

Beyond Communication: Exploring Kenya's Financial Technology through Mobile

A qualitative study of Unique dynamics of Mobile Payment Systems: M-PESA

Author: Ruth Mungai Christensen



Master Thesis:

Business Administration and Information Systems- Digitalization

Supervisor: Abayomi Baiyere

Student ID: 102692

Date of hand-in: 15-08-2020

Number of pages: 75

Number of characters incl. Spaces: 129.516

Abstract

The growth of mobile technology throughout the world is a phenomenon that has been remarkable as all classes of society have access to financial services as people are becoming more aware of the mobile money system. Thus, the ‘unbanked’ lacking financial services have the opportunity to have access through mobile payment services resulting in financial inclusion. However, many mobile payments services are failing among the reasons being security, trust and lack collaborations among many other factors. With this, the primary focus of this qualitative grounded theory study is to fill the gap that exists about unique dynamics of mobile payments outside the banks in the research literature. The goal of this study is to address the gap by investigating and reporting information about the unique dynamics of mobile payments outside the banks and to better understand how a successful mobile payment has had an impact on financial technology of a country. Qualitative grounded method was applied to analyze the unique dynamics of mobile payment service- MPESA, that makes the company- Safaricom gain its competitive advantage, the dynamic capabilities that Safaricom holds that makes it achieve a successful mobile payment service- M-PESA and the attributes and benefits that makes it unique over other incumbents. The findings resulted from the development of six themes and sub-theme. In addition, the findings presented factors that make M-PESA a success, among them simplicity of their products, trust, security and collaborations with financial services and international money transfers. The results also resulted in the development of a theoretical framework that describes the factors that contribute to the success of a mobile payment service.

Keywords

Mobile payment, Safaricom: M-PESA, financial technology, Grounded theory

ACKNOWLEDGEMENT

First of all, I would like to appreciate the guidance and support I received from my supervisor, Abayomi Baiyere throughout the undertaking of this project. To all my family for the encouragement and support they accorded me.

Table of Contents

ABSTRACT.....	1
ACKNOWLEDGEMENT.....	2
LIST OF FIGURES/ TABLES/ SCREENSHOTS.....	6
LIST OF ABBREVIATIONS.....	6
1. Introduction	
1.1 Background of the study.....	7
1.2 Statement of the problem.....	8
1.3 Purpose of the study.....	9
1.4 Research questions.....	9
1.5 Importance of the study.....	10
1.6 Scope of the study.....	11
1.7 Definition of Terms.....	11
1.8 Thesis structure.....	12
2. Literature review.....	13
2.1 Mobile payment context & research.....	13
2.2 Development of mobile payment solution.....	15
2.3 Success and Failures.....	16
2.4 Benefits and limitations of mobile payments.....	17
2.5 Technology acceptance of mobile payments.....	18
3. Methodology.....	20
3.1 Philosophy of Science.....	20
3.2 Qualitative Research.....	22
3.2.1 Trustworthiness of data.....	23
3.2.1 Credibility.....	24
3.2.2. Transferability.....	25
3.3 Applied method.....	25
3.3.1 Grounded Theory approach.....	26
3.3.2 Grounded theory analysis.....	26
3.3.3 Research design.....	27
3.3.4 Initial purposive sampling.....	28
3.4 Data collection.....	29
3.4.1 Qualitative interviews.....	29
3.4.2 In-depth interviews.....	30
3.4.3 Memos.....	31

3.5 Data analysis.....	32
3.5.1 Coding & constant comparative method.....	33
3.5.2 Line-by -line coding.....	34
3.5.3 Focused coding.....	35
4. Safaricom case.....	36
4.1 M-PESA.....	38
5. Findings.....	41
5.1 Product attribute innovation.....	42
5.1.2 Features of consumers & businesses.....	42
5.1.3 Benefits to users.....	44
5.2. Consumer engagement.....	47
5.2.1 M-PESA Agents.....	47
5.2.2 Marketing strategies.....	48
5.2.3 Collaborations.....	49
5.3 Dynamic capabilities.....	51
5.3.1 Ambidexterity.....	52
5.3.2 Determinants of growth.....	54
5.3.2.1Sensing opportunities.....	54
5.3.2.2 Seizing.....	55
5.4 Maintaining Competitiveness.....	55
5.4.1 Operational excellence.....	56
5.4.2 Strategy of innovation.....	56
5.5 Financial inclusion.....	57
5.5.1 Opportunities created.....	58
5.5.2 Revenue contribution.....	59
5.5.3 Value for stakeholders.....	60
5.5.4 Profitability.....	60
5.6 Financial technology.....	61
5.6.1 developing new technologies.....	61
5.6.2 Developing APIs.....	62
5.7 Theoretical Framework.....	63
6. Discussion and Implications.....	66

7. Summary & Conclusion.....	71
8. Managerial Implications.....	74
9. Recommendations for further studies.....	75
10. References.....	76
11. Appendices.....	83

List of figures/ Screenshots/ Tables

Figures:

Figure 1: Structure of the Thesis.....	12
Figure 2: Research Design.....	28
Figure 3: Focused Coding Steps.....	35
Figure 4: Themes and Sub-Themes.....	41
Figure 5: Theoretical Framework.....	65

Screenshots:

Screenshot 1: Example of line-by-line Initial Coding.....	34
Screenshot2: M-PESA Phone Menu Structure.....	40

Tables:

Table 1: Definition of Terms.....	11
-----------------------------------	----

Abbreviations

API: Application Programming Interfaces

ATL: Above the Line

B2B: Business-to-Business

B2C: Business-to-Customers

C2B: Customers-to- Business

GTM: Grounded Theory Method

KPI: Key Performance Indicators

KYC: Know Your Customer

SMEs: Small Medium Enterprises

1. Introduction

1.1 Background of the study

The rapid use of mobile technology has resulted in an astonishing speed due to its widespread all over the world, catering all classes of society including the poor. This is largely because of the prepaid model (Diniz et al., 2001-2011). Due to the fact that it is able to cater for all classes in the society, financial services has become easily accessible and everyone in the society is increasingly aware of a mobile-money system.

In addition, due to its prominent consumer products ever launched, the mobile payment services are receiving growing attention globally, from consumers to merchants, as an alternative to using cheque, or credit cards. The potential of this technology is enormous (Oliviera et al, 2016). Thus, they are increasingly being adopted by organizations as a new way of doing business in the 21st century (Aydin and Burnaz, 2016).

Prior studies have suggested mobile payments as being a solution to facilitate micro-payments in electronic and mobile commerce, and provides an alternative for the decreased use of cash at POS (Point on sale) (Begonha et al., 2002; Coursaris & Hassanein, 2002). The evolution of mobile payment solutions is based on the generation of mobile telecommunications technology, wide use of mobile phones and the success of early mobile content and services such as logos and ringtones. (Mallat, 2006).

With the use of mobile phones, Various telecommunications sectors provide financial services to the 'unbanked'. There are many services that are provided including long-distance remittances, buying and selling of goods, payments of services in hospitals, schools, hotels etc, and they are dubbed different names, among them mobile banking, mobile transfers and mobile payments. Thus, these services are broadly available and increasingly popular in Kenya, the Philippines, South Africa and elsewhere (Donner and Tellez, 2008).

In Kenya, the explosive growth of mobile payment service called M- PESA, has inevitably inspired a great deal of discussion about what the system really is and what it could grow to be.

M-PESA mobile money service has been defined as an innovation which has gained rapid growth, receiving significant attention with subtle diffusion in the Kenyan Economy (Gewald, Leliveld & Pesa, 2012).

Mobile technology has empowered the fintech revolution across the entire world. Thus, Safaricom Ltd in Kenya, has seen the development of mobile technology pave the way for Kenya's fintech revolution. Due to this revolution, the country's information technology sector has seen a growth of 10% which accounts for around 5% of the country's GDP. Moreover, East Africa has emerged to be a world leader when it comes to overseas mobile money transfers through the M-PESA platform (Safaricom.com).

The objective of this paper is to conduct a qualitative grounded theory study to explore the unique dynamics of mobile payments- M-PESA, in order to come up with a theory of what makes M-PESA a successful mobile payment service. The rest of the paper will be as follows:

1.2 Statement of the Problem

M-PESA has become the payment method of choice in Kenya. With a simple SMS text, those who traditionally lacked access to financial institutions can now easily send and receive money. Although MPESA mobile payment service is perceived as a success story of Safaricom company, It is, however, interesting to study the unique dynamics that makes it a success and the benefits that the service offers that make the company achieve its competitive advantage. Most of the literature that has been written about mobile payments solutions have been connected to setting up a bank account or getting connected to a debit or credit card, to a smartphone. Nonetheless, M-PESA is not related to connecting any bank account upon registration.

Although there are several scholars that have written about this mobile payment solution (MPESA), for instance examining how M-PESA has been used in Kenya, whether it is solely a low-value money transfer system. In addition, how MPESA went viral with the amount of consumers using it, the success factors that attribute to the use of M-PESA by micro-business

operators (Mbiti & Weil, 2015: Mbogo, 2010: Mas & Radcliffe, 2010). These studies do not specify the dynamics of the M-PESA mobile payment solutions and what makes it unique from not having to register with a bank account or credit and debit card details.

Moreover, M-PESA has grown by launching more innovative services that many scholars have not written about since these services have been launched in the past years (around 1-2 years ago) and recently. This study therefore, seeks to explore the unique dynamics of M-PESA innovation that is resulting in high financial inclusion in East Africa through digital mobile, and what makes Safaricom gain its competitive advantage over other financial services.

1.3 Purpose of the Study

The purpose of this qualitative grounded theory study was to understand the unique dynamics of M-PESA innovation over incumbents such as financial services or outside the banks, and to develop a theory or model that may be used to help guide the success of a mobile payment platform. A gap in the research of mobile payment systems dynamics outside the banks presented this opportunity to investigate the impact of a successful mobile payment system in a specific country.

1.4 Research Questions

The research sought to answer the following questions:

1.4.1 *What are the dynamic and expanded capabilities of Safaricom that influence MPESAs uniqueness over other financial services?*

1.4.2 *Which product attributes make MPESA innovation attractive hence influencing continued adoption and usage?*

1.4.3 *Which advantages has MPESA innovation offered that make the company (Safaricom) gain its competitive advantage?*

1.5 Importance of the Study

In order to conclude the introduction, I will shed light on the relevance of my research in connection to practice, academics and myself. With this, the motivation behind picking this area as my topic will be explained.

1.5.1 Practical Value

This study was carried out in collaboration with Safaricom Kenya. As a result of this, the implications were purely practical. In addition, my personal interest and the company's agreement to do the research about a present-day topic seemed to be a reasonable step of action. Due to technology advancement, there are many firms in the telecommunication industry that are catching up with advancing their technology by exploring innovative ways. Yet, not all the firms in this industry are experienced with exploring, while still maintaining the purpose of their industry. So far, Safaricom has been able to do that, by using the M-PESA platform and still operating as a telecommunication company, but with them influencing adoption and continued usage of the mobile payment solution (M-PESA) still remains a question of interest.

Besides, I find the Safaricom aspect of exploring through the attributes that M-PESA platform has launched and is continuing to launch more by innovating more and more, to be fascinating in the fact that the results are making Africa to advance in technology and also improve the economy.

1.5.2 MPESA Agents

Since MPESA agents are a part of its value chain, this study will make them get to acknowledge their contribution to the success of the mobile money transfer so as to focus on ways to serve their customers better.

1.5.3 The Academia

The extent of my research is mainly on a practical issue. However, it is my belief that academia can also acquire something out of this research. By the fact that this company is in a different industry, but following an explorative innovation that is far apart from what it generally does, which so far has managed to be successful in one country and trying to enter other countries can be challenging. In addition, other scholars who wish to extend research on the area of mobile money transfer would use this research as a reference point.

1.6 Scope of the Study

This study focused on the dynamics of MPESA services that makes them unique from other financial services resulting from Safaricom's achieving its competitive advantage, and which dynamic capabilities the company holds for it to deliver the various products they have to its customers. Safaricom Company Limited was selected as a case study because it has been able to transform financial technology, achieve the largest market share and have the highest financial inclusion in East Africa, through their mobile payment service- M-PESA.

1.7 Definition of Terms

Definitions of the main concepts employed in this study are presented in the following table.

<i>Concept</i>	<i>Definition</i>
Mobile Payments	Mobile payments is defined as payments made through digital mobility technologies with the use of handheld devices on telecommunications networks. The payments are via digital financial transactions, but not always linked to financial institutions.
Mobile transactions	Transactions that are carried out through mobile technologies and devices. Mobile transactions include “every kind of mobile transaction offered by technology, whether it involves financial value or not”.
Mobile Money	May be related to mobile wallet. This refers to a “digital repository of electronic money developed and implemented on mobile devices, allowing peer-to-peer transactions between mobile devices from users of the same service”. It is able to store money, credit and debit cards, just as a normal physical wallet.
Mobile banking	

Table 1: Source: Diniz et al, (2001-2011)

1.8 Thesis Structure

Figure 1 below shows an outline consisting of a brief description of each chapter to provide an overview of how the research questions will be answered.

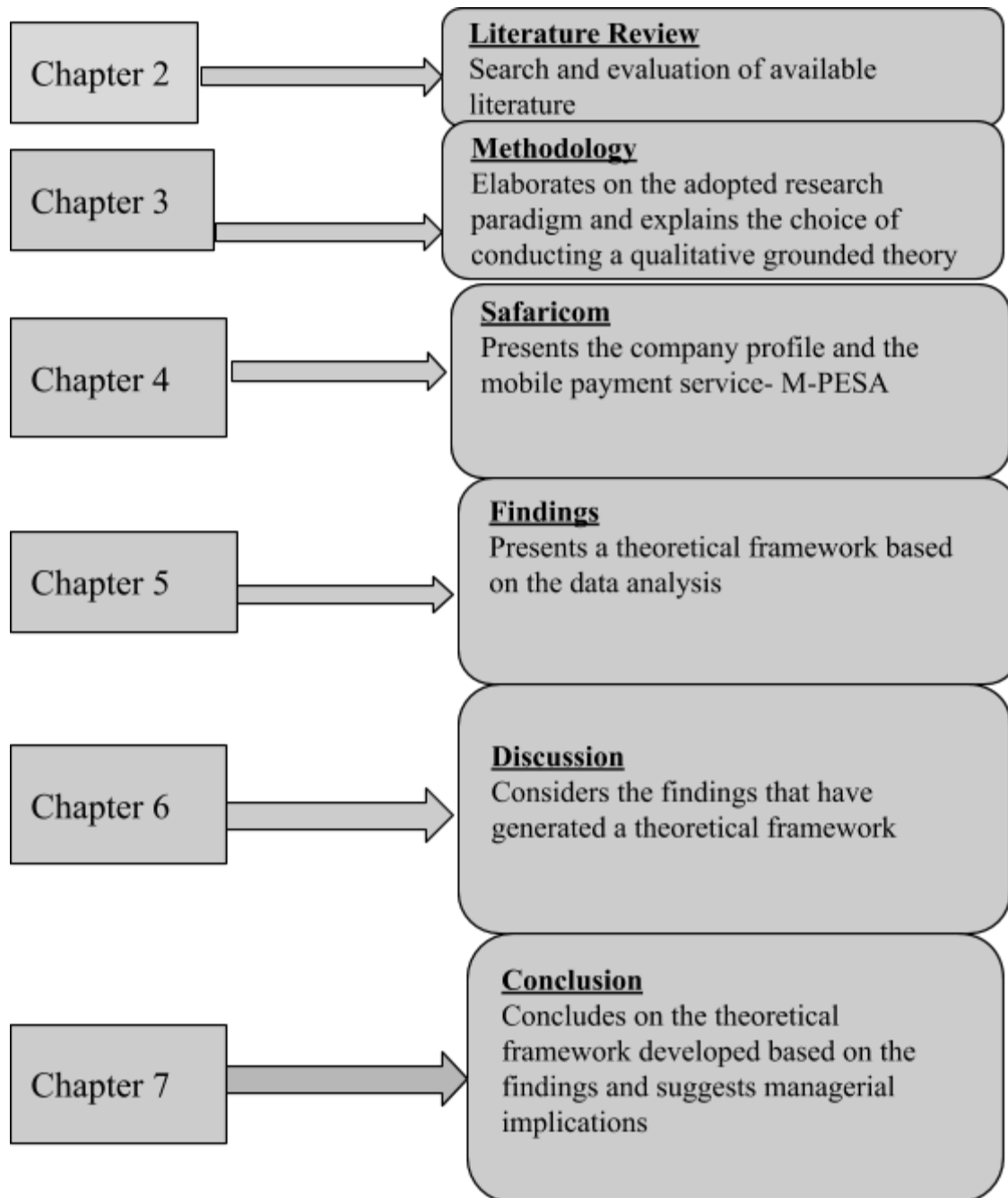


Figure 1: Thesis Structure

2. Literature Review

In this chapter, the literature review will investigate two important points: one it will synthesize past knowledge in the topic areas behind my research. In addition, it will identify important biases and knowledge gaps in the literature that I intend to fill and propose future research directions about mobile payment platforms.

The strategy adopted to search for relevant literature was a systematic approach of scanning online academic journals specifically on CBS library and google scholar. In the search for literature, the following keywords were used: “Mobile payment (s)”, “M-Payments”, “Mobile money”, “Contactless payments”. Searching was conducted from the titles and abstracts of the articles.

Furthermore, a sample of the articles were refined by screening for the title, abstract, introduction and conclusion. The articles with the most closely or which address the above topics were considered. In addition, a backward snowballing method was followed by scanning the reference lists of other works of authors as well as citations to look after the topic of interest (Webster and Watson, 2002).

2.1 Mobile Payment Context and Research

M-payment which seems to be a natural progression from e-payment systems, is a form of online payment made over a mobile network where transactions between unknown entities can take place (Chandra et al, 2010). Mobile payments research has received a substantial attention among scholars in their bid to explain how the mobile payment service providers innovate and compete (Dahlberg et al., 2015: Hedman et al., 2015). Most of the mobile payments studies are concentrated on the drivers to service adoption and competitive dynamics among mobile payment providers.

The mobile payment field is composed of several groups of actors, namely ;mobile payment service providers and technology manufactures which are on one side, and the consumers and merchants on the other side (Ondrus and Lyttinen, 2011). In addition, regulatory agencies and

government also play an important role in making the markets. At the end, mobile payment solutions form multi-sided platforms whereby various specific groups are involved and interact. Thus, they depend on the value of each other's participation and mechanisms of extract value (Rochet and Tirole, 2003).

Staykova & Damsgaard (2011), write that a mobile payment is one that involves transfer of money from one party to another using some digital means, via a mobile phone. This is achieved by one having a mobile app downloaded to their smartphones, then they are set up with a bank account or connected to a credit card or debit card. Thereafter, the solutions work using a phone number as the identifier and a PIN code to enable the payment(Staykova and Damsgaard, 2015).

