

**NETWORKS AS A DETERMINANT OF USAGE OF COMPLEMENTARY  
CURRENCIES IN KENYA: The Case of Bangla-Pesa in Bangladesh Slum**

**BY**

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## ACRONYMS

B£:	Brixton Pounds
BBN:	Bangla Business Network
BP(s):	Bangla-Pesa (s)
CBO:	Community Based Organization
CC(s):	Complementary Currencies
CES:	Community Exchange System
KES:	Kenyan Shillings
KIIs:	Key Informant Interviews
LETs:	Local Exchange Trading Systems
M.G.R:	Merry Go Round
MMT:	Mobile Money Transfer
MRC:	Mombasa Republican Council
NGO:	Non-Governmental Organization
NU:	NU Spaar-pas/NU card (literally “NOW-incentive card”)
RGT:	Red Global de Trueque
RT:	Red de Trueque
RTS:	Red de Trueque Solidario
SMS:	Short Messaging Service
UK:	United Kingdom
US:	United States of America

## **DEDICATION**

I dedicate this work to my loving parents: Esther Wanjiku and Solomon Kiguru; my special mums Anne Kamau and Virginia Mbao; and, my sisters Kami, Julia and Grace, for their unwavering love, encouragement and support throughout the challenging study period.

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## CONTENTS

DECLARATION .....	iii
ACRONYMS .....	iv
DEDICATION .....	v
ACKNOWLEDGMENTS .....	vi
CONTENTS.....	vii
LIST OF TABLES .....	xi
LIST OF FIGURES .....	xii
ABSTRACT.....	xiii
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1. Problem Statement .....	4
1.2. Research Questions .....	5
1.3. Research Objectives.....	6
1.4. Rationale/Justification.....	6
1.5. Organization of the Research Paper.....	7
<b>CHAPTER TWO .....</b>	<b>7</b>
<b>LITERATURE REVIEW .....</b>	<b>8</b>
2.1. Introduction.....	8
2.2. What are the functions of Complementary Currencies? .....	8
2.3. Theoretical Literature.....	9

2.4.	Network theory of diffusions .....	15
2.5.	Review of Empirical Literature and the Methodology Used .....	17
2.6.	Role of Networks in Adoption of M-Pesa in Kenya.....	23
<b>CHAPTER THREE .....</b>		<b>26</b>
<b>CONCEPTUAL FRAMEWORK.....</b>		<b>26</b>
3.1.	A discussion on the Conceptual Framework .....	29
3.2.	Hypotheses of the Study .....	29
3.3.	Definition of Terms.....	32
3.3. 1.	Network.....	32
3.3. 2.	Size of network .....	32
3.3. 3.	Number of network .....	32
3.3. 4.	Nature of networks.....	32
3.3. 5.	Informal Settlement .....	32
3.3. 6.	Complementary Currency .....	33
<b>CHAPTER FOUR.....</b>		<b>34</b>
<b>METHODOLOGY .....</b>		<b>34</b>
4.1.	Research Design.....	34
4.2.	Study Site .....	34
4.3.	Population and Sampling .....	34
4.4.	Data Sources .....	35
4.5.	Data Needs Table.....	36
4.6.	Data Analysis .....	38



<b>CHAPTER FIVE .....</b>	<b>40</b>
<b>FACTORS THAT INFLUENCE USAGE OF BP IN BANGLADESH SLUM .....</b>	<b>40</b>
5.1. Introduction.....	40
5.2. Characteristics of study respondents.....	40
5.3. Types of Networks and Usage of Bangla-Pesa.....	48
5.3. 1. Religious/Faith Based Organizations.....	48
5.3. 2. Social Support Networks .....	51
5.3. 3. Self-Help Networks .....	52
5.3. 4. Altruistic Networks .....	55
5.4. The Size of Networks and BP Usage in Bangladesh Slum.....	59
5.4. 1. Religious Networks.....	61
5.4. 2. Self Help Groups.....	62
5.4. 3. Altruistic networks.....	63
5.4. 4. Social support networks.....	64
5.5. The Number of Networks and BP Usage in Bangladesh Slum .....	64
5.6. Diffusion of Information on BP.....	68
<b>CHAPTER SIX .....</b>	<b>78</b>
<b>SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>78</b>
6.1. Introduction.....	78
6.2. Summary and main findings .....	78
6.3. Key conclusions .....	80
6.4. Recommendations.....	81

**REFERENCES..... 82**

**APPENDICES..... 92**

Appendix I: Survey Questionnaire 1: Users Questionnaire ..... 92

Appendix II: Survey Questionnaire: Non-Users Questionnaire ..... 97

Appendix III: Key Informants Interview Guide: Academics ..... 102

Appendix IV: Key Informants Interview Guide: Government Officials ..... 103

Appendix V: Key Informants Interview Guide: Bangla-Pesa Officials ..... 104

## LIST OF TABLES

Table 2.1: Types of CCs and their use .....	9
Table 2.2: Institutional Approach .....	10
Table 2.3: Rational Choice Approach.....	11
Table 2.4: Value laden Approach .....	12
Table 2.5: Network Theory.....	14
Table 2.6: Diffusion of innovation approach.....	16
Table 2.7: Empirical Literature.....	22
Table 2.8: Role of networks in Kenya’s M-Pesa.....	25
Table 4. 1: Data Needs Table.....	36
Table 5.1: Networks of users based on their gender orientation.....	42
Table 5. 2: Level of Education.....	43
Table 5. 3: key statistics on religious networks .....	50
Table 5. 4: Key statistics on social support networks.....	52
Table 5. 5: Key statistics on Self-help networks.....	55
Table 5. 6: Key statistics on altruistic networks .....	57
Table 5. 7: Summary on type of networks .....	58
Table 5. 8: How various networks contribute of BP members .....	60
Table 5. 9: Key statistics on size of religious networks.....	61
Table 5. 10: Key statistics of size of self-help networks .....	63
Table 5. 11: Key statistics on size of altruistic networks.....	63
Table 5. 12: Key statistics on size of social support networks .....	64
Table 5. 13: How number of networks affects chances of discussing BP .....	66
Table 5. 14: Number of Network Categories.....	67

## LIST OF FIGURES

Figure 3.1: Conceptual Framework (Author’s Conceptualization) .....	29
Figure 5.1: Gender Representation based on the study respondents .....	41
Figure 5.2: Age Distribution of the respondents.....	43
Figure 5.3: Levels of Trust.....	46
Figure 5.4: Distribution of networks in Bangladesh slum .....	58
Figure 5.6: Distribution of Networks.....	65
Figure 5.7: Phases of membership into the BBN.....	71
Figure 5.8: Discussion of BP in Meetings .....	71

## ABSTRACT

Past studies have attributed acceptability and usage of Complementary Currencies (CCs) to social, economic and political networks. Such studies have pointed out that CCs are network goods and consultation, information sharing, resource sharing, suggestions, support, and pressure from other users enhance their usage. However, network theorists have not examined whether it is type of networks that account for the acceptability of CCs or whether it is information diffused within the networks, the size of networks and the number of networks one belongs to are more important factors in determining usage of CCs. Further, network theorists have not examined the nature of networks in an ethnically and politically heterogeneous community such as Bangladesh Slum or usage of CCs where government support is lacking.

Using a mixed method approach (triangulation) this study examined the role of networks in determining the usage of Bangla-Pesa in the very heterogeneous Bangladesh Slum and where government support is lacking on CCs. The study has established that though networks are important in determining the usage and acceptability of CCs, it is not the presence of the networks per se that is important. Rather, it is their size, number of networks a user belongs to, level of trust and the kind of information that is passed in these network meetings.

The study shows that although a large network is important, the nature of information passed about CCs has an equally important impact on usage of CCs. That is, users of BP are in more networks (large and small sized networks), with dense relationships that share positive information about BP and have high trust levels. Non-users are in fewer small sized networks, with loose relationships and where negative information about BP is shared.

# CHAPTER ONE

## INTRODUCTION

Complementary Currencies (CCs) are alternative currencies that are privately issued to economically depressed communities to solve specific developmental problems. Their use has been more pronounced during times of financial crises and economic downturn when world economies or national currencies are experiencing the effects of war, economic shocks or stagnation that threaten future development (Liubertas, 2012; Schroeder, 2006). In developing countries, CCs are used in depressed communities, especially slums, as a way of rejuvenating their economies through improved trade (Ruddick, Richards and Bendell, 2013), reduce unemployment (Ruddick, 2011), tackle welfare problems (Miller, 2008) protect community values and the environmental (Joachain and Klopfert, 2012). The Great Depression of the 1930s and the 2007 Global Economic Crises are important reference points ( Lietaer and Hallsmith, 2006; Liubertas, 2012; Schroeder, 2013; Stodder, 2009).

Studies have indicated that the acceptability and usage of CCs have been influenced by a number of factors either singly or in combination. These factors include: government support (Sardi, 2013; Hayashi, 2012; Joachain and Klopfert, 2012), community relations/solidarity (Lietaer, 2004; North, 1997; North, 2013; Thiel, 2012; Primavera, 2007), social movements (Cladwell, 2000, Colom, 2007), business networks (Ruddick, 2011) and credit unions (financial institutions) support (Moers, 1998; Osterweil; 2013). Other determinants include: employer-employee relations (Schroeder, 2006); lack of government involvement (Schroeder, 2006), need to support local businesses (Jones, 2010); presence of material incentives (Joachain and Klopfert, 2012; Jones, 2010), presence of a closed economy (Eisenstein, 2011) and a counter cultural community of young, highly educated, homogeneous population with low paying jobs and levels of income (North, 2013; Colom, 2007).

In developing countries, the availability of networks has been an important determinant of acceptability and usage. During Argentina's liquidity crises of 1995-2001, CCs called Red De Turque were introduced throughout the country until 2003 when the crisis reduced. Their acceptability and usage was high and networks spread out throughout the country (Cato, 2006; Gómez, 2012). The high usage of Red Turque (RT), for example, was dependent on existing barter trade networks in the communities (Primavera, 2007). For Brazil and other Latin

American countries, when CCs were introduced in the major cities as a way of ending poverty through loans and access to financial services, their use and acceptability spread through existing community solidarity networks that locals had established as a communal guarantee system (Primavera, 2007). Similarly in Asian countries, such as Japan, the high acceptability and usage of CCs was attributed to the strong, influential and dense socio-economic networks that were already in existence. These community networks, barter trade networks and solidarity networks gave users confidence and trust in the currencies (Cato 2006; Osterweil, 2013).

In Africa, South Africa first introduced the internet-based Community Exchange System (CES) in 2003 for slum dwellers in Cape Town. Though the CES was replicated in Johannesburg and Pretoria, its usage was very limited mainly because of the limited network of internet users among the poor (Quintiliani, 2002). However, the same CES was replicated in another 58 developed countries and it has recorded high usage due to the presence of a large local/community networks (Dissaux, 2014). In Senegal, the Doole facilitated by a Non-Governmental Organization (NGO) called ENDA made use of the existing network of credit unions. Though it was a pilot project, its acceptability and usage was high and was used even in international transactions, and by neighbouring countries, such as Mauritania (Moers, 1998).

It is however not clear whether it is networks per se that are important in enhancing usage and acceptability of CCs or whether it is specific networks or certain types of networks that are important. In addition, where networks are key in determining usage, it is not clear whether economic networks are more important than social-political ones or whether the size of network is important. It is not clear whether women networks are more important than men's; whether community networks are more important than private networks; religion-based networks are more important than culture-based ones. Even within religion, different networks exist and it is not clear whether Christian based networks are more or less important than Muslim-based ones. In slum areas where communities live in ethnically, politically and religiously segregated groups, it is not clear whether intra-groups networks are more important than inter-group ones or even whether inter-group networks exist. This study therefore, focuses on Bangla-Pesa to understand how networks influence usage of adoption of CCs in Kenya.

## **Complementary Currency in Kenya – A Case of Bangla-Pesa**

Bangla-Pesa is a complementary currency that was introduced in Bangladesh slum in Mombasa County, Kenya. It was introduced in May 2013 but was accused of illegal activity in July 2013 by the Kenyan government due to political, consumer protection and legitimacy reasons (Brown, 2013). In August 2013, a letter from the Director of Public Prosecutions directed the Banking Fraud Unit to withdraw the case against the charges levelled against the officials of the facilitating Community Based Organization (CBO) and Bangladesh community members. The letter confirmed that the case was not an offence based on the Central Bank of Kenya Act and the Value Added Tax Act. The letter also recommends that the legal and policy department at the Central Bank should consider reviewing the relevant laws as they make policies in future (Ruddick, 2013). These concerns were resolved and in November 2013 the currency was reintroduced with the support of local government officials.

KORU Kenya—a non-profit community based organization based in Mombasa initiated the first community discussions/meetings that brought people from Bangladesh together to discuss the initiation of a complementary currency in November 2012. This resulted in an agreement to create a business network registered as a CBO called the Bangladesh Business Network (BBN) to facilitate exchanges using Bangla-Pesa. For one to join/gain entry into this network one had to be guaranteed by four local business owners, who would guarantee that he/she has a legitimate businesses located within Bangladesh slum. The new members chose five representatives who formed the BBN Board, replacing the previous interim committee (Interviewer's notes, 2013). After launching the currency, KORU Kenya handed over the issuance and management of Bangla-Pesa to this committee. Roughly 80% of businesses that joined the BBN are owned by women and deal mainly in consumer goods (Ruddick, Richards and Bendell, 2013).

Upon entry as a member, each business received 400 Bangla-Pesa for free. Of this 400, 200 Bangla-Pesa was retained as a contribution to the community fund to pay for administration/ community services and miscellaneous jobs that the business network undertakes in the slum. These include: surveys on the use of Bangla-Pesa, renovation of community schools, slum clean ups, and community policing.

The members use the remaining 200 Bangla-Pesa's to buy and sell with other members in the network when they do not have enough of the Kenyan currency. The members are encouraged



to use Bangla-Pesa in their daily transactions as they save the Kenyan currency for purchase of non-network goods. The end result of using Bangla-Pesa means that the business can use the extra savings to expand their businesses, and be better providers for their families. Businesses are also able to sell excess stock and increase their sales by targeting members trading with Bangla-Pesa (Interviewer's notes, 2014).

Before the court case involving Bangla-Pesa, about 109 businesses had already accepted it and were using the Bangla-Pesa in their daily exchanges. When it was re-launched in November 2013, a similar number registered as part of the initiative. Today, Bangla-Pesa is being accepted in more than 200 businesses –about 90% of the local businesses in Bangladesh slum (Ruddick, Richards and Bendell, 2013). Over 10,000 BPs are exchanged daily of the roughly 44,000 Bangla-Pesa in circulation (Ruddick, 2014). The use of the Bangla-Pesa is lowest during the period when people have received their salaries (the boom period), but increases with time as the Kenya Shilling starts to become scarce, especially from mid-month to end-month (the downturn period) (Ruddick, Richards and Bendell, 2013). The aim of Bangla Pesa is to bridge this period when residents of Bangladesh slum have no Kenyan currency but still have goods and services that they can exchange. Thus, Bangla Pesa is used to fulfil the function of money in terms of providing a standard of value and means of exchange and but cannot be used to store value/save especially because it expires annually.

## **1.1. Problem Statement**

The questions on what influences the use of CCs are especially important for Kenya, where two CCs—the Eco-Pesa and Bangla-Pesa—were introduced by KORU Kenya, a non-profit organization in two informal settlements in the Coastal region of Kenya. Their acceptability and use however varied significantly. The Eco-Pesa which was introduced in 2009 in Kongowea Market recorded mixed usage and was later discontinued (Ruddick, 2011) while the Bangla-Pesa which was introduced in 2013 is highly accepted and used within Bangladesh Slum (Ruddick, Bendell and Richards, 2013).

The acceptability and usage of the Bangla-Pesa is intriguing in a number of ways: first, unlike the Eco-Pesa that had local government support (yet did not gain high acceptability), the Bangla-Pesa had no such support. Secondly, in Bangladesh, the facilitating NGO was financially limited to offer the necessary material benefits that would have encouraged people to accept or use the

CC. Thirdly, the Bangladesh community is ethnically, politically and religiously heterogeneous. The slum is composed of native Muslims, Coastal (Christian) Bantus and ethnically diverse labour migrants from Kenya's mainland (Sabuni, 2011) who have intermixed at the Coast and in Bangladesh slum forming an intricate melting pot of cultures, and networks. Fourthly, the slum population has low levels of education and a large population of the elderly with low paying jobs and incomes. Lastly, the slum economy is highly dependent on goods sourced from outside the slum, especially for daily consumption needs. Such an open economy is not conducive for the development of an alternative currency.

With the above factors in mind, one would not expect the introduction of a CC in the region to be successful. Given that the Bangla-Pesa is a network<sup>1</sup>-based currency—issued and used to link business owners in the Bangladesh slum—it is important to examine why the Bangla-Pesa has had high acceptability despite apparent differences and antagonisms among its user communities. This study examined the role of networks in influencing the acceptability and usage of BP in Kenya. Specifically, this study examines the nature of networks present in Bangladesh slum, their size and membership, and whether and, how, these have influenced the acceptability and use of the Bangla-Pesa.

## **1.2. Research Questions**

This study examines the factors that influence the usage/acceptability of a complementary currency. The study sought to answer the following broad question: How do networks influence usage of Bangla-Pesa in Bangladesh Slum? Specifically, the study examined the nature of and how networks, their size and memberships influenced acceptability and usage of Bangla-Pesa in Bangladesh slum in Mombasa. The specific questions that the study sought to answer are:

1. Is the usage/acceptability of Bangla-Pesa a function of the types of networks available in the Bangladesh slum?
2. How has membership to these networks (size) influenced the acceptability/usage of the Bangla-Pesa?

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<sup>1</sup> In this study, a network refers to formal and informal relationships and ties between individuals/groups that facilitate day to day interactions amongst them.

3. Is the acceptability and usage of Bangla-Pesa dependent on an individual's number of the network?
4. How does the information diffused about Bangla-Pesa affect its acceptability/usage?

### **1.3. Research Objectives**

This study examined which the types, size and number of networks influence the use/acceptability of Bangla-Pesa in Mombasa.

1. Examine if the acceptability and usage of Bangla-Pesa is a function of the types of networks available in the Bangladesh slum.
2. Examine how membership and size of networks has influenced the acceptability of the Bangla-Pesa.
3. Examine how the acceptability and usage of Bangla-Pesa is influenced by the number of networks one belongs to.
4. Examine how the information diffused about Bangla-Pesa (within the network) affects BPs acceptability/usage.

### **1.4. Rationale/Justification**

The use of complementary currencies to solve developmental problems has gaining popularity in the last two decades. In developed countries, most CCs have been used in rural areas, with the exception of the Brixton Pound in the UK, which is used in an economically marginalised area in the UK. Even then, the Brixton informal settlement is not comparable to the African informal settlements where the government presence is minimal, businesses are unregistered and basic services are out of reach for most. The Latin American studies on CCs give a more vivid picture of the usage of CCs in developing countries but the use of CCs in Africa has been an unexplored area. There is little documentation on the CES in South Africa, and almost no trace to the Senegalese Doole that was used in a pilot project in 1998-1999.

