. Achieng and Ingari (2015, p. 6) undertook a study assessing these five risks in the Kenyan context. In the explanation, it is argued that these risks function to deter consumers from adopting a mobile financial service such as mobile banking. Thus, aspects such as poor network coverage and faulty banking servers are likely to deter the willingness of a customer to adopt mobile financial services such as mobile banking. In Kenya, this is a common phenomenon experienced by customers. Thus, it is likely to significantly influence the capability of consumers to adopt these services. Tirok (2012, p. 22) explain that consumers have a certain degree of uncertainty regarding an innovation, which is regarded as perceived risk. Consequently, it is argued that the perceived risk bears a substantial influence on the consumer adoption of mobile financial services. As noted earlier, several constructs make up perceived risk. Tirok (2012, p. 22) acknowledge these constructs and say that they influence

the behaviour of the consumers, which affect their likelihood of adopting a mobile financial service. It is important to note that the perceived risks functions as a deterrent to the adoption of mobile financial services (Shareef 2018, p. 54). For instance, the security risk exerts a huge influence on aspects such as the integrity of data, confidentiality, and trust, which are important to consumers<sup>4</sup>. Therefore, if a mobile financial service provider cannot assure these things, the adoption rate will be weak. It will be poor because customers do not trust the provider and they avoid transacting using the specific platform. Moreover, this also connects with social risk whereby the adopters seek advice from their relatives, associates, and peers. If they have the same level of perceived risk as the likely adopter, it means that they will be dissuaded from adopting the mobile financial service. Therefore, it means that if the level of perceived risk is high, then consumers may fail to adopt a certain mobile financial service, which reduces its success.

### **Perceived Ease of Use**

The extent to which an individual thinks that using a certain system would not involve any amount of effort is referred to the perceived ease of use (Achieng&Ingari 2015, p. 7; Tirok 2012, p. 19). Additionally, it is described as the degree to which a consumer rates their comfort and competence for utilizing a mobile financial service (Shareef et al. 2018, p. 57). It is a critical aspect that influences the level of acceptance. Subsequently, it is noted that there is a positive association between the usefulness and ease of use of mobile financial services. It implies that if the perceived ease of use is high, the consumers are more inclined to adopt the service. Tirok (2012, p. 19) explains that it is the capacity of the consumer to adopt new patterns of experience and knowledge, which affects the adoption of mobile financial services. Hence, the perceived ease of use highly affects this capacity. Consequently, consumers adopt a service if they feel that the perceived ease of use is high<sup>5</sup>. Moreover, if a consumer had come across such a mobile financial service before, which provided experience and knowledge, it facilitates their adoption of a similar service. Nonetheless, if the experience was unpleasant, it is likely that the consumer not adopt it. Achieng and Ingari

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<sup>4</sup>Consumers contemplate how safe their personal information is and if their accounts are safe from theft.

<sup>5</sup>Customers contemplate if a service is easy to use. The degree of ease of use influences if they adopt it or not. Thus, it is directly correlated to adoption (Tirok 2012, p. 19).

(2015, p. 7) stipulate that attributes, which influence the adoption of a mobile financial service based on the perceived ease of use include convenience, user friendliness, network speed, and accuracy. Further, the perceived ease of use is linked to consumer behaviour because if an individual has the experience of using a service, it is likely that they will feel comfortable to a new or similar service. Thus, their behaviour is influenced and it leads to the adoption of a mobile financial service. Typically, consumers assume that a mobile financial service application will be easy to utilize.

### **Perceived Usefulness**

The usefulness of a mobile financial service to consumers is of utmost importance. In essence, it influences the relative advantage a consumer obtains from its utilization. For example, relative advantage applies in instances whereby consumers view a specific mobile financial service as one that significantly helps them to save time when it is used. The consumer contemplates that that instead of losing that time, it is better to use the service such as mobile banking as it saves the time, which would be lost queuing in a banking hall waiting to be served (Wamai&Kandiri 2015, p. 2280). Consequently, consumers perceive that the mobile financial service is useful and adopts it. In addition, it is explained that the perceived usefulness adjudicates the association between the attitude among consumers and the ease of use toward the utilization of mobile financial services<sup>6</sup>. For example, an investigation focusing on Kenya noted that consumers attach high value to new inventions that involve mobile phones because they facilitate the ability of consumers based on the knowledge related to the offered services (Abdinoor&Mbamba 2017, p. 1392273). Thus, Wamai and Kandiri (2015) and Abdinoor and Mbamba (2017) agree that the perceived usefulness directly influences the attitude among consumers towards a mobile financial service. Therefore, this affected if the service is adopted. Besides, it is also noted that based on the perceived usefulness, consumers gain positive or negative view towards the mobile financial service, which determine whether they adopt it.

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<sup>6</sup>The perceived usefulness is crucial as it functions as a link between the attitude of the customer and the ease of use linked to a mobile financial service such as mobile banking. That is why young adults and the youth are likely to adopt mobile financial services more easily (Abdinoor&Mbamba 2017, p. 1392273).

