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The determinants of successfulness of Mobile Money in rural areas

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The determinants of successfulness of Mobile Money in rural areas

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AUTHORIZATION

Supervisor, **Dr. Shang Gao**

In my capacity as a supervisor, I do hereby authorize the student to submit his dissertation.

Signature:……………………………………………….Date:………./………./………..

DECLARATION

I declare that this Dissertation contains my own work except where specifically acknowledged

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Date…………………………………..

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ABSTRACT

For more than a decade, mobile money has undoubtedly changed lives of people living developing countries. Since 2003 when it was first launched in Philippines, mobile money has increased financial inclusion for unbanked people from developing countries. Although people in cities still use mobile money services than people living in rural places, mobile money has succeeded in rural areas. This success has been attributed to many different factors which have been revealed in this paper. To find those factors, the researcher has reviewed a large number of previous literatures and conducted structured interviews with people in rural areas of Rwanda.

To evaluate the success of Mobile Money in rural areas, the author used the Updated DeLone and McLean Model. The results showed that the success of MOMO is due to its system quality, information quality and service quality which make it easier for the people to use it regardless their education level, gender or age. These good qualities make the people feel satisfied and lead to enormous benefits for both MTN and the people in rural areas.

KEY WORDS

MOMO money, Rwanda, remote areas, mobile payment, mobile services, developing countries

LIST OF SYMBOLS AND ACRONYMS

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DIM: Diffusion Innovation Model

DOI: Innovation Diffusion Theory

E-Gov (eGov or eGovernment): Electronic Government

MOMO: Mobile Money

MTN: Mobile Telephone Network

TAM: Acceptance Model

TPB: Theory of Planned Behavior

UTAUT: Unified Theory of Acceptance and Use of Technology

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1 Introduction

Today, Rwanda is moving fast in digital transformation than ever before; people are using different digital devices to perform their daily activities which have significantly reduced the cost of many services including money transfer, transport, government services and much more. The growth in the IT industry in Rwanda is believed to rise exponentially in years to come as the government is eager to invest much money in that sector (ICT, 2013). However, many people remain computer illiterates and have to be facilitated to get access to the services that government has automated. In doing so, it is good to understand those individuals and design systems that may run on mobile phones because mobile phones don't require significant expertise like computers and people are familiar with them. One of the systems that clearly show an impeccable success is mobile money (MOMO) which has depicted success national-wide. This success is associated with various parameters but it is not known why people in rural areas have welcomed this IT system. Thus, in this paper, the researcher will be investigating "what are the factors influencing the success of mobile money in rural areas?" To explore this, the author will investigate the success determinants in other similar countries. In Africa, Mobile money has accelerated financial inclusion among the remote communities in developing countries such as Zimbabwe (Thulani, Chitakunye, & Chummun, 2014). Its success in a country like Zimbabwe can help people understand its success in other country such us Rwanda whose economy status lies in the same category.

The objective of this paper is to examine the factors that influence the success of mobile money in rural areas of Rwanda. The author conducted this study because MOMO is a cornerstone for the most of e-Government services as it helps people in rural areas to pay for all payable e-services offered by either private or public institutions. The response to the research question will help decision-makers strengthen mobile money and improve it in the years to come.

To dig into factors which strengthen the success of mobile money in the villages, let's first start by understanding what mobile money is and how it is used in developing countries.

Mobile money is defined as "a suite of financial services offered through mobile phones and other handheld mobile devices (Kasseeah & Tandrayen-Ragoobur, 2012)." These services might be transferring money between people, banks transactions and/or paying bills.

It was first launched in Philippines in 2003 but it become much more successful in Kenya than any other country giving unbanked people opportunities to access financial services (Tobbin P. , 2013). Therefore, this was welcomed with many other developing countries as the best way to help unbanked people to get access to finance. Since many African countries lie in the category of developing countries, mobile money is successful in most African countries compared to other continents. Developing countries such as Philippines, Kenya, South Africa, Tanzania, Nigeria, Ghana and Uganda show remarkable mobile money usage (Tobbin, 2011). When this research is complete, it will help the government to strengthen mobile money systems in order to fill the gap between people in cities and people in underserved places in utilizing e-government resources.