This study provides an insight to the use of CCs in informal settlements in Kenya. This study is important because it seeks to show why people use complementary currencies. This is important in order to enhance their usage and overall sustainability. For CC practitioners, this study will guide them as they replicate similar projects throughout the country. For instance, Gatina Pesa in Kawangware, Nairobi was launched in 11<sup>th</sup> October 2014 to build local business resilience in

the slum; Kangemi Pesa in Kangemi, Nairobi was launched in April 2015 while Lindi Pesa in Kibera, Nairobi was launched in June 2015 (Grassroots Economics, 2015).

## **1.5. Organization of the Research Paper**

Chapter One gives an introduction to Complementary Currencies. This section includes the problem statement, research questions, objectives and justification why this study. The main argument in this section is that there is a great variation on the role of networks as determinants of the use and acceptability of CCs. The study therefore seeks to examine the role of networks as determinants of the use and acceptability of CCs in Kenya.

Chapter Two of this study gives an extensive literature review that covers theoretical, empirical and methodological aspects on previous researches. This section highlights the gap that the study seeks to fill.

Chapter Three and provides the study's conceptual framework which is based on the network and diffusion of innovation theory. This combined theory is useful to explain how networks diffuse information and influence acceptability of innovations—which in this case is the BP. Chapter Four, the methodology section, highlights how data has been collected. The study uses a mixed method approach that combines surveys with key informant interviews (KIIs). The survey uses a questionnaire that generated both quantitative and qualitative data while KIIs generated purely qualitative data.

Chapter Five gives a detailed analysis of the key findings of the study. In Chapter Six are the conclusions and recommendations of the study. Lastly, the appendix contains the data collection tools.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

This section reviews relevant literature on CCs highlighting what has been studied and the gaps that the current study seeks to fill. The literature is organized into five sections: 1) the functions of complementary currencies, 2) theoretical literature review 3) empirical literature that discusses studies on experiences of CCs and the methodology used in the various studies; 4) theoretical framework and study's conceptualization of the network theory of diffusions; and 5) role of networks in adoption of M-Pesa in Kenya.

#### **2.2. What are the functions of Complementary Currencies?**

According to Sárdi (2013), currencies have three main functions: standard of value; means of exchange and store of value. According to Sardi (2013), local/community and complementary currencies fulfil the first two functions of money but are limited by the zero or demurrage interest rates and they therefore cannot be used for accumulation and speculative purposes.

A CC is an agreement within a community to accept another medium of exchange or payment other than the legal tender (Lietaer, 2004). CCs are introduced in economically specified territories to define, protect, stimulate and strengthen local economies through market principles (Blanc 2011); complement the official currency, bridge demand and supply and solve various developmental issues ( Lietaer and Hallsmith, 2006) such as economic difficulties caused by economic depressions, globalization, increased wealth transfer and the widening gap between the rich and poor (Sárdi, 2013). Other terms used for CCs include: social currencies (Primavera, 2010), community currencies (Sárdi, 2013; Fare, 2012; Lietaer and Hallsmith, 2006) and local currencies (Blanc, 2011).

Blanc (2011) argues that CCs have evolved to the fourth generation. The first generation existed in the 1980-1990s, where mutual credit and barter clubs were used in reciprocal exchanges between individuals in the community. The second generation CCs existed in the mid-1990s in which Time Banks were the dominant CCs. These were community currencies based on reciprocal exchanges among members. These two generations of complementary currencies were

inconvertible, and did not require backing of official currencies or goods. The third, the Local Exchange Trading Systems (LETs) generation emerged from 2000. LETs were basic complementary paper currencies with a territorial coverage and were run by communities or non-profit organizations. Most LETs were convertible and backed by national currency reserves. The last and the most recent generation is the NU Spaar-pas (literally “NOW-incentive card”) scheme in Europe. The NU schemes, which focus environmental conservation, are professionally run in partnership with the government. They have been minimally used even when economic incentives are provided for the users (Blanc, 2011). This is summed up below.

**Table 2.1: Types of CCs and their use**

Type of CC	Period Used	Countries In Use	Circumstances surrounding their use
<b>Mutual credits</b>	1980-1990s	Argentina	Used reciprocal exchanges between individuals; community based and inconvertible; no backing of official currencies or goods
<b>Time Banks</b>	Mid 1990	Japan; US	Community based currencies; reciprocal exchanges among members; inconvertible and no backing of official currencies or goods
<b>LETS</b>	2000s	Kenya; UK; South Africa	Paper currency; territorial coverage; communities/NGO run; convertible and backed by national currency reserves
<b>NOW-incentive card</b>	Since 2013	European Region	Regional currencies; for environmental conservation; used between individuals and selected stores; have governments backing; provide users with economic incentives to encourage usage

### 2.3. Theoretical Literature

According to innovation theorist, Rodgers (2000), getting a new idea adopted, even when it has obvious advantages is often difficult. Innovations take years before they are adopted? So, how does BP get to be accepted and used almost instantly after its introduction?

CCs have been studied using four main approaches: institutional (Sárdi, 2013; Knapp, 1924), rational choice (Evans, 2009); the value laden approach (North, 2000; Zagata, 2004); and through the network approach (Zagata, 2004; Jackson and Wolinsky, 1996).

Institutional theorists argue that the use of money is linked to the state, whose support or backing increases its acceptability and use since it increases confidence, legitimacy and subsequent use (Sárdi, 2013; Knapp, 1924; Lieater, 2004). This approach argues that acceptability of a currency is linked to the state, which gives it legal status and makes it enforceable and acceptable as tax payment (Lerner, 1947). Involvement of governments boosts the use of CCs (Sardi, 2013). The institutional approach has been used to explain the high usage of the Furreai Kippu in Japan, Bocskai Korona in Hungary and the Curitos in Brazil. In Japan, the government ran 49% of the Furreai Kippu branches; in Hungary, the government supported the Bocskai Korona through policies while in the Curitos was an initiative of the local government.

The institutional approach has a number of critics who argue that where the state is (or perceived to be) weak, its involvement will lower the usage (Cato, 2006). Government support is also associated with patronage, which undermines social exchanges, relationships and local links, which in turn reduces the level of trust in the CC (Cato, 2006; Primavera, 2000). Lastly, this approach cannot explain how currencies which are not supported by the state increase their usage or why certain currencies even when supported by the government do not gain wide acceptability or usage. See summary table below on the institutional theory on CCs.

**Table 2.2: Institutional Approach**

<b>Institutional approach to CCs</b>	
<b>Scholars</b>	<b>Key Tenets/Assumptions</b>
<b>Sárdi,2013); Knapp,(1924); Lieater,(2004); Lerner,(1947)</b>	The use of money is linked to the state whose support and involvement increases confidence and legitimacy to users. It provides legal status and makes it enforceable.
<b>Weaknesses</b>	Where the state is (or perceived to be) weak, its involvement will lower the usage.
	Government patronage undermines social exchanges and reduces level of trust (Cato, 2006; Primavera, 2000).
	Cannot explain how currencies not backed or supported by the state increase their usage for example BP or why certain currencies not supported by the government do not gain wide acceptability or usage.

The rational choice approach emphasizes on the individual consumer as the decision maker who acts to increase his/her economic benefits. According to rational choice theorists, the usage of a CC will increase if it increases the economic benefits for its users (Evans, 2009; Lieater, 2004) and they will pay any price to keep the currency running (Evans, 2009). Proponents argue that users of CCs do not have to hold radical political or economy views (North, 2000). People use CCs for individual economic reasons and thus, are willing to pay for the price and effort or running the CCs. Evans further points out that when economic benefits are not realized most people stop using them (Evans 2009). In addition, when the benefit is to the group, such as is common with community CCs, its usage is low and the CC never expands because those willing to use it are discouraged by its exploitation by free-riders (North 2000).

The rational choice approach has been used to explain the acceptability and usage of LETS (Cladwell, 2000). However, there is no rational explanation as to why people use some CCs, whose use is limited to specific geographical areas, or are not backed by the law (Thiel, 2013). It is also not rational why the Chiemgauer in Germany has one of the highest acceptability rates despite its huge operational costs to the users (Thiel, 2013). Pfajfar, Sgro, and Wagner (2012) have also questioned the rationality of those people accept to use CCs that do not offer added benefits from the mainstream currency.

**Table 2.3: Rational Choice Approach**

<b>Rational Choice approach to CCs</b>	
<b>Scholars</b>	<b>Key Tenets/Assumptions</b>
<b>(Lieater, 2004)</b> <b>(Evans, 2009)</b> <b>(North 2000)</b>	Individuals acts to increase economic benefits but the free-riders problem discourage usage and expansion If economic benefits are not realized most people stop using them Users can pay any price to keep the currency running. Users do not have radical ideologies
<b>Weaknesses</b>	No rational explanation why people use some CCs, whose use is limited to specific geographical areas, or are not backed by the law and have huge operational costs to the users (Thiel, 2013).

The value-laden approach argues that users of CCs are driven by objectives that are not necessarily economic. Rather, users are individuals with strong social and political values and are driven more by social objectives, such as gifting (Zelizer, 1994; Zagata 2004), or political and altruistic



objectives (North, 2000). They include money reformers, green socialists, and anarchists. According to the value-laden approach, this explains why the introduction of CCs began in countries, such as Germany, where monetary reform and social credit movements were strong. This approach argues that people create new forms of money and use them to express social values. William (1996) and Ryan-Collins (2011) even point that people can use CCs that do not benefit them personally, as long as the CCs contribute positively to the welfare of the community. Advocates of money reforms want interest-free money, removal of artificial scarcities in money, and creation of money that stays local (North, 2000). The Greens and socialists seek to 'humanise' or transform the economy by creating an economy that values people more than profit while anarchists use CCs in order to disassociate with mainstream institutions and organizations including the economy whose values they consider unresponsive to their needs (North, 2000).

However, the value-laden approach cannot explain why currencies which have no political or social benefits gain acceptability, some even becoming universally accepted. For example, the use of Bangla-Pesa cannot be termed as a political protest or ideology-based because it was initiated to deal with the economic problems that the poor in Bangladesh face. Bangla-Pesa officials insist it is not related to secessionist's politics of the larger coast province. In fact, the Kenyan currency is seen as superior and they encourage the users to spend Bangla-Pesa and save the Kenyan shilling so as to expand their businesses, meet emergency expenses and services that cannot be acquired inside the slum. Only small amounts of BP are in circulation—about 44, 000 BPs and 200 to 400 BPs per person, and these are not large enough for any political end. Therefore it is essential that Bangla-Pesa users to still use the official currency as it is not possible to carry out all transactions in Bangla-Pesa 200/400 BPs alone. Its acceptability is also limited to the Bangladesh community and it cannot be exchanged to the Kenyan currency (Interviewers notes, 2014).

**Table 2.4: Value-laden Approach**

<b>Value-laden approach to CCs</b>	
<b>Scholars</b>	<b>Key Tenets and Weaknesses</b>
<b>Zelizer, 1994</b>	Usage of CCs is driven by objectives that are not necessarily economic such as social values (gifting) and political or community values.
<b>North, 2000</b>	Introduction of CCs began in countries, such as Germany, where monetary reform and social credit were strong. People create new forms of money and use them to express

Value-laden approach to CCs		
	social values.	
	Types of CC users	Reasons for Using CCs
	money reformers	interest-free money, removal of artificial scarcities in money, and create money that stays local
	green socialists	'humanise' or transform the economy, create an economy that values people more than profit
	Anarchists	disassociate with mainstream institutions and organizations
<b>William (1996) and Ryan-Collins (2011)</b>	People can use CCs that do not benefit them personally, as long as the CCs contribute positively to the welfare of the community.	
<b>Weaknesses</b>	Cannot explain why currencies which have no political or social benefits gain acceptability, some even becoming universally accepted. Use of Bangla-Pesa is not a political protest or ideology-based.	

Network theorists argue that networks are important because individuals act and react to the social groupings in their environment and thus they are neither purely rational nor puppets of the social structure (Pescosolido, 2006). Since networks are ties and relationships that could either be formal or informal, social, political or economic, they shape an individual's actions through consultation, information and resource sharing, suggestions, support, and pressure from others. Based on this view, network interactions influence an individual's behaviour, action, outcomes, beliefs and attitudes toward the CC and its use (Pescosolido, 2006).

According to North (2004), before members begin trading using a CC, they must create networks; build on barter trade and mutual aid exchanges. If there are no people to join the network, there will be no trading partners to exchange the CCs with. North (2004), referring to Cox and Mair (1988) argues that businesses are more likely to use CCs if their linkages are local. This is because they see it beneficial to trade with each other using the unlimited or less limited local currency. Suppliers accept to use a CC to show loyalty and reward those businesses with which they have strong relationships built on trust. Strengthening this local network feeds back by increasing competitiveness and subsequent use of the CC (North, 2000).

According to Collum (2012), participants can be located in areas with highly concentrated and connected networks while others are in areas with sparse network connections. Those in well-

connected regions have greater resources and are likely to be more active in using CCs. Dense networks are generally good for producing bonding social capital since information flows faster through dense networks. For Time banks, referrals within the network are important in learning about services that other members are offering. The members often talk about the network and their exchanges within it during their transactions. If one’s trading partners are well-connected and talk about some great services that they have received or some members who are really in need of particular things, that information may spur greater trading activity. Collum (2012) suggests that to enhance the role of networks in exchanges, coordinators should know whom is exchanging with whom and match members with no connections to those in well-connected regions to make them more active in the network.

Zagata (2004) argues networks are important to facilitate a successful cycle of exchanging CCs. Thus, if a CC has social benefits (such as crime reduction and environmental conservation), its use will rely on social networks while those with economic objectives (for a purely means of exchange) will rely on economic networks. According to McAndrews (1997), existing networks increase usage and benefits by adding value to any good. This encourages higher adoption and usage rates. Any CC that is backed by a network of users will have a higher value and wider acceptance (Ryan-Collins 2011). According to Jackson and Wolinsky (1996) informal and formal social networks are useful for communication and provide new opportunities. Similarly, Kinyanjui (2010; 2012) shows that ordinary people in Kenya use informal, social trust-based relations and associations such as Vyama (Swahili word for social groups) for survival, coordination of market encounters and human interaction in the informal economy.

**Table 2.5: Network Theory**

<b>Networks theory approach to CCs</b>	
<b>Scholars</b>	<b>Key Tenets/Assumptions</b>
<b>(Pescosolido, 2006).</b>	Individuals act and react to the social groupings in their environment; neither purely rational nor puppets of the social structure;  Networks shape an individual’s actions through consultation, information and resource sharing and they influence individual’s behaviour, action, outcomes, beliefs and attitudes.
<b>North (2004)</b>	Networks build on barter trade and mutual aid exchanges; no trading can occur without networks

<b>Networks theory approach to CCs</b>	
<b>Collum (2012)</b>	Concentration of networks is important because they produce bonding social capital; ensure information flow is faster and give referrals.
<b>Zagata (2004)</b>	Networks facilitate a successful cycle of exchanging CCs.
<b>McAndrews (1997) and Ryan-Collins (2011).</b>	Networks increase usage and benefits by adding value to any good and network backing is important in influencing usage.
<b>Jackson and Wolinsky (1996)</b>	To informal and formal social networks are useful for communication and provide new opportunities.
<b>Kinyanjui (2010; 2012)</b>	Networks in Kenya are important for survival and coordination of market encounters.

## **2.4. Network theory of diffusions**

The above theories have however overlooked the information discussed among various networks that lead to people within the same community, experiencing the same social, economic and political conditions to accept or reject CCs. To fill this gap, this study incorporates the diffusion of innovations theory/network theory of diffusions—a theory that is concerned with why some innovations are adopted more quickly than others and why some people adopt innovations while others reject them. This study identifies CCs as a type of innovation.

According to Rodgers (1997), new ideas are diffused and communicated through special types of messages in the social system and how the social system is responsible of communicating characteristics of the innovation. Acceptance of innovations is a social process. The social system is the most important element in diffusion the innovation because it constitutes a boundary within which an innovation diffuses. The social system—individuals, informal groups, organizations, and/or subsystems dictates the behaviour patterns of individuals within the social system. The social structure influences the spread of new ideas and practices by shaping patterns of interaction within the network—who talks to whom (Burt, 1987). The structure of any network has innovators and highly central players who have many contacts and are more likely to be early adopters of advantageous innovations. Isolates—people who are not connected to anybody else, tend to show considerably later adoption times (Rogers and Kincaid, 1981). Through weak ties, people serve as bridges between unconnected groups and they are equally

important links in the diffusion process (Granovetter, 1983; Burt, 1992). Highly centralized networks (with a small number of highly central actors) should demonstrate a higher rate of diffusion. It is argued, when an innovation is adopted by the central actors, the innovation will spread rapidly through the network (Valente, 1995). Diffusion will be more rapid in networks that are densely interconnected (Black, 1966).

The information diffused about an innovation is centred on five issues: the advantages of using the innovation, compatibility of the innovation to the existing system, the ease of using the innovation, the observability of the results of using and the rules pertaining the usage of the innovation (*see further discussions in Chapter Three: Conceptual Framework*).

**Table 2.6: Diffusion of innovation approach**

Diffusion of innovation theory approach to CCs		
Source	Key Tenets	Strengths
Rodgers (1997)	Social system dictates behaviour patterns Opinion leaders informally influence other individuals' attitudes or behaviour to what is deemed as desired.	Allows better understanding of networks and the diffusion of information; why some innovations are adopted more quickly than others and why some people adopt innovations while others reject them.
	Information diffused: the advantages, compatibility to the existing system, the ease of usage, the observability of the results and the rules on the usage of the innovation.	

This theory is important because it allows us to:

- Understand the role of networks in the diffusion of information and the adoption of CCs.
- Explain the variations in people's adoption strategies and rate of adoption of CCs among different groups.
- Understand the importance of the information shared and how social interactions shape the adoption of CCs.

## **2.5. Review of Empirical Literature and the Methodology Used**

Several studies have looked at how networks generally influence the acceptability and usage of CCs. The following section reviews how networks have determined the usage of CCs in different regions, highlighting the issues discussed in the theoretical section. Every study is followed by a brief summary of the methodology used in establishing the findings.

While studying an undisclosed U.S Time Bank, Collom (2007) established that social networks of friends, family and acquaintances were only useful in the introductory stage of a CC—in introducing new members and spreading information. However, subsequent usage relied on economic and professional networks (emails and telephone directories) since most people were in formal employment and had less time to socialise. Most users preferred using directories to request the services while only very few relied on referrals and social events to get contacts (Collom, 2007). This conclusion was drawn from a longitudinal survey of usage based on data of transactions records within the Time Bank. The data was collected through an online questionnaire which had both closed and open ended questions. The questionnaire targeted all members of the CC and had a response rate of 46.1%.