The majority of new mobile payment solutions address retail payment transactions, including micro-payments (Dahlberg et al., 2008). These solutions offer the possibility to pay for the purchase of small value physical products (e.g. fast food from a restaurant), vending (e.g. soft drink from a vending machine), ticketing (e.g. bus tickets), mobile content services (e.g. mobile phone entertainment), games, intangible services (e.g. internet content) (Ibid).

Currently, mobile phones are increasingly developing into personal trusted devices (PTD), as they are managed only by their owners. Furthermore, various security features are being integrated into the mobile phone technology to make m-payment transactions secure. Among the security features are wireless transport layer security (WTLS) and wireless public key infrastructure (Claessens et al., 2002).

One precision of mobile payment markets is that mobile payment services stretch across different and heterogenous industries that have never actually integrated in the past (Ondrus and Lyytinen, 2011). Usually the service providers that are there, are mobile networks operators (MNO) and financial institutions(banks and debit/credit card companies). Different combinations of the above actors have been tried in the past by a number of solutions. Furthermore, most

payment solutions in terms of technology have been on text based SMS/USSD platforms and standardized messages to operate payment services.

However, with the emergence of smart-phones, there has been fast mobile internet capabilities and powerful operating systems with multi tasking and sufficient memory, which offer better and more spontaneous icons based user interface. All these new features enable companies to innovate new types of online mobile payments with a totally different user experience (Ondrus and Lyytinen, 2011).

2.2 Development of mobile Payment Solutions

The commercial history of mobile payment solution is short, but at the same time characterized by rapid development. According to Dahlberg et al (2015), Mobile payment research started soon after the first payment took place via a mobile device in 1997. The first mobile payment efforts as written by Pousttchi et al (2006), originated from the fact that the mobile phone due to its specific properties, its wide distribution in the population, and its consumers' behavior is especially well suited for payment activities. In addition to the attractiveness of the technology, the appearance of mobile services and mobile commerce with 2.5G networks by the end of the 1990s made it essential to develop an appropriate form of settlement that possesses the same properties, especially ubiquity, as the mobile offers for which billing occurs.

Dahlberg et al., (2008) writes that, among the first commercial mobile payment solutions was launched by the Finnish telecom operator Sonera in 1997, whereby goods were bought via vending machines with mobile phones and paid for with mobile operators' service bills together with the mobile telephony services. Mobile payment services from developing markets are unlikely to penetrate developed economies with their advanced financial markets and sophisticated telecom, merchant and consumer infrastructures.

Several definitions about mobile payments have been given by past literature . Dahlberg et al (2008), argues that the terminology related to mobile payment is vague and inconsistent. The authors defined mobile payment as “*payments for goods, services, and bills with a mobile device by taking advantage of wireless and other communication technologies*”.

In addition, *“A mobile payment is carried out with a mobile payment instrument such as a mobile credit card or a mobile wallet”*.

Furthermore, *Cheney, (2008)* defines Mobile payment as;

“Payment transactions initiated or confirmed using a person’s mobile cellular phone or personal digital assistant”.

2.3 The success and failure of Mobile Payment Systems

Numerous conditions have been proposed by scholars that influence the success and failure of new mobile payment systems. Among them are available technologies, competition and business models (Dahlberg et al., 2008). In addition, consumer trust has also contributed to the success and failure of mobile payment systems. McKnight et al. (2002) conceptualized trust as the belief which allows consumers to willingly become vulnerable to online vendors for an expected service after duly considering the vendors characteristics. Keen, (1997), writes that the most significant long-term barrier for the success of e-commerce and e-payment systems has been lack of consumer trust. Despite M-payment systems being a progression from the e-payment systems, there are some distinct differences, particularly in terms of the mobile service provider involvement and mobile device limitations (Chandra et al, 2010).

Unlike the M-PESA mobile payment systems, trust is one of the factors that has been seen to be present positively, and this is evident by the number of users of M-PESA, which is around 24 million. Meaning that consumers have trust in M-PESA.

Furthermore, for mobile payments to be successful, collaboration between the telecom operators and banks (Au & Kauffman, 2008), is essential and this can be challenging and lead to failure (Dahlberg et al, 2008). Failure of mobile payments has been evident in the past as there were some scholars who had analysed its failure as a result of collaborations. The factors that led to failure in this case from the collaborations were different strategic objectives and interests, conflicts, lack of dependencies and governance issues between three Dutch banks and three Dutch telecom operators (de Reuver et al. 2015). In my study of M-PESA, findings suggest that

collaborations with banks seems to be working out well since the two banks that collaborate have been together for some years now and the collaborations are still there.

Among the characteristics of mobile payments is the ability to increase consumer convenience by reducing the need for coins and cash in small transactions and also increasing the availability of purchase possibilities (Coursaris & Hassanein, 2002). There are however limitations of mobile device features that decrease the usability and user-friendly of mobile technologies (Siau et al., 2004).

2.4 Benefits and Limitations of Mobile payments

Dahlberg et al, (2008), writes that mobile payment solutions providers have proposed various benefits in favor of their solutions. Although there is a big variety in the claimed benefits, almost all vendors argue that their solution is more secure, easier and faster to use than competing (traditional) solutions.

Ubiquity is one of the main advantages of mobile payments compared to offline and online payments (Lingling and Kerem, 2017).

Furthermore, mobile payments offer great potential for both mobile and non-mobile products and services. One of its benefits is, consumers can shop now wherever they can take their mobile phones. However, mobile commerce cannot exist without payment systems, because for any transaction to take place, there must be a way for consumers to pay (Zmijewska et al; 2004).

However, some limitations are stated by past authors, who argue that mobile payments applications still lack proper regulations and standardization, because the mobile network operators billing solution is unregulated and incompatible with banks and financial services (Chen & Adams, 2013).

Other limitations identified as obstacles for using mobile payments platforms are technological, security issues, cost, computer literacy and environmental issues in some of the continents. In

addition, some researchers have stated some of the challenges facing service providers such as interoperability, security and infrastructure (Titus & Ernest, 2017; Tehrani et al; 2010).

Furthermore, repeated failures of mobile payments platforms have been associated with lack of collaboration between stakeholders, no technology standard and low value added for consumers and merchants compared to existing payment solutions (Gannamaneni, Ondrus & Lyytinen, 2015). In regards to collaboration between stakeholders, MPESA mobile payments has had several collaborations with different stakeholders. This and many other factors are the reasons why the mobile platform has been successful and competitive through its unique features by exploring Safaricom's dynamic capabilities.

Lastly, the obstacles to the implementation and success of the mobile money services as many authors outline, the following categories apply to the key constraints (Diniz et al., 2001-2011):

Users: The adoption and experience of the users due to security, privacy, trust, fraud and risk perception. Psychological inhibitions due to the technology and new services is also a constraint.

Business models: restrictions and complexity are the main business model problems. These are seen as the obstacles to adoption and the need for an ecosystem with multiple operators and relations.

Suppliers: lack of service coverage and infrastructure, agents lack of new skills, competitions with traditional service providers and lack of banking expertise.

price/cost: especially on the user side; the cost and price of the service in terms of transaction costs; on the suppliers side, lack of financial sustainability of the initiatives . In addition, the challenges of maintaining price competitive for low-value transactions.

Regulation: to enable innovative business models, the need for public regulation in highly regulated environments (Ibid).

2.5 Technology Acceptance of mobile payment solutions

Zmijewska et al; (2004), writes that the success of mobile services adoption hinges on their ability to cover user needs and attract consumer interest. Some of the reasons identified for the low adoption rates for M-payment solutions are blamed on mobile device and network

limitations, low maturity level of m-payment solutions, limited advantages over other payment modes, and changes of consumer behavior (Mallat, 2004).

Various theories have been proposed to explain user adoption and acceptance of new technologies. Among the theories are Technology Adoption model (TAM) Davis et al, (1989), and perceived characteristics of innovations, PCI (Moore and Benbasat, 1991; Plouffe et al., 2002) (Dahlberg et al; 2003). Schierz et al; (2010) presents factors determining consumers' acceptance of mobile payment services as compatibility, individual mobility, and subjective norm.

In conclusion, most of the literature that has been written about mobile payments solutions have been connected to setting up a bank account or getting connected to a debit or credit card, to a smartphone. Nonetheless, the M-PESA mobile payment solution is not related to connecting any bank account when you register . Although there are several scholars that have written about this mobile payment solution, for instance examining how M-PESA has been used in Kenya, whether it is solely a low-value money transfer system. Further, how it went viral with the amount of consumers using it, the success factors that attribute to the use of M-PESA by micro-business operators (Mbiti & Weil, 2015: Mbogo, 2010: Mas & Radcliffe, 2010). There has not been one that specifies the dynamics of the M-PESA mobile payment solutions and what makes it unique from not having to register with a bank account or credit and debit card details. Moreover, the mobile payment system has grown by launching more innovative services and moving from traditional products and leaning more to platforms that many scholars have not written about since these services have been launched in the past years (around 1-2 years ago) and recently.

M-PESA mobile payment solution has, however, collaborated with kenyan banks purely on transactions basis; meaning, one can transfer money via their bank account to their M-PESA account but no other transactions are involved. In other words, with M-PESA mobile payment solution, the money is in the phone (M-PESA wallet), and not on your bank account.

3. Method

The aim of the study was to investigate the unique dynamics of mobile payment service-MPESA outside the banks. This was to be examined by investigating what dynamic capabilities Safaricom Ltd hold that influence M-PESAs uniqueness over other financial services, the innovation attributes that makes their M-PESA service attractive, benefits to users and influence adoption and continued usage. This chapter describes the methodology that was used to undertake the research. The chapter details the research philosophy, including the research design and strategy. In addition, the chapter also explains the data collection methods. Lastly, the data analysis tools and techniques applied are explained.

3.1 Philosophy of Science

This research is conducted within the field of social science. Social science is based on the paradigm that seeks to understand expressions of life other than explain these as found in natural sciences (Young and Collin, 2004). A research paradigm's main aim is answering three foundational questions that explains the basic beliefs of scientific philosophy. The three questions are concerned in the research of ontology, epistemology and methodology (Denzin & Lincoln, 1998).

Ontology is the study of reality. In qualitative research, the philosophical stance of ontology is that there exists multiple realities, and that each reality is subjective (Creswell, 2013). Multiple realities mean that, the researcher goes to the participants, they may have similar situations but the explanations and views of the situation may be very different based on their backgrounds. Thus it is subjective because it is influenced by individuals' influence and biases (Yilmaz 2013, Creswell,2013).

Epistemological stance is the study of knowledge. For qualitative studies, the researcher closely interacts with the participants (Creswell, 2013). As a result of close interaction, the researcher might influence how participants think about issues or rather this might influence how the researcher and the participants come up with knowledge. In the epistemological stance, the

researcher's interaction with the participants influences the kind of information you get from them. So, the participants need to trust the researcher in order to get accurate information. Thus the researcher's background and experience can influence what kind of information they are collecting or what kind of information is generated through the interaction they have with the participants. That means that the researcher has to see themselves as an instrument because they influence the information that comes to them (Adu, 2016).

Finally, the methodological stance is the study of the process of the research. The researcher uses inductive logic, studies the topic within its context, and uses an emerging design. In addition, the researcher works with details before generalisations, describes in detail the context of the study and continually revises questions from experiences in the field (Creswell, 2013).

According to Cohen et al, (2000) Perspectives among researchers can vary a great deal since they see the world through different cultural, philosophical or professional lenses. Thus, one researcher might seek evidence of the regularity of patterned behavior in trends, rates and associations, while others might focus on how people understand or interpret what they experience. The latter research worldview is the interpretive paradigm which has a constructivist ontology and interpretivist epistemology that will be the focus of the study.

Yilmaz, (2013), writes that the post-positivist, post-structural, constructionist and critical paradigms lay the bases for the ontological, epistemological and methodological underpinnings of qualitative research design.

The thesis is situated in the interpretivist- constructivist paradigm within social science research. The following account draws on notions from interpretivist.

An interpretivist or Constructivist paradigm portrays the world as socially constructed, complex and ever changing in contrast to the positivist assumption of a fixed, measurable reality external to people. Interpretivist sees the world as socially constructed, interpreted and experienced by people in their interactions with each other and with wider social systems

(Maxwell,2006; Guba and Lincoln, 1985; Merriam, 1988). They seek to understand values, beliefs and meanings of social phenomenon, thereby obtaining a deep and sympathetic understanding of human cultural activities and experiences (Ibid).

Furthermore, the interpretivist researcher tends to be non-manipulative and non controlling (Merriam, 1998). For this reason, interpretivist place strong emphasis on better understanding of the world through firsthand experience, truthful reporting and quotations of actual conversation from insiders' perspectives (ibid) .

The nature and purpose of inquiry according to the paradigm is interpretive and the purpose is to understand a phenomenon and not to generalize to a population (Farzanfar, 2005). For this reason, the thesis follows the interpretivist paradigm to understand the phenomenon at hand, from the participants' views of the situation and recognises the impact on the research of their own background and experiences. This will be done by analysing the respondents' views on mobile payment service MPESA that has made it successful through their unique dynamics of the MPESA platform, which gains Safaricom competitive advantage through the various innovations that they have accomplished and are accomplishing. Furthermore the research will be subjective, since the analysis will be based on the respondents perspectives which are different from person to person. For this reason, I accept the fact that it is challenging to evade these different opinions which can be seen to be biased and interpret data objectively when doing comprehensive investigations. Nonetheless, this has been taken into consideration to avoid the challenge and develop a quality and trustworthy research

3.2 Qualitative Research

With the methodology being “transactional and subjective”(Guba & Lincoln, 1994, p.109), an interpretive approach is taken to analyze the respondents' description, of MPESAs mobile platform attributes, innovation and dynamics capabilities that gains the company safaricom its competitive advantage, thus making MPESA to be unique, so as to make sense of or interpret

this phenomena in terms of the meanings that the respondents will bring (Crowe et al.; 2015). This is achieved through describing the emerging data findings and generating a theoretical framework so as to seek a better understanding of the phenomenon (Tracy, 2013).

There are three important concepts in a qualitative study: *self-reflexivity*, *context* and *thick description* (Tracy,2013). ‘*Self-reflexivity*’ requires a researcher to be aware of his or her own influence of the research in the likelihood of any biases and the approach used in the research. ‘*Context*’ involves the social contexts and emerging theoretical constructs relationships as social theories can emerge from observing and seeking to understand the social world. Lastly, ‘thick description’ is involved with accounting for data accurately by including information about the research site, context of the respondent, information that is presented before hand and any other points that are found to describe the scenario in which data is collected (Tracy, 2013). These three concepts are taken into consideration throughout the decisions and actions taken in data collection and analysis. This enables the trustworthiness, credibility and transferability of the research. Discussions concerning these perceptions are explained below.

3.2.1 Trustworthiness of the data

In the pursuit of doing trustworthy research, replication is essential. Thus, to better ensure that replicability is applied, transparency about the data and methods used in the research has to be accounted for (Pratt et al., 2020). Trustworthiness is defined as “*the degree to which the reader can assess whether the researchers have been honest in how the research has been carried out and reasonable in the conclusions they make*” (Ibid, p. 2)

The thesis applies Guba and Lincoln (1985) two of the four criteria to tackle the issue of trustworthiness and ensure that the data presented is true. The following illustrates how the four constructs were followed in the study at hand.

3.2.2 Credibility

One of the most important factors in establishing trustworthiness is ensuring credibility. Credibility establishes whether or not the research findings represent plausible information drawn from the participants' original data and is a correct interpretation of the participants' original views (Graneheim & Lundman, 2004; Lincoln & Guba, 1985). Several strategies were followed in order for rigor of inquiry to be established. Among them was; Prolonged engagement of the study at hand. I started investigating the phenomenon at hand several months in, and this ensured prolonged engagement in the participants world view (Bitsch, 2005), thus, helped to understand the context of the study and minimize the distortions of information.

The other strategy that was applied to ensure credibility was *triangulation*. This involves the use of multiple and different methods, investigators, sources, and theories to obtain corroborating evidence (Lincoln & Guba, 1985). The thesis used data triangulation by using different sources of data, that is both primary and secondary data. By interviewing respondents from different MPESA departments so as to enhance the quality of data.

Member checks will also be applied in order to improve the quality of the data. Meaning that, the “*data and interpretations are continuously tested as they are derived with members of the various audiences and groups from which data are solicited*” (Guba, 1981, p. 85). This entails including the voices of respondents in the analysed data and interpretation made from the data.

The thesis will apply two strategies of first, establishing structural corroboration or coherence i.e. testing all data to be sure there is no internal conflict or inconsistencies; second, establishing referential adequacy i.e. testing all the analysis and interpretation against documents records that were used during data collection and final member checks before producing final document as described above (Guba, 1981).

3.3.3 Transferability

Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents – it is the interpretive equivalent of generalizability (Bitsch, 2005; Tobin & Begley, 2004). According to Bitsch (2005), the “researcher facilitates the transferability judgment by a potential user through ‘thick description’ and purposeful sampling” (p. 85).

Thick Description

This study has developed an extensive set of details in the methods applied and the context, by explaining the research processes that were applied from data collection, context of the data and finally to the production of the final report. Thus, providing thick descriptions of the study ensures transferability of qualitative inquiry (Guba, 1981).

3.3 Applied Method

In the investigation of mobile payment platform services, the study explores various characteristics that contribute to the dynamics of MPESAs payment platform, and their unique features that it offers over other incumbents like financial services and other mobile payments services. This study's research design is structured in collecting empirical data through qualitative interviews, so as to increase reliability and validity of the findings. First, an open ended interview is conducted and analyzed through grounded theory analysis. Next, four in-depth interviews are conducted and apply the same method of analysis. The analysis is inductive, as it allows themes and codes to emerge from the data (Brinkmann, 2014).’

The interviews are rooted in the interview guide and the analysis reflects the characteristics of an iterative approach. In the iterative approach, the theory can support and enable a framework to understand the data findings, which lets new contributions emerge from the data, thus bringing out a structure associated with grounded theory (Tracy, 2013). As new data emerges from the interviews, this informs the interview guide for more in-depth interviews. The inductive nature is also evident, as theoretical constructs are allowed to emerge from the data and

contribute to a more refined understanding of creating a theoretical framework(Corbin & Strauss, 2008).

3.3.1 Grounded Theory Approach

Grounded theory is founded by Glaser and Strauss (1967). This theory has since been applied in qualitative research. This approach uses a “systematic set of procedures for developing an inductively derived grounded theory about a phenomenon” (Strauss & Cobin, 1990, p. 24), thus it is referred to as a bottom-up approach (Tracy, 2013). In addition, it answers the question of ‘What was going on in an area?’ by generating a theory related to a case and developed inductively from empirical data to reach an abstract level (Strauss & Cobin, 1990).

