The Diffusion of M-Pesa in Developing Countries: Convergence Program Lead Vodafone Albania Sh.a, Tirane, Albania

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Abstract

The purpose of this study is to investigate whether this kind of innovative service was successful in all developing countries. Prior to the introduction and implementation of M-Pesa, people used a variety of formal and informal channels to save or send money to others. It is supposed that through mobile money technology, the population currently out of the reach of financial services will be integrated as formal players into the market and that informal ways of transferring money will be reduced (Jenkins, 2008). Financial inclusion is an issue that has gathered a lot of attention among policymakers and researchers and is referred to as a process that guarantees ease on access, availability and also the usage of banking services for all householders of a country (Sarma, 2010). Without doubt, the introduction of M-Pesa in Kenya has deeply changed the way through which transactions occur. Based on the review of the literature but also the case-studies on the application of M-Pesain Albania and other countries, at the end of the paper we give some important conclusions.

Keywords: M-Pesa, mobile money, developing countries, case-study, Kenya, Eastern Europe

Introduction

In the last decade, the mobile market has been one of the most rapidly-growing markets in the world and continues to grow fast. Some believe that this is just the beginning of data capabilities utilization in their mobile devices. Mobile technology is transforming the means through which economic activity is organized and directed, it greatly affects the way users interact with each other and is responsible for causing externalities for the economic activities that users conduct (Gruber &Koutroumpis, 2010). M-Pesa[1] is an electronic money transfer product that enables users to store value in the SIM cards of their mobile phone. M-Pesa is a mobile account, in the form of electronic currency that can be used for multiple purposes including transfers to other users, payments for goods and services, and conversion to and from cash.

Mobile money services are being deployed rapidly across emerging markets as a key tool to further the goal of financial inclusion.(Lal &Sachdev, 2015). A key component mobile money services share, is their ability to ensure financial inclusion and coverage for the poorest and others inhabiting remote, deprived rural areas (Lal&Sachdev, 2015; Gruber &Koutroumpis, 2010; Bresnahan&Trajtenberg, 1995). Mobile Money is a service which by using mobile device offers access to financial services such as payments for goods, services, and bills, especially to the unbanked population (Dahlberg et al., 2007). This technology, as being easy to use by people that have never been in touch with financial services, creates new opportunities to improve their livelihood. With mobile payment models, people can transfer funds to others, pay bills from their phone (Mbogo, 2010) and not by walking for days to pay them (in some rural areas of different countries this still happens), they can even deposit money and in some cases receive interest. Actually, these kinds of services are not new and have been offered earlier by others. This is why a clarification of the difference between Mobile Money and Mobile Banking is necessary. According to Porteous(2006), mobile payments are "financial transactions undertaken using mobile

[1]M-Pesa is SMS-based money transfer system, where M stands for *Mobile* and *Pesa* means money in KiSwahili (Chigada &Hirschfelder, 2017)

device such as a mobile phone" (p. 3); meanwhile m-payment it is included in mobile banking, but it offers a broader range of banking services, so the mobile phone technology is used as a delivery channel for banking services. Another difference between these two technologies is the distribution channel (Jenkins, 2008). By distribution channels, we understand the agents, which play a vital role in mobile money well-functioning because they make it more easily accessible.

Emerging economies are more likely to use M-Pesa because they are mainly cash-dependent and almost all their citizens possess a mobile phone (Castri,2013).

The main reasons M-Pesa successes are: first, the widespread adoption of mobile phones including developing countries (Dermish et. al., 2012); and second, due to the low penetration of financial services in developing and poor economies, especially in rural areas.

However, this study shows that M-Pesa is a strategy that does not work in all developing countries. Factors such as the size of the country, the development of the banking sector or banking electronic services, competition between operators, geographical distances, the predisposition of regulatory entities to support an innovation in the financial system and more should be taken into account during the M-Pesa feasibility study in a developing country.