This study comprehensively captured the statistical attributes of the exchanges but the qualitative responses were limited to the Likert scale or pre-determined static responses. The networks were measured by asking questions on how respondents learnt about the Time bank, whom they frequently exchanged with and how they sourced for services. However, the study did not show how the size of the social and economic networks and membership facilitated the acceptance of the Time Bank and how the usage varied when people were using either the social or economic networks. It also did not elaborate on what type of information that was exchanged within the social networks (especially in the introductory stage) that led to acceptance of the Time Bank. The study does not incorporate the accounts of non-users of the Time Bank and therefore, it does not comprehensively rule out why certain groups opt to use/not to use the Time Bank.

In the United Kingdom, North (2013) examined how the users of the Stroud Pound and the Brixton Pound identified and perceived the benefits of using a CC. The Stroud Pound is used by Gloucestershire local businesses while the Brixton Pound is a paper currency used in an infamous, violent and relatively impoverished neighbourhood in South London. He also examined the BerkShares- a US based community currency in Massachusetts. North (2013)

used interviews with activists and participating business owners, which he recorded, transcribed and coded, and were supplemented with textual analysis of the local currency notes and promotional materials, and participant observation of customers using the CCs in business settings. From the study, he found out that businesses with local networks were more willing to use CCs.

Businesses with little or no local networks are less likely to use a local CC even when the businesses are locally owned (North, 2013). Studying the BerkShares, North established that a co-op and an upmarket grocery store declined to use the CC because their suppliers were not part of the local network and it would cost them 10% to exchange the BerkShares. These two claimed that they would accept BerkShares seven days a week if the network included their supplier's, tax collectors, garbage collector, and utility bills persons or institutions that could accept the BerkShares (North 2013). However, North did not show how the size and membership to the local/ foreign business network affected the actual usage of these currencies. North (2013) tried to understand the usage of the Brixton Pound which is used in an informal settlement in London. However, Bangladesh (an informal settlement in a developing country) and the Brixton city have very distinct and different structural, economic, political and social conditions that cannot be compared in understanding the role of networks in using CCs.

In Germany, Thiel (2012) used the case study method to examine why people joined the Chiemgauer network. He found out free-riders in the Chiemgau community are either enticed or forced to use it as people boycott businesses of those not using it until the owners joined the Chiemgauer network. Family members, friends and acquaintances are introduced to the CC by being given the Chiemgauer Currency as a present. They are thus made to use it since it is considered rude to throw away gifts. Majority of Chiemgauer users knew each other before the Chiemgauer started—in schools, music places. Initially, it was circulated through social networks and it did not go beyond these social networks (Thiel, 2012). Thiel concludes that there is no rational, opportunity-optimizing attitude on why people use a CC with high operating costs and lesser individual gain. For Thiel's study, the Chiemgauer was chosen because it is the most successful CC in the Regiogeld project in Germany. This is a qualitative study whose data was collected through participant observation, narrative interviews and discussions with

consumers, businessmen and Chiemgauer practitioners. It captures the consumer's usage patterns, reasons for using the Chiemgauer and the appropriated usage patterns.

Gelleri's (2013) is a descriptive study that gives the general information on the performance and progress of the Chiemgauer and how it is used. Gelleri (2013) attributed the increased usage of the Chiemgauer to the expansion of the local currency network to include suppliers and local producers. When the business chain started becoming independent of imported products, the usage increased. As businesses increasingly joined the network, other reluctant businesses also joined the Chiemgauer network because they could now see where they could spend it. For example, they could buy new stock locally, especially from local farmers who were their suppliers and were accepting the Chiemgauer (Gelleri, 2013). Gelleri gives a general insight on how the currencies work. This study has two main limitations: first, this study does not clearly show the differences in acceptance and usage as the network expanded and secondly, it did not distinguish which are the most important networks in influencing usage of the Chiemgauer Currency.

In Hungary, North (2004) pointed out that the low usage of Budapest Talentum, Szolnok and Bordány Kör was due to their incompatibility with the mutual aid networks that existed in the communist Hungarian community. These CCs were introduced by Green Economy activists who wanted to retain the communist Hungarian life in the new capitalistic state. The usage of these CCs was limited because people could not understand why they should charge their friends and neighbours for services they had always been doing for free. According to North (2004), the Talentum and Kor CCs in Hungary failed to take off because the localised nature of community networks that the CCs were promoting were not compatible to the conservative and private networks that existed in the Hungarian lifestyle (North, 2004). This shows that the type of networks and membership to various networks is important and affects usage of CCs. The major limitation of this study is that it does not specify the methodology used.

In Japan, Lietaer (2004) argued that social networks of friends and neighbours were responsible for the high usage of the Furrei Kippu. The Furreai Kippu was able to establish a large circle of trusted and closely relating networks nationally and even overseas where the currency was used. It gained wide usage within networks, to the extent that the elderly preferred having care givers who were paid with the Kippu rather than those paid with Yen (Lietaer, 2004;



Miller, 2008). Lieater (2004) shows that informal networks were preferred over the formal systems and CCs introduced within informal networks spread faster and were used more. According to Lieater, acceptability of the WAT currency depended on the level of trust among the people involved. Reputation was key in enhancing the usage of CCs. Anybody accepting a bill automatically became a “member” and it rapidly spread as it spontaneously created “circles of trust” among sub-groups of participants. Lieater collected the data over a two year period: from 2001 to 2003. The data was collected using personal interviews with key participants and originators of the different currencies. On the contrary, the Earth-day-money—a professionally run CC—that was geared to environmental conservation in an upmarket neighbourhood struggled with low usage due corporate suspicion, lack of trust in the organization that had initiated the currency and failure by the organization to establish strong networks with the target community. People assumed that the company gained immense profits and donations for running the ‘Earth-day-money’ project and were unwilling to cooperate (Lietaer, 2004). This study does not show how the size of the networks influence usage; the type of formal and informal networks that exist and which are most influential as well how membership to various networks influences acceptance of CCs.

Hayashi (2012) conducted a desktop evidence-based historical study on the 40 years development and evolution Fureai Kippu, its trends, variations, operational details and difficulties, and responses and challenges. In it, he contextualized the social, political, and cultural development of Fureai Kippu and interviewed Fureai Kippu members to explore their experiences, views and opinions; observations of member meetings and activities at Fureai Kippu organizations visited. From the study, Hayashi, (2012) linked the success of the Furreai Kippu to the already existing reciprocity Japanese culture. The Furreai Kippu grew strong networks because they developed from mutual help groups of aid volunteers who cared for the elderly in the Japanese society. The Fureai Kippu was widely accepted because it acknowledged altruistic motives and harmonized volunteer-user relationships. This is because the paid volunteer system seemed business-like yet it entrenched personal relationships between users and volunteers. However, this study also fails to show the size of the networks were and how acceptance varied based on the size and density of these networks. It also did not show the type of information discussed within the various networks.

In Argentina, Powell (2002) studied two Red de Trueque (RT) systems—the Red Global de Trueque (RGT) and Red de Trueque Solidario (RTS). Powell (2002) used a mixed method approach that included: an exploratory study; semi-structured interviews for Key Informants; and questionnaires to capture massive quantifiable data from RT participants whom interviews could not cover due to time limitations. The role of networks was captured in questions on participants' motivations to use the RT and how they learnt about the RT.

Powell found out that social networks of friends, relatives and neighbours were instrumental in the national-wide spread of the RT. New members joined because they had heard about it from someone they trusted. The members even wanted the networks to be exclusive closed systems to avoid infiltration by outsiders who would bring in fraud and reduce the trust that people had in the currency. Social networking was also a key reason why most people joined the RT networks. Powell's study revealed that the RGT network nodes were too small to the extent that they were not beneficial since they failed to provide an adequate diversity of goods and services. Members transferred to nodes that were larger with a good clientele. Like other studies, Powell does not distinguish which are the most important networks or how size and membership affected usage. He also did not elaborate what type of information was exchanged with in networks that encouraged/discouraged usage of the RTs.

Phillipe (2011) used one-on-one interviews and focus group discussions to study the Belgian SEL and established that its spread was through advertisement mainly by word of mouth by friends. Most SEL members knew each other from a school within the locality, or from the bio-products sphere. Foreigners and the underprivileged were socially excluded from its use because locals felt that these two groups would not be fully committed and would erode the trust and commitment of the other members. Phillipe (2011) used semi-structured, one-on-one interviews and focus group discussions to distinguish the opinions, motivations and feelings of the interviewees. They were designed based on themes highlighted in the theoretical research. Key players in the initiation of Belgian SEL and participants of a focus group were also interviewed.

In Kenya, Ruddick's (2011) descriptive study attributed the low and irregular usage of Eco-Pesa to lack of a material incentive for the users, presence of a small network, negative publicity from the network and mistrust with the initiating organization. While some felt it was not valuable, others complained they did not know what to do with it, where to spend it and who would accept

it. Ruddick (2011) noted that if the network had been a little bit bigger, and more diverse, there usage could have been higher, easier and more beneficial.

**Table 2.7: Empirical Literature**

<b>Summary of empirical Literature Review</b>			
<b>Author</b>	<b>Currency, country and Year of operation</b>	<b>Level of usage</b>	<b>Types of network ( Findings and Key Variables)</b>
<b>Gelleri, 2011</b>	Chiemgauer (Germany—2004-2015)	High	Social networks_Gifting and boycotting local stores Local business networks
<b>Collum, 2007</b>	U.S Time Bank	Mixed	Social networks (High) Vs. Economic Networks (Low)
<b>North, 2006</b>	Talentum and Kor (Hungary)	Low	Community Networks
<b>Powell, 2002</b>	Red De Turque (Aregntina)	High	Barter Trade Networks and Social Networks
<b>North, 2013</b>	Berkshares (US)	Low	Local Business Networks
<b>Lieater, 2004</b>	Furreai Kippu (Japan)	High	Informal Social Networks
<b>Ruddick, 2011</b>	Eco-Pesa (Kenya)	Mixed	Local Business Networks

The above studies have following shortcomings in common:

- They overlooked the non-users accounts on why the did not use various CCs and they therefore cannot conclude on whether networks were the main determinants of usage
- While they dicussed the type of networks in relation to acceptability and usage of a CC, they did not discuss the size of networks and number of memberships to various networks as a determinant of usage.
- The studies did not elaborate on the information diffused within the networks.

Therefore in the design of this study we used the network theory of diffussion as discussed in conceptual framework.

To show the relevance of networks in this study, the section that follows highlights how networks have been instrumental in the adoption and use of M-Pesa—a mobile money transfer system that was launched in Kenya from 2007. It has been widely adopted with over 17 million users, about 42.5% of the Kenyan population (Safaricom, 2014).

## **2.6. Role of Networks in Adoption of M-Pesa in Kenya**

M-Pesa is a mobile money transfer system that was launched in Kenya from 2007 and is the most successful mobile based financial service in the developing world. By December 2007, M-Pesa registered 10000 new users daily and two years later, it had recorded 7.7 million users, 38% of Kenya's adult population (Jack and Suri, 2010). M-Pesa is widely used with over 12000 agents across Kenya. Today, M-Pesa (the pioneer of mobile banking in Kenya) is a means for financial inclusion given that over 70% of Kenyan households and over 50% of the poor, unbanked and rural populations use M-Pesa (CGAP, 2010). But how did M-Pesa achieve this success in under two years?

CGAP (2013) compared data from three undisclosed African countries who have different levels of Mobile Money (MM) maturity from 5-25%. CGAP (2013) concluded that social network drives adoption of mobile money and that those who called more people frequently were more likely to use mobile money. This is because Mobile Money Transactions are mainly conducted among friends (CGAP, 2013). According to this study, individuals with five MM connections are over 3.5 times more likely to adopt MM than individuals with only one MM connection. The more active MM users are, the more likely their non-MM connections are to adopt MM. Countries with MM success have larger mobile networks as compared to countries with lesser success. This study shows the relevance of social networks in the adoption of financial innovations and thus vilifies the importance of studying how networks affect the adoption of M-Pesa. CGAP (2013) uses a quantitative data to try to explain the disparities in adoption rates among different types of users, and to identify adoption drivers. Some of the data derived include mobile money transactions, mobile phone activity (calls, SMS, and data), top-up recharges, customer tariff plans, customer and agent demographics of three different countries and this data is used to show why Mobile Money transfer was successful or unsuccessful in any of the countries based on their social connections.

William Jack and Tavneet Suri (2010) argue that in the beginning, registered Mobile Money users forced many unregistered relatives and friend to register for mobile money so that they could lower transaction costs. The continued use of Mobile Money is however now dependent on the number of agent network (William Jack and Tavneet Suri, 2010). This shows that opinions,

pressure and from social networks are important in shaping decision making for the adoption of financial innovations especially those that are network goods..

Johnson (2012), reveals that the success of M-Pesa is based on its embeddedness in social connections, relationships and networks. M-Pesa transactions occur in social networks beyond the household in a wider circle of other relatives and friends. M-Pesa transactions involve inter-personal cash transfers ranging from gifts, giving assistance, celebrating birth of a child to transactions involving borrowing and repayment. There is no time limit or interest to funds borrowed. Traditionally, social networks were based on kin and lineage relationships but in modern Kenya they extend into networks of friends and peers across social contexts of home, social and work life. The use of M-Pesa in informal groups is based on their flexibility and personalized nature of mediating these social relationships as compared formal institutions such as bank (Johnson, 2012).

According to Johnson (2012), poor people look at four key principles of a financial service: its reliability, convenience to access it, flexibility to transact with it and a structure that promotes self-discipline (Collins et al, 2009). Informal financial groups are also favoured because of the social connections they offer, the discipline they provide in making contributions and the 'negotiability' that allows for access to resources at times of need (Johnson, 2012). Similarly, Bangla-Pesa can be considered a flexible, convenient and reliable payment option but as discussed earlier in section 2.4, the network theory of diffusions, suggests that people look at an innovation's advantages/benefits, observable results, rules of using the innovation, ease of use and its compatibility to the existing system. Thus, this study will seek to understand which were the key principles that BP users considered before beginning to use BP.

Further, Johnson (2014) attribute the massive spread of M-Pesa to social networks of friends, neighbors and close relatives. The study is concerned with the reasons why M-Pesa users they send money to each other and who they send money to. Johnson (2014) attributes the deep penetration of M-Pesa into rural Kenya to social networks arguing that although M-Pesa started as a system of domestic remittances in which urban workers send money to their rural folks, a network of rural M-Pesa users has developed whose transactions far outnumber those from urban remittances (Johnson, 2014). To understand the underlying motivations on why rural dwellers use the mobile money transfers, the study takes a qualitative approach while using in-depth

personal interviews. This study shows that social networks are key in the adoption of financial innovations and that people in close relationships adopt the innovation as compared to those with no social relationships.

**Table 2.8: Role of networks in Kenya’s M-Pesa**

<b>Summary of literature on the role of networks on the adoption of Mobile Money in Kenya</b>	
<b>Source, type and location</b>	<b>findings and variables</b>
<b>CGAP (2013)</b>	quantitative study of 3 undisclosed african countries: Social network drives adoption of mobile money.
<b>William Jack and Tavneet Suri (2010) (Kenya )</b>	Registered MM users forced many unregistered relatives and friend to register for mobile money so that they could lower transaction costs. Opinions, pressure and from social networks are important for the adoption of financial inovations
<b>Johnson (2012), Qualitative study based in Kenya</b>	M-Pesa is embedded on social connections, relationships and networks. Important social networks include: household circle, relatives and friends. Poor people look at four key principles of a financial service: its reliability; convenience to access it; flexibility to transact with it; structure that promotes self-discipline.
<b>Johnson (2014)-Kenya Qualitative (in-depth personal interviews.)</b>	M-Pesa spread due to social networks of friends, neighbors and close relatives. In rural Kenya its sustained by a network of rural M-Pesa users has developed whose transactions far outnumber those from urban remittances. People in close relationships adopt the inovation as compared to those with no social relationships.

Having shown the relevance of networks in the adoption of M-Pesa, a key payment system in Kenya, this study will therefore seek to understand how these networks could also be key in the adoption of CCs in Kenya.

## CHAPTER THREE

### CONCEPTUAL FRAMEWORK

This study uses a combination of network theory and the diffusion of innovation theory as its theoretical framework. This is because, although the networks are an important aspect of the study, what is more important is the kind of information that is passed in these networks. For instance, the study hypothesizes that negative messages about BP will discourage usage while positive ones will increase acceptability.

Network theorists emphasize on the importance of social-cultural, economic and political ties in understanding the success of CCs. According to Network theorists, social-cultural ties— of family, friends, neighbours, self-help groups, religious and ethnic organizations, and community/welfare groups (Zagata, 2004; Jackson and Wolinsky, 1996; Ryan-Collins, 2011; Dodd, 1994) and economic ties—of business partners, employer-employee, acquaintances, colleagues; credit unions and people trading in the same goods/services (Zagata, 2004; Kinyanjui, 2010; Kinyanjui; 2012) are key in the explaining and determining the usage and acceptability of CCs.

According to Pescosolido (2006), networks are important because they shape an individual's actions (Pescosolido, 2006) and they serve different purposes (Zagata 2004). Jackson and Wolinsky (1996) argue that informal and formal social networks are useful for communication and provide new opportunities. North (2004) argues that before members begin trading using a CC, they must create networks build on barter trade and mutual aid exchanges. If there are no people to join the network, there will be no trading partners to exchange the CCs with.

The network theory assumes that an individual cannot be understood independently of relationships, ties, social structure and the society he lives in (Pescosolido, 2006). According to Zagata (2004), networks are important in facilitating successful cycles of exchanging CCs. For a CC to be used, an appropriate amount of reciprocal exchanges and cooperation between community members must be available.

Kinyanjui (2010; 2012) shows that ordinary people in Kenya use informal, social trust-based relations and associations such as *Vyama* (Swahili word for social groups) for survival, coordination of market encounters and human interaction in the informal economy.

The diffusion of innovation theory explains the relevance of the information passed/diffused within the social network—either positive or negative and argues that such information will determine whether an individual accepts or declines to use the CC. For instance, a large network tells members in their meetings that a certain CCs is hard/complicated to use, or it offers no advantages over the existing currency, members of that network may be inclined to not accepting the CC. The social system is the most important element in diffusion the innovation because it constitutes a boundary within which an innovation diffuses. The diffusion of innovation theory explains how new ideas are diffused and communicated through special types of messages in the social system and how the social system is responsible of communicating characteristics of the innovation which include:- the relative advantage of using the innovation; its compatibility to the existing system, the use of its use and the observability of the results of the experiment (Rogers, 1995).

According to Rodgers (1962), an innovation must be perceived as better than the idea it supersedes. Relative advantage is mainly calculated based on the economic terms, but social prestige, convenience, and satisfaction are secondary considerations. The higher the perceived relative advantage of an innovation, the more rapid its rate of adoption will be. This study will look into how various networks are viewed the relative advantage of using Bangla-Pesa and which was the most important for them. For instance, did some networks see it as a tool of economic stability or did they use it to improve their social status in society?