Charmaz, (2014), writes that grounded theory is a systematic process. Meaning it is a step by step process but also a repetitive (iterative) process, as you go back and forth looking at your data, reducing the data into codes and sometimes you have to go back to the data that you coded. In other words it is a back and forth process. Unlike other research methods, GT in data collection involves actively gathering information that will help you to develop a theory or to understand a phenomenon that you are focusing on. This process is driven by the research question and gaps that you identify in the initial stage. Questions which the current data are not adequate to address (ibid).

The thesis follows a grounded theory research approach and analysis, having its origin in Corbin and Strauss (2008) and Charmaz, (2014), understanding of the method. This requires the emergence of theoretical constructs from the data set. However, these constructs are influenced by the researchers interpretative stand and theoretical insights. In addition, this understanding of grounded theory emphasizes the researchers prior knowledge as influential on the analytical findings.

3.3.2 Research design

One must be able to design how to carry out research that fits a research philosophy and adopt an approach for them to conduct the research in a proper way. The purpose of this design is to account for the application of the methods for data collection and analysis. Only the findings from the data analysis will be part of the discussion, as the researcher chooses not to follow any theoretical framework, but review the literature about the phenomenon before and after a theory has been created. This enhances an understanding of how the study at hand contributes to the existing literature. As can be seen from this framework, and in the discussion that follows, the process of doing a GT research study is iterative and recursive and not linear. This means that GT research involves a detailed application of specific methods and processes

The research design is illustrated in figure 2, Inorder to account for the applications and methods for data collection and analysis.

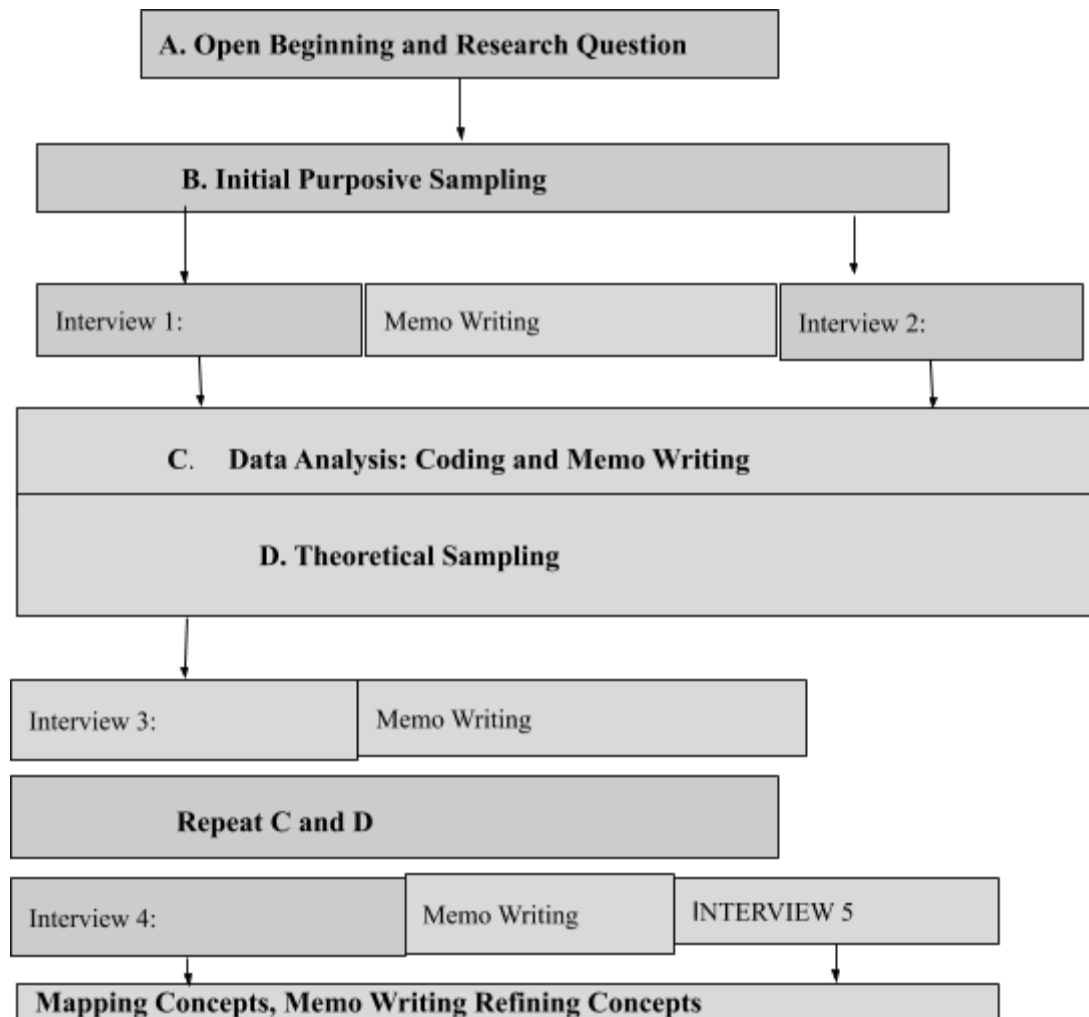


Figure 2: Source: Carter et al., 2011: Research design

3.3.3 Initial purposive Sampling

The thesis followed Guba and Lincoln (1985) guidelines for purposive sampling in selecting the informants. I first started with an informant who would be most appropriate to inform me on my research question regarding how MPESA products and services are innovated and the reason behind the innovations. Thereafter, I used a snowball technique, whereby I asked the informant for recommendations of who can best expand to me the processes of interest (Corley and Gioia, 2004).

The sampling of this study started with the top product manager as he plays an important role in the strategic aspect of MPESAs product development. Corley and Gioia, (2004) write that prior research has identified top managers as critical players in perceptions about change in organizations.. An iterative process was applied in the whole procedure whereby it involves simultaneously collecting data, analyzing and seeking new respondents following the information that was given and seen to be important by prior respondents. This resulted in a progressing sample of respondents and an increase in the data that was relevant to the emerging theory (ibid). Purposive saturation reached where the data collection and analysis provided no further explanation for a given theme or category (Glasser and Strauss, 1967).

3.4 Data Collection

Data collection was informed by some elements of ethnographic methods (Charmaz, 2014). That is, I actively searched for rich data while engaging with participants and data. Empirical data of this thesis is collected using two techniques: semi structured one on one interviews, and written and electronic documentation.

3.4.1 Qualitative interviews

Interviews were the main source of data on the different innovations, adoption and dynamic capabilities of MPESA mobile service. While documentation data and web pages of the company were mainly for triangulation and supplementary sources which aided in understanding the various product features that the MPESA app offers and their influence towards the users. In addition, documentation offers insights on the company's market share and profitability as these are means of gaining perspectives' on key issues (Corley and Gioia, 2004).

An interview is a conversational situation. Brinkmann and Kvale (2009) write that the interview conversation is a construction, whereby the interviewer and respondents are not equal. This is the fact that the conversation is structured and guided by the interviewer, thus the

respondent can be asked to elaborate on topics, thereby altering what is considered as a normal conversation flow (Brinkmann, 2014).

The interviews will be conducted in a semi-structured manner, which is open-ended. This means that an interview guide covers topics on the research interest, that are prepared beforehand, although they are not followed strictly. Among the benefits of a semi structured interview is; it enables the knowledge producing potential of the dialogue during the interview (Brinkmann, 2014). In addition, the semi.-structured interview views the researcher as a participant in the knowledge production, as the researcher can ask the respondents to explain in comments that specifically support important aspects of the research project (Jakobsen, 2016). Thus, this form of interview allows me to find out *what* is wanted, and *how* it is to be achieved.

The following paragraph will elaborate further on the interview method employed and detailed decisions that will be taken to collect empirical data of the study.

3.4.2 In-depth interviews

Since the main method of data collection is the in-depth interviews for all the interviews done, this will enable a deeper investigation of the themes that emerge from previous data analysis of the interviews that will be conducted. Among the benefits of in-depth interviews is that it allows for the researcher to direct the conversation towards the research topic (Brinkmann, 2014). This thesis employs in depth interviews which are semi-structured, thus giving the interviewer an advantage to ask probing questions that are “*used to explore responses that are important to the research topic*” (Saunders et al., 2015, p 320.). In addition, this is important as the thesis follows an interpretivist epistemology, whereby i seek to understand the meaning that participants ascribe to the phenomenon at hand. Moreover, conducting semi-structured interviews will enhance the usage of words or ideas in a particular way, providing me with the opportunity to probe these meanings, thus adding significance and depth to the data that will be obtained (Ibid). Due to this, the interview may also lead to or open up discussions into areas that were not previously considered, but are significant for understanding the phenomenon better. This is an advantage as this opened area will form the interview guide to the next interview.

There are certain contextual factors as well as the actions of the researcher that should be taken into consideration in order to provide the best possible setting for the in-depth interview. One way of respecting research participants is through trying to establish rapport with them (Charmaz, 2014). The researcher should be in control of the interview and suggest a comfortable environment to make the respondent feel confident when answering the questions, and explain on aspects that he or she may not have thought before hand (Tracy 2013; Brinkmann & Kvale, 2009), thus this builds a rapport with the respondent making them feel more at ease. The researcher can provide different locations for the interview to allow the respondent to choose the one they preferred (Saunders et al., 2015). If the interviews are conducted via online, the same should apply.

The interviews were conducted with key employees of Safaricom company, specifically M-PESA department, which deals with the mobile payment solutions product development and strategy making. The respondents were four from different departments in M-PESA, of whom all of them have been there since the launch of the mobile payment solution.

All the interviews were held online via skype and zoom since the company is based in Kenya. The interviews lasted about 1-1.5 hours. Prior to the beginning of the interviews, the respondents were briefed on the purpose of the study. Furthermore, all the respondents were informed earlier before the interview date that the interview will be audiotaped and transcribed afterwards in order to help with the analytic process. At the end of each interview, I debriefed the respondents pointing out how the interview data will only be used in this study, and that their first name and job status will appear when describing the respondents. This allowed them to express their wishes if they wanted to be anonymous in the thesis, which all of them chose to remain anonymous.

3.4.3 Memos

In this thesis, memo writing was also applied as it is one of the characteristics of GT approach (Charmaz, 2014). The memos started as soon as I conducted the first interview, whereby I wrote

a case based memo that reflected what I learnt from that interview. This memo included my impressions about the respondents experiences on working with M-PESA (Sbaraini et al; 2011). (APPENDICES P. 87).

Further, when I started coding I wrote conceptual memos about the initial codes and focused codes that were generated, as described by Charmaz, 2014. I used these memos to reflect and write about the meanings of the codes and to record how and when processes occurred, how they changed and what the benefits or feedback of these changes were. I made comparisons between data, cases and codes in order to establish some sort of similarities and differences. (APPENDICES P. 87). The process of memo writing continues throughout the whole process.

3.5 Data Analysis

Induction describes the logic of working something out based on the evidence available, in this case, participants accounts (Ward, 2017). When the data collection started, inductive analysis of the data was also done at the same time, following the guidelines stated on the methods of naturalistic inquiry and constant comparison techniques (Lincoln & Guba, 1985: Glaser & Strauss, 1967). Thereby providing the basis for an accurate collection and analysis of qualitative data, so as to assist in *“determining the sampling and content foci of later data collection”* (Corley & Gioia, 2004, p. 12). In addition, these two approaches provide the basis of outlining themes and dimensions by examining and comparing key events, including ideas discussed by the informants (Gioia et al., 1994: Isabella, 1990).

In GT, analysis of the data begins with coding of the first transcript to inductively identify initial constructs, important words, or phrases that are labelled accordingly. Coding means categorizing segments of data with a short name that simultaneously summarizes and accounts for each piece of data, thus it is a pivotal link between collecting data and developing an emergent theory to explain these data (Charmaz, 2014). Thus, Grounded theory coding is the process of defining what data is about.

The first step in the analytic process is becoming familiarized with the data set. This phase starts when transcribing the interviews, as interesting data extracts are noted in the initial part of the analytic process (Tracy, 2013). The process of transcribing is seen as informative of the early stages of analysis as it establishes an understanding of the data (Braun and Clarke, 2006). Re-reading the data sets in full length while making notes and getting an overview of the various topics covered in the conversation, also make you familiarized with the data set.

3.5.1 Constant comparative analysis and Coding

Constant comparative analysis is a process that is used in GT for coding and category development. This process begins with the first data collected or generated and penetrates the research process as presented in figure 2. Incidents are identified in the data and coded. The constant comparative technique is used to find consistencies and differences, aiming to continually refine concepts and relevant categories (Tie et al., 2019).

Charmaz writes that: "*coding is the pivotal link between collecting data and developing an emergent theory to explain these data*" P.46). Thus it is essential to the development of a grounded theory. There are three stages of coding as presented by Charmaz, (2014): In *initial coding*, many ideas are generated by the researcher inductively from early data. In *focused coding*, a selected set of central codes are pursued by the researcher throughout the entire dataset of the study. This is where decisions about the most important initial codes are made contributing the most to the analysis. In theoretical coding, the final categories are refined in their theory and relations to one another are established. In order to capture actions or processes gerunds are used as codes (Charmaz, 2014).

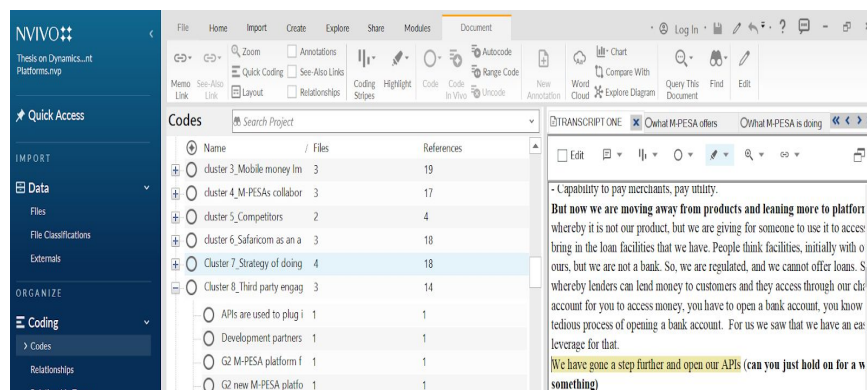
Grounded theory coding is the process of defining what data is about. This began as soon as I conducted the first interview, as it helps with scrutinizing and interacting with data as well as asking analytical questions of the data (Charmaz, 2014). The grounded theory coding process followed the two phases that Charmaz, 2014 presents: *Initial phase* and *focused selective phase*. Since my research question is an epistemological one, I applied the theming data as a coding

method whereby I used sentences to describe the meaning of an aspect of a data (Saldana, 2013). Coding was done using Nvivo software.

3.5.2 Line-by-line Initial coding

I began with initial coding (open code) that was data driven ((Crowe et al., 2015). The initial coding involved actively engaging with the data by looking for implicit meanings, they say something, but what did they mean by that? the assumptions associated with the respondents statement and explicit meanings (Charmaz, 2014). Thereafter, I started labelling portions of data by coding actions, happenings and processes by using gerunds(verb + ing) to some of the codes. This was done line by line, coding each line of the document (SEE APPENDICES P. 89).

Line by line coding is done so as to gradually understand what is important and also to help control assumptions so as to increase the validity of findings. In other words it helps you to look at the data anew (Charmaz, 2014). In addition, since you are coding each line, it helps in finding information which you would have missed if paragraph coding was applied. In my case, it helped me identify a code which I could have otherwise missed and it turned out to be one of the themes. The above table shows an example of an important code identified by applying line-by line initial coding.



Screenshot 1: An example of line-by-line initial coding

Furthermore, I followed a constant comparative method whereby I compared the data with codes, data with data and codes with data, to see whether the codes that I have developed

represent the information that I have coded. This was done on all the four interview transcripts. After all the interviews were coded line by line, a large amount of data and many initial codes were generated. This included codes that captured how M-PESA is moving away from their traditional products and leaning more to platforms to allow third parties to do business around their core system, thus developing APIs in order for the developers to plug into M-PESA. Because of this move to platforms, and developing APIs seemed central to what M-PESA is doing now, I decided that searching for more data about that should become a focused code. There were a total of 281 codes that were generated from all the transcripts (APPENDICES P. 90).

Moreover, there was data that emerged from line by line coding which prompted me to edit my interview guide inorder to include the new information so as to use it in the next interview (APPENDICES.P. 86). A case based memo was written as soon as the first interview ended and a conceptual memo, followed at focused coding stage (APPENDICES P. 87).

3.5.3 Focused coding phase

During this second phase of coding, sorting of the codes was conducted inorder to develop categories and finally the themes. I followed the following steps in order to move from codes to categories and themes

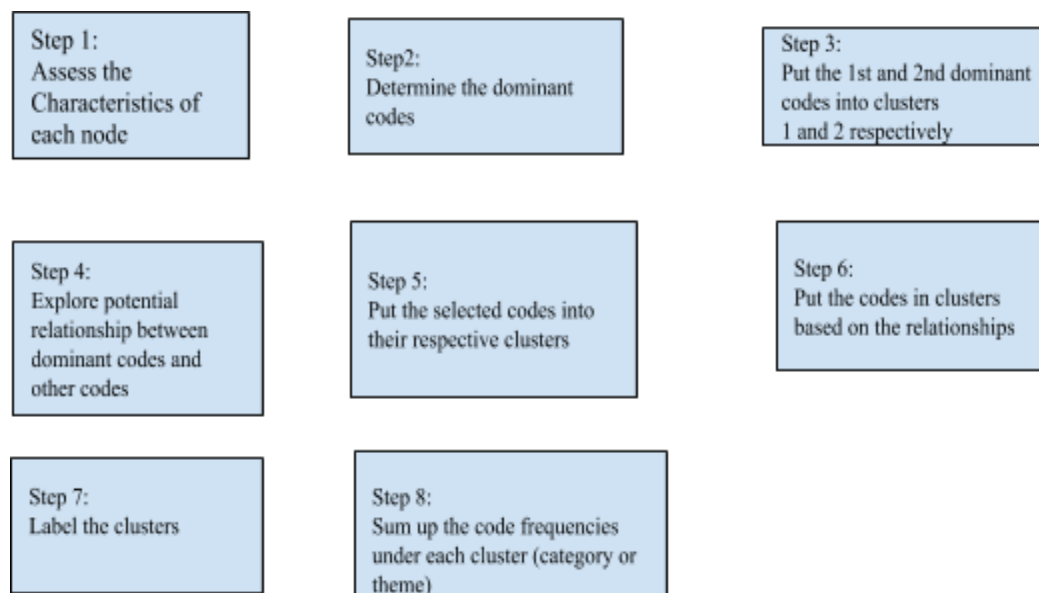


Figure 3: Source: Phases adopted from: Adu, 2017

The first step is I went through each code, and assessed their characteristics. I went ahead and I created 20 clusters. Next, i identified the dominant code in the codes that i had created in the line-by-line initial code. Dominant code is assessed based on the source of the code and the number of frequencies (Adu, 2017); (APPENDICES P. 91). I moved the codes in the clusters based on the relationships and then i labelled the clusters based on the content of the codes. After labelling the clusters I named them categories (APPENDICES P.92)

Since I developed 20 categories, I went further and developed themes within the 20 categories, based on the research questions of the phenomenon. The categories became themes which will be grouped under the three research questions. I developed 4-6 themes under each research question which will be applied in the findings. (APPENDICES P. 93).