2 Literature review

The literatures that author was looking for was the literature that are in line with mobile money (MOMO) because the research was basically founded on the question of determining the factors that determine the success of MOMO in rural areas of Rwanda. For many years Africa particularly Sub-Saharan Africa has been lagging behind the rest of the world in state-of-the-art technologies (Tchouassi, 2012). By Tchouassi, this incompetence of the African continent leads to inadequacy of high-tech services. With the creation of The Regional African Satellite Communications Organization (RASCOM), the price of telecommunication went down significantly for African people. Therefore, mobile phones which enable mobile money become affordable to the people all over the continent. To further study the progress of mobile money services and the factors that influence its success in Rwanda and in Sub-Saharan Africa and study the DeLone and McLean Model which is being used in this research; we explored literature the DeLone and McLean Model and on mobile money in developing countries and interviewed people in rural of Rwanda.

3 Research methods

3.1 Selection of Papers

As said, mobile money is popular in developing countries and hence, it is a bit hard to find adequate literature on mobile money. To find credible sources, the author needed to use a

credible selection model which has been verified and tested by researchers. Therefore in this paper, the Information source selection model by Islam & Scupola (2011) was been used. This model suggests that we should start by searching in leading journals and major conferences because it is most likely to find the outstanding literatures in these journals because they have been peer-reviewed. However, as a good paper might be published in bad journals, the author has to check in different journals with a keen eye. Thus, in this paper, the author consulted other journals to complement literature from leading journals and increase relevance to this research. The figure 1 illustrates the Information source selection model used in this research.

To search for the papers, the author used different keywords in different journal and databases. Those keywords include: DeLone and McLean, Model, mobile money, mobile payments, money transfer, developing countries, mobile banking, Success, success factors and determinant factors. All of the research I did, I got 103 paper and I reduced to 37 because I they were relevant to my study. The paper that has the keyword used but has the content different to what I was aiming for, I started by rejecting them and remained with manageable readings. WIith those readings I included even the report from known institution such as National Institute of Statistics, World Economic Forum etc.

3.2 Findings from literatures

Mobile money has only 14 years of existence as it was first launched in Philippines in 2003 and then spread to other developing nations. Because of its impact and its rapid growth, researchers have studied factors that allowed mobile money to grow across many countries on the globe. To study the determinant factors of success of mobile money we referred to what was discovered by previous researchers in Africa and in developing countries of Asia. Majority of previous literature demonstrates that the most popular theories to evaluate the success of information system such mobile money are: Updated DeLone and McLean Model (Ojo, 2016), Technology Acceptance Model (TAM), Innovation Diffusion Theory (DOI), Unified Theory of Acceptance and Use of Technology (UTAUT), and Theory of Planned Behavior (TPB), Diffusion of Innovation Model (Narteh, Mahmoud, & Amoh, 2017). Both (Tobbin P. , 2013) and Maret et. Al (2017) used these Technology Acceptance Model (TAM), Innovation Diffusion Theory (DOI) and Diffusion Innovation Model (DIM) as powerful theories to evaluate mobile money services.

The following is information source selection framework developed to guide the authors and make sure that they selected credible sources.