The compatibility of the innovation with the current system, existing values, past experiences, and needs of potential adopters influences its adoption rate. When an innovation is perceived as incompatible it will not be rapidly adopted. If it is to be adopted, a new value system must be adopted prior and this is a relatively slow process. The study will look at how various networks perceived the compatibility of the Bangla-Pesa to the official monetary system, the Islamic finance laws, the local businesses set up, and whether they viewed it as compatible or incompatible.

The complexity of an innovation is the degree to which an innovation is perceived as difficult to understand and use. Where new skills and understandings are needed to use an innovation, the rate of adoption may be slower. Where the innovation can be experimented it increases the faster adoption. It reduces the uncertainty and future adopters who consider learning about it while

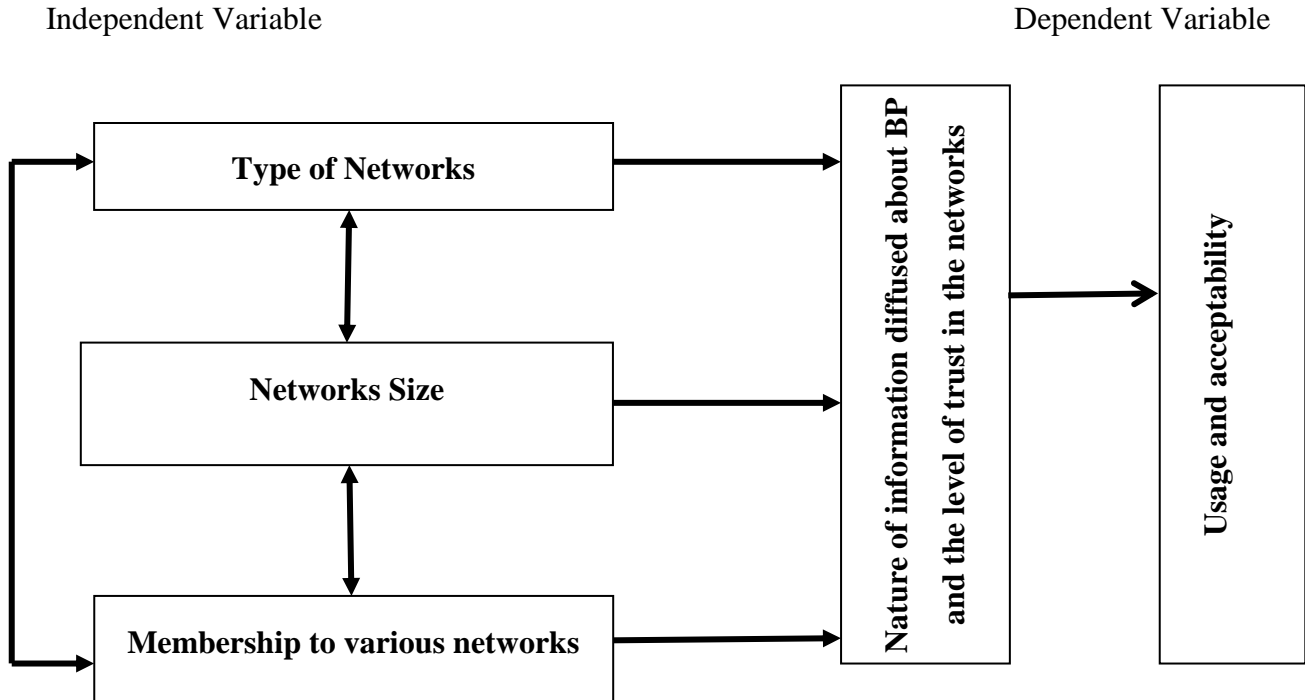


doing it (Rogers, 1962). The study will look into how various networks understood the using of Bangla-Pesa, if they viewed it as easy or complicated to use. Further, the study will look at whether the various networks tried to understand how Bangla-Pesa is used and whether the use of Bangla-Pesa was demonstrated in their meetings or they ignored it all together.

Lastly, the degree to which results of an innovation are visible to others can affect the adoption rate. Visibility of results stimulates peer discussion of a new idea, as friends and neighbours of an adopter often request innovation-evaluation information about it. The study will look at whether the various networks saw the benefits or using Bangla-Pesa and what were the debates among friends, neighbours and business associates on the benefits of using Bangla-Pesa.

The theory notes that individuals in the same social system adopt innovations at different rates and this can be examined by the case with the time when people adopt. The first group to adopt is usually the innovators who come up with the idea. The early adopters are opinion makers—liberal minded people who can influence decisions. Early majority, late majority are other categories based on the rate of adoption. The laggards are those that completely reject the innovation. The study will look at networks which had the innovators (those that came up with the idea), the early majority (the first 50 users), the late majority (the last 50 users) and the laggards (those who have qualified to use Bangla-Pesa but have completely refused to accept it). This theory is conceptualized as follows:

**Figure 3.1: Conceptual Framework (Author's Conceptualization)**



### **3.1. A discussion on the Conceptual Framework**

This study looks at how networks affect the usage and acceptability of BP. The usage and acceptability of BP is therefore the dependent variable in this study. The study narrowed down to one key independent variable (networks). To understand ‘networks’ this variable has been operationalised in the following parts: type of networks; size of networks; number of networks. As explained in the theoretical literature review, the study goes beyond looking at what networks were involved in using CCs, to capture the exact information that this networks shared about BP and how this information shaped acceptance and usage of BP. For this reason: the diffusion of information and the level of trust are intervening variables cutting through all key aspects of networks.

### **3.2. Hypotheses of the Study**

The study has four main hypotheses based on the research questions in Chapter One:

### **Size of the network**

Small close knit networks have high levels of trust and are influential in impacting an individual's decisions while large dispersed and weakly linked networks are sources of a lot of information but are less trusted and less influential in impacting on the individual's decisions. The study expects that users of BP are likely to be in both large and small size networks while non-users are in large size, loosely connected networks.

Hypothesis 1: Size of the networks does not affect the diffusion of information within the network and therefore does not affect people's responses to accepting and using CCs.

To test this hypothesis, the study asked questions on how big the respondents' networks are; which networks they trust most; who the users exchange BP with; how many people in respective networks have adopted BP; number of people in the networks connections with which the respondent exchanges BP with; connection between BP guarantors; number of people has the respondent has introduced to using BP; frequency of exchanging with people not within the respondents networks; connections between those with their frequent exchangers; and the relationship of the respondent have with those they introduced.

### **Membership to various networks**

The membership to a higher number of networks can significantly determine how many sources of information one has on an innovation. Thus, the study expects that users higher the number of membership to more networks and the information they garnered from these networks increased the chances of accepting Bangla-Pesa. Meanwhile, non-users are likely to have lower number of memberships to various networks are likely to receive a lot less information and may therefore not accept BP due to lack of awareness, experience, lack of personalised information or the right information.

Hypothesis 2: Membership to a high number of networks does not increase possibility of accepting BP.

To test this hypothesis, the study asked questions on the number of memberships; where they first heard of BP; who guaranteed them into using BP, why they begun using BP and who they exchange BP with. Further, the non-users answered questions on their awareness of BP; if they have qualified to receive BP; relationship to any BP users and whether they are members of the

same networks and if they are, why they do not join the BBN. The study also sought to understand the features of BP that appeals/ do not appeal to them.

### **Type of network**

Various networks will encourage individuals to accept BP if it is in line with their objectives, goals and activities. Thus, the study expects that users are members to networks that relate to the BP components while non-users are members to networks that do not relate to BP activities. For instance: members environmental networks are inclined in accepting BP as it has environmental conservation benefits to the community which is one of their main activities. The settings, leadership, values, characteristics of members are also some of the considerations when looking at the type of networks.

Hypothesis 3: Type of networks does not affect member's inclination to accept BP

To test this hypothesis, the study asked questions on the types of network respondents belong to; composition of the networks, such as gender, age, community; trust levels of various networks; how they are sustained and which are considered most important. Further, the study probed on how often respondents participate in networks activities and which networks that contribute the highest/least number of BP users

### **Diffusion of information**

The study recognises that networks are important sources of information, shaping opinions and perceptions on innovations. For instance, the study hypothesizes that negative messages about BP will discourage usage while positive one will increase acceptability. Thus, if a given network only disburse information that portrays BP negatively, its members are more likely to stay from using it because they trust their leader's opinion or even because other members are not using the innovation. This forms our fourth and final hypothesis.

Hypothesis 4: the type of information diffused with in networks does not affect the usage of BP.

To test this hypothesis, the study asked questions on where the respondents first learnt about BP; their attendance to networks meetings; on whether they ever had discussions did you have about BP; how the messages portrayed BP and whether they encouraged or discouraged usage of BP. Specifically, the study asked questions on the five issues in the network theory of diffusions on:

innovation's advantages/benefits, observable results, rules of using the innovation, ease of use and its compatibility to the existing system.

### **3.3. Definition of Terms**

#### **3.3.1. Network**

A network is a social network consists of a set of actors (individuals, groups, organizations, or societies) and the relationships between these actors. These relationships/ties may on an individual-to-individual level or may cross through several levels such as an individual-to-group tie (Katz et al., 2004). In this study, the purpose of forming or belonging to a network is for information sharing. A network is therefore operationalized as a group or membership to a group that shares information about CC. This consist of mothers union, mother's guild, merry go round, chama, distribution channels, football/soccer club as well as other economic/social/cultural/religious groups where members meet to discuss or share information.

#### **3.3.2. Size of network**

The size of networks refers to the number of members in a given group. In this study networks, the networks sizes are referred to as large networks (with more than 100 members) or small networks (with less than 100 members). This cut off point because 100 is the average of the BBN (a network which is considered to have high memberships in Bangladesh slum)

#### **3.3.3. Number of network**

The number of networks refers to an individual's membership to various groups.

#### **3.3.4. Nature of networks**

The nature of network refers to the composition of the network, the characteristics of members and the periods when they meet.

#### **3.3.5. Informal Settlement**

According to the UN Habitat Programme1.) an informal settlement is a residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally; 2.) unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing) (UN, 1996). In this study, an informal settlement refers to an unplanned or poorly planned physical space that

is formed through gradual infiltration into private or government owned land by squatters and especially rural urban migrants, without formal approval from relevant authorities. They concentrated with residential and commercial activities and mostly located on the outskirts of major cities and towns. The word slum is used to refer to an informal settlement (Gatabaki and Karirah, 2004).

### **3.3. 6. Complementary Currencies**

A complementary currency is an agreement to use something else than legal tender as a medium of exchange, with the purpose to link unmet needs with otherwise unused resources (Lieater and Hallsmith, 2006). In this study, a complementary currency is an alternative, mainly un-official or non-government issued medium of exchange used to facilitate transaction among businesses in a specific geographical area by members who subscribe to the currency's business network.

Having reviewed the relevant literature, the next section examines the study's methodology, and how data was collected.

## **CHAPTER FOUR**

### **METHODOLOGY**

#### **4.1. Research Design**

The research uses a mixed method approach—triangulation between qualitative and quantitative research methods. It combines qualitative (key informant interviews) and quantitative (surveys) research methods. The quantitative section allows for quantification of descriptive statistics and test of significance between the independent and dependent variable. The quantitative section uses frequency and percentage distribution tables and contingency tables to express the data. The qualitative section complements the quantitative method and is summarized in thematic sections. The main objective is to understand ‘how’ networks and the information diffused within these networks have shaped the usage of Bangla-Pesa. In this study, the role of the network is main the independent variable that influences the acceptability and usage (dependent variable) of the complementary currency in the Bangladesh Slum.

#### **4.2. Study Site**

This study was conducted in Bangladesh Slum in Mombasa, Kenya. Bangladesh slum is located along the highway in Changamwe District and is the largest slum in Mombasa with a population of about 25,000 people (with an average of seven people per household). It has 6 villages: Nairobi area, Mkupe, Kichimbeni, Majengo/Majengo Mapya, Giriamani and Bangladesh centre/central. The slum’s population is a multi-ethnic mix of people who have migrated from rural Kenya to work in the coastal town especially in the port and warehouses (Sabuni, 2011). Bangladesh Slum is ideal for the study because it has the only operational CC in Kenya. The other CC, the Eco-Pesa in Kongowea market as a pilot project and was discontinued in 2011 due to operational difficulties. The Gatina Pesa in Kawangware, Nairobi has just been introduced in October 2014.

#### **4.3. Population and Sampling**

The units of analysis in this study are businesses in Bangladesh slum and business owner/manager was the targeted respondent. The total population of the businesses in Bangladesh slum is 300 of which 200 use BP. The 200 businesses represent 70% of the total

businesses in Bangladesh slum (Ruddick, Richards and Bendell, 2013). This means that 100 businesses or 30% of the total do not use the Bangla-Pesa. According to Borg and Gall (2003), for a population more than 100 but less than 500; a 30% sample is representative enough. For this study, 60 businesses for users and 30 businesses for non-users formed the sample size. This represents 30% of the populations. Therefore, the total sample size for the study is 90 businesses. While there is a list of all the 200 users of Bangla-Pesa, no such list exists for the non-users. In this study, users refer to businesses registered as members of the Bangla Business Network and have been issued with Bangla-Pesa. The study used simple random sampling to select the 60 user businesses in the sample. This was done by first assigning numbers to all the 200 businesses. After that, I wrote the numbers of all the 200 businesses in the BBN on small pieces of paper. I then folded them and placed them in a box. I randomly drew 60 papers and these were the business which I interviewed. Non-respondents were replaced from the remaining population using the same procedure. For the 30 non-users, I used convenient sampling where any 30 non-users (at least four in each village) in Bangladesh were interviewed. Non-users refer to any business within Bangladesh slum whose owner is not a member of the Bangla Business Network and has never been officially issued with Bangla-Pesa. I identified non-users as businesses that lacked the “Bangla-Pesa Inatumika Hapa” sticker (means Bangla-Pesa is used here).

#### **4.4. Data Sources**

For this study, data sources include both primary and secondary data sources (Blaikie, 1999). The primary sources include interviews with key informants/expert respondents and survey respondents. The key informants/expert respondents were drawn from the following institutions: NGOs and especially KORU Kenya, government, university experts, Bangla Business Network (BBN) and Gatina Business Network (GBN) members. In total, the study targeted between ten to fifteen experts.

The experts interviewed included:

1. KORU Kenya Chair/ Founder of Bangla-Pesa
2. Bangla-Pesa official
3. Gatina-Pesa official
4. The area Member of Parliament
5. The area chief, the county commissioner and the Officer Commanding Police Division



6. University experts
7. A Central Bank of Kenya official
8. Treasury official
9. Most recent Bangla-Pesa member
10. The first Bangla-Pesa member

Data for the Key Informant Interviews was collected using an interview guide (*see appendix III to V*). For the survey data, the study used a face to face administered questionnaire with both structured (closed ended) and unstructured (open ended) questions (*see appendix I and II*). The data was then entered into an SPSS database for analysis.

Secondary data sources used in this study include: books and book chapters; electronic journals and especially the International Journal of complementary Currencies Research at <http://www.ijccr.net>; Reports and Websites of renowned CCs researchers such as <http://www.lieater.com/>; blogs such as @devlog (University of Bath, UK), Research thesis; newspapers and news clips.

#### **4.5. Data Needs Table**

The data needs table below breaks down, the data collection methods used and the kind of data collected and from whom. This study used both quantitative and qualitative research methods.

**Main research question: How do networks influence usage of Bangla-Pesa in Bangladesh?**

**Table 4. 1: Data Needs Table**

<b>Research Question</b>	<b>Data Needed</b>	<b>Respondents</b>	<b>Type of Data</b>
<b>To what extent is the usage/acceptability of Bangla-Pesa a function of the types of networks available in the Bangladesh slum?</b>	Types of network	Users and non-users	Quantitative
	Composition of the network such as gender, age, community	Users and non-users	Quantitative
	Most important networks	Users and non-users	Qualitative
	Participation in networks activities	Users and non-users	Quantitative
	Networks that contribute the highest/least number of BP users	Users and non-users	Quantitative
<b>How has membership to these networks influenced the acceptability of the Bangla-Pesa?</b>	Number of memberships	Users and non-users	Quantitative
	Where they first heard of BP?	Users	Qualitative
	How many people in respective networks have adopted BP?	Users	Quantitative
	Connection between BP guarantors	Users	Qualitative
	Number of people has the respondent has introduced to using BP	Users	Quantitative
	Network connection with people they have introduced	Users	Qualitative
	Awareness of the BP	Non-Users	Quantitative
	Have you qualified to receive BP	Non-Users	Quantitative
	Knowledge of any BP users Relationship with the users Network connection with users	Non-Users	Qualitative
	Why they do not join? Features of the BP that appeals/ does not appeal to them	Non-Users	Qualitative
<b>To what extent is the acceptability/usage dependent on the size of the network?</b>	Whom they exchange BP with	Users	Qualitative
	Networks connections with their frequent BP trading partners	Users	Quantitative
	Exchanges with people beyond their networks	Users	Quantitative
	Network connections with their frequent exchangers	Users	Qualitative
<b>Diffusion of Information on Bangla-Pesa</b>	Where did you first learn about BP	Users and Non Users	Qualitative
	Meeting attendance	Users and Non Users	Qualitative
	Discussions did you have about BP	Users and Non Users	Qualitative
	How the messages shaped usage.	Users and Non Users	Qualitative

## 4.6. Data Analysis

This study generated both qualitative and quantitative data. The qualitative data is mainly sourced from the Key Informant Interviews and open ended questions in the questionnaire. The quantitative data was derived from the quantifiable closed ended questions in the questionnaire.

The demographic and basic characteristics of the unit of analysis—business owners generated quantitative descriptive statistics. Each variable was analysed independently—uni-variate analysis and was analysed into frequency and percentage distribution tables. The analysis has been presented graphically using graphs/charts/tables that show the percentage distribution of various characteristics.

Specifically, the four research questions were analysed as discussed below.

**Question One:** How is the usage/acceptability of Bangla-Pesa a function of the types of networks available in the Bangladesh slum?

To answer this question, we used both quantitative descriptive statistics and qualitative data. For quantitative data, the variables were independently analysed and presented in percentage/frequency distribution tables. The data was analysed through simple descriptive statistics. The qualitative data was analysed using content analysis on type of networks available, the most trusted networks, roles of various networks and their memberships. After interviews were done, and cross checked, the data was transcribed and thematically reduced and sorted into categories/content themes. Sub-themes were lined within larger theme using Microsoft Word. The responses of the respondents have been paraphrased and are accompanied by a caption that reflects the respondent number and the year of the interview so as to maintain the confidentiality of the respondents.

**Question Two:** How has the size of these networks influenced the acceptability of the Bangla-Pesa?

This question generated both qualitative and quantitative descriptive statistics. The data was analysed using bivariate analysis. This allowed cross tabulation to measure how the two variables relate. The quantitative statistics is supported by verbatim responses in the case of where respondents gave explanations or elaborated their networks. The responses of the respondents have been paraphrased and are accompanied by a caption that reflects the

respondent number and the date of the interview so as to maintain the confidentiality of the respondents.