Countries' Case-Studies

Everything starts with Kenya

M-Pesa was launched in Kenya 2007 as an alternative to established commercial banking services with the view of providing formal financial services to 'the unbanked' population (Onsongo,2017). In 2011, more than 14 million Kenyans had an M-Pesa account using services provided to them by Safaricom. With its rapid growth, the interest of businesses was great, a significant number began to adopt this service, by allowing their clients to perform different activities via mobile (Kendall, Maurer, Machoka, &Veniard, 2011). It turned out M-Pesa was a great success in Kenya, though its replicability in other countries is questionable because it appears that Kenya had an appropriate environment for such a success. Environmental factors in Kenya were crucial because they set the scene for a successful development (Heyer& Mas, 2009), also the service design features served as facilitators for the rapid adoption of M-Pesa (Mas &Morawczynski, 2009). Another factor was the Safaricom's execution strategy (Mas &Ng'weno, 2010). M-Pesa's success in Kenya can be attributed to the favourable market conditions and to a presence of unmet needs (Heyer& Mas, 2009). Some of these enabling conditions were: demand for domestic remittances, a banking regulator that permitted Safaricom to experiment, poor quality of alternative financial services and the fact that Safaricom was the leader of mobile operators' market.

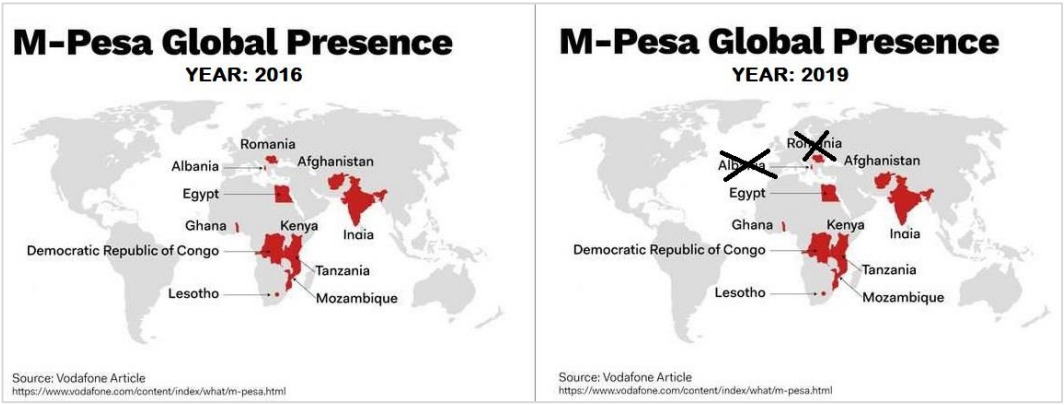
M-Pesa diffusion in other countries

In fact, mobile banking services have been launched also in other countries, like Afghanistan, Mexico, Thailand, and Sudan in 2008; Colombia, Rwanda, Uganda and Tanzania in 2009; India in 2011; and Eastern Europe in 2014; but not all of them were as successful as Kenya's case (Flores-Roux & Mariscal, 2011). M-Pesa has the capability to take advantage of the economies of scale, from the demand for remittances to the support from banking regulator (Heyer& Mas, 2009). Actually, M-Pesa itself can be used as a benchmark for other mobile money launches and operations. Almost every new mobile money operator has tried to emulate the success that Safaricom achieved.

Sub-Saharan Africa was a perfect environment for the growth of mobile money industry (Hinz, 2014). The main reason was the large number of unbanked populations, the existence of many barriers for an individual to access formal institutions and a well-established market of mobile phones. However, these types of initiatives didn't follow the same path outside of Africa. First of all, it must be stated that mobile money services did not have a strong appeal to the majority of developed countries (World Bank, 2014). These countries do not have the same problems as the developing ones, and they might find the same services that mobile money platforms offer in other already existing providers. Citizens of developed nations already have access to financial services; they don't suffer from financial exclusion and are massive users of credit cards, which provide more than what M-Pesa's implementers have promised in developing countries. In addition, many believe that platforms such as M-Pesa won't ever reach the United States or Western Europe. Due to the lack of mobile banking existence in Eastern Europe, which is known for its cash dependence(Hinz,2014), Vodafone, after a market analysis, decided to implement M-Pesa in Romania, aiming to reach about 7 million customers (The Economist Intelligence Unit, 2014), and after in Albania. In April 2015, the Central Bank of Albania approved and issued the license for electronic money service to Vodafone M-Pesa, being the second in Europe to do so.