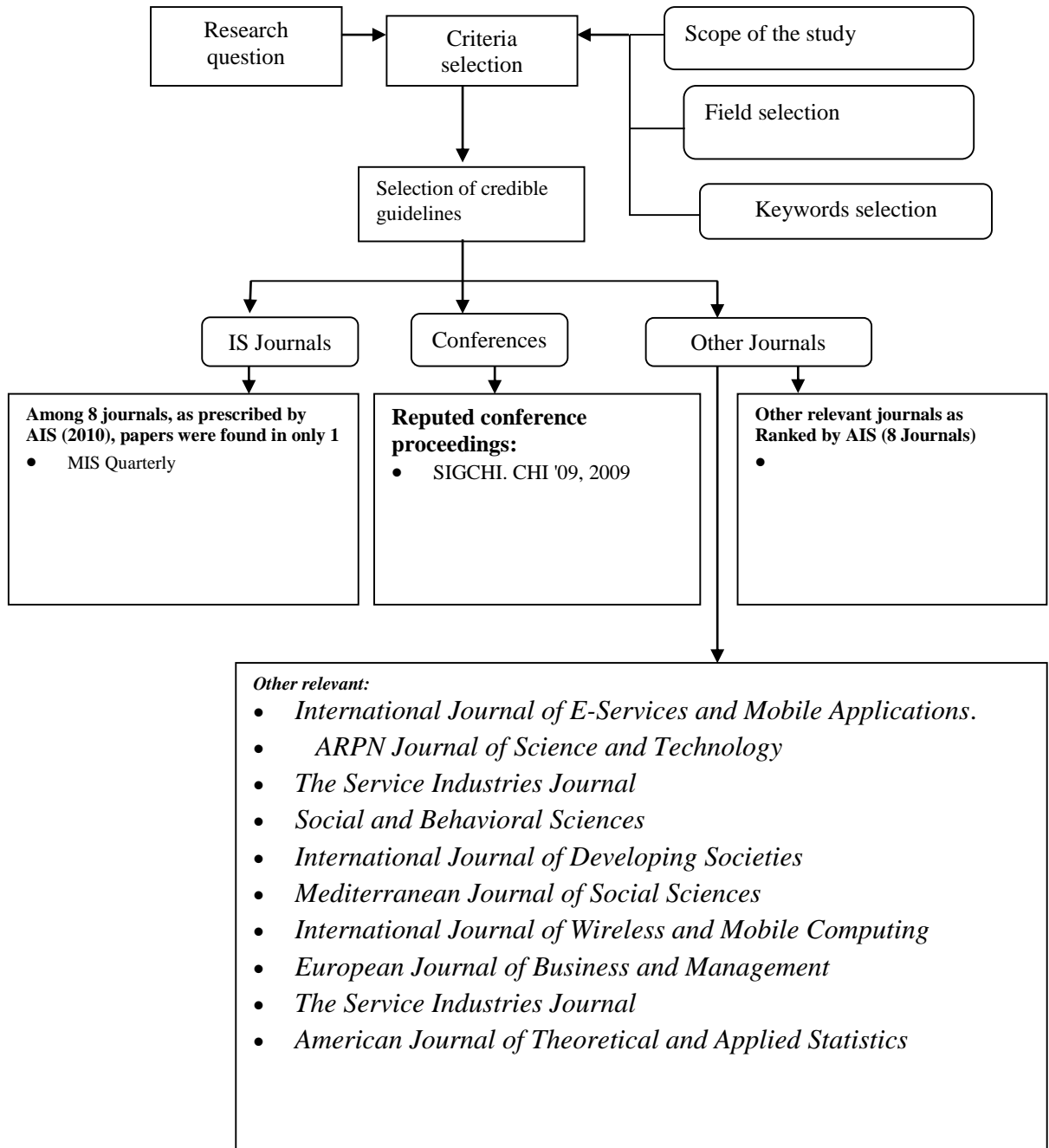The following figure shows the information selection model that was used in this research.

Figure 1: Information source selection m model by Islam & Scupola (2011)

The following table illustrates the list of selected paper which gave the author insight about what he was doing.

Category	Literatures reviewed
1. DeLone and McLean Model	(Delone & McLean, 2014), (Ojo, 2016), (Petter, DeLone, & McLean, 2008) , (DELONE & MCLEAN, 2003), (Halonen, Acton, Golden, & Conboy, 2009), (Hellstén & Markova, 2003)
2. Mobile Money	(Munyegera & Matsumoto, 2016), (Lepoutre & Oguntoye, 2018), (Diniz, Cernev, & Nascimento, 2016), (SandraL.Suárez, 2016), (Singh, Mobile banking based money order for India Post: Feasible model and assessing demand potential, 2012), (Tchouassi, Can Mobile Phones Really Work to Extend Banking Services to the Unbanked? Empirical Lessons from Selected Sub-Saharan Africa Countries, 2012), (Islam, Muzi, & Meza, 2017), (Gichukia & Mulu-Mutukub, 2017), (Castle, Pervaiz, & Weld, 2016), (Medhi, Gautama, & Toyama, A Comparison of Mobile Money-Transfer UIs for Non-Literate and Semi-Literate Users, 2009)
3. Popular IS Evaluation framework	(Zouaq, Gagnon, & Jean-Louis, 2017), (Egusa, et al., 2013), (Haider, 2009), (Wang & Hui, 2012), (Goldkuhl & Lagsten, 2012), (Islam M. S., 2011)