**Question Three:** To what extent is the acceptability depended on the number of the network?

Quantitative data is analysed through cross tabulation to test significance. This analysis is expressed in contingency tables. This level of analysis is bi-variate analysis. This is supported by verbatim responses in the case of where respondents gave explanations or elaborated their networks.

**Question Four:** How does the information diffused about Bangla-Pesa affect its acceptability/usage?

The data was gathered in qualitative form and thus analysed through themes based on the theoretical review. These themes include: BP as a political tool; compatibility of BP to the Kenya shilling and current monetary system, the advantages of using BP, the rules of using BP, the ease of using BP and the observability of the advantages of using BP. The section uses verbatim responses from the respondents to elaborate on the exact information diffused with in networks.

## **CHAPTER FIVE**

### **FACTORS THAT INFLUENCE USAGE OF BP IN BANGLADESH SLUM**

#### **5.1. Introduction**

This chapter discusses the study characteristics of the study's respondents and reports on the findings of the study based on the research questions in chapter one. The chapter is divided into five sections: Section one discusses the characteristics of the respondents; section two, the types of networks; section three, the size of the networks, section four, the number of membership to these networks; and, five, the information diffused about Bangla-Pesa (within the network) and how it has influenced usage of BP. The level of trust and the nature of information diffused are intervening variables and they are discussed within the various sections in this chapter. Tables, figures and charts have been used to illustrate the study findings where appropriate.

This analysis shows that there is no single reason that accounts for the decision by a resident of Bangladesh slum to use Bangla-Pesa (BP). In summary, while belonging to networks was an important influence or determinant of the usage of BP, it was not the network per se that was important. Rather, it was the type of memberships, the size of the network (how large or small in membership), and the number of networks one belonged to that was more important in determining the usage. Users and non-users in Bangladesh Slum belonged to similar networks. However, there is a significant difference between the types, numbers and sizes of networks that users and non-users belonged to. BP users were in more networks than non-users and their networks were both large and small. Non-users belonged to only small networks, while the networks of users are in larger networks (more members). It is therefore not belonging to a network per se that was key in determining usage but the nature, size and number of networks that determined usage. This is discussed in detail in the sections that follow.

#### **5.2. Characteristics of Study Respondents**

To understand the role of population demographics and characteristics of the respondents as possible determinants of usage of BP, the study asked general questions on the respondents age, gender, level of education, type of businesses, and general trust levels to various networks/community members. This section gives a detailed discussion of these characteristics.

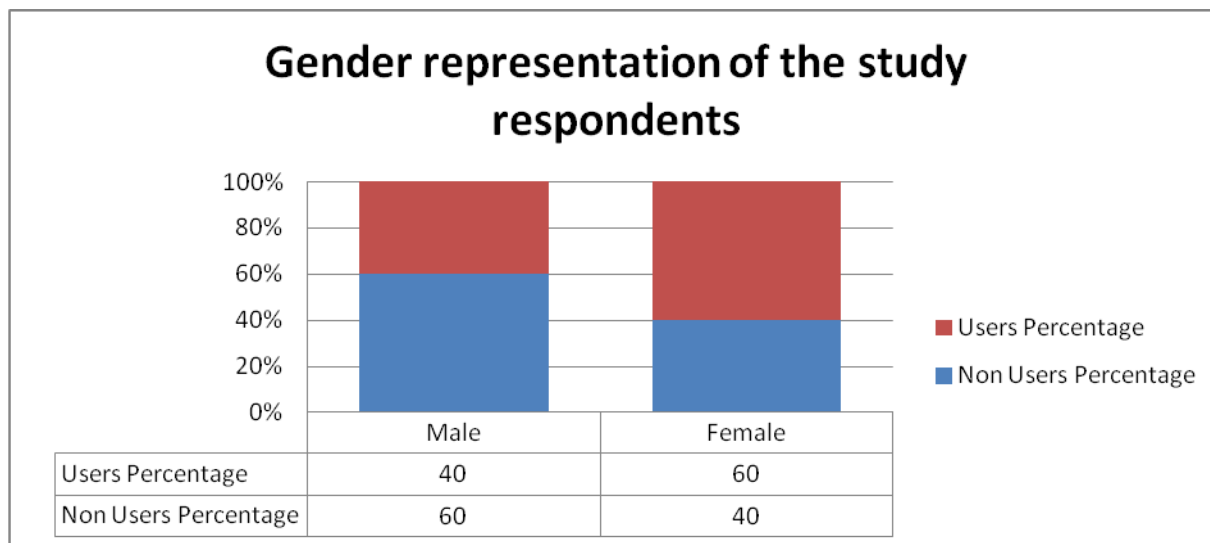
##### **Gender**

In the survey data, we asked the respondents on their gender — male or female. The question was analysed using simple descriptive analysis. From the survey data analysis, a large percentage of users of BP (60%) are women while a majority of the non-users surveyed (60%) are men. This data is a reflection from the 60 user respondents and 25 non-users respondents. This is not surprising because it is reflective of the demographics in the slum. Most households in Bangladesh slum are headed by women and majority of the businesses within the slums are women owned. Many of the men in the slum are unemployed or unemployable. A Key Informant explained this:

*They (men) came to Mombasa and the joys of Mombasa ate them up. Few men are left, and even those left are sick, very sick or are drunk. The few sober men left work outside the slum in warehouses, at the Port and thus they are not qualified to get BP. (KII C, April, 2015).*

This finding is supported by Omanga (2015), who found that among 123 respondents a majority of BP users were women (71%), as compared to men (29%). The gender representation of the survey respondents is as shown below:-

**Figure 5 . 1: Gender Representation based on the study respondents**



*Source: Survey Data*

However, while the statistics above show that gender is a possible determinant of usage of BP, it is important to note that women have more networks than men. Thus, this study argues that

women use BP more than the men because they have more networks than men. From the survey data, majority of the women-users (51%) have four or more networks as compared to 30% for men with more than four networks. Majority of the men (71%) have 1 to 3 networks as compared to 50% for women. Thus, gender by itself is not a determinant of usage of BP. This correlation of gender and number of networks is elaborated below.

**Table 5.1: Networks of users based on their gender orientation.**

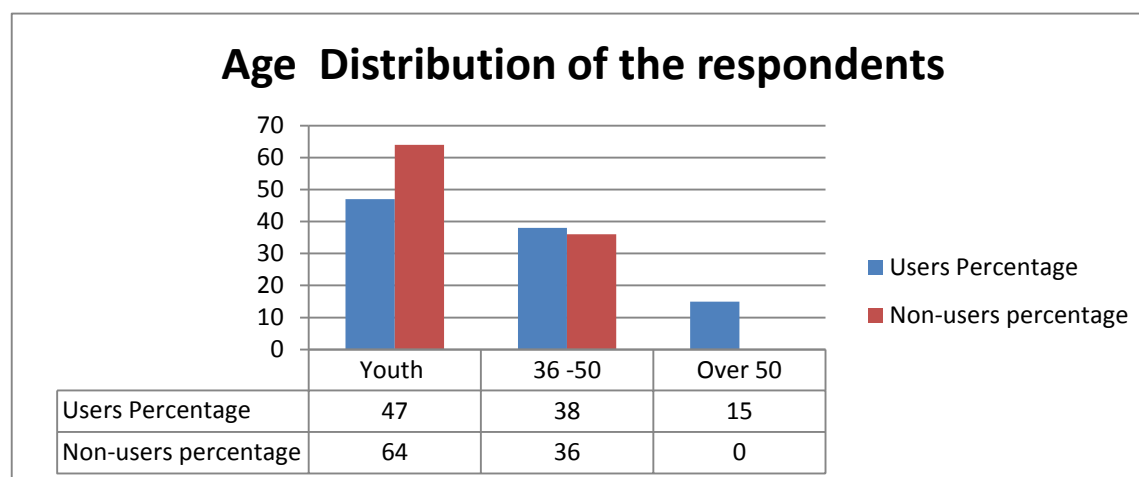
<b>Gender</b>	<b>1</b>	<b>2-3</b>	<b>4-5</b>	<b>Over 5 networks</b>
<b>Male</b>	13%	58%	30%	0%
<b>female</b>	10%	39%	39%	12%

Source: Survey Data

**Age**

The study findings show that age was not a determinant of usage especially because the youth form huge percentages of the users and non-user populations. 47% of users were youth (35 years and below) while 64% of the non-users were categorised as youths. Only 15% of users were over 50 years and the rest (38%) were aged between 36 and 50 years. Majority of the non-users were youths (64%) while the rest (36%) were aged between 36-50 years. In this study, all respondents of over 50 years use BP. This is elaborated in the graph below.

**Figure 5. 2: Age Distribution of the respondents**



Source: Survey data

### Education

In the survey, the respondents were asked of their highest level of education based on the categories shown in table 5.2 below. The level of education is important in this study because according to North (2013) and Collum (2007), CCs are successful in communities with high levels of education. On the contrary, the survey data reveals that the education levels in Bangladesh slum are generally low. 73% of BP users and 60% of non-users have not acquired complete secondary school education. While 23% of users have less than primary school education, only 8% of the non-users have less than primary school education. This is elaborated in the table below.

**Table 5. 2: Level of Education**

Level of education	Users (%)	Non-Users (%)
Not completed Primary School Education	23	08
Primary Education	27	36
Some Secondary School Education	22	16
Secondary School Education	20	12
Tertiary/University Level Education	08	28
<b>Total</b>	100	100

Source: field data



As elaborated in the table 5.2 above, all levels of education (from those with no basic education to those who have acquired tertiary/university education) were represented among the users and non-users populations. 28% of the users and 40% of the non-users had at least completed secondary education. A further 50% of users and 52% of non-users had completed class eight (and graduated with primary education). However, only 8% of users had tertiary or university education. There is a slight but significant difference in the education levels of users and non-users. Generally, users are less educated, with only 8% having acquired tertiary/university education while 28% of non-users have degrees/diplomas/polytechnic training. Similarly, while 23% of the users did not get to class eight, only 8% of the non-users did not get to class eight. Lastly, while 40% of the non-users had at least secondary school education, only 28% of the users had secondary school education. Based on the study findings and analysis, education is not a major factor in determining the use BP because the education levels are generally low and even those with higher levels of education do not use BP.

### **Types of businesses**

In the survey, respondents were asked what their main source of income was. The analysis study found there is a major difference in the businesses (and business persons) that use BP and those that don't use/accept them. Based on the survey data, both users and non-users of BP tend to cut across the larger cross-section of businesses in the slum ranging from retailers, whole sellers of locally produced goods and those sourced outside the slum. However, the users of BP were mainly small food vendors, retailers and businesses whose main goods were sourced within the slum. Their mainly sell: water, cooked and raw food, vegetables, detergents and services. Most non-users were in more established businesses which sourced most of their goods are sourced from external markets such as Kongowea Market and their clientele include people who live outside the slum. The non-users businesses included: wholesale shops, service oriented businesses (wholesalers of key food commodities, photo studios, taxi services, cosmetics shops, health clinic, barber, M-Pesa's and electrical shops) and whose goods are largely sourced from outside the slum (spare parts, vegetables and food stuffs and cosmetics).

When asked why they use/don't use BP, the reasons given contrast significantly. For instance, while users of BPs in these businesses see the alternative currency platform as beneficial to them

and their businesses, non-users claim that it is because it does not have any significant benefits that they don't use it. Some BP Users gave the following statements in support of using BP.

*I use it with food so that I can get money for school fees since I avoid spending my Kenyan money on food. I can pay tuition for one child in BP since they attend St Mary's Primary. Though the rest are not in Bangla, I usually save enough when I use BP so I can pay their fees in Kenyan Shillings (KES). (Respondent 36, April 2015).*

*When I am broke, I go to my colleagues and we help each other out. (Respondent 23, April 2015)*

*It is easy to use since you cannot lack food. It gets to a point when all you have is BP and no KES. For instance, there is a time when lights went off for three days and given I am a barber, there was no work. However, i still had food since I bought food with BP. I currently have 200BPs. I used it on Monday last week when I bought meat at Mangenda's for 20KES and 50BPs. The last time I received BP was on 22/03/2014 (Respondent 40, April 2015).*

*I like it because I exchange it with teachers of St. Peter's and Paul primary where my children go to. I pay for tuition in Bangla-Pesa (Respondent 47, April 2015).*

Many non-users said that the wholesale businesses have high daily turnovers and since BP transactions are not a significant portion of their daily sales they see no point or benefit of going through the trouble of using it. They also see BP as risky because of the limited number of places and goods that can be traded via the BP platform. These businesses also complain of BP's limited convertibility with other currencies or to purchase new stock. Most of the business owners interviewed claimed that they did not want to use BP because they could not use it to replenish their stock. To them BP is not profitable for their type of businesses or their spending habits. Non-users made the following comments on the why they do not use BP:

*Those who use BP are mostly selling food. For me, it does not help. I don't think many people use it, so where do I take it? (Respondent 67April, 2015)*

*You cannot pump it back into the business. It is not profitable. You cannot save papers.*

*It has no profit. How do 20bobs, 30 bobs and 50bobs help? That is nonsensical work. (Respondent 78April, 2015)*

Some of the responses by non-users need to be treated with caution. This is because there are a number of users who own similar businesses (as the non-users) who find BP beneficial and profitable. There are BP users who own salons, M-Pesa shops, butcheries, retail shops, cyber cafés, hardware shops, tailoring shops and schools. According to a key informant B, the nature of business conducted has nothing to do with why people use BP. According to the key informant:

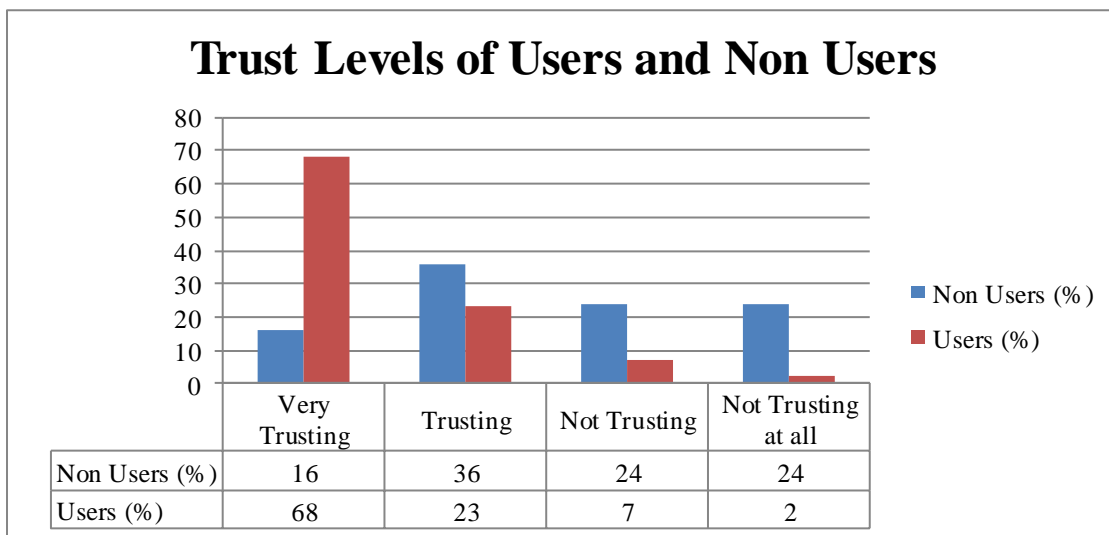
*My neighbour here sells airtime and accepts BP in M-Pesa transactions. It depends on what you want from it. She knows where to spend it and she is interested in the welfare of the community. It's simply being interested. (KII B, 21 April, 2015)*

### Trust Levels

From the survey data, trust is a key characteristic of the people in Bangladesh slum. When asked whether they consider themselves very trusting, trusting, not trusting or not trusting at all, the overwhelming majority (92%) of users of BP consider themselves very trusting/trusting. The question of trust was very important for this study because it is an overarching variable in the conceptual framework and because trust is an important ingredient of constructing strong networks (Hayaki, 2006; Collum, 2007). Moreover, studies by Hayaki (2006) in Japan, Collum (2007) in US and North (2004) in Hungary show that CCs are more highly used in well integrated communities with high levels of trust and cohesion.

There is a significant difference in the trust levels between users and non-users. For example, while 92% of users considered themselves trusting or very trusting, the number of non-users considering themselves as trusting/very trusting was only 52%. That is, while over 9 out of every 10 users considered themselves trusting, only one out of every two non-users considered themselves trusting/very trusting. Indeed, while only 2% of the users considered themselves not trusting at all, the figure for non-users was 24%. This is elaborated in the figure below.

**Figure 5. 3: Levels of Trust**



Source: Survey Data

The qualitative data complements the quantitative data above and also shows that BP users are generally more trusting than the non-users. Statements showing that they are trusting and hopeful include:

*If you give birth to a child, you start breastfeeding it, waiting to see the results. I had the same faith. (Respondent 14, April, 2015).*

*I thought it was to cushion me from uncertainty of this future. This currency could be our saviour. (Respondent 39, April, 2015).*

*We live in poverty and that is why we accept a lot of things to try and help ourselves and others. (Respondent 38, April, 2015).*

*When the group started, it was very popular. We had agreed that the money we could contribute would be used to give members loans but those were just dreams. (Respondent 60, April, 2015).*

The importance of trust is attested by the fact that 96% of the users said they were introduced into using BP by someone they trusted and especially friends, relatives and fellow business men. Those who introduced them became their guarantors and first exchanging partners as they got to know other members in the BBN. Even then, they learnt about other members through referrals and discussions with their guarantors and colleagues. The importance of trust is collaborated by KII F.

*Networks greatly contribute to usage of BP because BP is built on expanding trust relationships. BP mostly relies on introductions because people receiving BP must be able to buy and sell with them locally and must have a network of people to trade with (KII F, April, 2015)*

Below are some of the excerpts from the survey with users that show that they were introduced into using BP systemically, by people they trusted.

*I talked to my friend and after explaining to me, I saw he had the best of intentions. I started with one of my parents who happens to be my good friend called Mama Sigo. (Respondent 44, April 2015)*

*My land lady and customer explained to me how it works and I saw as if it was going to be profitable in the future. (Respondent 19, April, 2015)*

*My friend told me it is something good. (Respondents 35, April, 2015)*

*A friend of the school told me of its benefits, that I could save more and so i decided to join the group. (Respondent 43, April 2015)*

Having shown in this section that the individual's personal attributes are not a major factor in determining the usage of BP, it makes it necessary to probe further what role networks play influencing usage of BP. The discussion that follows is based on the four research objectives in

section 1.4 that seek to understand how the type, size, number of networks and the information diffused within these networks influence the usage of BP.

### **5.3. Types of Networks and Usage of Bangla-Pesa**

The previous section has discussed the major characteristics of the users of BPs. This section seeks to examine the relationship between types of networks found in Bangladesh Slum and the usage of BP. The section seeks to answer question 1: Is the usage of Bangla-Pesa a function of the types of networks available in Bangladesh Slum? To answer this question this section examined the types of networks in the slum.