After all the themes and sub-themes are identified, I developed a sketch, building up a theory based on the themes. I went back again to do one interview, then I linked the information that I got to compare it with the sketch I made, but there was no new data and so at this point, I reached saturation.

4. Safaricom Ltd

One of the companies in Kenya that has been in the forefront specifically in information and communication technologies, is Safaricom Kenya with its frugal innovation of mobile banking application known as M-PESA, which has and continues to invest greatly in technology.

Safaricom is the largest telecommunication provider in Kenya, and one of the most profitable companies in East and Central Africa. It was formed in 1997, as a fully owned subsidiary of Telkom Kenya, and later acquired by Vodafone group of the United Kingdom in 2000, but was recently sold to Vodacom and Safaricom Kenya . The company has emerged as a leader in the internet market in Kenya. In 2007, Kenya became the first country in the world to use mobile phones for cash transfers, when Safaricom in conjunction with Vodafone by embracing innovation, launched a mobile-phone based money transfer, financing and microfinancing service, which they call M-PESA (Safaricom.co.ke). This service will be my focus on my paper.

Furthermore, the ability of Safaricom- M-PESA to use its innovative digital methods to move money around, has opened up an entirely new audience of customers, who do not have traditional bank accounts and for this the company has taken advantage of it accordingly. Certainly, Safaricom Kenya facility of M-PESA has been seen to be one of the leading stories of technology developments, with its innovative ability to offer a digital mobile financial alternative. Thus, with more people having financial access, means that more investments can be made where necessary and this would help boost not only the economy of the country but Kenya's position in technology advancement.

Safaricom- MPESA has been regarded as extremely innovative as it has intensified their exploration ventures but still committed to their present endeavors in the telecommunication industry. In an industry which is so competitive in Kenya, Safaricom has to be innovative in order to stay relevant and also to maintain its millions of subscribers. Nonetheless, to succeed with this was seen to be very challenging considering that the company was owned by outside investors (Vodafone.com) until recently (2020) when Safaricom and Vodacom South Africa acquired the company. Before the acquisition there was a lot of pressure from the government of Kenya, political influence and also competition from other telecommunication and financial service industries within the country. However, Safaricom M-PESA platform gives them an advantage to break the bridge between their competitors and still continue to pursue their ways of innovation, on one hand, and still remain committed to their telecommunication services, and as a result it gives them a big advantage over their competitors.

With the above advantage, Safaricom continues to make strategic moves in advancing its M-PESA platform and attracting different kinds of the community from small to medium investors and the common consumers (Safaricom.com). The biggest challenge is not why or what they should do to attract this community in the M-PESA platform, but mainly how they can increase explorative strategies for them to be more innovative, beat the competition and also remain relevant. As I mentioned earlier, Safaricom was started by a foreign company, and so for

them to remain relevant due to competition and continue increasing their community presence in the M-PESA platform, not only in Kenya but also the rest of East Africa, becomes an interesting area of focus. Thus, investigating whether or not Safaricom has the abilities to maintain such innovative revolution becomes an area of interest. It is without a doubt that Safaricom has improved Africa's digital economy through introducing various digitizing financial services on smartphones, but the question remains if M-PESA will remain to be an innovative digital platform working across different industries and sectors through an extensive business ecosystem as well as continue with the innovations to develop East Africa to be in the forefront with technology and digitization.

4.1 M-PESA

Mobile telephone operator Vodafone, developed M-PESA and the service was launched officially by its Kenyan affiliate, Safaricom, in March 2007. M-PESA (“M” for mobile and “PESA” for money in Swahili) is an electronic payment and store of value system that is accessible by both the ‘unbanked’ and ‘banked’ through mobile phones (Mas and Radcliffe, 2010).

This platform enables millions of people and businesses in Kenya and parts of East Africa to store value in the SIM cards of their mobile phone- a mobile account, in the form of electronic currency that can be used for multiple purposes including payments for goods and services, transfers to other users and conversion to and from cash. Thus it has become a technological platform that has enabled financial transactions with ease and in real time efficiently. Other products have been developed and rolled out in this technological platform. Moreover, the platform has provided a virtual savings network and a virtual system applying and receiving short-term credit (Vodafone.com).

M-Pesa platform has developed in four stages of virtuous process over the years: from a payment platform to a virtual banking and saving services; to a credit supply platform and finally to a platform for cross-border payments/ transfers and international remittances.

How it works

M-PESA facilitates a variety of financial transactions through the mobile phone. To access M-PESA services, a customer must first register at an authorised M-PESA retail outlet. The process is free and only requires the customers name, government identification number, date of birth, occupation and mobile phone (Mas and Radcliffe, 2010). After registration, a customer gets an individual electronic money account that is managed by Safaricom, which in turn deposits its full value its customers store in M-PESA accounts at a pooled account in a regulated bank. Hence, the issuer of the M-PESA account is Safaricom, but the value in the accounts is entirely backed by highly liquid deposits at a commercial bank (Mas and Morawczynski, 2009)

When registering for the service, the customer chooses a secret personal identification number (PIN) and is then assigned an individual electronic money account that is linked to their phone number and accessible through a SIM card-resident application on the mobile phone. Since the M-PESAs user interface is driven by an application that runs from the users mobile phone, launching the service becomes easier since it's done right from the phones menu. Thus, when a user wants to use M-PESA, the menu loads fast and it does not need to be downloaded from the network each time since it resides on the phone. Based on the type of transaction one wants to make, the menu prompts the user to provide all the necessary information, one piece at a time and then sends it for processing through the air interface in a single text message. Figure 4 shows systematically the structure of the M-PESA user menu.

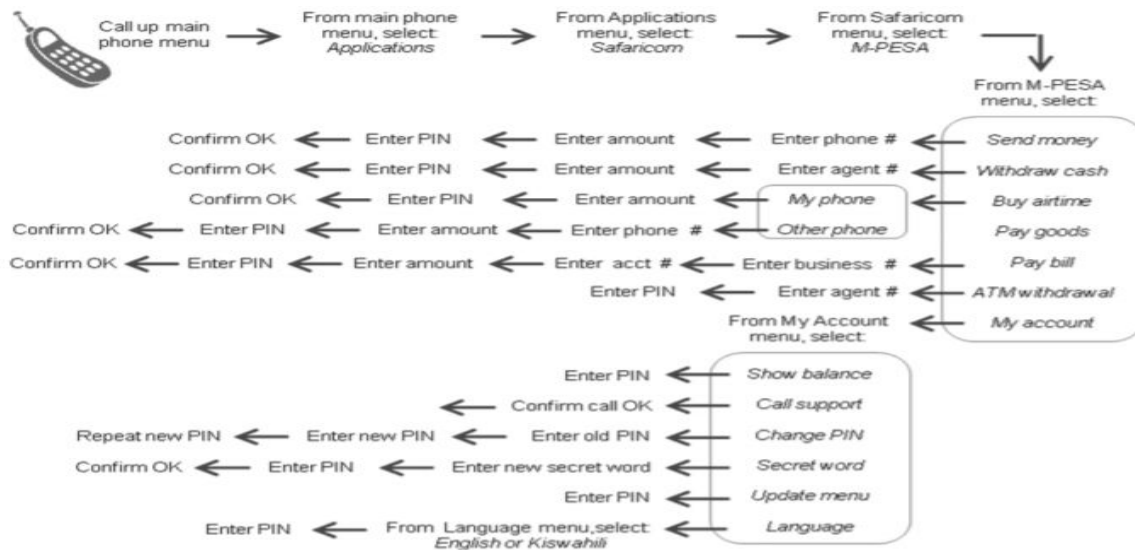


Figure 4: Source: Mas & Morawczynski, 2009: M-PESA Phone Menu Structure Used to initiate customer transactions

There are two ways through which customers can deposit and withdraw money on their phone: one is turning cash into e-money at Safaricom dealers, and then following simple instructions on their phones to make payments through their M-PESA accounts/wallets. This system/service provides money transfers as banks do in the developed world. The M-PESA account/wallet is very secure, PIN-protected, and supported with a 24/7 service provided by Safaricom and Vodacom group (Hughes and Lonie, 2007).

The second way is through transferring money via their bank account, which is connected to their MPESA wallet. The product concept is very simple: an M-PESA customer can use his or her mobile phone to move money quickly, securely, and across great distances, directly to another mobile phone user. Moreover, the customer does not need to have a bank account, but just the registration mentioned above.

Once customers have money in their M-PESA wallet, they can use their phones to do a couple of transactions. Among them is, to transfer funds to other M-PESA users and even to non-registered users. They can also pay bills, and purchase mobile airtime credit or save the money for future use, hence using their mobile phones as banks. The user's PIN is usually a 4 digit secret code (referred to as pin' yako siri yako' in swahili) used to access one's M-PESA account and transact business. This makes M-PESA considerably 'safe' since only the owner of

the mobile phone or one with a registered M-PESA line can access their own money, that is, unless they reveal the secret code to another mobile phone owner. A loss of a mobile phone or subscriber identification module (SIM) card does not affect the money saved on M-PESA wallet.

5. Findings

The grounded theory analysis results in themes which are grouped based on the three research questions. Each research question has two themes, and these themes hold a number of sub-themes. Figure 4 presents the themes and sub- themes. It shows that all the themes are interrelated, and this is illustrated by the double-side arrows. The differentiation is attained through the names that are given in the themes and the coded data extracts which correspond to each of theme or sub-theme.

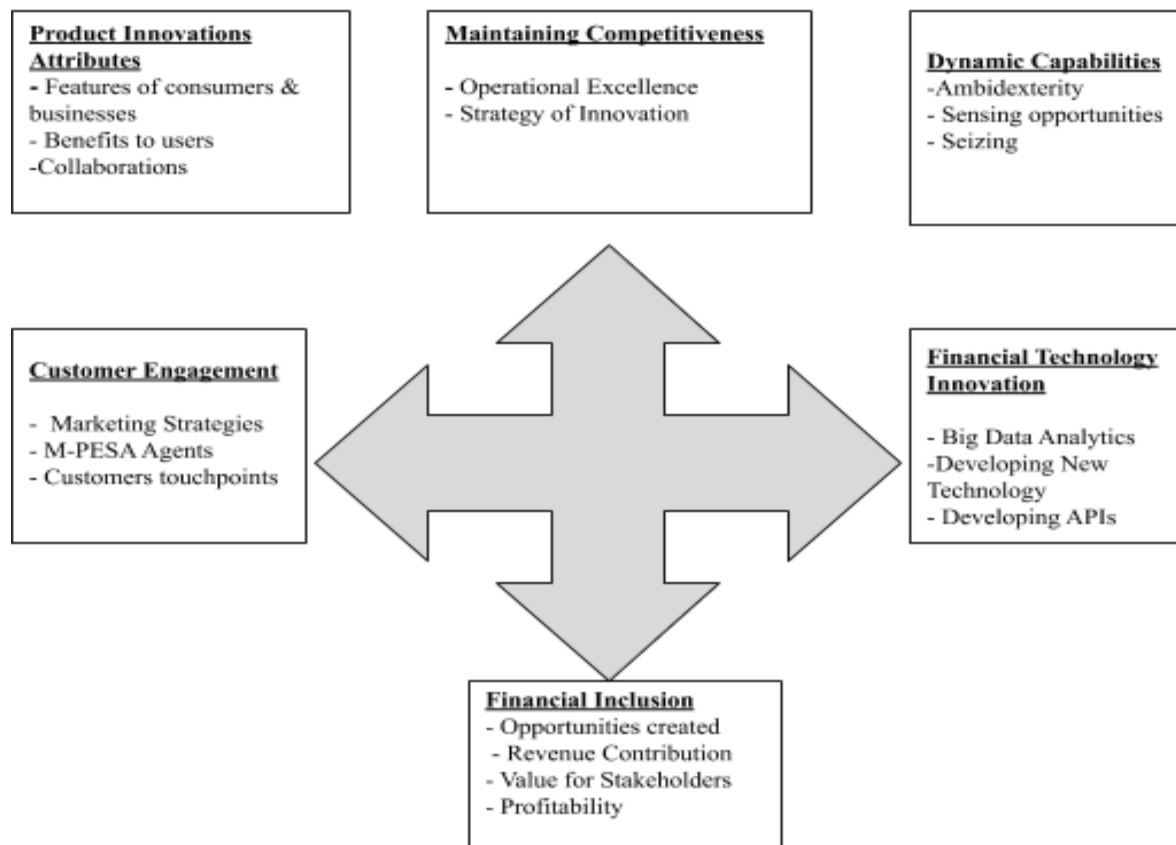


Figure 4: Themes and sub-themes

1. which are the product attributes that make M-PESA innovations attractive, hence influencing continued adoption and usage?

5.1 Attributes/features and roles of M-PESA platform

M-PESA mobile service provides customers and organizations a wallet where they can store value on their mobile phones. The analysis reveals that M-PESA platform has a variety of features that are divided into different types of users whereby, the users can log in to the M-PESA app into their mobile phones and access the services. The three sub-themes each elaborates the attributes that the platform offers.

Sub-themes

5.1.1 For consumers

The main M-PESA product attributes offered to consumers are money transfers through features such as , send money, withdrawals, deposits of funds and pay bills. One respondent states this features:

So the three basic and most used features of M-PESA platform are the transfer, withdrawal and deposits of funds features. This i can say are the most popular and active features, but not to say that the rest are not used. They are also used but not as regularly as these three. (Respondent 2: appendix 2).

A respondent supports this statement of the three features: *“Something like sending money, person to person, there alot of person to person transactions that happen in MPESA, and you see with 24 million customers that's a huge base”*(Respondent 3, appendix three).

However, the analysis also reveals that the feature of saving money is also a common feature among the mostly used on a day to day basis. This is related and backed up by the population of the ‘unbanked’ in Kenya, meaning that the savings feature is also at the top since there are many people who do not have a bank account in Kenya:

I think data from the government says right now i think we only have about 2% of the population banked, but for me i think i have more data on M-PESA and what we have covered because currently we have covered around 9 out of 10 Kenyans, that's around 90% have an M-PESA account (Respondent 1, appendix one.)

To ensure that funds are transferred to the correct customer, the analysis indicates that there is a Hakikisha feature which a consumer can click on to see if the transaction done whether it is sending money or buying goods, has been done correctly. The rest of the features include: consumers can receive payments from organizations, that is B2C transactions, feature of requesting for loans, among these features is an overdraft called fuuliza, whereby consumers can be able to access credit whenever they have insufficient funds to complete a transaction:

If you have 100kshs and go to pay a merchant and then it adds to 200kshs, a pop up appears saying insufficient funds fuuliza helps you complete the journey by giving you the extra 100 at an interest (Respondent 1: appendix one)

In conclusion, from the interviews, there are other consumers features that can be used to conduct different transactions. From doing money transfers, checking account balances, paying bills, purchasing mobile phone credit and transferring such credit to other users. They can also make deposits and withdraw cash from their M-PESA account by visiting an authorized M-PESA agent. Saving and credit overdraft features are also offered in the M-PESA menu.

5.1.2 For Businesses

The analysis informs among the M-PESAs platform features that are offered to businesses: Businesses are able to pay wages via B2C. A respondent supports the feature/notion that businesses can use M-PESA platform to pay salaries to their employees: *“Yes sure. M-PESA is a fully fledged financial service proposition” (Respondent 3, Appendix three)*. Businesses can also withdraw funds directly from bank accounts through the mobile banking services in conjunction with M-PESA collaboration with banks.

Another feature of the platform to businesses is the integration with partners to allow for value-added services such as withdrawal of funds directly to the bank accounts via the real time settlement product/service. One of the benefits of the M-PESA platform is that it is safe to conduct transactions. Thus, for the reduction of frauds during withdrawals and deposits, the platform offers a feature where the businesses can validate customer information, and the analysis indicates that this makes the businesses feel more safe doing transactions on M-PESA (respondent 2, Appendix two).

M-PESA recently introduced the feature of M-PESA Business till. This according to the findings was to empower businesses to do more. Business owners can now pay suppliers, salaries, utility bills, and sell airtime straight from your business till (Respondent 4).

5.2 Benefits of using M-PESA mobile money service

Safaricom recently made a brand promise to their customers and partners that they dubbed “*Simple, Transparent, Honest For You*”. This as the analysis reveals will demonstrate the above through their service, network, products and communication promises (Respondents 4).

The analysis reveals various benefits of the M-PESA platform and the products and services it offers that makes its innovation attractive and active. These benefits are compared to other competitors like financial services. The following sub-themes elaborates the features of the platform

5.2.1 Simple and user friendly

The vision and Mission of Safaricom as revealed in the analysis, is to make things simple, transparent and honest. This also applies to M-PESA as: “*it is aligned to the company's vision under Safaricom*”(Respondent 1). That means that, simplicity is a key criteria of M-PESA products as they are designed in such as way that they are easy to use for everyone:

Even an old woman, being that they may not be able to do so many other things, but using M-PESA is one of the things that almost everyone within the country is able to do (Respondent

3).

5.2.2 Accessibility and reliability

The analysis informs that M-PESA is very digital, and this is the key differentiator from other competitors:

M-PESA is not defined by the traditional boundaries and barriers of the financial services sector. All you need is a sim card and your national identity card and your set. Then you are able to do a lot more (Respondent 3).

The fact that the service is very digital enables easy accessibility of services offered compared to the traditionals, thus making it highly reliable hence the big number of users. Accessibility is also present because the service has a wide reach: *“Even with registration you can do it in Lokichogio or lodwar and still access MPESA from that point” (Respondent 1).*

In addition you can access it even in the comfort of your house, highlighting also the benefit of convenience:

But that's nothing compared to the time it would have taken to go to the bus station, the courier place, the inconvenience, you know you're carrying cash, you don't know who you're going to meet on the way, and also the privacy (respondent 3).

5.2.3 Speed

The fact that M-PESA is very digital there's the issue of speed in terms of the network. The analysis revealed that the platform is extremely fast, meaning that it is faster to make a transaction via M-PESA compared to a credit card:

I think the transaction completes in milliseconds. It's even faster than; if you're paying via credit card, and we start at the same time, I will finish before you, my transaction will go through before yours (Respondent 3).

5.2.4 Affordability

In Terms of affordability, it was revealed that M-PESA transactions are very affordable for meeting the needs of the consumers. A good example would be when sending money:

“ So , a long time ago people would go to courier services. But nowadays you will do it in the comfort of your house. Of Course you will be charged like 20kshs. But that's nothing compared to the time it would have taken to go to the bus station, the courier place, the inconvenience, you know you're carrying cash, you don't know who you're going to meet on the way, and also the privacy. That no one needs to know that you're sending money to anyone (Respondent 3).