Table 1: Literature used on each category

Even though these theories have been used by many researchers, the most explored theory was Updated DeLone and McLean Model (Ojo, 2016) and TAM. This model was initiated by Devis (1989) and is still in use till today. This model measures the parameters such us Perceived usefulness, Perceived Ease of Use etc. while Updated DeLone and McLean Model focuses on information quality, system quality and service quality in order to see whether the system can satisfy the users and attract them when using it. An information system such as mobile money has to be easy enough in order to facilitate even non-literates to adapt to it. Mobile money runs on USSD (Unstructured Supplementary Service Data) platform that uses numbers, asterisks and hash signs (*182#) as user interface (UI). As said in couple of sentence above, numbers are proven to be userfriendly for both illiterates and semi-literates individuals because most of the people knows numerical digits. For Medhi et.Al.(2009) UIs for Low-Literacy Users is one of parameters that influence usefulness of mobile money in communities from developed countries. Indeed, in the paper of Narteh et. Al. (2017), they combined two models to form a model that suites their study on "customer behavioral intentions towards mobile money services adaption in

Ghana" and they found that "Perceived ease of use, Perceived Usefulness, Perceived Trust, Perceived cost of use" are most important factors towards mobile money customers. In addition to these, they found that usefulness of mobile money services are influenced by social groups such as friends and relatives. Moreover, security of mobile system, high charges and delay in responding to customer complains was raised as a concern among customers. Regardless of these concerns, mobile money plays a vital role in financial inclusions for unbanked communities. The success of mobile money in Sub-Saharan Africa is undoubtedly enormous as for example in Kenya, 80% of adult population were registered on mobile money service. Although Kenya is leading the African countries in mobile money payment systems, the neighboring countries (Easter African Community countries) have adopted mobile money at a considerable level. For example in Uganda, 21.1 million customers were registered on mobile money services and they were making 693million transactions which were valued at 32,506 billion Ugandan SHS (Ssettimba, 2016). The success of mobile money is not only seen in Sub-Saharan Africa but also in other developing countries of Asia and Pacific. In India, the success of the mobile money order over the Indian Postal Money Order has been attributed to efficiency, low commission charges and convenience (Singh, Mobile banking based money order for India Post: Feasible model and assessing demand potential, 2012). In this country, the velocity of the money being transferred has also been given much attention. In has helped Indian switching from the older postal services to this new and efficient way to send money (mobile money).

This study was conducted in Rwanda in Western Province, Nyamasheke district in Gihombo sector and a structured interview was conducted among selected respondents. As the aim of this study was to figure out the factors that influence the success of mobile money in rural areas, Gihombo sector was a great match. Gihombo sector was chosen because it is located in one of the poorest districts of Rwanda with undeniable remote villages. The National Institute of Statistics of Rwanda ranks Nyamesheke as the 3rd district with extreme poverty in Rwanda (NISR, 2011). In addition, Gihombo has a lot of hills and these hills prevent Gihombo to have adequate IT infrastructure other than GSM networks. Indeed, Gihombo is far away from the capital city of Rwanda and it is even far away from both capital city of Western province and Nyamasheke district. However, it has a relative population density of 444/km² (NISR, 2012). All of these attracted the researcher to choose this sector as one of the sector that can represent all sectors with similar characteristics.

3.3   Data Collection

To collect data that was used in this study, structured interview has been ideal as some of the people in the villages of that sector were non-literate or semi-literate. For these people it is practically hard and sometime impossible to respond to the written questionnaires. In addition, semi-literate and literates people of that sector preferred interviews over questionnaires. With questionnaires, it could be hard for the research to find respondents willing to provide information on the questionnaire. Therefore, the research interviewed 50 citizens of Gihombo with pre-defined questions in an interview that lasted approximately 10 min per person. The author chose 50 people because he wanted to have a representative number that would represent all cells from of this sector. In addition, having a 50 people the author thought would give him insights about whole population of this sector and use those insights in order to predict the general trend of the Nyamasheke district that has Gihombo as one of its 15 sectors. Furthermore, the author had limited time to interview a lot of people and he decided to limit himself to that number. The interview was conducted in Kinyarwanda and later translated in English because the majority of respondents could not understand English.

The author has structured interview such way that he has pre-defined questions and wrote them on questionnaires which he used to ask those 50 people in form of interview. Every single person was responding to the same questions and the author recorded the answers with the phone and sometime wrote the answers on papers.