It should be noted that Bangladesh slum is an ethnically, politically and religiously heterogeneous community of labour migrants from outside Kenyan Coastal regions. As discussed in section 2.5 above, in other countries, CC have taken off in homogenous communities. However in Bangladesh slum, migrants make up over 95% of the slum's population. The main ethnic groups living in the slum include: Luo, Luhya, Kamba, Giriama and the Kikuyu. The overwhelming majority of the slum dwellers are Christian, confessing to belong to over 60 different Christian denominations. Interestingly, Moslems are a tiny minority in the slum. Politically, Bangladesh slum is a microcosm of the entire country. During national general elections in 2013, the slum inhabitants conflicted over both national and local politics. Both at the national and local politics, the local politicians and the entire slum is engaged in heated competition characterized by occasional street and verbal fights, but which is quickly forgotten once the elections are over, as their daily hardships force them to rely on each other for survival (KII C, April 2015).

This research found that despite the heterogeneity of the people of Bangladesh slum, they unite across the economic, social, and political divide on four broad networks. These networks are: religious/faith based organizations, self-help networks, social support networks, and altruistic networks. I now discuss each of these in turn.

#### **5.3.1. Religious/Faith Based Organizations**

The main objective of faith based organizations is to evangelize and spread the Gospel. Majority of these groups are found within a single congregation with very few of them being found among different denominations. Majority of them were Christian in orientation—in fact no respondent

had a Muslim faith based network. During the study, I could not identify a Mosque within the slum. The primary activity of these groups is either worship or fellowship. Religious networks include members who live within and outside Bangladesh slum.

85% of the users belong to religious networks as compared to 60% of the non-users who have religious networks. 73% of non-users are members of the same religious networks as the BP users. However, the religious networks of users are larger (with an average of 350 members) while the non-users are smaller (with an average of 97 members)<sup>2</sup>.

The religious networks especially the St Patrick Catholic Church is the most influential with at least 2000 members. It closely relates with political outfits in the slum to fight for human rights. In fact, offices of “Haki Yetu” group are based within the Catholic Church and calls for meetings are disbursed on Sundays or through religious networks.

St Mary’s, a CDF community school, and St. Patrick’s Catholic Church are the nerve centre of BP and the slum as well. Almost every important decision made and implemented started at either St. Mary’s School or at St Patrick’s Catholic Church. They have the most members and are well established institutions. They also happen to be neighbours (literary) and share common facilities. Smaller religious networks are also part of larger religious networks: for instance; I found a church like St Patrick’s has seven other smaller groups for fellowship purposes, specific professions (such as teachers) and scholarship giving groups. These networks are recognized as separate entities though they converge under the same conditions.

While 85% of the users belong to religious networks only 8% trust them. Among the non-users, out of the 60% with religious networks, only 24% trust them. The trust levels within religious networks are particularly low especially because members do not use such networks to transact on a personal level. The activities of these networks are regular fellowships with no experiences that allow members to build on trust on an interpersonal level. In fact, even those who trust religious networks said they trust them because they have strong religious beliefs.

When asked if they have ever discussed BP in church, 27% of the users and 16% of the non-users said they discussed about BP in church, in their religious networks or while leaving church.

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<sup>2</sup> These networks include: Upendo Group, Anglican Church of Kenya, Women’s Group, Charismatic, Kenya Assemblies of God, Holy Gospel, God’s Temple of Africa, St Patrick’s Catholic Teachers Association, New Singuruok, Rof, Sportsman Group, St Patrick’s Mtakatifu Elizabeth Fellowship, St. Patrick’s Fellowship, St Gabriel Fellowship, Mwomba Mungu Hachoki.

For the 73% of the users who said that BP was not talked about in their religious networks they said this was the case because the church memberships included people who come from outside Bangladesh and since BP is only used within the slum, the leaders of such religious networks felt that such discussions would alienate those who come from outside the slum. Other networks felt that BP is for economic use and is inappropriate to discuss ‘market matters’ in church. However, some of the religious networks that discussed BP even accept it in church offerings. For instance, BP is most used within the Legio Maria church, in which all members accept BP. The Legio Maria church was the first church to accept BP every Sunday as church offerings, and they have used the BP to run church activities and renovations.

The religious networks discussed BP in light of: 1). How it can be used in the church? And 2). How it can economically empower the lives of their members? For religious networks that discussed BP; they discussed its benefits; how it can be used; the regulations surrounding the Bangla-Pesa; recruitment of members and the ease of its usage of BP. Below are some excerpts of some of the discussions that were discussed about BP within religious networks:

*I am the one who took it to my church group called Upendo. Most of them did not like it because they were afraid of the court case and the clash with the authorities. We however discussed that it could help in building the church and buying musical instruments. (Respondent 35, April 2015—Member of the Upendo Spiritual Church)*

*That we could pay school fees in BP since the church has a school. (Respondent 9, April 2015—Member of Legio Maria Church)*

In summary, religious networks have many members but they are not very trusted, people do not know each other so well and they barely discussed BP. For this reason, religious networks do not significantly contribute to the use of BP. Nevertheless, the table below gives a summary on key statistics on religious networks.

**Table 5.3: Key statistics on religious networks**

	Users	Non Users
<b>Members</b>	85%	60%
<b>Discussed BP in religious networks</b>	27%	16%
<b>Had most trust in religious networks</b>	8%	24%

*Source: Survey Data*

### 5.3. 2. Social Support Networks

One of the missions of churches and other faith based organizations is to take care of the elderly, sick (especially people living with HIV and AIDS) and other vulnerable groups such as orphans and widows. Many of social support networks are faith based in orientation while others are branches of international and national NGOs. Most members of social support groups in the survey use BP. The primary role of social networks is to help the less fortunate.<sup>3</sup> They are involved in counselling, providing health care, giving members support groups to cope with social stigma, advice on family planning and healthy living and provide them proper nutrition, ARVs and other medications.

Social support groups are the least popular especially because people do not want associated with diseases such as HIV/AIDs, disability, or death due to stigma surrounding this people. They are however based in other broader settings: schools, community groups and churches.

While all respondents who are members of social support network members use BP, only 5% said they trust social support networks and only 5% of users discussed BP within social support networks. The social support networks discussed BP because they were interested in uplifting themselves economically but some social support networks felt that it was rude to discuss BP in their meetings because it was inconsiderate of those who are members living outside Bangladesh Slum. Within the social support networks, members discussed about how they can recruit more members form their networks and the benefits associated with using BP. For instance:

*We discussed that we will invite those doing BP registration to come and register members of our group—Bangladesh Physically Disabled Group. We said that it is good and you can save what you could have used to use outside Bangladesh. (Respondent 25, April, 2015—Member of Physically Disabled Group).*

In summary, this discussion shows that only BP users are members of social support networks. Members of the social support networks form 5% of the users and they all said they had discussed BP in their networks. They also said they trusted the social support networks more than any other type of network. This is discussion is summarised in the table below.

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<sup>3</sup> They include: Bangladesh Physically Handicapped Group, Community Health Workers Networks, Orphans and Vulnerable Children Networks, Pioneer, Uvumilivu and International Centre for Reproductive Health (ICRH).



**Table 5.4: Key statistics on social support networks**

	Users	Non Users
Members	13%	0
Discussed BP in social support networks	5%	0
Had most trust in social support networks	5%	0

*Source: Survey Data*

### **5.3. 3. Self-Help Networks**

Self-help networks aimed at advancing the economic status of their members and were of different kinds. They mobilize resources for common goals, encourage savings, embark on common income generating projects—for instance buying motorbikes (popularly known as *boda boda*) to earn income, they cost share during funerals and other calamities as well as loaning money for business expansion to members. Members are brought together, not just because of their relationships and ties to one another but because they have similar needs, and want to help each other overcome their daily struggles together. Self-help networks are the most trusted by users of BP.

Notable self-help networks in Bangladesh slum include those by women’s groups, youth groups, merry go rounds (M.G.R) and funeral/burial groups; savings and lending groups and ethnic welfare networks. The members of these groups generally have some histories together—either as friends, neighbours in the same rural village, being members to one ethnic community or taking children to the same school, and, thus they know each other very well. Many of the self-help groups are formal and are able to access financial help from politicians, NGOs and government agencies.

Self-help groups are the most common among BP users with 87% of the users having self-help networks as compared to 48% among the non-users. Many of the self-help groups were formal and are able to access financial help from politicians, NGOs and government agencies. Friend’s networks, merry-go-round, savings groups and women’s networks also have overlaps in memberships and activities. Most people formed merry-go-round and savings groups with people they can ultimately trust with their money. While 60% of the users trusted their self-help networks, only 28% of the non-users had complete trust in self-help networks. In fact, people,

the respondents joined the Bangla Business Network as one of their self-help group and some of them even trust it the most. For instance:

*I knew it could help me because we could get help as a group. (Respondent 33, April 2015)*

*When the group started, it was very popular. We had agreed that the money we could contribute would be used to give members loans but those were just dreams.” (Respondent 60, April 2015)*

*It was not an individual’s decision. At first, I joined the BBN because I am a business person and I did not want be left out of the network. We, as the BBN decided to initiate a currency to trade amongst ourselves so as a group, we all begun using it. (Respondent 23, April 2015)*

In Bangladesh slum, the researcher identified 60 self-help groups of networks including.<sup>4</sup> Business oriented groups or networks were included in the self-help groups and were some of the most successful networks, which also had great influence on the decision to use or not to use BP. Business oriented networks are dominated by the local elites in the slum and head community development projects within the slum. They also set the agenda for these networks. Where business elites supported the use of BP, the issue was put as an agenda to be discussed in the community development meetings. This was the case in groups such as Upendo Rising Group and Akamaba Men Register. In networks where the elites and prominent businessmen and leaders opposed the use of BP, it was rarely made an agenda for discussion in their group meetings. This is what happened in groups such as Jirani Mix.

Youth groups have tended to be politically inclined and have often been used by politicians and prominent business people in the area for political or personal gain or spread propaganda about certain projects. This has had a negative effect on the use of Bangla-Pesa within youth groups. For instance, Future Beyond Imagination (FBI) is an environment oriented network whose

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<sup>4</sup> Kaza Moyo, Kibarani West Pickers, Mwamko Mpya, Once a Week, Saidia, Samaki, Sokoni, St. Peter's and Paul M.G.R, VS&L, Wanyonge Women Group, Women's Group, Bangladesh Ajua Club, Down Town, Together as One, Kibera Women Group, JuaKali Selfhelp group, Muungano Group, Mizizini, Jirani Mix, Women Group, Bangladesh Star Women Group, Bohehe, Gemu, Jirani Unity, Mkindani Self Help Group, Jitahidi, St. Charlis, Tujipange Support Group, Agera/Agero Welfare, Akamba Men Group, Akamba Register, Buhayo Women Association/Welfare, Marach Welfare, Mwakitao Foundation, Nyakach Welfare, Rachuonyo Welfare, Ramogi Group, Tin Tin Wadu Riruok, Ugenya Welfare, Winam, Bohehe Women Group, Kaogagi Welfare, Nthongoni Welfare, Obulala, Faulu Kenya Bank group, K-REP bank, Haba na Haba, Kenya Commercial Bank group, Kenya Women, Small and Micro Enterprise Programme, Sweetie Sweetie, Uwezo Fund, Wanandege Sacco, Yehu, Kaza Moyo, Kojolo, Rapid Investment, Self Help Group, Silky and Samila.

members and leaders are youth who are overwhelmingly supported by the community. This means that the group is heavily influenced by community interests and by the leaders. The FBI, a predominantly youth group is engaged in trash and garbage collection had initially accepted BP as payments in for their services. However, local business community leaders paid them off or influenced them to oppose the use of BP. They have become some of the strongest opponents of BP and are even also hostile to BP users (KII C and Interviewers Observation Notes 2015).

The self-help networks are trusted by 60% of the users making them the most trusted groups in Bangladesh slum. The respondents said they trusted their self-help networks because: 1.) the groups had been in existence for very long periods (some even 20 years); 2.) they had always received their annual, monthly, weekly savings without fail; 3.) they trusted their friends; 4.) they had received help from the group when they were at the lowest point of their lives. Some of the self-help groups whose all members joined include: Samaki M.G.R; Bohehe Women Group; Sokoni M.G.R. In self-help networks, members discussed BP while to explain members how it is useful to them, the rules of using BP and how it is used.

*We discussed that it allows you to network and know your customers. (Respondent 16, April 2015—a member of Sokoni M.G.R)*

*We discussed that there are new projects that will be brought for BP members. (Respondent 19, April 2015)*

*We explain how it is used but some still say they do not understand or it is illuminati. Most people do not understand how BP works and they will still ask you...how does it benefit me as a poor person? (Respondent 43, April 2015)*

73% of the users said they discussed BP within their self-help networks. Most users said that their self-help networks saw BP as a means to empower the small businesses and given most self-networks are concerned with empowerment, it constantly featured on their top agenda's.

In summary, self-help networks are the most popular, most active and most trusted networks with the highest number of discussions on BP and ability to influence decisions on BP. This is due to strong relationships based on trust. Below is a table that summarizes the key statistics on self-help networks in this section.

**Table 5. 5: Key statistics on Self-help networks**

	Users	Non Users
Members	87%	48%
Discussed BP in self-help networks	73%	20%
Had most trust in self-help networks	60%	28%

*Source: Survey Data*

#### **5.3. 4. Altruistic Networks**

Altruistic networks are groups with universal or non-self-benefiting objectives, which have open membership to residents of Bangladesh Slum. Some of these objectives include environmental protection, clean air, protection of water sources, and forests; the protection of orphans and widows, women empowerment and good and peaceful coexistence. A majority of altruistic networks are registered with a local authority. They include: environmental networks, community development networks, political justice networks, health and nutrition initiatives, nyumba kumi initiatives and youth empowerment initiatives. These are groups that are involved in trash collection, tree planting programs, youth employment initiatives, fighting for human rights and injustices against the people in the slum and security issues among other development issues. The researcher identified 17 such networks.<sup>5</sup>

Altruistic networks (especially based around environment, health, sports and human rights protection) and social support networks have common linkages with school networks. Mainly, community health workers have been involved in promoting child healthcare and nutrition programs in schools. Sports and youth groups have sponsored community games within local schools and the Environmental networks have introduced tree planting and other income generating and environmental conservation project to local schools. In most cases, youth group members are alumni's of these schools and they have mentorship programs with the local schools. Some community groups have also been repeatedly referred to "friends of the school"

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<sup>5</sup> They include: Future Beyond Imagination (FBI), Mkupe Development Group, Bangla Community Based Organization, Bangladesh Community Development Group, Bangladesh Youth Bunge, Alfa na Omega, Bangladesh Development Community, Maji na Ufanisi, Uvumilivu, Cobweb, CU, Neon, Green Bomba, Battalion, Bangladesh Youth for Change, Bamako and Haki Yetu.

due to their continued support to the schools in rehabilitating classrooms and offering financial support to the schools.

Environment networks and community development networks overlap, both in membership, and activities. Community members are expected to fund and support environment networks due to minimal government presence in the area. Environment networks are spearheaded by the youth and at times, they are mistaken for being youth groups. Informally, these groups have been deliberately set aside to encourage the youth to be active and stay away from criminal activities.

Somehow, environmental networks and health related networks overlap. In most cases, members could not tell which network is a branch of the other, which began first and which they are members of. Groups such as: Maji na Ufanisi (Community Environment Network) and Bamako (Community Health Network); Uvumilivu (Community Environment Network) and (Pioneer Network (Community Health Network) are some of the most interlocked groups. This is because health and environment issues are the most important concerns for the residents of the slum. Incidentally, these two networks are organized by the community school.

Community health worker networks were often referred to as “Elder’s Networks. Most of the members are elderly and are care givers in the community. Health related networks such as community health workers closely work with religious and faith based networks because as they heal, they want to restore hope. The religious networks support most health-related/social support networks.

While 80% of the users have at least one altruistic network, only 37% of the users trust them. Among the non-users, while 60% have altruistic networks, only 36% have total trust in altruistic networks. The altruistic networks are thus the second most trusted network category. Those who trust networks do so because they believe that altruistic networks are genuinely interested in helping the community since they step in to fight for people’s rights and they do what the government will not do for the community.

While 68% of users in the altruistic networks discussed BP in their meetings, 32% did not. Within altruistic networks, the members discussed: 1.) the benefit it had for the community; 2.) how BP circulates among members and 3.) recruitment of new members. The following are some of the discussions in various community groups.

*We discussed on how to network youths through BP and sport events sponsored by BP. We talked about how we can unite the community and not use BP for political reasons. Yesterday (21/03/2014) the BP community arranged a successful sports event where everyone including the disabled had their own games to compete. It brought us together despite of our differences...we also said that it brings people together and we network and care to know who is our neighbour.(Respondent 12, April, 2015—Member of Bangladesh Community Development Group.)*

*We discussed how we can exchange the money for school purposes such as we allow parents to pay in BP respondent. We told them that BP members cannot have their children sent away from school because they have the option of paying in Bangla-Pesa. (Respondent 13, April, 2015—Member of St. Mary’s Primary School)*

*In our last meeting, we tried telling or colleagues of the importance of BP. We were encouraging other staff members to join BBN. However, people complained that few parents use BP and this will make it hard for the teachers to use it. (Respondent 43. April, 2015—Member of St Peter’s and St. Paul Academy)*

According to most users in altruistic networks, these discussions encouraged usage and BP is accepted and used in five schools out of the eight primary schools within the slum. Ethnic Welfare and community networks are also intertwined, especially because the Luo’s and Luhya form over 90% of the slum population.

In summary, altruistic networks have high memberships, and trusted because they run non-profit community based programs. They are an important source of information and shape members decisions were especially important in shaping the usage of BP.

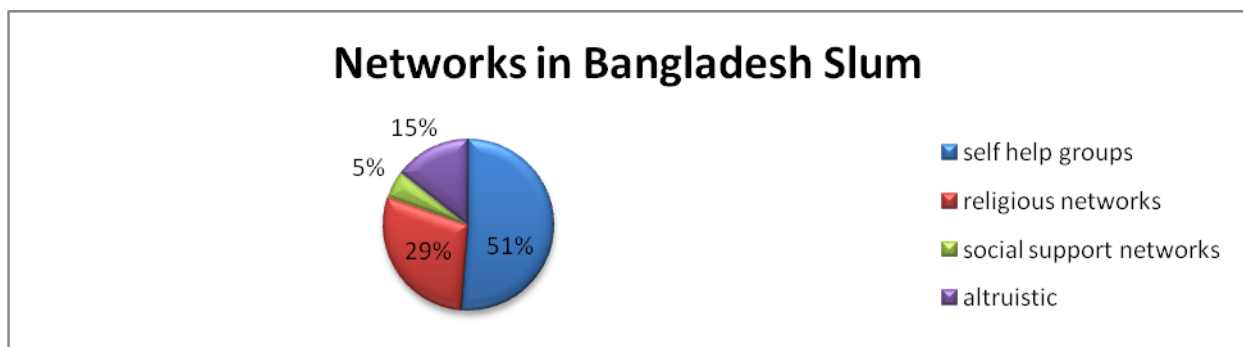
**Table 5. 6: Key statistics on altruistic networks**

	<b>Users</b>	<b>Non Users</b>
<b>Members</b>	80%	60%
<b>Discussed BP in altruistic networks</b>	68%	8%
<b>Had most trust in altruistic networks</b>	37%	36%

Source: Survey Data

In summary, there are four main types of networks in Bangladesh slum—self-help networks, social support networks, altruistic networks and religious networks. Self-help networks and altruistic networks are popular and trusted among the users while religious network are most popular among non-users. Based on that data collected, they are represented as shown below.