M-Pesa, most recently

Vodafone marks the 10th anniversary of M-Pesa as the world's leading mobile money service provider. During 2018were processed a record of 1200 M-Pesa transactions/second. Vodafone now offers M-Pesa services mainly in Asia and Africa in developing countries such as: The Democratic Republic of Congo, Egypt, Ghana, India, Kenya, Lesotho, Mozambique, Romania and Tanzania. As of the end of December 2018, M-Pesa served almost 33.4 million active customers through a network of more than 206.940 agents.



Despite the positive statistics from year to year, not all developing countries succeeded in implementing M-Pesa. The fact is that M-Pesa has to date never been able to duplicate the success it enjoys in Kenya, where it launched in 2007 and today has more than 15m subscribers who transact as much as 60% of the country's GDP over the mobile platform. There are two reasons for this. Firstly M-Pesa's parent Safaricom, a mobile operator partly owned by Vodafone, has quasi-monopoly status in the Kenyan market. And secondly, M-Pesa was quick to establish a huge agent network, mostly mom and pop shops, where subscribers could easily cash in or out. No European country is likely to offer up this perfect storm of conditions, so Vodafone's M-Pesa had better prepare for an uphill battle (EUI, 2014).

During 2017 both countries in Eastern Europe abandoned this service as a result of the failure to meet the target objectives. The same had happened with South Africa on 2016. Vodacom, the provider of M-Pesa declared the service interruption due to failure to reach the target number of customers. In six years from the launch, M-Pesa has only 76,000 active users far away from the target of 10 million (BBC Africa Business Report, 2016).

Vodafone Romania, the second operator in the domestic market, decided to finish this service after "detailed assessment of its evolution". According to the Ministry of Finance, "Vodafone Romania M-Payments, the branch managing M-Pesa at country level, suffered a loss of EUR 2.5 million (Romania Insider, 2017.) One of the main reasons was competition with Romania's Orange operator, who had previously been mobilized with mobile money in other countries and has already conducted remittances circulation with different countries (Riecke, 2014).

On July 2017, Vodafone announced that it would terminate the M-Pesa service for their 250,000 customers (Monitor, 2017). The reason was never declared officially. Based on the authors' searches some of the causes M-Pesa failed in Albania were:1) the existence and well-functioning of the domestic financial system as well as electronic payments, before the M-Pesa was involved in the services market; 2) the technology used for M-Pesa, (USSD),was old, unlike what Albanian operators offer, which are constantly upgraded and modernized and the same can be said for mobile devices; 3) the size of the country avoids the necessity to use M-Pesa for payments or other money transfers within the country; 4) emigrant remittances in recent years have been unsatisfactory compared to the expectations; 5) the culture and financial literacy.

Conclusions

When revising current findings and latest studies, it was interesting to analyse the process of M-Pesa's diffusion. Findings from Kenya's case were analysed and compared with other countries. Thus, it could serve as a reminder that even in similar environments and settings to those where mobile money services are implemented, not always situations show success. Mobile payments services such as M-Pesa have been most successful in economies with fragile institutional structures, including weak banking systems.

The great success of M-Pesa in some of the not much developed or still in development African countries, was not to be considered an assurance for its success in Albania. On the contrary, the failure to succeed in another European country such as Romania, almost at the same time, should be the confirmation that the country specific development conditions play a crucial role. Let's not forget South Africa, which interrupted M-Pesa, while many states around it continue to use it successfully.

Conclusively, the diffusion of Information and Communication Technologies has been proven to be a complex process that can also be viewed from four country-level aspects: economy, culture, technology, and politics. When specifically, analysing Mobile Money diffusion, the main factors that influence were shown to be: regulation environment, existing alternatives, cellular market landscape and service providers' market share.

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