3.4   Sampling procedures

This study aimed to find out the real factors leading to success of mobile money in rural areas of Rwanda. Thus, as the time and resources to correct data were limited, purposive sampling technique (which is a nonprobability sampling technique) (Etikan, Musa, & Alkassim, 2015) was used to select the sample to interview. As this was targeting the people in rural areas, it was eventually good to select individuals from a countryside which is well known at being rural and poor. In addition, the research tried to balance the sampling basing on age, gender, location and educational level. This procedure was used to ensure that the responses received from interviewees from Gihombo sector reflect the situation of people in rural areas. Men and women with different age, educational level and living in both electrified and non-electrified places were

interviewed. This approach was used because he author wanted to understand views from people of different societal groups. Table 1 briefly summary the demography of responds. .

3.5 Demography of respondents

Demographic Profile		Frequency	Duration
Gender	Male	29	On average each person took 40min of interviews
	Female	21	
Age	16-25 years	10	
	26-35 years	16	
	36-45 years	11	
	46-55 years	8	
	>55 years	5	
Education	No formal Education	7	
	Primary	22	
	Secondary	13	
	University	8	
Location	With electricity	19	
	With-no-electricity	31	
Total		50	500

Table 2: Demography of respondents

3.6 Interview questions

In the interview with Gihombo residents, the researcher used questions that were created from the conceptual framework presented in the next section. And those questions were used by Hellstén & Markova in their paper that focused on the DeLone and McLean Model of Information Systems Success. The author preferred to use these interview questions in order to go in line with the presented model.

4 Conceptual Framework

This study was built on an update DeLone and McLean Model success model which is used to evaluate the success of mobile money in rural areas in Rwanda and help the researcher to identify

the factors that cause this success. This framework is preferred because it has recently update in order to meet today's demand set by several kinds of information systems, and from different points of view (Halonen, Acton, Golden, & Conboy, 2009).

This framework is a cornerstone that helps to understand how information quality, system quality and service quality of a given information system help the user to keep using and be satisfied by the service it gives him/her and then lead to the great benefits.
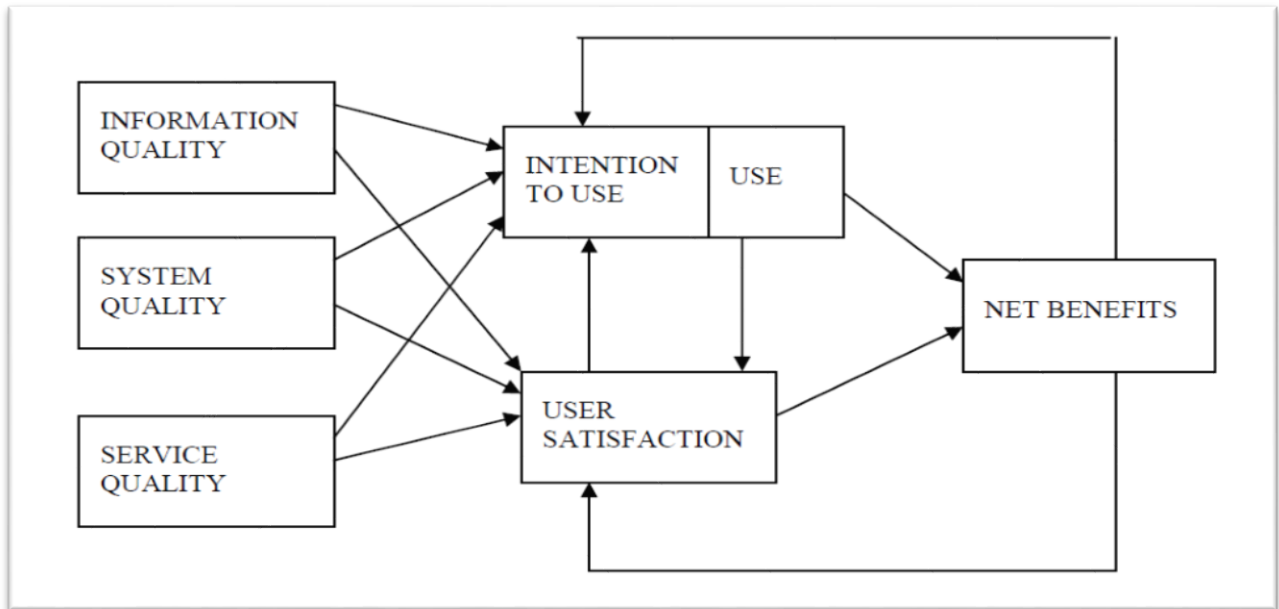

Figure 2: Updated D&M IS Success Model

4.1 Element of the model

In this framework, the information quality is understood as an umbrella for the measurement that define the information quality such as importance, relevance, usefulness, timeliness, readability and Content while system quality enclose the measurements such as ease of use, ease of learning, convenience of access , fulfilling the user demands, usefulness of system functions, data and system accuracy (Hellstén & Markova, 2003). These elements go hand in hand with service quality which is measured through assurance, empathy and responsiveness.