**Figure 5. 4: Distribution of networks in Bangladesh slum**



Source: Survey Data

The users and non-users belong to all types of networks except for the social support networks which not even one non-user said they belong to. However, the percentage of users with social support networks is quite low and they social support network members had most trust in them. The table below gives a summary of trust, popularity of various networks and whether they discussed BP or not.

**Table 5.7: Summary on type of networks**

	Social support networks (%)	Self-help networks (%)	Religious networks (%)	Altruistic networks (%)
Most trusted network <sup>6</sup>	5	45	8	29
Discussed BP	100	73	27	68
Did not discuss BP	0	27	73	32
Popularity among users	11	85	85	80
Popularity among non-users	0	58	67	62

Source: Survey Data

The hypothesis for this section was that type of networks that a person belongs to do not affect the decision to accept and use BP. Based on the analysis above, we can tentatively conclude that the type of networks affect the usage of BP because people trust some type of networks such as self-help networks and have no trust for others such as religious, altruistic and social support

<sup>6</sup> 13% of the respondents did not trust any network.

networks. The type of network also determines whether an individual will ever hear of BP. For instance, those in social support and self-help networks had a higher likelihood of discussing BP than those who only had religious networks only.

#### **5.4. The Size of Networks and BP Usage in Bangladesh Slum**

The previous section sought to examine the relationship between types of networks found in Bangladesh Slum and the usage of BP. The section tried to answer question 1: Is the usage of Bangla-Pesa a function of the types of networks available in Bangladesh Slum? To answer this question the section examined the types of networks in the slum. This section examines the second research question: whether the size of networks one belongs to influences or determines the use of BP in Bangladesh Slum. To answer this question, the section relies on the analysis of the sizes of networks and the use of BP, that is, how large the membership of the network is. This section hypothesizes that the usage of BP will be higher in networks that have more members, and where the members trust one another more and spread more positive information about BP. That is, where networks are large, trust one another and encourage one another to use BP, the usage is more than where networks have fewer members or have a large network that trust each other less or encourage their members not to use BP.

There is a significant difference in the size of networks that users and non-users belong to. The users generally belonged to large networks (more than 100 members) and small networks (100 or less members) while the non-users belonged mainly to smaller networks only. The large networks were the first points of information while the small networks served as the points of decision making. The users were generally more informed about BP because they had gathered a lot of information about BP from the large networks, which they shared and discussed in their small groups. The non-users networks lacked links to the large networks and thus they did not acquire enough information in their small networks. In fact, 36% of the non-users said that they did not use BP primarily because they do not understand it or they have never had someone to explain them how it really works, its benefits and objectives. Users were members of networks that were so big that they would overlap with other networks performing similar activities or sharing members. This meant that they would be getting information about BP over and over again. Thus, for users, both large and small networks contributed a fair percentage of users. Within social support networks, religious networks and altruistic networks, the groups that had



large networks contributed more BP users. For Self Help groups, it was the opposite, that is, those with smaller memberships tended to discuss and encourage their members to use BP more. The contribution of networks in the sample is elaborated in the table below.

**Table 5.8: How various networks contribute of BP members**

Contribution of BP members				
Size of networks	Religious	Social Support	Self Help	Altruistic
Large	53%	67%	46%	74%
Small	47%	33%	54%	26%

Source: Survey Data

For large networks that have many members, the relationships are less strong and people just interact with a few people. Large networks have loose ties among their members and the levels of trust are low and are therefore they are less significant in shaping peoples decisions. A large group that meets monthly or annually will not affect individual’s day to day decisions, but a large network that frequently meets is a key source of information about BP. The main function of large networks in the acceptance of BP is informing their members. The larger networks meant a large audience and wider spread of information and the larger the rate of acceptance within that network.

The smaller networks of friends, colleagues, age mates have few members but they strongly connected, are active, with high levels of trust and people strongly consider the information shared. The relationships in the small networks are close and all members know each other and trust each other. In many cases, entire small groups of (friends, women groups, merry go rounds) joined Bangla-Pesa usage networks. When leaving or ceasing to use, they also stopped as a group. The smaller groups and those based on work place relationships tend to be meet more often than the larger groups.

*All of us (Bohehe Women Group) were in the BBN but we cannot see the benefits. Now people are just interested in seeing how its working since we all left. (Respondent 66, April, 2015—member of Bohehe Women Group).*

*One member showed us the money and told us that BP has no benefits. How do we join, if a member says it is not beneficial? (Respondent 78 April, 2015-Member of FBI).*

### 5.4. 1. Religious Networks

In the majority of them, the membership is large and members are not directly related. In most of the cases, especially in the bigger churches with more members, the majority of the members do not know one another. Religious networks have the highest number of memberships, with some of them having over 2000 members and some having as few as 8 members. As a result, religious networks are not closely knit as compared to smaller groups where members know one another. Religious networks include members who live within and outside Bangladesh slum. Some users and non-users are members of the same religious networks but the religious networks of users are larger (with an average of 350 members).

Only 12% of the users trust religious networks and only 3% of the users have religious networks as their sole networks. The larger networks are mostly used; they are more active and are influential in this slum. Religious networks are mostly used to deliver messages on Sundays. They are the first source of information, especially informing their members of any development. As a result, the large religious networks contribute 53% of BP users while small religious networks contributed 47% of the BP users. Nevertheless, most users said that religious networks did not affect their decisions on accepting BP because as members of large networks barely know each other and would not know what the other member has been up to. For instance, when asked to identify if they knew other members who use BP, respondents in religious networks said they only knew 2 people, while others said they knew no one who uses BP yet they are in the same networks. One user said that: *“People use it in secrecy... no one is willing to openly admit they use it.”* This was especially the case with BP users who are members of St. Patricks Catholic Church. From the survey, I identified 24 BP users from St Patricks Catholic Church. However, when I asked them if they knew other members from their religious network, most of them admitted to knowing less than two BP users from the church. A majority of the non-users (59%) are in small religious networks. This is summarised in the table below.

**Table 5. 1: Key statistics on size of religious networks**

	Users	Non users
<b>% of in large religious networks</b>	53%	41%
<b>% of in small religious networks</b>	47%	59%

Source: Survey Data

#### 5.4. 2. Self Help Groups

At least 87% of the users of BP belong to at least one self-help group and 60% of members said they had total trust in self-help networks. 83% of the self-help groups have less than 100 members. Their memberships average at about 107 members. The large groups contribute 46% of the users while the small groups contribute 54% of the users. In small self-help networks, the usage of BP is higher than in larger networks. In many cases, entire groups of (friends, women groups, merry go rounds) joined Bangla-Pesa usage networks. When leaving or ceasing to use, they also stopped as a group. The smaller groups and those based on work place relationships tend to be meet more often than the larger groups. Bigger or larger groups meet monthly or annually and as a result they do not affect individual's day to day decisions. Larger groups do not also have closer ties among its members.

*All of us (Bohehe Women Group) were in the BBN but we cannot see the benefits. Now people are just interested in seeing how its working since we all left.”(Respondent 66 April, 2015—member of Bohehe Women Group).*

The majority of non-users (76%) are members of small self-help networks and this is similar to users whose majority (54%) are in small self-help networks. This study concludes that given that non-users were members of small networks only, they had not gathered much information on BP from their other networks. That is, even though they had small self-help networks, it did not affect their decisions to accept BP because they ignored it, were not well informed about and did not understand it. Below are some of the excerpts from non-users on why they had no discussions on BP in their self-help networks.

*We brought it up in the agenda but they postponed it and said it would be talked about on another day. (Respondent 82 April, 2015).*

*It has never been in our agenda but when Emma told me about it, i was encouraged to use it but after the arrests, no one can hear about it. (Respondent 83 April, 2015).*

*We are just not interested because it is not profitable. (Respondent 61 April, 2015).*

*We tried talking about it but we were told it would scare away some members from the group. That they would feel like members from Bangla are imposing their issues especially because Bangla-Pesa will not benefit them in any way. It is now a pending issue because majority refused it. (Respondent 84 April, 2015).*

In summary,

**Table 5. 2: Key statistics of size of self-help networks**

	Users	Non users
% of in large self-help networks	46%	24%
% of in small self-help networks	54%	76%

Source: Survey Data

### 5.4. 3. Altruistic Networks

Have average size of 96 members. However, the size of these networks could be larger because most of these have open membership to all community members. While most people are not registered members of these groups, they admitted to often attending the community meetings when a community problem/issue comes up and paying the required fees to support development programs initiated by these community groups.

Of the 68% of users who discussed BP, 42% said their discussions were the large altruistic networks. This is because the agenda for altruistic groups are set prior and is strictly adhered to; the meetings are less frequent and some of the members who are non-users ensured that BP would not be discussed in community meetings. This is especially because top businessmen in the slum who oppose BP also chair the community meetings. 58% discussed BP and a majority of them were the small altruistic networks. This is because the leaders championed for them to be up on the agenda; they meet frequently and members are few so they can quickly agree on whether to discuss a certain item or not.

**Table 5. 3: Key statistics on size of altruistic networks**

	Users membership (of the 80%) who have altruistic networks	Users discussions (among the 68% who discussed BP in their altruistic networks)	Non users
% of in large altruistic networks	74%	42%	40%
% of in small altruistic networks	26%	58%	60%

Source: Survey Data

#### 5.4. 4. Social Support Networks

Social support networks have an average of 76 members. In fact, Key Informant C warned that most people will not disclose if they are members of these groups even though they get help from this group. They do not want to be publicly associated with such groups. This could possibly explain why they are smaller in size and why they are less used. In this survey, only BP users admitted to having social support networks.

**Table 5. 4: Key statistics on size of social support networks**

	Users membership	Non users
% of in large social support networks	50%	0%
% of in small social support networks	50%	0%

Source: Survey Data

In summary, the users generally belonged to both large networks and small networks while the non-users belonged mainly to smaller networks only. While large networks were the first points of information, the small networks served as the points of decision making. The users were generally more informed about BP because they had gathered a lot of information about BP from the large networks, which they shared and discussed in their small groups. The non-users networks lacked links to the large networks and thus they did not acquire enough information in their small networks. Our hypothesis section was that the size of the networks does not affect the diffusion of information within the network and therefore affects people's responses to accepting and using CCs. However, this section tentatively concludes that the size of networks that one belongs to also influence the chances that one will adopt and use BP. This is especially because the users and non-users are members to networks of different sizes. While users hear about BP in big networks, they make the critical decision to use BP while in the smaller networks.

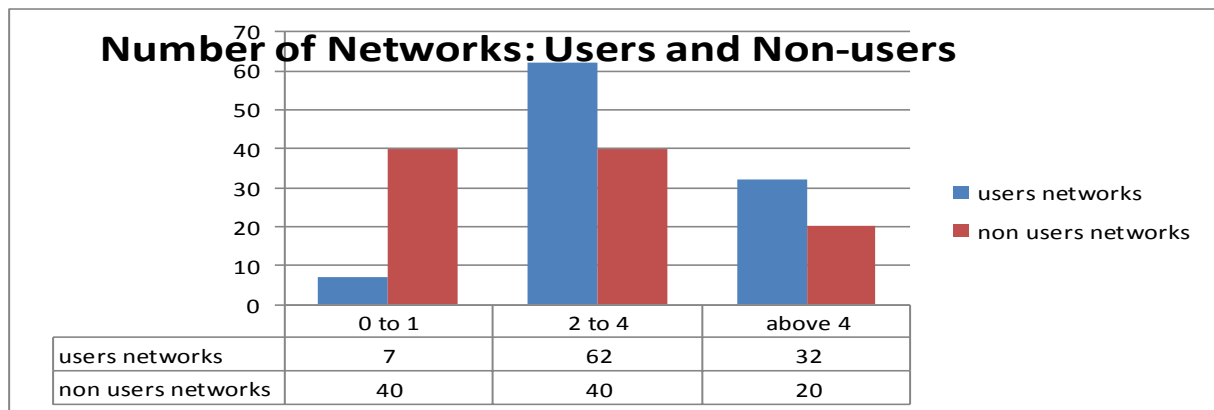
#### 5.3. 5. The Number of Networks and BP Usage in Bangladesh Slum

The previous sections have discussed Question 1: the relationship between types of networks found in Bangladesh Slum and the usage of BP and Question 2: on whether the size of networks one belongs to influences or determines the use of BP in Bangladesh Slum. This section now seeks to analyse the relationship between an individual's number of membership to various

networks and usage of BP. To answer this question, the section relies on the analysis of the number of networks, membership to the four categories of networks as discussed in question 1 and 2. This section hypothesizes that the usage of BP will be higher among people who have a higher number of networks and especially networks which spread more positive information about BP.

Networks are important for the usage of BP. All users of BP belong to at least a network, 25% belonging to at least two networks and 68% having more than 2 networks. From the survey, there was also a significant difference in number of networks that users and non-users belong to. While 40% of non-users belonged to one or no network, only 7% of users had one network. 8% of non-users belong to no network at all, while every user belongs to at least one network. Similarly, while 32% of users of BP belonged to over four networks, the number for non-users was only 20%. 62% of the users (compared to 40% of non-users) have 2 to 4 networks. This indicates that users have significantly *thicker* networks than non-users. The figure below shows this.

**Figure 5. 5: Distribution of Networks**



Source: Survey Data

People said they had joined the networks that they had because: their friends were also joining; they were called upon by the community to lead; it is only normal to align themselves with like-minded people. Women have more networks with majority (36%) having more than five. Majority of the men (58%) have 1 or 3 networks as compared to 50% for women. This explains why women use BP more than the men.

Further, the number of networks influenced usage of BP because it determines whether a person will ever hear about BP. For instance, 75% of people with one network said they had never discussed BP while all the people with 7 and 9 networks said they had discussed BP in their networks. Similarly, the majority with more than two networks had discussed BP in their networks. This is elaborated in the table below:-

**Table 5. 5: How number of networks affects chances of discussing BP**

<b>Cross tabulation between Number of Networks and Discussions on BP among users</b>			
<b>No of Networks</b>	<b>Discussed BP (%)</b>	<b>Did not discuss BP(%)</b>	
<b>1</b>	25	75	100%
<b>2 to 3</b>	54	46	100%
<b>4 to 5</b>	76	24	100%
<b>Over 5</b>	71	29	100%

Source: Survey Data

For religious networks, 85% of the users belong to at least one religious network with 23% of the users having more two religious networks. For self-help networks, at least 85% of the users of BP belong to at least one self-help group while 45% of the users have more than two self-help networks. Some members have about five self-help networks—that is, savings and lending groups, merry-go-rounds, women groups and ethnic welfare groups. Most users identified merry-go-rounds and friends networks to be ones that have the highest number of BP users. For social support networks, some people had more than one social support network. This was the case especially those who were HIV positive, disabled or widowed. 92% of the users who had social support networks had only one network with only 8% having two social support networks. For Altruistic networks, some users had more than one altruistic network depending on their social status in society, their leadership roles and level of participation in various community affairs.

Other than having more networks, the types of networks were distributed evenly within the four categories—social support networks, self-help networks, religious and altruistic networks. From the table below, 8% of users had all four categories of networks and no non user had all the four categories of networks. Most non users had one category of networks while majority of users (42%) belonged to three network categories. Table 5:13 elaborates this.

**Table 5. 6: Number of Network Categories**

Category of networks	Users	Non Users
4	8%	0%
3	42%	24%
2	35%	28%
1	15%	32%
0	0%	16%

Source: Survey Data

The most common combination of network categories was on with self-help networks, religious networks and altruistic networks that had 42% of the user respondents while 13% had a combination of self-help and religious networks. As such the usage of BP cannot be attributed to one network. Meanwhile, the 28% of the non-users had a combination of self-help, religious and altruistic networks.

This combination is the most popular because religious networks and community networks overlap, both in memberships, location of meetings, and religious networks informed people about community meetings. For instance, as stated earlier in section 5.3.1, religious networks such as the St. Patrick’s Catholic Church closely relates with political outfits in the slum to fight for human rights and it even houses the “Haki Yetu” group and calls for meetings are disbursed on Sundays or through religious networks.

In summary, users belong to more networks than non-users with some non-users having no network at all. The hypothesis for this section was that membership to a high number of networks does not increase possibility of accepting BP. Based our analysis above, this study nullifies the above hypothesis to indeed confirm that those membership to more networks increases ones likelihood of accepting BP. This section tentatively concludes that on one hand, people use BP because they get information and pressure from more networks. On the other hand, people in fewer or no networks, or in networks that have never discussed BP do not use it because they have less sources information about BP.



## **5.5. Diffusion of Information on BP**

This section seeks to discuss the nature information diffused in these networks about Bangla-Pesa (within the networks) and whether it encouraged or discouraged usage. BP was launched in May 2013 by Mr William Ruddick—a former US peace-corps volunteer. Mr Ruddick had been working with local communities and street families within Mombasa when his wife and friends who worked with health groups brought him to Bangladesh Slum. As usual, people wanted help from the ‘white’ tourist but he observed that injecting donor funds in slums has never been solution to the poverty, hunger and poor living conditions in the slum. Mr Ruddick observed that the people in Bangladesh had so many needs and so much to offer, but due to low levels of income, they lacked a means of trading or exchanging what they had for they needed (Interviewers notes, 2014). Most of the people were heavily indebted to each other and every time they got paid, they would use the little Kenyan shillings to pay debts. They were saving less every other day and debt levels kept increasing. Mr Ruddick suggested to a community worker that to break this poverty cycle, they needed to inject a local currency that would allow them to trade amongst themselves, purchase key basic commodities while saving the Kenyan money to expand their businesses, educate their children and get themselves out of that poverty. Mr Ruddick approached several key opinion shapers in the slum: they included a former councillor, a youth leader, a community leader, a community health worker and several influential businesspersons.

The recruitment began immediately since the first people calling other people in meetings that were held in local churches, local schools, friends’ houses and key businesspersons shops. The first recruitment drive was from the people who attended the first meetings. They then told their friends, neighbours and relatives to attend subsequent meetings to learn more about BP. The few who did not attend meetings waited to hear what the meetings were about from their friends, neighbours or relatives who had attended the meetings. In these meetings, Mr Ruddick and the members he had personally approached taught other members on how BP would circulate and the requirements to join the BBN. Using illustrations on manila charts they gave the new members examples of how they would trade among themselves. They also issued vouchers to exchange among themselves and with time, they would see that they would use BP just like any

other currency. The members were like ambassadors of BP and they spread the information (KII B, April 2015).