This feature also correlates with convenience, compared to the inconveniences that were there before M-PESA was launched, of having to travel a long distance just to deposit money and this is also a safe and private way of conducting your transactions. No one has to know how much money and what transactions you are doing, thus the issue of privacy is also highlighted.

The cost of transactions as it was revealed above is very affordable. When sending money you can pay as little as 20kshs as transaction cost (Respondent 3 above). In addition, when repaying an overdraft, the interest rate is also not so high compared to financial services and this as revealed in the analysis, is the reason why many M-PESA users prefer using Fuuliza overdraft, and this illustrates how much the service has loaned out since it was launched over an year ago: “ *I think right now we have done 9 months to November. We have lent out 140 billion kshs. So that's around 1 billion \$*” (Respondent 1). This was as per November 2019.

Overall all respondents mentioned that MPESA has the ability to transfer money instantly, securely and inexpensively. By doing all this, it does not require physical interaction for the exchange of funds. There is also very minimal KYC to register for M-PESA. One does not need a lot of documentation:

“We have competitive saving schemes like M_SHWARI lock savings. Like in banks, MPESA does not require any paperwork for transactions that is to mean that transactions are branchless and cashless. We also have a service that is available to sort out emergencies FUULIZA overdraft” (Respondent 2).

To answer the second part of the above sub-question of *M-PESAs continued adoption and usage*, the following themes have been applied.

5.3 Engagement with consumers

Interacting with consumers through various online and offline channels is one way through which Safaricom applies in order to engage with their customers.

The analysis revealed how Safaricom engages with their customers for continued adoption and usage of the M-PESA platform services. Customer segmentation was one of the various ways of M-PESAs consumer engagement. This as per the analysis is performed by applying KPIs:

Mmmh customers are segmented using certain KPIs and this data is then analyzed to gather insights that are used to build strategies around customers (Respondent 2)

Among the KPIs tracked are customer lifetime value, acquisition data, customer engagement with different products and reasons for contact and customer activity or dormancy. This process is divided on a 30, 60 and 90 day. The process is called data driven decision making and is performed using the business intelligence tools and this process (Respondent 2).

Furthermore, the company engages with their consumers through listening to them. Safaricom has many customer touch points: *“There are the call centers, Safaricom shops, feedback from our agents and all that”* (Respondent 3).

In addition, MPESA agents are spread out all over the country and this helps to learn the consumers better as the agents help consumers whenever they have issues with M-PESA and the agents give the company consumers feedback.

Another important aspect of how M-PESA engage with their consumers highlighted from the analysis is doing forums and outreach and this is normally done by their agents: *“We have*

regional presence, so in every region we have presence, we have our agents” who are our foot soldiers on the ground (Respondent 1).

The analysis reveals that, Safaricom manages its agent training programs, although they are executed by an outside company: *”We have maintained tight control of the M-PESA customer experience, even the portion delivered by our retail agents (Respondent 4)*

Further, Safaricom has call centers... one of the biggest data centers where customers call and report if there is any issue whether negative or positive. Whenever a new product has been launched, consumers normally call. The analysis informs that 90% of the calls that consumers make are just to appreciate an innovation:

Like when we launched a FUULIZA product, an overdraft product, whereby when we launched it everyone was just calling to say how thankful they were about the product
(Respondent 1).

Lastly on consumer engagement, the analysis reveals that M-PESA has helped reduce subscriber churn, this has resulted in an increase of overall user engagement within the Safaricom network.

5.3.1 Marketing strategies

Another way by which M-PESA engages with its customers is through the different channels that M-PESA markets their products. Safaricom is known for going big in advertisements. From the interviews, every product has a different go to market strategy and this depends on the niche of the product. When M-PESA launches a product, they decide on which market strategy through different access channels:

We decide like, is it a digital product, we do it via Facebook, twitter and YouTube videos. Is it a mass market product, we do it above the line. We do radio advertisements, tv ads and then we have to have ground activation (Respondent 1).

Another respondent supported the digital space as an engagement platform, which he pointed out was important in reaching the younger, the more tech savvy of M-PESA's customer base.

In addition, customer engagement is also exercised when M-PESA sets up activators on the ground to market their products. This is done by brand ambassadors who go out whenever there are market days and activate on the ground level, thus engaging with the M-PESA users.

Traditional ATL method was another way by which M-PESA reached out to the consumers. One respondent stated that electronic media is very effective especially in Kenya, since they have a lot of radio and television channels that transmit in vernacular languages:

You will find almost every region, even some small regions, they have their own radio stations, they have their own radio stations and networks. Those ones are extremely effective in terms of educating customers. If you want to educate customers, there are the traditional ads that will run, that will have programs to educate our customers (Respondent 3).

5.4 M-PESA's Collaborations

Collaborations with other organizations brings with them potential benefits and this is evidence in the various collaborations that M-PESA has engaged in.

The findings indicate that when M-PESA was launched back in 2007, the service was mostly for cash outs and peer-peer. Ever since it has grown to many more product innovations, and this has resulted in collaborating with financial services and other international money transfers services such as paypal, western union, world remit. Recently M-PESA collaborated with ali express in order for users to be able to shop online outside the country.

Among the collaborations that M-PESA has done with financial services are CBA-Mshwari which is a banking product exclusively for M-PESA customers provided by the Commercial bank of Africa (CBA) to financial access of millions of Kenyans who previously had no access allowing them access to micro savings and microcredit straight from their phones. In addition,

the findings revealed that M-PESA offers a mobile savings and loan product which was launched in 2015 in collaboration with Commercial bank of Africa (CBA).

Lastly in financial collaborations is: *“A product that is in collaboration with the banks to allow pay bill and BUY GOODS customers to receive withdrawn funds to their bank accounts within 5 minutes” (Respondent 2).*

These collaborations have increased continued adoption and usage by customers because M-PESA offers this service all in one platform. This also has enabled the customers: *“To integrate their wallet to their bank account and they can pull money from their bank account to the MPESA wallet or the other way round” (Respondent 3).* This is done through M-PESA collaboration with mobile banking.

The respondents all express what and how collaborations with different financial services have had an impact on the benefits to the company. With regards to M-PESAs collaborations with the two financial services KCB and M-PESA and CBA- M-Shwari savings, one respondent stated:

“Obviously, the transactions take place on MPESA so first of all there is value to our customers in terms of the products, because you want to be a one stop shop for financial services. Then two there's the revenue that comes out of it, now to the company (Respondent 3).

In addition there is the revenue share since these services are provided mostly to the ‘unbanked’ customers.

The analysis further revealed that, through M-PESA global, customers can send and receive money globally via Western Union, world remit and money gram. Safaricom has partnered with the above money transfer services to ensure that it will be free of charge to receive money from this services (Respondent 4).

Safaricom’s continued push to position M-PESA as a truly global money transfer and payments platform, has resulted in partnership with AliExpress. This move, as the analysis indicates, especially targets micro-traders in the country who source for goods and other supplies from

manufacturers in China. Furthermore, as one respondent states: “ *Consumers can also shop on AliExpress and will be presented with M-PESA as one of the payment options when checking out their shopping cart on the website (Respondent 4).*

Lastly, as the analysis reveals Safaricom has recently signed a deal to collaborate with Visa global network that will boost the M-PESA brand:

This new M-pesa product will revolutionize how our customers transact, and merchants operate. This new phone-based M-pesa virtual card will enable users to make payments and cash transfers via their VISA linked debit cards to their M-pesa wallets even when abroad (Respondent 4).

2. How does the dynamic capabilities of Safaricom influence M-PESAs uniqueness over other financial services?

The following themes and sub-themes were derived from the data analysis to highlight the dynamic capabilities that Safaricom hold that influences their mobile money platform service M-PESAs uniqueness over other competitors.

5.5 Dynamic capabilities of Safaricom

Safaricom as the analysis reveals has been able to simultaneously explore new opportunities and at the same time exploit the current business units. This, it has accomplished by taking advantage of its dynamic capabilities as a tool for making strategic decisions that evolve around innovative initiatives. Further, from the findings this has supported M-PESA in increasing its relations to the external environment by collaborating with financial services and international money services. Thus, this has enabled the company to gain its competencies.

However one respondent comments on the notion of dynamic capability: “*I think the main thing is the solution that we are offering because at the end of the day whatever your strengths are, what matters is what you are taking into the customers*”(Respondent 3).

In addition, the above respondent stated that the main thing that a company should look at is, if they are addressing a need that a customer has. The respondent further points out that a company can have all the technology that can be but at the end of the day, what determines the company's growth is what it is offering to its customers.

Of course there are enablers like the fact MPESA is very easy to use, and it lets you be very personal with your wallets. You know like a bank you have to go and queue, like if you want to check your balance, especially in the countryside where banks are not always near, but MPESA its personal, it is with you in your phone all the time (Respondent 3).

The company's wide reach was also mentioned as a dynamic capability. Safaricom, as mentioned by the respondents, has the capability of having M-PESA agents outlets located in every region around the country. This as one of the respondent states, are supporting points but they come second, they are not the main thing. The fact that Safaricom is able to identify the needs of the customers is the main thing.

The analysis has identified several sub themes that will be able to elaborate how the company has implemented innovations around M-PESA that have seen the service uniqueness and raised its competitiveness.

5.5.1 Ambidexterity as a dynamic capability

The analysis revealed that Safaricom started out as a mobile service provider in the core business of selling airtime and has since grown and launched many other services. One of the respondents outline all the services that Safaricom has launched since then (*Appendices p.*)

Further, all the respondents were in agreement that Safaricom is an ambidextrous organization. With all the different telecommunications products and services it provides, it is still on the lookout for opportunities and launching different innovations:

In my opinion I think it is ambidextrous. As much as we look at today and also, we look at the future. So, what today's resources that we have sorted out today's market and then we have to look at the future (Respondent 1).

The analysis further shows that Safaricom is always measuring their products, services and processes against other organizations that are known to be leaders in aspects of their operations. This according to respondents provides necessary insights to help Safaricom understand how their company compares with similar organizations, even if they are in a different business or have a different group of customers:

So, we also benchmark with other organizations. We do not want to be like we are happy with how we are in Kenya and what makes us a leader we benchmark against international organizations. We look at, what are they doing? What can be applied here? (Respondent 1).

Before expansion

In 2007, Safaricom launched M-PESA service, out of a gap between customer behavior: “So there was a huge gap in terms of the number of people that the traditional model of banking was serving” (Respondent 3). Thus, the company saw that opportunity and decided to move into that space. According to the analysis, the services were to allow people to save through a mobile saving platform and then from the customer behavior it started to offer cash outs and peer to peer, whereby people send money to one another.

After now

The analysis further revealed that Safaricom has been able to expand into the mobile money space by launching more innovative products into their M-PESA platform. First, they had traditional products like sell money capabilities, capability to pay merchants, pay utilities like pay utilities. Now with the growth of M-PESA through the large number of users, Safaricom is becoming more digital by M-PESA moving away from products and leaning more to platforms:

What we have done is we have a platform whereby we are opening more products to third parties to be able to innovate around our core system(Respondent 1, Appendix One).

5.6 Determinants of growth

Another important aspect of dynamic capabilities is the determinants of growth. The analysis revealed the process by which Safaricom follows when an opportunity arises to launch a product or service in order to grow more. These are discussed in the following sub-themes.

5.6.1 Sensing opportunities

Safaricom is always looking for opportunities to expand and always serve their customers with the best. As one of the respondents states: *“Whenever an opportunity arises, Safaricom runs with it . We make sure we introduce more products as they come” (Respondent 4).*

Most of the respondents state that there is a very strong customer feedback and many customer touch points that the company is able to collect feedback from to be able to get insights of which innovative move to make:

There's a very strong feedback or rather there's so many .. that company is able to collect feedback. There are many customer touchpoints. There are the customer call centers ... which is really huge. safaricom dealers. Safaricom employees, other resources within the company (Respondent 3, Appendix Three).

In addition M-PESA agents are also important because as one of the respondents mentions, they serve as foot soldiers on the ground. M-PESA is supported by a nationwide agent network of over 156,000 outlets, who are spread out all over the country and they are closely associated with customers as they serve them all the time. They give feedback about customers' views, negative and positive, and then the agents report the issues to the company.

To conclude, Safaricom has the ability to sense for any opportunities when they arise through the various channels they have initiated.

5.6.2 Seizing opportunities

Seizing for opportunities when they arise is one of the properties of a thriving business. As one of the respondents comments, Safaricom's commitment to the customers remains steadfast in developing products and services that combine investment and innovation to transform lives (Respondent 4, Appendix four).

The data gathered from the interviews suggests that Safaricom follows a process that they apply to seize for any opportunities that arise in M-PESA products and services. The company is keen on making the customers' needs satisfied. From the analysis it shows that there is a process by which they follow:

There will be a strong or something that is an idea that is being looked at, so they will be the traditional product development funnel. There is the ...all those things. It means at some point there will be testing at some point. (Respondent 3, Appendix Three).

An example of safaricom seizing opportunities to deliver to their customers is the introduction of tools and resources for SMEs to navigate through the economic shock of the covid-19 crisis (Respondent 4).

5.7 How Safaricom maintains its competitiveness

Building and maintaining competitive advantages attract customers, adds to fair prices and generates loyalty. Safaricom has been upfront in delivering high and quality digital products and services in order to meet customers needs and this, as the analysis reveals their transactions charges are indeed fair. Customer loyalty is evident in M-PESA by the number of users who use these different services, and this is evident that they have trust in M-PESA services.

The following sub- themes identified from the data analysis elaborates further how safaricom's maintains its competitiveness

5.7.1 Operational excellence

Safaricom executes its business more consistently and reliably. This is evidenced by the results of their products and services in terms of number of users, revenues and innovations that the company rolls out from time to time.

Operational excellence is delivered by technology enabling a digital society: *“we invest in enablers that allow our customers to stay connected to each other and to the world around them” (Respondent 4).*

Safaricom is always thinking digital. As one of the respondents mentions: *“M-PESA is very digital. It is not defined by the traditional boundaries and barriers of the financial services sector” (Respondents 3).*

Another respondent supports the notion by revealing that the company digitises its operations, products and services to become more agile in order to enable the digital lifestyle of their customers (Respondent 4).

Lastly on operational excellence, the cost of transactions and services is also suggested in the analysis, as: *“Safaricom structurally transforms their operating model and fundamentally reshapes their cost base”(Respondent 4).* This is done while also improving their overall experience for their customers and generating incremental value.

5.7.2 Strategy of innovations

Safaricom follows a strategy to encourage advancements in services. This is usually applied by investing in research and development activities.

Strategy really defines the things that you are going to explore and the direction you generally want to take. So, yes the company is led by strategy (Respondent 3).

The strategy of Safaricom as the analysis revealed is aligned all the way from Vodafone and comes down to all the subsidiaries which are a part of Vodafone and then management: *“At the end of the day people still forget that we (M-PESA) do not do the strategy for the company. Remember there is Safaricom” (Respondent 1).*

The analysis revealed from one of the respondents that Safaricom will do the strategy, and then M-PESA plays their part within that part of the strategy. It is important to note that this analysis of the first interview was conducted a few months before Vodafone sold M-PESA to Safaricom and Vodacom.

Other respondents supported the notion by stating that there is an overarching strategy. In that every other product and every mini business area with MPESA is expected to converge to that: *“So for instance, credit, there is a strategy for credit, but that is not supposed to be in conflict with the overall strategy for MPESA” (Respondent 3).*

Furthermore, one respondent revealed that the strategy they follow for new innovations is conducted using predictive analytics to customers intentions and behavior:

After that, we take a prototype to the market, and collect customer feedback. We then go ahead and develop the product and take it back to the market for testing. We iterate the product based on the market . We repeat the iteration process again and finally we launch the product (Respondent 2).

3. What advantages does M-PESA innovation offer that makes the company gain its competitive advantage?

6. Financial Inclusion

Financial inclusion aims to provide financial services at low costs to sections of disadvantages and low-income parts of society. This is evident in M-PESA as the service is tailored to cater for everyone in the society.

The analysis emphasizes that due to M-PESA innovation, Safaricom has gained its competitive advantage through financial inclusion. In addition, the analysis informs that M-PESA has a very huge impact on financial inclusion, and Kenya has the highest level of financial inclusion in

Africa: *“I think about 74% the level of financial inclusion and that is to a very huge part i would say 80-90% because of M-PESA” (Respondent 3).*

Based on the analysis, the following sub-themes were identified as particularly suitable/ factors of how M-PESA innovation has impacted financial inclusion

6.1.1 Creation of opportunities

The analysis illuminates that opportunities have been created especially on the agent network. M-PESA agents are all over the country: *“There is nowhere in Kenya you will go and not see an M-PESA agent shop” (Respondent 1).* As a result, having these agents has created job opportunities in terms of them acting as partners for M-PESA. There are 120,000 M-PESA outlets in Kenya which are spread out all around the country.

In addition, through M-PESA innovation, people who do not operate any bank accounts, especially in the rural areas have had the chance of using the services. The women in the marketplaces have also had the chance to have access to M-PESA products to save the little they get after selling their products:

M-PESA has also allowed for the ‘unbanked’ to access services, and this has reduced poverty levels, thus changing the savings behavior (Respondent 2).

When we started BUY GOODS products it was for large merchants or big enterprises, But now we have scaled it down to even mama mboga in the market, they have access (Respondent 1).

Thus, this shows that financial inclusion has created opportunities for all small scale to large scale businesses.

Effects of high financial inclusion

From the findings it shows that M-PESA has about 80-90 % financial inclusion. This has had a positive effect on how people and businesses view the service. People are able to do business in

a more secure way and M-PESA is able to facilitate business and wealth creation: *“We are able to afford people access to capital in terms of credit and with a lot of dignity “(Respondent 3).*

The data further revealed that in terms of efficiency, there is an increase within the banking sectors ensuring businesses do not lose income and time for failed payments. This is made possible through M-PESAs collaborations with M-Shwari and KCB and KCB- M-PESA. Thus , this can be accessed and used by businesses for trading: *“There is also a new form of collateral that we have introduced especially for microfinances who use M-PESA statements to issue loans for businesses” (Respondent 2).*

I further learned that M-PESA has opened more collection modes that ensures that businesses do not lose funds through manual accounting. The findings also revealed that collaboration with international money transfer services avail cash flow for trading (Respondent 2).

6.1.2 Benefits of M-PESA to Safaricom (LOOK FOR A BETTER SENTENCE)

With around 24 million users of M-PESA service, this has had an impact on the company as it has benefited from the various services that the platform offers to both consumers and businesses. The following sub-themes elaborates the benefits of the platform to the company.

According to the respondents, M-Pesa has drastically transformed Safaricom’s business. First, M-Pesa has allowed Safaricom to diversify and capture new value from customers.

6.1.3 Revenue contribution

Revenue contribution plays a significant role in the benefits of M-PESA service to its overall company according to the respondents. Many of the respondents point out that the penetration of active M-PESA users has steadily been increasing and is currently at 87.0 % of the company's 30-day active customers. This is compared to 86.6% in the 2019 financial year.