The intention of use is the one of the aspect of the above model which is crucial and difficult maintain because it require prerequisites. This property groups other properties such as the nature of use, smooth patterns and the sum of transactions performed.

The user satisfaction goes handy with intention of use as the even have the same triggers. In order a system to satisfy the user who is using it, it has to have a very good quality in information, system and service it provides. In addition to these, it has to be usable and provide benefits to its users.

The net benefits are the target for any information system and they are reached which the system is good, functional and easy to use. The benefits include but not limited to cost saving, speed up the process, reduced price, decreasing the time it used to take before information system. All of these are seen as foundation for measuring whether an information system is successful. Let's look at what the author found after asking questions and analyzing them.

5   Results, analysis/Discussion

In Rwanda mobile money was brought by MTN Rwanda (the pioneer and popular telecommunication company) in 2009 and since then, it has grown exponentially across all the country (Correspondent, 2009). Other two mobile operators (Tigo and Airtel Rwanda) adapted mobile money later. Today, people are registered for mobile money and they make millions of transactions each month. According to Financial Inclusion in Rwanda (2016) "around 2.3 million adults in Rwanda use mobile money (m-money). Approximately 34% of adults are registered on mobile money and furthermore, 10% of Rwandans, are not registered but use friends` mobile money accounts" (FinScope, 2016). In addition to this, the report estimates that about 2.7 million (46%) m-money accounts are registered and 12% of these adults have multiple accounts. This clearly indicates that people are using m-money in their everyday lives. MTN Rwanda alone has "over 1 million active Mobile Money users, these customers make over 7 million transactions per month, with a monthly transaction value of Rwf70 billion on the platform" (MTN-Rwanda, 2017) and this leaves MTN with 10 percent of the total revenue that it makes. With this information, it is clear than mobile money plays a vital role in the daily life of Rwandans.

The recap from the literature review indicates that MOMO is a necessity in Rwanda society but it does not show how people in rural areas perceive it. As this paper was to investigate the factors that determine the success MOMO in rural areas, let see the results from interviews and discuss them in order to have insight about which factors that control its success in rural areas. As indicated in the sections above, the author of this used the Updated DeLone and McLean Model in order to elaborate and comprehend the requirements.

The following table indicates the response the author got from when he was conducting interview with people in rural areas of Rwanda specifically in Gihombo sector.

Factors	Surveyed questions	Responses
Infrastructure	1. Do you have electricity?	Yes (38%), No (62%)
	2. How do you access the *MOMO* service?	Myself(70%),Others(30%)
System quality	3. *How good the MOMO is in terms of its operational characteristics?*	Easy to use (70%), Don't have phone(16%), Don't know (14%)
	4. Which features of MOMO seem uncomfortable to you?	Send money (14%) Get/Put money-from/to bank(32%) Pay bills (26%)
	5. I am satisfied with the stability and availability of the network	Satisfied (92%), Unsatisfied (8%)
information quality	6. How good the MOMO is in terms of its output/content quality?	Easy to understand (58%), it take time(28%) It is hard (14%)
	7. Do the contents of *MOMO* serve the purpose of helping you in using it?	Yes (86%), No(14%)
Service quality	8. How do you interpret MOMO service quality?	High quality (56%),Good (24%), Not all(0%)
	9. Is it responsive? Is it available and reliable all the time?	Yes(64%), sometime(36%)
User satisfaction	*10.* Do you have feelings *of pleasure or displeasure regarding MOMO?*	Pleased (100%), displeased (0%)
System *use / Intention to use*	11. To which *extent of the MOMO being used?*	Almost everyone (78%), Neutral (16%), Few people (6%)
Perceived Mobile Money benefits	12. How do you e*valuate the benefits of the MOMO to you?*	Very helpful (94), Somehow (6%), Not at all (0%)
	13. Overall, how satisfied are you in using the *MOMO service*?	Very satisfied (82%) Somehow satisfied(18%) Not at all (0%)