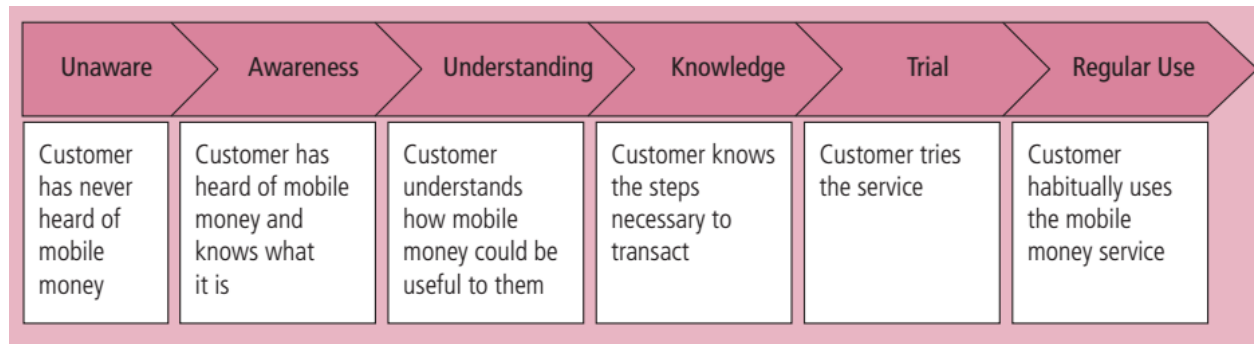


## **Perceived Awareness**

Conceptually, perceived awareness relates to accruing and obtaining consciousness, education, and knowledge as much as consumers think to be adequate to absorb the attributes of a mobile financial service such as mobile banking and utilize it skilfully to realise the intended functions (Shareef et al. 2018, p. 57). Therefore, potential consumers assess their awareness of a specific mobile financial service to determine if they will adopt it. Consequently, research shows that the personal awareness of a mobile financial service is vital as it involves aspects such as financial education and knowledge pertaining to the service on offer (Abdinoor&Mbamba 2017, p. 1392273). Further, if an individual is not aware about the pertinent attributes of a mobile financial service, it is likely that the person will not adopt it. It is argued that knowing the name of the name of the mobile financial service or the provider is insufficient (Davidson & McCarty, 2011). Awareness needs to be created, for example through advertisements, to assist consumers to understand the relevance and benefits of the service<sup>7</sup>. In the Kenyan context, M-Pesa presents a good example of a mobile financial service, which has been adopted widely because consumers are aware of its products as its parent company runs numerous advertisements that familiarise new and existing consumers about it. Awareness is part of the journey a consumer has to undergo before adopting a mobile financial service. The consumer journey is defined as the behaviour change that individuals undergo from the moment they first come across the mobile financial service to the period whereby they habitually utilize the service through the availed platform (Davidson & McCarty 2011). It is key in laying the foundation for behavioural change, which will convince the consumer to adopt the mobile financial service. The diagram 2 below illustrates the consumer journey to adopting a service, which includes awareness.

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<sup>7</sup>Personal awareness is obtained from information sources such as education on financial solutions. It is vital as it affects the behaviour of a consumer towards a service. Some of the things consumers consider include the government's involvement in the mobile financial service sector and the distance to the banks, which triggers an awareness of the benefits and advantages of the provided services (Abdinoor&Mbamba 2017, p. 1392273).



**Diagram 2:** Consumer journey, which includes awareness (Davidson & McCarty 2011).

### Conclusion

Since its inception, mobile financial services have grown immensely. Adoption of mobile financial services has been relatively positive in Kenya based on the example of M-Pesa. However, banks and other MNOs have rolled out mobile financial services that have been adopted at varying rates across the country based on the type of the mobile financial service such as mobile banking, mobile payments and others that are mentioned in the introduction. Globally, statistics show that the adoption of mobile financial services is growing. Nonetheless, as noted in the commentary justification, there are varying reasons that influence the adoption of mobile financial services. Kenya is a leader in the adoption of mobile financial adoption. Numerous Kenyans use mobile financial services such as banking and making payments and the value of this adoption is reflected based on the GDP. The factors that influence Kenyans to adopt a mobile financial service include perceived risk, ease of use, usefulness, and awareness. Each factor has an influence on the consumer. For example, based on the cited research, the perceived risk appears to have a high ability of deterring consumers from adopting a mobile financial service because of time, privacy, performance, social, and financial aspects. The ease of use relates to the assumption that one can competently and comfortably use a mobile financial service. Thus, if this is the case, consumers are more likely to adopt it. Additionally, if the mobile financial service is deemed as useful to the consumer, the probability of adopting it is high. Consumers who are aware about a mobile financial service tend to adopt it more than those who know nothing about it. Awareness is part of the consumer journey and it is a crucial facet of adoption. Thus, these factors influence the adoption of mobile financial services in Kenya.

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