The analysis also shows that the value of M-PESA transactions increased 18.4% in the 2019/2020 financial year, as its revenue grew 12.6% to KSH.84.4 billion, with 43.4% of the growth attributed to new business channels primarily savings and lending products: M-Shwari,

Fuuliza and KCB M-PESA: *“Because of revenue contribution, I think right now we are currently the biggest revenue contributor as accompaniment in Kenya” (Respondent 1).*

6.1.4 Value for stakeholders

Besides revenue contribution being one of the factors that M-PESA service benefits Safaricom, the analysis also shows that value for stakeholders has also played an important role. M-PESA has brought returns to the stakeholders. As a result, share price has gone higher:

Share price has gone higher, so return to our investors. Value to the community as well. Even as staff, when you put your name to a product it gives you bragging rights and when you feel it has 22 million customers overnight. So there's that sense of... it's like a culture. It is embedded within us (Respondent 1).

6.1.5 Profitability

The analysis indicates that Safaricom profits are boosted by mobile money growth through M-PESA. As a result of wider adoption, consumer based products drive more volumes and therefore more profits: *“Something like sending money, person to person, there alot of person to person transactions that happen in MPESA, and you see with 24 million customers that's a huge base” (Respondent 1).*

In addition to M-PESA services that drive profits is, Cash out service. This is as a result of the fact that Kenya is still a very cash heavy economy and people still use cash in making various payments:

As much as people will keep money on MPESA, there will be instances, where they need to withdraw to pay their guards etc. So, cash out and send money are the ones that drive the highest volume, they generate the highest revenue (Respondent 1).

Lastly, M-PESA has altered the way in which Safaricom operates with traditional airtime distributors. Now that M-PESA enables consumers to purchase additional airtime (e.g., call

minutes) directly from their phones, the company can reduce commission pay-outs and its dependency on these traditional partners.

6.1 Financial technology as a factor of M-PESA growth

The respondent states that M-PESA is in the Fintech space and this enables the service to make more and more innovations in the financial and technology crossover space. They do this by rethinking and digitising their operations, products and services to become more agile in order to enable the digital lifestyles of their customers. Further, the analysis revealed that one of the ways in which MPESA learns about which innovations to launch is through big data analytics:

Big data provides rich data sets that have helped identify better opportunities to scale M-PESA in order to meet the growing demands by customers. An example of a product that was developed through big data is overdraft Fuuliza (Respondent 2).

According to the analysis, the overdraft fuuliza was launched in 2019, and have since grown in terms of how much it M-PESA lends to its customers, thus increasing Safaricom's revenue.

6.1.1 Developing new technologies

Since M-PESA is at the upfront in fintech, this has enabled faster transaction processing time, thus having an increased number of transactions being conducted all the time. The analysis also states that due to fintech there is convergence of different market players to provide more scalable solutions: *“Due to these market players, there is competition, hence improved services” (Respondent 2).*

In addition to more market players due to fintech, the analysis reveals that the regulator is able to understand how things work. As a result, the environment becomes easier:

At the end of the day, the growth can also spark for us new partners that we can work and collaborate with. So, it is an opportunity for us. We feel like it is an opportunity for us, then we are able to reach more customers with it (Respondent 3).

Lastly, because of fintech, the analysis suggests that there are more business opportunities as a result of reduction in transactions costs.

6.1.2 Providing Application programming interfaces to third party

The analysis revealed that since M-PESA started to lean more to platforms, they are moving away to their traditional products. They have created a G2 platform for M-PESA 2nd generation platform, whereby they are giving other people to use it to access their customer base:

So these people bring in the loan facilities that we have. People think facilities, initially with our first partners, are ours, but we are not a bank, we are regulated and we cannot offer loans (Respondent 1).

The M-PESA platform is created for lenders to come in and lend money to M-PESA customers. This platform is compared to a bank, whereas the process of opening a bank account to access money is tedious, they saw the opportunity of having an easy platform and M-PESA can take leverage for that.

The analysis revealed that M-PESA platform is opening more products to third parties to be able to innovate around their core system: *“We have developed a portal just like the likes of Facebook and Amazon, where third parties' developers can go and innovate, create our products and can power it via M-PESA and be able to sell it via the market” (Respondent 1).*

The analysis further shows that this G2 platform offers versatile integration capabilities that M-PESA development partners can take advantage of, to create excellent M-PESAs journeys across the different industries they serve (Respondent 2).

Inorder for third parties to easily plug into M-PESA, they have developed application programming interfaces, which was a key factor in moving to the new platform: *“We have been consolidating the different interfaces our developers have expressed interest in to enable innovation around M-PESA” (Respondent 2).*

The analysis informs that most of these are about the payment journeys covering both business to customers- B2C, and service payments customer to business (C2B) and business to business (B2B).

7. Theoretical Framework

The emergent/ resulting grounded theory was summarised in terms of themes, core sub-themes. This summary is shown as a network diagram in figure 5, that identifies the relationships between the major themes, sub-themes, linked sub-themes and associated attributes. Each node within the theoretical framework, is linked by a lead operator with the node attached to the arrowhead denoting the successor. All of the relational types within the framework are the lead and the network is read from left to right.

Product attribute innovation, which is the root node of the framework is a conceptual theme, and it is a predecessor of its three sub-themes, *features*, *benefits* and *collaborations*.

The process through which M-PESAs mobile payment service operates can be described as follows: The *Features* of the Mobile service platform are developed by investing in enablers. The *Benefits* of the platform to customers among them *Affordability*, which is achieved by reshaping the cost base, contribute to *Operational Excellence*. Creating *Enablers* also provide Application Programming Interfaces for third parties as it offers versatile integration capabilities to create excellent M-PESA journeys across the different industries they serve, when plugging into the M-PESAs ecosystem. *Investing in Enablers* also improves *Service Quality* and as a result, customer *trust* is achieved. All these advantages lead to increased adoption and usage.

Operational Excellence is viewed as one of the ways that contribute to how the company maintains its competitiveness. *Speed, Accessibility, Reliability* of the mobile platform is achieved through *Developing New Technologies*, resulting in *Faster Transaction Time*, thus improving *System Quality* and this enables *Customer Satisfaction*. This is made possible by the companies *Dynamic Capabilities* of innovation, which also enables *wide reach* through the many *Agents Outlets* across the country, and through the agents outlets *Collecting Feedback* and educating the customers on the various features of the mobile payment service, promotes *Customer Engagement*. *Marketing strategies* which promote consumer engagement, include setting up ground activators, digital and traditional ATL methods.

Dynamic Capabilities also acts as a tool for *Strategic Decisions* and this results in *Developing Strategic Innovations*, resulting in achieving *Operational Excellence*. *Sensing and seizing for Opportunities* whenever they arise is also achieved by the *Dynamic Capabilities* of the company and this contributes to continued adoption and usage, because customers' needs are realised.

Collaborations with financial services and international money transfers, results to *Growth* and supports continued adoption and usage as the mobile platform has created value to customers in terms of the products, because M-PESA has become a one stop shop for financial services to them.

As a result, *Profits* are also realised, increasing the percentage of *Revenue Contribution*. Thus *Financial Inclusion* is attained, which raises the *Value of Stakeholders* and creates *Opportunities* for the 'unbanked' to be able to access financial services.

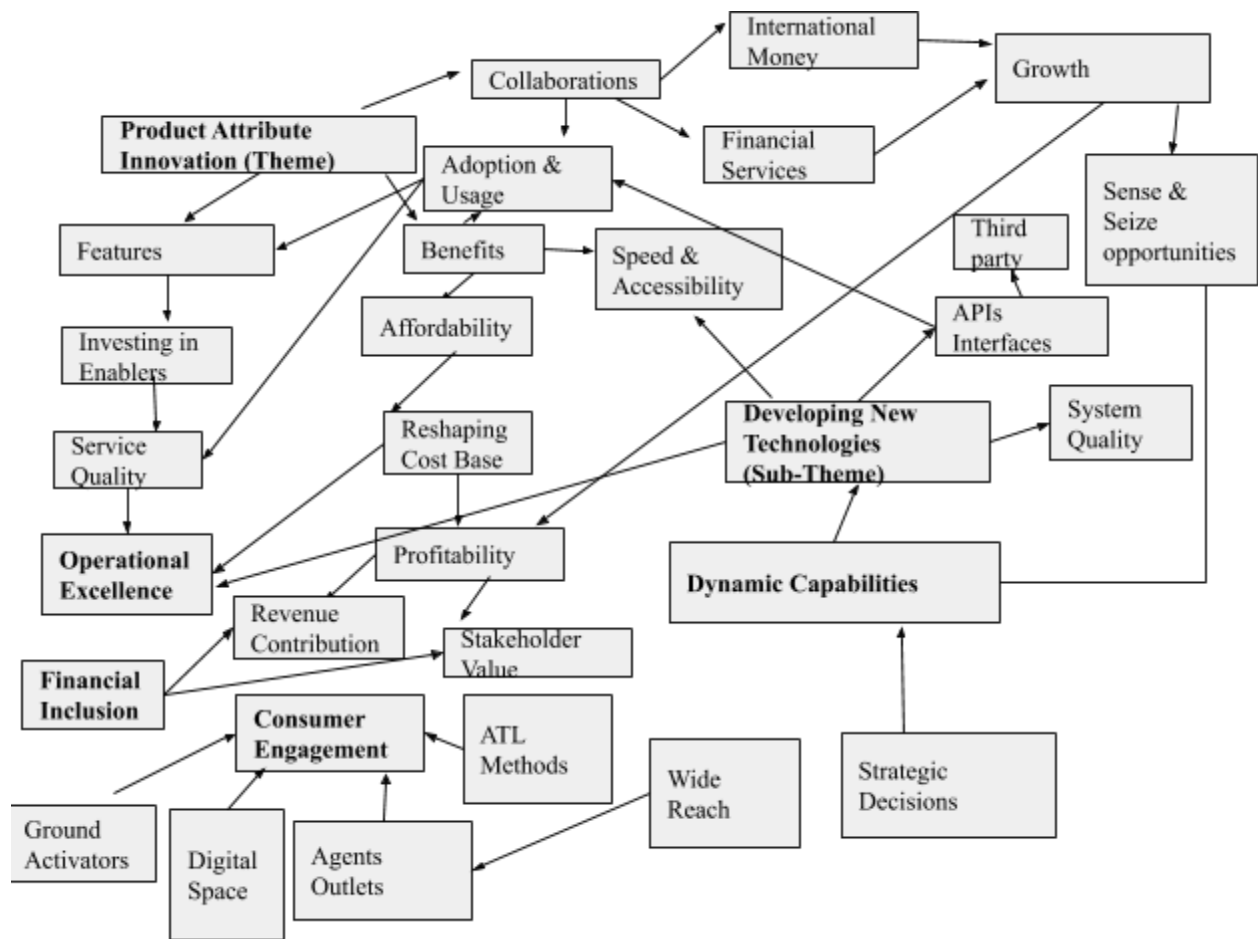


Figure 5 : Theoretical Framework

8. DISCUSSION

The focus of the study was to examine the unique dynamics of M-PESA mobile payments. Based on the gap in the literature identified in this paper, the aim of the study was to explore what dynamics M-PESA mobile payment service entails, that make the service be one of the most successful and to have a huge impact on financial inclusion in Kenya. A set of three research questions were formulated. These research questions are revisited below and an analysis of the findings are reported.

Research question 1 relates to identifying dynamic capabilities that Safaricom holds that influence the uniqueness of M-PESA over its competitors. The findings showed that due to the growth of Safaricom's products and services resulting in high revenues, in the long run, the company has been able to develop M-PESA by implementing innovations from time to time, thus showcasing M-PESA's uniqueness through the various innovations. However, this notion of Safaricom's growth of products and services through its dynamic capabilities was first suggested by one respondent, who argued that the main thing is the solution the company is offering to a real need, and not the capabilities it holds. It is found that Safaricom is ambidextrous as it both looks at today and in the future. Thus, this factor is also a great contributor to M-PESA's innovative implementations.

The findings revealed that, in order for the company to launch unique innovative products and services, Safaricom benchmarks with other organizations by measuring their products and services with other organizations that are competitive in their aspects of their operations.

Safaricom has been in the upfront to locate opportunities. This is achieved by various factors among them strong customer feedback and many customer touch points whereby the company is able to collect feedback to get insights on which innovative moves they can make. The findings also indicate that M-PESA agents play a big role because they interact the most with the customers. They are referred to as the foot soldiers on the ground as they give so much feedback directly from the customers from all over the country since the agents are widespread. All these factors assist the company in sensing opportunities. After sensing innovative opportunities, the company further follows a process in order to seize it.

From a managerial perspective the findings reveal that when innovating the products and services, a strategy is followed by applying investing in research and development activities to encourage advancements in services. It is found that before M-PESA was sold out a few months ago, to Safaricom and Vodacom, they did not have their own strategy, but there was an overall strategy from Safaricom which is aligned from Vodafone, and comes down to all subsidiaries which are part of Vodafone and then the management.

Lastly, for the company to maintain competitive advantage, the findings indicate that through its dynamic capabilities, it is able to execute the business consistently and reliably by delivering technology to enable a digital society. This also indicates that M-PESA is very digital, thus the company digitises its operations to become more agile. As a result, Safaricom is able to enhance their operational excellence.

Research Question 2 relates to the product attributes that make M-PESA innovations attractive, hence influencing adoption. M-PESA has 24 million users/subscribers as the findings reveal. The users have a wallet on their mobile phones where they can store value. The product features are divided into different types of users which are customers and organizations. The findings indicate three features on the M-PESA platform that are mostly used by customers: transfers, withdrawals and deposits funds features. In addition, in terms of profitability, it is found that these three features are the ones that raise the most revenues.

Furthermore, there are a number of features on M-PESA platform that are offered to businesses. As the findings reveal, M-PESA is giving business owners the chance to empower their business to do more, with the recent launch of a new product M-PESA business till. Businesses owners can now pay suppliers, salaries, utility bills, straight from their business till. This also indicated that M-PESA is a fully fledged financial service proposition, thus businesses can withdraw funds directly from their bank accounts through the banking services in conjunction with M-PESA collaborations with banks.

The findings support the notion that a platform should be easily accessible, user friendly and reliable. This is clearly indicated in the findings as Safaricom's vision and mission is to make things simple, transparent and honest. Simplicity is identified as a key criteria of M-PESA products as the findings indicate that M-PESA products are designed in such a way they are easy to use for everyone. Due to ease of use of M-PESA features, the findings showed that this contributed to the success of M-PESA brand to a great extent. This again, is reflected by the number of users of the platform. It is found that customers are able to conduct transactions without delays as it is found that M-PESA platform is extremely fast as it completes a transaction in milliseconds. Due to this, it is indicated that it is faster to pay via M-PESA than using a visa card.

Further findings revealed that the simplicity of M-PESA registration and service requirements contributed to the success of M-PESA and this is evident by M-PESA's service revenue of 33.6%.

Consumer engagement is found to increase continued usage of M-PESA services. This is supported by M-PESA conducting forums and outreach and it is done by M-PESA agents. It is found that M-PESA has regional presence and this is made possible by the agents who are spread out across the country.

It is found that Safaricom engages with its customers by listening to them. The company has many customer touchpoints, among them a big call center where customers call whenever they have issues whether negative or positive. This also contributes to continued usage as the customers feel they are a part of the M-PESA family, thus loyalty to the brand is highlighted by the number of transactions conducted on a daily basis, thereby promoting continued usage.

MPESA was designed to serve the company's strategy of maintaining customer loyalty in order to build the bottom-line over the long term; a strategy for which the findings of this study show evidence that it has worked. One viable strategy that M-PESA applies to engage with their customers is the customer segmentation. This as findings reveal is performed by applying KPIs. Further, the data is analysed to gather insights that are used to build strategies around customers.

Lastly, it is found that M-PESA engages with its consumers through marketing. One of the most common ways through which M-PESA reaches out to consumers, is via the traditional ATL method. Kenya has a variety of different TV and Radio channels that are broadcasted in different vernacular languages. This method is found to be extremely effective in consumer engagement, especially educating them on how to use the various services of M-PESA. Consumer engagement is also exercised when M-PESA sets up ground activators whenever there are market days, which brand ambassadors/influencers engage with consumers by informing them about what M-PESA is doing and new products and services that have been launched. For the young and tech savvy, the findings found that the digital space is used to engage with them via different social media platforms.

Research Question 3 relates to the advantages that M-PESA innovation offers that makes Safaricom to gain its competitive advantage. The findings showed that the majority of the respondents were of the view that due to M-PESA innovation, Safaricom has gained its competitive advantage through financial inclusion. M-PESA as the findings indicate has a very huge impact on financial inclusion and it is found that Kenya has the highest financial inclusion in Africa of about 74% and a very huge part is because of M-PESA.

Financial inclusion through M-PESA innovations has created many opportunities. The findings illuminate that job opportunities have been created especially in the agent network. There are about 122,000 M-PESA outlets and they are managed by agents. Furthermore, as the findings indicate, M-PESA has allowed for the 'unbanked' to have the opportunity to access services and this has reduced the poverty levels and changed the savings behavior.

High financial inclusion from M-PESA has had a positive effect on how customers and businesses perceive M-PESA, thus gaining Safaricom its competitive advantage. The findings support that users have been able to do businesses and conduct transactions in a more secure way, this also highlights that the users trust the service. As a result, M-PESA has been able to facilitate business and wealth creation. This according to the findings has enabled M-PESA to afford people access to capital in terms of credit.

It is found that M-PESA has drastically transformed Safaricom's business. The findings support this by pointing out the impact it has had to Safaricom, meaning the company is able to diversify and capture new value from the customers. This has enabled the company to earn its competitive advantage. M-PESA has benefited Safaricom by a number of factors:

Revenue contribution as the findings reveal plays an important role in terms of an increase on the penetration of active users, which is currently at 87.0%, resulting in an increase of the value of M-PESA transactions by 18.4% in 2019/2020 financial year. Thus, this has had an impact on Safaricom becoming the biggest revenue contributor in Kenya, thus earning its competitive advantage. The findings indicate that due to M-PESA, returns to the stakeholders have increased in value. Profits of Safaricom as the findings reveal, are mostly from M-PESA's products and services. Among the services that drive profits are the sending money option/feature, since there are a lot of person to person transactions that happen, and with the large number of users, this is a huge base thus increase in profits.

It is found that, since M-PESA is in the fintech space, this has gained Safaricom its competitive advantage, because of M-PESA's products and services being digitised, they become more agile and this results in more innovations being implemented/ rolled out. It is found that since M-PESA are digital, they are able to learn/ know what innovations they are going to implement next through big data analytics. This is the findings indicating big data provides rich data sets that help to pinpoint better opportunities in order to meet the customers demands. The findings support this by highlighting a product that was developed through big data. This product as the findings reveal is an overdraft- fuuliza which users of M-PESA can borrow credit when they have insufficient funds to make purchases. It is found that the overdraft has had success and it has lent out 1 billion \$ as of November 2019.