Table 3: The results from interview

Refer to information from the interview, it is clear that the people in rural areas understand the importance of the mobile money and see it as the most effective IT solution brought to them. If you look in the table 2, you find that 70% of the populations of Gihombo know how to use their mobile phone to make transactions on mobile money and this implies that the MOMO system is easy to use and satisfies its customers and presents them the opportunities to that attract. This means one factor that may define that success of mobile money in rural areas is systems quality of MOMO. This increase in MOMO service of mobile money in rural areas can support by the factor that people don't have other cheap and quick options in transferring money. In addition, it is also supported by the fact there is unprecedented increase in mobile phone and many e-government services are paid online via MOMO.

In addition, if you look again at the results from interview, you realize that the people in that sector are informed by MOMO system. 58% of the population indicated that using mobile money is easy and 28% agreed that it took them time to memorize how to use it while 14% still indicate inability to work with MOMO. In this figure, it is deducible that 86% percent can be able use MOMO when given time and expose them to MOMO platform. This is due to the simplicity of how content of this platform is written. Therefore, the information quality is also another factor that attracts the people to use MOMO in the villages. It does not require them high tech skills.

These factors we have seen are crucial to the success of an information systems but the model used suggest service quality one of the key measurement as more than 60% of the people has specified that MOMO deliver to them incredible services and give it to them in very short time. Thus, the third factor to explain the success of MOMO is its service quality.

Moreover, interviewees showed that they are satisfied with the service and everything that MOMO has to offer at 100% and they also showed that they will continue to use it at 78% because they almost are expect benefit from it. These statistics we have in the table 2 means that the user satisfaction, intention to use and net benefit are respectively factor fourth, five and six. This is because when the information quality, system and service quality are good the system satisfies the use and keeps him/her to use it.

6   Discussion

The adoption of mobile money in Rwanda is obviously enormous as all respondents have indicated that they used mobile money mainly to send and/or receive money to/from their friends

and relatives. Even though some of them have indicated that they do not own mobile phones but they said that they ask their friends and relatives to allow them use their phones when sending or receiving money.

Unlike in Ghana where more than 90% of respondents have indicated that they heard about mobile money but they did not use it (Tobbin, 2011), all respondents in this study admitted that they have used MOMO in either sending/receiving money or paying bills.

In the author's opinion, this difference in success of MOMO in both countries can be explained by the difference in time when these two studies were conducted, accessibility, trust, cost of use and the attitude towards financial services in both countries. These are not only factors that explain the success of mobile money in rural areas in Rwanda but they are the main factors to indicate people perception towards mobile money in Rwanda. With these factors, it is crucial to understand that people join mobile money in order to gain benefits encapsulated in the above-mentioned factors. Those benefits attract many people to join mobile money as indicated in section 3.

In addition, the respondents mentioned that they use mobile money to pay bills and governments services. Therefore, as the government continue to promote the use of e-Services, the number of mobile money subscribers to continue to increases as well. If you ask people in street their perception on mobile money even in informal interview, they all show enthusiasm of using mobile money as their major channel towards financial inclusion. One can maybe think that mobile is mostly used by unbanked people but in reality all people we discussed with use their mobile money than they use their bank services. The reason behind this, most of the people in rural areas do not have bank accounts and those who have them they are obliged to have mobile account because they need transfer or receive money to their friends and relatives who uniquely use mobile money and they do not have any other inexpensive option to help them. In addition, even though they some of them have bank accounts, paying bills such electricity, driving license and other governments services is less expensive or free of charge with mobile money while with banks they have to pay commission fee. As mentioned by some of the banked people from the village, this attracts banked people to join this growing platform. In general, when you look at the factors that attract many people to join mobile money in rural areas, you frequently see that Perceived Ease of Use, Perceived Usefulness, Perceived Trust, Perceived Cost of Use, Perceived

velocity of money, Perceived efficiency, Perceived Convenience, Perceived Relative and Social Influence stands in forefront of the rest of the factors.