Lastly, it is found that collaborations have heard some benefits. M-PESA's collaborations with financial services have benefited the users as they are able to transfer money from the bank accounts to their M-PESA mobile wallet through M-PESA's collaboration with mobile banking. Further, users are able to save up and loan money through M-PESA Mshwari and this is done on

their mobile phone. All this transactions with the banks takes place on M-PESA and this has created value to customers in terms of the products, because M-PESA has become a one stop shop for financial services to them.

Collaborations have also enabled M-PESA to be a global money transfer and payment platform. Through M-PESAs partnership with AliExpress, micro traders who source for goods and other suppliers from manufacturers in China are able to pay through M-PESA. The findings also revealed that a new collaboration of M-PESA and VISA global network is underway, but the deal is still pending regulatory approval. This according to the findings will see M-PESA mobile network record notable growth.

9. Summary and Conclusion

Understanding the unique dynamics of a successful mobile payment service outside the banks, was the goal of this study. The thesis provided detailed information of how the study evolved using the grounded theory method (GTM).

Literature reviews pointed out a number of factors resulting in failure of mobile payment systems such as security, trust, lack of collaborations factors that have resulted in failed collaborations. This study investigated the reasons behind the success of M-PESA mobile payment service.

First, reviews of these failures of mobile payment services were the focus. Second, according to the design of the qualitative, grounded theory study, the analysis of data from five M-PESA

employees was considered. Knowledge was gained and explained as to how M-PESA has come up to be the most successful mobile payment service in East Africa resulting to the highest in percentage of financial inclusion in East Africa.

From the findings, six themes and a number of sub-themes were generated to support the purpose of the study. The first theme is identified as the product innovation attributes. According to the findings, sub themes which were created under these themes showed that M-PESAs product features are very easy, fast and convenient. This is backed up by the key criteria of the product features which is simplicity. Among the most beneficial factors that the consumers gain from using M-PESA is that it is a one stop shop to financial services.

According to the second theme, “Customer Engagement”, listening to customers was a stronghold to M-PESA as the findings showed that they are keen on customer feedback with a variety of customer touch points and call centers. Having a wide spread of M-PESA agents, with outlets all over the country was also an important factor on customer engagement and the company getting feedback about the customers needs. The agents as the findings suggested, are trained by the company. Marketing strategies according to the study’s analysis also featured customer engagement as M-PESA engaged with customers digitally and traditional ATL methods which were considered to be the most effective methods in Kenya.

With Safaricom's diverse agent network, robust money transfer platform, low price and strong mobile infrastructure are the drivers that generate trust, convenience and brand recognition necessary to ensure consistently high levels of M-PESA service adoption.

The third theme, “Financial Inclusion” is shown as a factor of M-PESAs innovation in gaining Safaricom its competitive advantage. This has resulted in creation of opportunities for the consumers, among them being the opportunity for the ‘unbanked’ to access services, and this has reduced poverty levels, thus changing the savings behavior. Other benefits that were sub-themes were revenue contribution which was at a high percentage (86.6%) in 2019 financial year, value for stakeholders, as shares have gone up because of M-PESA, and profitability as a

result of wider adoption, M-PESAs consumer based products are the ones that drive more volume, hence more profits.

“Dynamic Capabilities” as a fourth theme derived from the data analysis brought in ways by which the company senses and seizes opportunities for new/launching innovations. From the findings, it was suggested that Safaricom is ambidextrous from the fact that as the company looks at today's market it also looks at the future and the resources they have sorted out today's market as they are keeping an eye on how the futures market will be.

M-PESA being very digital gives the study the fifth theme of “Financial Technology”. Since M-PESA is in the digital space, the findings revealed that it makes/launches innovations in the financial and technology space through rethinking and digitising their operations. This results in M-PESA products and services becoming more agile. It was found that big data analytics plays an important part in identifying better opportunities to scale M-PESA in order to meet the growing demands of customers. Moreover, it was also found that since M-PESA is doing away with their traditional products and leaning more to platforms, they have created APIs for third party developers to be able to plug in on their core-systems, to access M-PESAs customers.

Operational excellence and the strategy for innovation are among the factors that determine Safaricom from maintaining its competitive advantage, and this is the last theme of the study.

In conclusion, through these themes and sub-themes, a theoretical framework was created to illustrate the process and strategy by which Safaricom has developed and followed to bring out a successful mobile payment service, M-PESA. The theoretical framework that surfaced is to encourage managers to enforce the different measures and processes or build on their present one.

10. Managerial Implications

Understanding and listening to the consumers can be seen to be not so important an issue, but it can be the most important managerial implication of the study. A company can have all the resources and dynamic capabilities to innovate, but if they do not understand their consumers, especially in realising a need, then they may not have an impact on growth. From this, certain implications can be outlined.

Realising consumer needs can be attained by several ways. One can be based on big data that the company collects about their consumers. This can assist the company to look for gaps and establish/ realise what their consumers are lacking. The findings of the new overdraft innovative product from the study can support this, why it is an imperative point to address for the company.

Ultimately, of particular importance to managers of firms providing mobile payment solutions or offering them as a mode of payment to customers, is the question of how to effectively move their perception of realising the needs of consumers. This can be done by looking or creating ways which they can engage with their consumers more effectively to be able to also create a relationship that enhances consumers trust on the brand. This can either be on advertisements which they do digitally on social media or ground activations with the help of brand influencers. boost the number of users.

Another managerially interesting insight can be gained from the relevance of collaborations with interrelated firms. Meaning having collaborations with companies that are interrelated with the needs of the customers. For example, the way mobile money service companies collaborate with other international money services like western union, world remit etc or collaborations with online stores to provide E-commerce so that the mobile payment products can add value to the customers by being one shop stop to financial services. This enhances the factor of convenience and also impacts the growth.

11. Recommendations for Further Studies

In retrospect like any other research, this study was not without limitation. Two limitations worth mentioning is that data was not collected from the M-PESAs agents and users customers of Safaricom's- M-PESA. It could have been an interesting aspect to hear from the agents about their views on M-PESA and the challenges and benefits of the M-PESA environment.

Further, this research potentially forms the foundation for further research with two main areas potential for future research. Firstly, a follow up to investigate the M-PESA and visa collaboration that is still pending regulatory approval. It would be interesting to investigate if it becomes a successful collaboration in terms of what value it will bring to the customers and Safaricom. Secondly, now that Safaricom Kenya recently acquired M-PESA, it would be interesting to see what the future holds for the company, whether it will enter the global market.

References

- Adu, P. (2017, Oct 05). Using Grounded Theory Approach from Start to finish. Retrieve October 05, 2017 from <https://www.slideshare.net/kontorphilip/using-grounded-theory-approach-from-to-finish>.
- Adu, P. (2016, march 06). Writing the Methodology chapter of a qualitative study. Retrieve March 06, 2016 from <https://www.slideshare.net/kontorphil/writing-the-methodology-chapter-of-a-qualitative-study>
- Ali, A.M. & Yusof, H. (2011). Qualitative Studies: The Case of Validity, Reliability and Generalizability. *Issues in Social Environmental Accounting*, 5(½), pp. 25-64.
- Arnould, E. J. & Thompson, C. (Eds) 2018: *Consumer Culture Theory*. SAGE
- Au, Y. A. & Kauffman, R. J. (2008). The economics of mobile payments: *Understanding stakeholder issues for an emerging financial technology application*. Electronic Commerce Research and Applications, 7(2), 141–164. doi:10.1016/j.elerap.2006.12.004
- Aydin,G; Burnaz,S. (2016). Adoption of Mobile Payments Systems. A study on mobile wallets. *Journal of Business, Economics and Finance (JBEF)*, ISSN: 2146 – 7943
- Begonha, D., Hoffmann, A., Melin, P. (2002). M-Payments: *Hang up, try again*. Credit card Management- elibrary.ru
- Belk, R., Fischer, E., & , R. Robert Kozinets (Eds). 2013: *Qualitative Consumer & Marketing Research*. SAGE.

- Bitsch, V. (2005). Qualitative research: *A grounded theory example and evaluation criteria*. Journal of Agribusiness, 23(1), 75-91.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), pp. 77-101
- Chandra, S., Srivastava, S., & Cheng, Y (2010). Evaluating the Role of Trust in Consumer Adoption of Mobile payment systems: *An Empirical Analysis*.
- Chen, Y.Y., Shek, D.T.L & Bu, F.F. (2011). Applications of Interpretive and Constructionist Research Methods in Adolescent Research: *Philosophy, Principles and Examples*.
- Claessens, J., Dem, V., De Cook, D., Preneel, B., & Vandewalle, J. (2002). On the security of today's online electronic banking systems.
- Cohen, L., Manion, L. & Morrison, (2000). Research Methods in Education (5th ed.). London: Routledge Falmer.
- Corbin, J. M. & Strauss, A. L. (2008). Basics of Qualitative Research (3rd ed): *techniques and procedures for developing grounded theory*. London: SAGE
- Corley, G. K., & Gioia, A. D., (2004). Identity ambiguity and change in the wake of a corporate spin-off.
- Coursaris, C., Hassanein, K. (). Understanding M-Commerce: A consumer-centric
- Creswell, J. W. (2003). Research design: Qualitative, quantitative and mixed method approaches (2nd ed.). California: Sage.
- Crowe, M., Inder, M. & Porter, R. (2015). Conducting qualitative research in mental health. *Thematic and content analyses. Australian and new zealand journal of psychiatry*, 49 pp. 616-623.
- Dahlberg, T., Huurros, M., & Ainamo, A. (2008). Lost Opportunity Why Has Dominant Design Failed to Emerge for the Mobile Payment Services Market in Finland? *Paper*

presented at Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008). doi:10.1109/HICSS.2008.235.

- de Reuver, M., Verschuur, E., Nikayin, F., Cerpa, N., & Bouwman, H. (2015). Collective action for mobile payment platforms: *A case study on collaboration issues between banks and telecom operators. Electronic Commerce Research and Applications*, 14(5), 331–344. doi:10.1016/j.elerap.2014.08.004.
- Denzin, N.K., & Lincoln, Y.S. (1998). Major paradigms and perspectives of qualitative inquiry.
- Diniz, E.H; Albuquerque, J.P; & Cernev, A.K. (2001-2011). Mobile Money and Payment: *A literature review based on academic and practitioner-oriented publications*.
- Farzanfar, R. (2005). Using Qualitative Research Methods to Evaluate Automated Health Promotion/Disease Prevention Technologies: *A Procedures' Manual*. Boston University. Robert Wood Johnson Foundation.
- Gannamaneni, A., Ondrus, J., Lyytinen, K. (2015). A post- Failure Analysis of Mobile Payment Platforms (2015). 48th Hawaii International Conference on System Sciences.
- Gewald, J., Leliveld, A., & Pesa, I. (2012). Transforming Innovations in Africa: *Explorative Studies on Appropriation in African Societies*. Leiden: Brill.
- Glaser, B.G & Strauss, A.L. (1967). The discovery of grounded theory: *strategies for qualitative research*. New York, NY: lioncrest publishing.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: *Concepts, procedures and measures to achieve trustworthiness*. Nurse Education Today, 24(2), 105-112. doi: 10.1016/j.nedt.2003.10.001.
- Guba, E. & Lincoln, Y. (1985) Naturalistic Inquiry. Newbury Park, CA: Sage.

- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, 29(2), 75- 91. doi: 10.1007/bf02766777.
- Guba, E.G., & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194)
- Hedman, J., & Henningsson, S. The new normal: Market cooperation in the mobile payments ecosystem. *Electronic Commerce Research and Applications*, 14, 5 (2015), 305-318.
- Hughes, N., & Lonie, S. (2007). M-PESA: Mobile money for the “Unbanked” turning cellphones into 24-hour tellers in Kenya.
- Mas, I., & Radcliffe, D. (2010). Mobile payments go viral: M-PESA in Kenya. Elibrary. Worldbank.org.
- Mbiti, I., & Weil, D. N. (2015). Mobile banking. The impact of M-PESA in Kenya: *African Successes*, volume III: Modernization.
- Rocher, J. C., & Tirole, J (2006). Two-Sided Markets: *Where we stand*. Rand J.Econ., 37 (3) (2006), pp. 645-666.
- Johnny Saldana (2013). The coding manual for qualitative researchers (2nd ed). Sage publications Ltd.
- Kalina S. Staykova and Jan Damsgaard, (2015). The race to dominate the mobile payments platform: Entry and expansion strategies.
- Kathy Charmaz (2014). Constructing Grounded Theory.(2nd Edition). SAGE
- Keen, P.G.W. (1997) “Are You Ready for ‘Trust’ Economy?” *Computer World* (31)16, p. 80.

- Kvale, S. & Brinkmann, S. (2009). Interviews: Learning the craft of qualitative research interviewing. London: SAGE.
- Linck, K.; Pousttchi, K., & Wiedemann, D. G.: Security Issues in Mobile Payment from the Customer Viewpoint. In: Ljungberg, J. (Hrsg.): *Proceedings of the 14th European Conference on Information Systems (ECIS 2006)*. Göteborg, Schweden 2006, S.1-11.
- Lingling, G., & Kerem, W. (2017). Examining the Role of initial trust in user adoption of mobile payment services: *An empirical investigation*
- M. Mbogo (2010). The impact of mobile payments on the success and growth of micro-business: *The case of M-PESA in Kenya*.
- Tehrani, M., Amidian, A.A., & Mohammadi, J. (2010). A survey of systems platforms for mobile payment.
- M-PESA. www.safaricom.co.ke/personal/m-pesa.
- Mallat, N. (2006). "Exploring Consumer Adoption of Mobile Payments - A Qualitative Study," Proceedings > Proceedings of Helsinki Mobility Roundtable. Sprouts: Working Papers on Information Systems, 6(44). <http://sprouts.aisnet.org/6-44>. ‘
- Mas, I., & Morawczynski, O. (2009). Designing Mobile Money Services Lessons from M-PESA. innovations / spring 2009.
- Maxwell, J. A. (2006). Qualitative Research Design: *An Interactive Approach* (2 nd ed.). Thousand Islands: Sage.
- McKnight, D.H., V. Choudhury, and C. Kacmar (2000) "Trust in E-Commerce Vendors: A Two-Stage Model", *Proceedings of the 21st International Conference on Information Systems*, Brisbane, Australia, pp. 532–5.
- Merriam, S. (1988). Qualitative Research and Case Study Applications in Education. San Francisco: Jossey-Bass.

- Moore, G.C. and I. Benbasat (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information systems research* vol 2 No 3 pp 173-191.
-
- Moses, J. & Knutsen, T. 2012: Ways of Knowing: *Competing Methodologies in Social and Political Research*
-
- Ondrus, J., & Lyttinen, K. (2011). Mobile payments market: Towards another clash of titans?
- Young, R.A. & Collin, A. (2004) Introduction: constructivism and social constructivism in the career field. *Journal of vocational behavior*, 64, pp. 373-388.
- Safaricom.co.ke. www.safaricom.co.ke
- Schierz, P.G., Schilke, O., & Wirtz, B.W. (2010). Understanding Consumer acceptance of Mobile Payment Services. *Electronic commerce research*.
- Stern, P.N. On solid ground: essential properties for growing grounded theory. In: Bryant A and Charmaz K (eds) *The Sage handbook of grounded theory*. Los Angeles, CA: SAGE, 2007, pp. 114–126
- Plouffe, C. R., Hulland, J & Vandenbosch, M. (2001). Research report: richness versus parsimony in modelling adoption decisions- *understanding merchant adoption of a smart card-based payment system*. *Information systems research*. Vol 12 No 2 pp 208-222.
- Pratt, G. M., Kaplan, S., & Whittington, R. (2020) Editorial Essay: The tumult over Transparency: *Decoupling Transparency from replication in establishing trustworthy qualitative research*.
- Saunders, M., Lewis, P., & Thornhill, A. (2006). *Research Methods for Business Students* (4th ed. ed.). United Kingdom: Pearson Education M.U.A.
-
- Sbaraini, A., Carter, S.M., Evans, R.W., Blinkhorn, A. (2011). How to do a grounded theory study: *A worked example of a study of dental practices*.
- Schutt, R. K. (2006). Investigating the social world: *The process and practice of research* (5 ed.). Thousand Oaks, CA: Pine Forge.
-
- Siau, K., Sheng, H., & Nah, F. (2004). A qualitative investigation on consumer trust in mobile commerce. *Int.J. electronic business*, vol.x, No.x.

- Dahlberg, T., Guo, J., & Ondrus, J (2015). A Critical review of Mobile Payment Research.
- Dahlberg, T., & Mallat, N. A (2003). Trust enhanced technology acceptance model- consumer acceptance of mobile payment solutions.
- Tie, Y. C., Birks, M., Francis, K. (2019). Grounded theory research: SAGE open medicine volume 7: 1.8
- Tobin, G.A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of advanced nursing*.
- Jakobsen, A. T. (2016). Value Creation in commercial pop-up activities. *A qualitative study of value co-creation from a consumer perspective.*
- Tracy, S.J. (2013) Qualitative Research Methods: *Collecting evidence, crafting analysis, communicating impact*. West Sussex, UK: Wiley-Blackwell.
- Titus W.S., & Ernest, M. (2017). Challenges facing the use of mobile applications for E-Commerce in Kenyas manufacturing Industry.
- Vodafone.com www.vodafone.com
- Webster, J., & Watson, R.T. (2002). Analyzing the past to prepare for the future. *Writing a literature review*. MIS Quarterly 26 (2). Xiii-xxiii.
- Yilmaz, K (2013). Comparisons of quantitative and qualitative research traditions: *epistemological, theoretical and methodological differences*.
- Żmijewska, A., Lawrence, E., & Steele, R. (2004). Towards understanding of factors influencing User Acceptance of Mobile Payments Systems.

Appendices

Interview Guide

A. Personal Information

- What is your job title?
- Is it related to M-PESA? If yes, how?

B. Background of M-PESA

- What was the motivation behind safaricom launching mobile money service-M-PESA?
- What is the vision of M-PESA?
- What is the unbanked population in Kenya? How many people do not have Bank accounts? (since M-PESA does not need bank account details to register)
- What is the role of the M-PESA agents and how are they recruited? Are they Safaricom M-PESA's employees?
- Is Safaricom an Ambidextrous Organization, in your opinion? (exploiting existing resources and capabilities while Exploring resources use for future opportunities)

C. Features

- What are the features/ attributes of M-PESA platform and their roles?
- How do you differentiate M-PESA from financial services like banks?/ what are the unique dynamics of M-PESA over banks?
- Does M-PESA have any involvement/ collaborations with financial services?
- How does Safaricom learn about their consumers, especially in the rural areas?
- How are these products/services marketed and how does Safaricom teach/train Consumers how to use this product? What are the methods of marketing?
- Is there a story behind every product launched? If yes, give an example of a product which has a story behind its launch

D. Role of M-PESA to the Economy of Kenya

- Does mobile money have an impact on financial inclusion in Kenya?
- What does the evolution of Fintech in kenya mean for M-PESA's growth as a payment Solution?
- Does big data and analytics play any role in the development of M-PESA features?what role

- What are the dynamic capabilities that Safaricom M-PESA has, that enable them to roll out innovations more frequently?
- Do you follow any strategy when thinking of launching new innovations? If yes which one?
- What is the future of the new products? Like e.g fuliza?

E. Adoption

- What are the factors that necessitated the spread of MPESA in Kenya?
- Why do you think consumers/users are attracted or prefer using this mobile payment system over banks?
- What characters/ features do you think attracted SMEs and other businesses to use M-PESA services?
- Is the M-PESA app/ features easy to use for everyone?

F. Driving Competitive advantage through Innovation

- From your own opinion, what is your evaluation of MPESA innovation in terms of the following dimensions?
 - Speed
 - simplicity/user friendly
 - Affordability
 - Uniqueness
- From all the safaricom products, which one is the most profitable product in terms of revenues? Can you please name them from the first to the last profitable product?
- Which MPESA service is mostly/ frequently used by Safaricom customers? Can you please start with the highest used service till the lowest?
- In your opinion, do you think that MPESA has earned Safaricom competitive advantage in the market?
- The telecommunication / mobile money service industry is in an environment of rapid technological change, how does Safaricom **sense** and identify potential opportunities when they arise in terms of satisfying customers' needs?
- How do they seize opportunities when they arise, are there any processes that are followed? (Seizing In Terms of launching new products/services). An example is the recent collaboration with Visa. Can you please comment on that
- How do the company maintain competitiveness?

Strategy

- Does Safaricom have any strategy to cope with environmental changes, e.g like the ongoing pandemic (Covid-19) or any other environmental changes?

F. Benefits / Challenges

- Has M-PESA as a service benefited Safaricom? If yes, how?
- Does M-PESA have competitors? Other mobile money services OR banks?
- Do you receive any negative feedback from users/consumers about the M-PESA App? If yes give an example
- What feedback are you getting from the market/consumers about the different services that you offer?
- Has safaricom any plans/ has it expanded M-PESA globally?

Edited Interview Guide

Driving Competitive advantage through Innovation

- From your own opinion, what is your evaluation of MPESA innovation in terms of the following dimensions?
 - Speed
 - simplicity/user friendly
 - Affordability
 - Uniqueness
- What are the factors that necessitated the spread of MPESA in Kenya?
- From all the safaricom products, which one is the most profitable product in terms of revenues? Can you please name them from the first to the last profitable product?
- Which MPESA service is mostly/ frequently used by Safaricom customers? Can you please start with the highest used service till the lowest?
- In your opinion, do you think that MPESA has earned Safaricom competitive advantage in the market? If yes, please explain

Dynamic Capabilities of Safaricom-MPESA: product and customers

- The telecommunication / mobile money service industry is in an environment of rapid technological change, how does Safaricom **sense** and identify potential opportunities when they arise in terms of satisfying customers' needs?
- How do they seize opportunities when they arise, are there any processes that are followed? (Seizing In Terms of launching new products/services). An example is the recent collaboration with Visa. Can you please comment on that
- How do the company maintain competitiveness?

Strategy

- What is Safaricom doing to cope with environmental changes, e.g like the ongoing pandemic (Covid-19) OR any other environmental changes?

Motivation behind MPESA launch

- I had that Safaricom's motivation behind the launch of MPESA was through a gap between customer behaviour. Originally, MPESA was for saving before ending up to be peer-peer. Can you elaborate the saving part?
- Can you tell me about MPESA moving away from their traditional products and leaning more to platforms?

MPESA Wallet

- When you say that your money is in your phone, in your MPESA wallet, where is that money really? And is there a limit of the amount of money that should be in your MPESA wallet?

MPESA products

- MPESA platform is opening more products to third parties to be able to innovate around their core system? Can you comment more about this? Who are this third parties?
- Apart from Fuuliza, is there any other product that its launch was driven from data?

Expansion

- Can you please tell me about MPESA global?

Memos

Case-based Memo

Memo writing after interviewing Product Development Manager

This was quite an intense interview in the sense that the manager was very open, direct and practical. In his accounts, he emphasizes on the fact that moving from traditional products over to leaning on platforms, is one of the ways that opened more growth leading to more innovations. He also mentioned about developing Application Programming interfaces for third parties. This was something I was not sure of at first because I did not know that the platform is created whereby the products are not theirs, but they have actually given people access to use the platform and also to access their customer base. Those are the third party developers.

This is definitely something i learnt, that i will dig more in my next interviews.

I learnt also that M-PESA is not an entire entity on its own. It always operates under Safaricom, has the same vision and follows the same strategy.

An interesting part I also learnt is that M-PESA agents are not employees of Safaricom, they act as a distribution channel. They are actually just independent and they apply to be agents. The company only does regular training on their policies. This is something I will also sort to find more about the agents.

He was also more open about the feedback they get from their customers, positive and negative. Overall the manager was so proud of working for the company and even mentioned how he feels when he put his name to a product.

Conceptual Memo

***Innovating + Customer Engagement + Collaborations + Operational Excellence/
new fintech= Determinants of Growth and Adoption/ continued usage/Competitive Advantage?***

M-PESA was first developed out of a huge gap in terms of the number of people that the traditional model of banking was serving. It first started as mostly cash outs and peer to peer, and then it grew to providing other services

Product innovations are mainly developed by big data from the consumers. Big data provides rich data sets that have helped identify better opportunities to scale M-PESA in order to meet the growing demands of customers.

Simplicity is a key criteria in product development. The product is developed in such a way that it is user friendly, even with registration, it is simple and can be done anywhere.

Customer engagement plays an important part in adoption and continued usage. Also it plays an important part in creating awareness. This is mainly done through M-PESAs marketing strategies: advertisements through traditional ATL methods considered to be very effective; digitally through various digital platforms and ground activations by using M-PESA brand ambassadors and also through M-PESA agents outlets which are spread out in every region.

Collaborations with financial services ensures that consumers are able to move their money from their bank accounts to their M-PESA wallets and vice versa. Other collaborations like international money transfers ensure that the M-PESA creates value to the consumer by being a one stop shop to financial services. They do everything concerning money digitally on one platform. This has been a strength in adoption and growth in terms of numbers.

Upgrading the M-PESA platform into a new G2 platform to move from traditional products to now incorporating third party developers has been a strength in terms of high revenues and also upgrading the technology by developing interfaces where the developers can be able to plug in M-PESAs ecosystem has also ensured continued usage because of more product innovations and improved service quality which in turn has increased customer loyalty.

All the respondents are in the agreement that M-PESA is unique and they believe that there is no other mobile money platform that is like M-PESA. Most of them were given examples of failed mobile platforms, and are in agreement of the product features and benefits as being among the factors as to why they are very successful. They all report that their biggest competitor is cash as public transport is mostly cash based.

LINE-BY LINE INITIAL CODING GENERATED AFTER FIRST INTERVIEW

The screenshot displays a qualitative data analysis software interface. The top menu bar includes options like File, Home, Import, Create, Explore, Share, Modules, Document, and Edit. Below the menu is a toolbar with icons for various functions.

On the left, a 'Codes' sidebar shows a list of codes generated from the transcript. The codes are listed in a table with columns for Name, Files, and References. The codes include:

- 2% of population banked, 1, 1
- 24 million subscribers of M, 1, 1
- 5% inclusion at the beginn, 1, 1
- 90% of calls are consumers, 1, 1
- a tedious process of openi, 1, 1
- access channels to market, 1, 1
- Agency model with agents, 1, 1
- airtel money are competit, 1, 1
- Aligned to companys visio, 1, 1
- all modes of transport are, 1, 1
- Alot of people do coding, 1, 1
- always find apart in the go, 1, 1
- anytime an issue is reporte, 1, 1
- as a staff putting your nam, 1, 1
- as much as we say inclusio, 1, 1
- as much we say inclusion c, 1, 1
- automatic swipe of money, 1, 1

The central text area displays a transcript of an interview. The transcript is titled 'TRANSCRIPT ONE' and 'OM-PESA started with a campaign, OM-PESA launched 2007'. The transcript includes questions and answers about the launch of M-PESA. The text is as follows:

1. What is your job title?
 Julius working for MPESA at the Financial Services Department, Division: in Product Development. I have worked in Safaricom for 10 years.

2. What was the motivation behind Safaricom launching mobile money service- M-PESA?
 The service (MPESA) was launched in 2007. It was launched out of a gap. So, the company saw a gap that was there between customer behavior. So originally, it was for saving. It was to allow people to use through a mobile using platform, but it ended up from the peculiar behavior, it ended up being a peer-to-peer sending platform whereby people send money to one another.

3. What is the vision of M-PESA?
 At the end of the day we are aligned to the company's vision under Safaricom. Right now, we just changed our vision recently with the new CEO. Now we have a new mission just to make things simple, transparent and honest and it's just for the customer. But next year in April (2020) there will be a new CEO, that's where we start our new financial year.

4. Can you tell me about the unbanked population in Kenya? How many people do not have bank accounts? (since M-PESA does not need bank account details to register)
 I think data from the government says right now i think we only have about 24% of the population banked, but for me i think i have more data on Mpesa and what we have covered because currently we have covered around 9 out of 10 Kenyans, that is around 90% have an Mpesa account in Kenya. We are at 24 million subscribers or active users and the data shows that we have about 27 million population of adults.

5. What is the role of the M-PESA agents and how are they recruited? Are they Safaricom, M-PESA's employees?
 Mpesa agents act as a distribution channel. Unlike traditional banks where you have to open a bank branch whereby the employees are part of the branch, that model scalability is very hard. So, it means that we have to have over 800,000 employees. So, we have gone to the agency model whereby we have a contract with them. So we do a due diligence. We do the search, and we ensure that they have the compliance, they have good conduct and then we do a background search, and then from there we do a contract with them whereby we have done with what we call our head offices. We have contracted dealers who have the head offices. From these dealers they have either subcontracted agencies and we do regular training on our policies, on times and we do checks and do find that some of them are not abiding with the policies that we have.

6. In Safaricom as an Ambitious Organisation, in your opinion? (exploiting existing resources and capabilities while Exploring resources use for future opportunities)
 In my opinion, I think it is ambitiousness. As much as we look at today and, we look at the future. So, what today's resources that we have sorted out today's market and then we have to look at the

On the right, a 'CODE STRIP' sidebar shows a list of codes generated from the transcript. The codes are listed in a table with columns for Name, Files, and References. The codes include:

- have failed ventures
- automatically goes to their bank accounts reason for partnering w
- Buy grocery goods scaled down to main mboga in the market
- look at what can be applied there things we cant
- like the launch of overdrift Fuliza everyone called to say thank yc
- M-PESA does not do the strategy. It is Safaricom then we play our
- people used to track small merchants sale and rob them at gunpoint
- always find apart in the governments agenda,

The bottom of the interface shows a search bar with 'In Codes' and a 'Code to' dropdown menu. The status bar at the bottom indicates 'RMC 174 Items Codes: 174 References: 175 Editable Line: 3 Column: 30' and a zoom level of '60%'.

LINE BY LINE INITIAL CODES GENERATED FROM ALL THE INTERVIEWS

NVIVO
Thesis on Dynamics...nt
Platforms.nvp

Quick Access

IMPORT

Data

Files

File Classifications

Externals

ORGANIZE

Coding

> Codes

Relationships

Relationship Types

Cases

Notes

Sets

EXPLORE

Queries

Visualizations

Reports

File Home Import Create Explore Share Modules

Clipboard Item Organize Query Visualize Code Autocode Range Uncode Case Classification File Classification Workspace

Codes Search Project

Name	Files	References	Created on	Created by	Modified on	Modified by
Evaluating M-PESAs in dimensions	1	3	8/3/2020 3:30 P	RMC	8/3/2020 3:32 P	RMC
Evolution of Fintech for M-PESAs growth	1	2	8/1/2020 12:03	RMC	8/1/2020 1:02 P	RMC
Example of consumer based products that drive more reven	1	1	8/2/2020 1:11 P	RMC	8/2/2020 1:11 P	RMC
Examples of cash outs transactions	1	1	8/2/2020 1:12 P	RMC	8/2/2020 1:12 P	RMC
factors necessitating the spread of M-PESA are basic	1	1	8/2/2020 12:54	RMC	8/2/2020 12:54	RMC
from products to Platforms	1	1	8/1/2020 11:40	RMC	8/1/2020 1:02 P	RMC
How M-PESA works	1	3	8/3/2020 9:26 P	RMC	8/3/2020 9:26 P	RMC
How to open an M-PESA account	1	1	8/1/2020 12:22	RMC	8/1/2020 1:02 P	RMC
implementing based on a feedback sustainability	1	1	8/2/2020 1:35 P	RMC	8/2/2020 1:36 P	RMC
Initially i was not there	1	1	8/2/2020 11:29	RMC	8/2/2020 11:29	RMC
intems of system hanging	1	1	8/2/2020 1:42 P	RMC	8/2/2020 1:42 P	RMC
It is not a separate entity	1	1	8/2/2020 11:34	RMC	8/2/2020 11:35	RMC
Kenya is in the center of excellence	1	1	8/2/2020 1:45 P	RMC	8/2/2020 1:45 P	RMC
Kenya need M-PESA service because they are enterprising	1	1	8/2/2020 12:55	RMC	8/2/2020 12:55	RMC
Key benefits for M-PESA when businesses go cashless	1	1	8/1/2020 12:28	RMC	8/1/2020 1:02 P	RMC
Key differentiator of M-PESA	1	1	8/2/2020 11:56	RMC	8/2/2020 11:56	RMC
Learning process	1	1	8/1/2020 11:38	RMC	8/1/2020 1:02 P	RMC
leaving your shopping due to less money was a need that co	1	1	8/2/2020 12:25	RMC	8/2/2020 12:25	RMC
Limit of money in M-PESA account	1	1	8/3/2020 3:46 P	RMC	8/3/2020 3:46 P	RMC

RMC 281 Items

SCREENSHOT OF SORTING THE FOCUSED CODES BY CLUSTERS- CATEGORISATION

NVIVO
Thesis on Dynamics...nt
Platforms.nvp

Quick Access

IMPORT

- Data
 - Files
 - File Classifications
 - Externals

ORGANIZE

- Coding
 - > Codes**
 - Relationships
 - Relationship Types

Cases

Notes

Sets

EXPLORE

- Queries
- Visualizations
- Reports

Codes Search Project

Name	Files	Referen	Created	Created	Modifie	Modifie
Cluster 1_Role of M-PESA Agen	3	17	8/3/20	RMC	8/4/202	RMC
Cluster 10_Partnerships and gl	3	12	8/3/20	RMC	8/4/202	RMC
cluster 11_History and Motivati	3	15	8/3/20	RMC	8/4/202	RMC
Cluster 12_M-PESA features	3	21	8/4/20	RMC	8/4/202	RMC
Cluster 13_Financial technology	3	6	8/4/20	RMC	8/4/202	RMC
Cluster 14_How Safaricom mai	2	9	8/4/20	RMC	8/4/202	RMC
Cluster 15_Marketing product s	3	14	8/4/20	RMC	8/5/202	RMC
Cluster 16_Company engagem	3	6	8/4/20	RMC	8/5/202	RMC
Cluster 17_Overdraft product F	3	20	8/4/20	RMC	8/5/202	RMC
Cluster 18	3	10	8/4/20	RMC	8/4/202	RMC
Cluster 19_Benefits of M-PESA t	2	3	8/4/20	RMC	8/5/202	RMC
cluster 2- 'Unbanked populatio	3	4	8/3/20	RMC	8/5/202	RMC
Cluster 20_Role of Big data anal	3	4	8/4/20	RMC	8/5/202	RMC
cluster 3_Mobile money Impact	3	19	8/3/20	RMC	8/5/202	RMC
cluster 4_M-PESAs collaboratio	3	17	8/3/20	RMC	8/5/202	RMC
cluster 5_Competitors	2	4	8/3/20	RMC	8/5/202	RMC
cluster 6_Safaricom as an ambi	3	18	8/3/20	RMC	8/5/202	RMC
Cluster 7_Strategy of doing Inn	4	18	8/3/20	RMC	8/5/202	RMC
Cluster 8_Third party engageme	3	14	8/3/20	RMC	8/5/202	RMC

RMC 281 Items

***SCREENSHOT AFTER GROUPING THE CATEGORIES TOGETHER BASED ON
RELATIONSHIPS- PROVIDING THEMES
SCREENSHOT SHOWING RESEARCH QUESTION TWO WITH THEMES***

The screenshot displays the NVivo software interface. On the left is a dark blue sidebar with the NVivo logo and navigation options: 'Quick Access', 'IMPORT' (with sub-items 'Data', 'Files', 'File Classifications', 'Externals'), 'ORGANIZE', and 'Coding'. The main window has a top menu bar with 'File', 'Home', 'Import', 'Create', 'Explore', 'Share', and 'Modules'. Below the menu is a toolbar with icons for 'Clipboard', 'Item', 'Organize', 'Query', 'Visualize', 'Code', 'Autocode', 'Range Code', 'Uncode', 'Case Classification', 'File Classification', and 'Workspaces'. The central pane is titled 'Codes' and contains a search bar 'Search Codes'. Below it is a table listing codes and their associated file counts and reference numbers.

Name	Files	Referenc
RQ 2_What product attributes make M-PESA innovations attractive, hence i	0	0
Company engagement with customers	3	9
Partnerships and global expansion	3	13
Marketing product strategies	3	14
M-PESAs collaborations	3	17
Consumers engagement and feedbacks on the platform	3	22
M-PESA features	3	36

SCREENSHOT SHOWING RQ 2. FOCUSED CODES WITH THEMES AND SUB-THEMES

The screenshot shows the NVivo software interface. The sidebar on the left contains the following sections:

- Quick Access**
- IMPORT**
 - Data
 - Files
 - File Classifications
 - Externals
- ORGANIZE**
 - Coding
 - Codes (selected)
 - Code frame for RQ
 - Relationships
 - Relationship Types
- Cases
- Notes
- Sets
- EXPLORE**

The main window displays the **Codes** section. At the top, there is a search bar labeled "Search Codes". Below it, a table lists the codes and their associated files and references.

Name	Files	References
RQ 2_What product attributes make M-PESA innovations attractive, hence i	0	0
Company engagement with customers	3	9
company has many customer touch points	1	1
employees and everyone aware of happenings in society	1	1
Agents are all over help in learning the customers	1	1
Consumer engagement	1	1
customers are segmented	1	1
Business intelligence tools	1	1
Dividing KPIs in specific days	1	1
Tracking KPIs	1	2
Partnerships and global expansion	3	13
M-PESA expansion globally	1	1
M-PESA and visa card partnership	1	1
business about identifying partners	1	1
E-commerce platform	1	1
M-PESA customers will be able to access markets like Amazon	1	1
M-PESA being an enabler than a partnership	1	1