7 Conclusion

This study provided important information about the factors that influence success of mobile money in rural areas in Rwanda. It used Updated DeLone and McLean Model to confirm those factors referring to the information gathered during interview with Gihombo sector. The people responded favorably to the interview questions and showed that MOMO is really vital in their daily like. They showed that six factors that inference the development of MOMO in their region can be classified as follow: 1) Information system, 2) Service quality, 3) System quality, 4) intention of use, 4) User satisfaction and 5) net benefits. Knowing these factors will help the government decisions-makers to use the same factors to evaluate e-government services that reach in some areas to see whether they are explored to the maximum. And when designing new e-government system, it will help them to put into considerations those factors.

Briefly, mobile money is generally seen by most of the people in rural areas as a cornerstone for their financial inclusion which make mobile money ideal to increase financial inclusions in developing countries such as Rwanda and benefit from it a lot.

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Appendix

The following table contains the questions used during interview. I took these questions from the paper of Hellstén & Markova(2003) and add some others from the paper of Islam (2011).

Factors	Surveyed questions	Responses
Infrastructure	1. Do you have electricity?	
	2. How do you access the *MOMO* service?	
System quality	3. *How good the MOMO is in terms of its operational characteristics?*	
	4. Which features of MOMO seem uncomfortable to you?	
	5. I am satisfied with the stability and availability of the network	
information quality	6. How good the MOMO is in terms of its output? i. Content quality ii. Context and linkage quality	
	7. Do the contents of *MOMO* serve the purpose of help you in using it?	
Information quality	8. How do you interpret MOMO system quality?	
	9. Is it responsive? Is it available and reliable all the time?	
User satisfaction	*10.* Do you have feelings *of pleasure or displeasure regarding MOMO?*	
System *use / Intention to use*	11. To which *extent of the MOMO being used?*	
Perceived Mobile Money benefits	12. How do you *valuate the benefits of the MOMO to you?*	
	13. Overall, how satisfied are you in using the *MOMO service*?	

Table 4: The interview questions
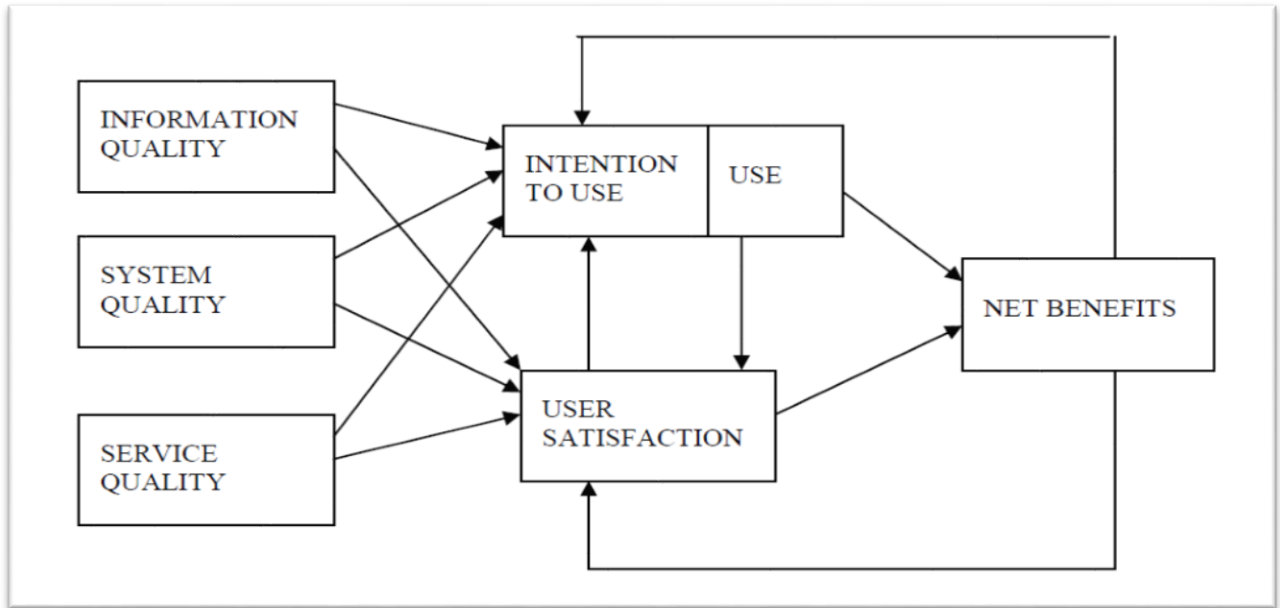
The flowing diagram is the DeLone & McLean IS success model used in this paper

Figure 3: The DeLone & McLean IS success model