Most of those who were excluded from these networks had no clear sources of information about BP and they negatively perceived BP. Prior to the government ban of BP, the leaders of some influential networks and top businessmen had attempted to take over the leadership of the BBN committee but when they failed, they approached government officials and told them that BP was part of a secession plot by the Mombasa Republican Council. They alerted news outlets and in June 2013, the government banned BP. A month after the arrest of the leaders, the Director of Public Prosecutions dropped the charges and said that a regulatory framework on complementary currencies in Kenya would be formulated. According to KIIs from the local government institutions, the government has now accepted BP and sees it as an instrument that complements its efforts in fighting poverty. Though it has not responded to any requests by elected leaders to make policies on CCs, they believe that the government will support CCs because of the growing use of CCs across the country. Locally, they also support BP because they have realised that it is not a politicians tools and is neutral on political matters (KII's J, K, L, M; June 2015).

During the second introduction, the government was represented by the area chief, area MP and the Officer Commanding Police Division (OCPD). Today, due the influence that the BBN has gained overtime, BBN has been incorporated in many government projects such as Nyumba Kumi initiatives from the County Commissioners Officers, Orphans and Vulnerable Children support groups and CDF bursary disbursement (KII C, April, 2015).

During the first introduction, the government felt threatened due to the multiplicity of networks, spread of information in a manner that they could not control it. The government also felt that the membership would be uncontrolled and it would create an MRC-like situation. During its second launch, BP was introduced as a strategic and calculated manner where they clearly showed that BP is not a threat to the government. For instance: those in interested in altruistic activities were told to use BP because they could use the BBN in pursuing activities in environmental conservation, community development and security matters. People in self-help networks and with commercial interests were told that they could use BP to save more, expand their businesses and educate their children even outside the slum. The diffusion of information within religious networks proved to the government that BP was not in any way related to MRC since most MRC

members are linked to Islam extremists groups. In short, the uses of BP were tailored for different groups while attempting to portray it as a poverty alleviation tool.

The adoption of BP has occurred in two main phases. The early adopters of BP were those who accepted it in the first phase from May 2013-July 2013 (until when BP was banned). The first adopters were instrumental in calling people for meetings and saw it as a good developmental idea. Their behaviour corresponds to the diffusion of innovation theory that there are early adopters who take up innovations much faster than others. The initial adopters were key opinion makers in the slum including: community health workers, community leaders, principals and owners of well established businesses. The founder of BP personally approached the initial adopters who met them at businesses/homes/local schools and this is especially because they were in networks that made them cross paths. The first adopters then informed their friends, neighbours, and customers. This argument is drawn from the excerpts below:

*I am a patron, all Bangla-Pesa training and meetings happen in my school. I wrote letters which I gave to children to call their parents for a food and nutrition meeting. The sponsor was ready. Food and nutrition even at the family level is important for these kids to finish school” (Respondent 12, April, 2015)*

*I was introduced to it by Will. He came with his Wife who was a community worker with Afya Plus. (Respondent 2, April, 2015)*

The early majority were mainly sourced through networks and are the majority of members who joined from May 2013 to December 2013. As users of BP, they are members of more networks than non-users, the networks are well connected and they are well informed about BP.

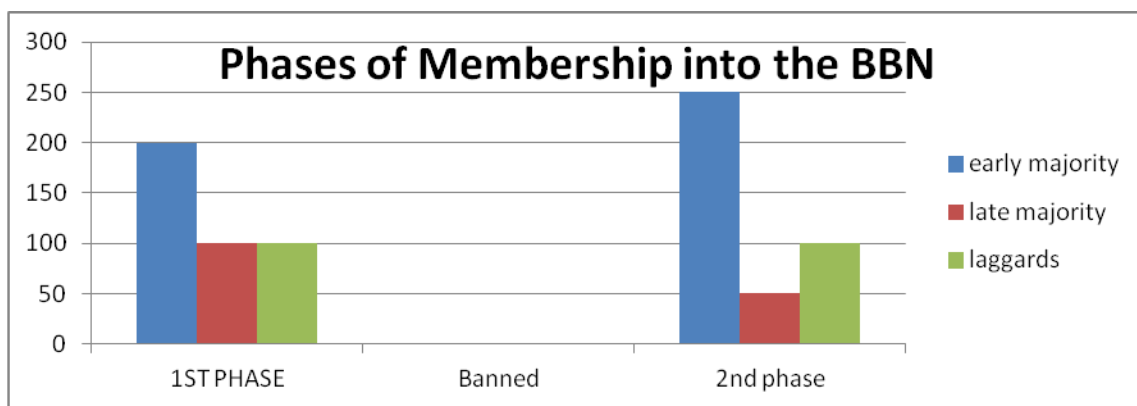
The late majority group refers to the second phase users which begun after the BP was re-introduced in January 2014 while others have adopted it as late as July 2014. Most of them heard about BP in their networks, while in the market, at their business, at the local community school, at church or their friends’ houses. They heard about BP from community health workers, community leaders, friends, neighbours and fellow businesses men. This argument is drawn from the excerpts below:

*I first heard about BP from Kongowea with my neighbours who were saying they have heard of a new currency that helps the poor. (Respondent 23, April, 2015)*

The third group refers to the laggards—who have been previously referred to as the non-users, who are either adopting a wait and see attitude on BP or have simply decided not to accept BP. Most laggards are not using BP and are still thinking about it, are waiting for some features to be

changed or improved or claim they still don't have the full information about using BP. Some laggards have completely rejected BP as an innovation and are not willing to accept it even the features they do not like about Bangla-Pesa are changed. The laggards operate isolates with one or no network. For this reason, most laggards first point of information was from the media or on the day of the arrests and this gave them a negative perception of BP. The laggards heard about it during the arrests of BP leaders, or in the TV, radio and newspapers after it made news. Only 34% of the non-users heard about it from their friends, neighbours, community workers and leaders prior to the arrests. The membership into the BBN is summarised in the graph below.

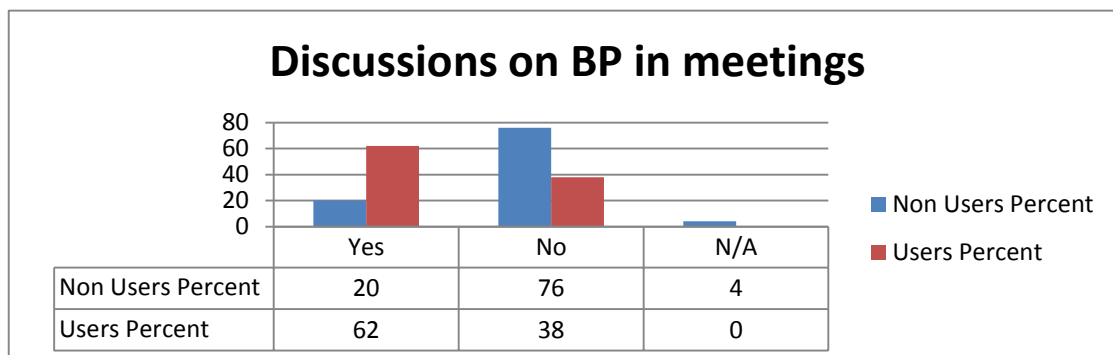
**Figure 5. 6: Phases of membership into the BBN**



Source: Survey Data

As previously discussed, BP has been discussed with in various networks. The discussions about BP defined the usage of BP because while 62% of users discussed BP in their networks, 76% of the surveyed non-users have never discussed BP in their networks.

**Figure 5. 7: Discussion of BP in Meetings**



Source: Survey Data

The self-help groups, especially those related with funeral fundraisings and religious networks did not discuss BP majorly because it was not a relevant agenda to their activities. The self-help groups—especially merry go rounds, friend's, ethnic welfare and savings/lending networks discussed BP as a means for the individuals to advance their businesses, savings and loaning power which are key components of the self-help groups.

In some religious networks, they did not discuss BP because they felt that it was inappropriate to discuss business in church while others suggested that it push away members who came from outside the slum because it was a Bangladesh affair. Altruistic networks discussed BP because they saw it as an avenue to advance their activities since environmental conservation, security and community unity were some of their top objectives.

The diffusion of information on BP begun in Nairobi Area—a village in Bangladesh slum—where key networks (community clinics, community schools, many businesses and offices of local community groups) are located. The use of BP is thus highest in Nairobi Area with over 100 businesses that accept Bangla-Pesa being located here. The users of BP are concentrated in Nairobi area where it begun and where most businesses are located and where most meetings were held. Those in the outskirts use BP less. This is because the rate of adoption among different region corresponds to degree of spread of information. In fact, some areas such as in sections of Giriamani in Bangladesh have never heard about BP at all. Nevertheless, there some very active pockets users who are located Nairobi area but have strong links to this area are able to use BP very well.

47% of the survey respondents discussed the advantages or benefits of using BP. Most networks that the users belonged to discussed the advantages of using BP. They said it would allow them to get advance salaries, save more Kenyan shillings and expand their businesses. The users consequentially discussed how the BP can be used, and how they can make it easier to trade among themselves. For instance, they suggested that recruiting more members would increase the diversity of goods that can be bought using BP and this would make trading in BP easier.

Depending on the type of network, the use of BP was being tailored to fit in objectives of the network. Where the BP would not identify with the said network's objective, it was never discussed because it would either not feature in the agenda or because those who found it relevant were afraid that the rest of the members would feel alienated in the group. For instance:

when BP was discussed in environmental networks, the potential users were encouraged to start using BP because people would pay for trash collection in BP and that the environmental component would help in restoring the communities drainage system and plant trees in the community. Those in schools networks were encouraged to join BP because they would pay school fees in BP and that their children would not be sent away due to fees arrears. The teachers were encouraged that they would get salary advances in BP and they would buy school supplies in BP. Those in health related networks were encouraged that they would get aid through partnerships with other NGOs. This is especially because the founder of Bangla-Pesa first came into Bangladesh slum with friends who worked with youth groups and HIV/AIDS NGOs such as Afya Plus. Those in community networks were generally encouraged to join because they would individually benefit through improved security, increased saving and trash collection exercises. Below are some of the discussions on BP (for instance) within altruistic networks.

*We discussed that we could pay school fees in BP since the church has a school. (Respondent 8, April, 2015)*

*We wanted the issued BP to be increased to even 1000BPs person because it is for food and nutrition. If children eat well, they perform well and 1000BP can take them for about three days. (Respondent 12, April, 2015)*

*We discussed on how to network youths through BP and sport events sponsored by BP. We talked about how we can unite the community and not use it for political reasons. Yesterday (21/03/2014) the BP community arranged a successful sports event where everyone including the disabled had their own games to compete. It brought us together despite of our differences. (Respondent 11, April, 2015)*

30% of the survey respondents discussed about the ease of using BP. 71% felt that these messages were positive and encouraging the use of BP while 29% felt that these messages were negatively portraying BP and were discouraging the use of BP. Due to lack of understanding and information on BP, the non-users saw BP as hard to use and this was one of the reasons why they were not using BP. However, the users went the extra mile to explain to each other how BP worked, how they could make it easier for them to use BP. People said it was somehow hard to use because 1.) one could not accept much, 2.) one could not use it outside Bangla and 3.) that one could get broke. Some of the discussions regarding the ease of usage of BP are detailed below:

*We explain how it is used but some still say they do not understand or it is illuminati. Most people do not understand how BP works and they will still ask you "how does it benefit me as a poor person?" (Respondent 23, April, 2015)*

*It is easy. We drew charts showing them how to trade and they realized it is just the same thing they have been doing all along. (Respondent 35, April, 2015)*

*People liked it because it was just like using the Kenyan currency. (Respondent 57, April, 2015)*

*We said it is easy to use since it is available locally. (Respondent 74, April, 2015)*

*We said it is like barter trade. (Respondent 8, April, 2015)*

*We were wondering when ones stock is over, where do we get some more? It is hard to use it to buy more stock." (Respondent 73, April, 2015)*

*We said it is hard because big shop owners do not trust the currency. (Respondent 45, April, 2015)*

*We discussed that few parents use BP and this will make it hard for the teachers to use it. (Respondent 41, April, 2015)*

*We discussed that it is easy if you sell and buy with BP. You should not accumulate it. (Respondent 47, April, 2015)*

Only 22% of the survey respondents confirmed having discussed how BP is compatible with the Kenyan shilling, the market prices, their businesses and mode of transacting business. 63% of those who discussed BP's compatibility said the discussions encourage usage of BP. Below are some of the excerpts:

*It is good it's just a voucher. It is not as valuable as the Kenyan money. (Respondent 1, April, 2015)*

*It is compatible because it is just like using Kenyan money. (Respondent 2, April, 2015)*

*That it is the ratio of 1:1 to the Kenyan shilling (respondent 37, April, 2015)*

*That BP is less strong because it is used in BP alone (respondent 38, April, 2015)*

*That it is only a voucher that can be used by members only with the shilling is universal. (Respondent 45, April, 2015)*

Though some non-users understood how BP worked, most found BP incompatible with their businesses primarily because they sell imported goods, are whole sellers or do not understand how they can replenish their stock in BP. However, some non-users had also gathered some false but positive information about BP that was encouraging them to think of using BP in future BP. For instance, some believed that BP had higher value than the Kenyan currency, which is actually not the case. They had this to say:

*I heard that BP has more value than the Kenyan currency. (Respondent 81, April 2015)*

*When buying a commodity, let's say it is worth 100KES, you can pay 50KES and 50BP and thus save 50KES. (Respondent 74, April 2015)*

*The only problem I have is my profession. Hospital things are expensive and only available outside Bangladesh. (Respondent 85, April, 2015)*

Only 19% of the survey respondents discussed the results of using BP but 62% said the discussions were encouraging the adoption of BP. 23% of the users already had discussions on the results of using BP, while only 8% of the non-users had ever discussed the results of using BP. KII D confirmed that discussing the results is important because people first wait to see the results. When they see the benefits, they are interested in joining and will even be waiting for an introduction. Below are some of the discussions (both positive and negative) that were shared within various networks.

*That you watch as make yourself poor (laughs). (Respondent 60, April, 2015).*

*It is hard to explain to people the benefits especially after people got arrested but we usually share the certificate to show its legitimacy. (Respondent 10, April, 2015).*

*All of us (Bohehe Women Group) were in the BBN but we cannot see the benefits. Now people are just interested in seeing how its working since we all left.”(Respondent 66 April, 2015—member of Bohehe Women Group).*

*We could all see the results because people shared results on how they used it and how much they had.” (Respondent 59, April, 2015).*

*It helps small scale business people to boost their incomes. (Respondent 74, April, 2015)*

*We have been trying to implement it. We are yet to discuss the results because we are still trying it out. (Respondent 44, April, 2015)*

*The results you can see for yourself. For instance, members cannot have their children sent away from school because they have the option of paying in Bangla-Pesa. (Respondent 12, April, 2015).*

*In a day, you can use 100/200, BP so that you can save in Kenyan money of the same amount. (Respondent 1, April, 2015)*

Discussions on the rules of BP encouraged usage of BP. This is because the rules made people feel that there was regulation and exclusivity in membership. With the regulations in place, the majority felt that the problems associated with the official Kenyan Money would not arise with BP because it could not be hoarded/saved/speculated upon and members could only have a maximum of 400BP. The users mainly discussed the rules because it was part of their joining



constitution and they had to accept to the terms and conditions before joining the Bangla Business Network. They had the following to say about BP rules.

*That the rules are good because they regulate us. For instance, you must be a member and cannot accept more than 400BP, attend meetings and respect other members. (Respondent 36, April, 2015).*

*We have the constitution but we have never read it full. (Respondent 1, April, 2015)*

*That you cannot take BP to the bank or use it as a medium of exchange outside Bangla unless it is with another member. (Respondent 44, April, 2015).*

*Do not use with someone who is not a member and do not take it to the bank. If you do, you are on your own. (Respondent 34, April, 2015).*

*You must be a registered member of BP and you cannot take it to the bank.*

*We must have BP but you cannot use it outside the community, and can only use it with members. You cannot sell BP or have more than 400BPs. (Respondent 2, April, 2015).*

*“That we do not have so much money so we should use it for local stuff like food.” (Respondent 3, April, 2015).*

*“It is good to have your stock in Kenyan money so it is not right to liquidate all your stock in BP. I cannot accept more than 200. (Respondent 5, April, 2015).*

Networks discussed BP positively or negatively with information diffused either encouraging discouraging usage of BP. Almost all networks did not discuss the use of BP as a political statement to the government to decry marginalization, under-development or rebellion. Only 12% of the survey respondents talked of using BP as a political tool. In fact, the users simply used it because it would personally benefit them. When BP was banned by the government, it created fear and the usage generally declined to the extent that one respondent said that they use BP in secrecy because fear arrests. This led to a decline in usage because the users do not know each other as much as they used to before. Most users have removed the “Bangla-Pesa Inatumika Hapa (BP is accepted here)” stickers since they do not want to be publicly associate with it.” Some users who stopped using after the arrests say they are still assessing the situation to see how the government will treat it and even one user claimed that she has been warned by her husband to stay away from that thing (BP), lest she branded a traitor or a member of the Mombasa Republican Council (MRC). Below are some of the discussions that were on the political issues surrounding the use of BP.

*When we were discussing it, people said "ni ya majimbo" or "ni ya wajaluo" while some dismissed it as a currency for food vendors. (Respondent 14, April, 2015)*

*We said that it is just for community use. It is the media that wrote their own things and given that we are known opposition supporters, they made the government think we were planning a political revolution. (Respondent 59, April, 2015)*

*We said that the government does not take it kindly. That we should use something like a dollar because the government might see like we are denying them tax because it is not taxable. (Respondent 35, April, 2015)*

*People just said they want the government to give them loans to do business.” (Respondent 56, April, 2015)*

*During its introduction, the big businesses and small businesses clashed during the election of the leaders. The big businesses wanted to impose their own in the committee but we refused. That is when they began saying we are MRC and were making our money. They alerted the government and shortly after, we were arrested. However, our voice can now be heard as one. Good roads brought by the government and loans for different projects have come in due to lobbying by the Bangla-Pesa family. (Key informant 2, April, 2015)*

*The users never thought about using BP to make a political statement. (Key Informant 3, April 2015)*

In summary, most users discussed BP while most non-users did not discuss BP in their networks. Among those who discussed, the users recalled having discussed positive information that encouraged the usage of BP while most non users recalled negative messages that discouraged them from using BP. The hypothesis for this section was that the type of information diffused with in networks does not affect the usage of BP. From the analysis above, it clear that the information diffused with in networks determines whether one will accept or reject BP.

## CHAPTER SIX

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 6.1. Introduction

The previous chapter presented the study findings of the four research questions and how the study connected with the existing literature and theories. This chapter reviews the main findings and draws conclusions on the study findings based on the hypothesis in chapter three. Further, the study gives recommendations on further research and the practice of introducing CCs in Kenya's informal settlements.

#### 6.2. Summary and Main Findings

This study is centred on understanding why people use complementary currencies in Kenya's informal settlements. The study considered all determinants of usage including: government support; characteristics of users; economic incentives; presence of a closed economy and networks in the diffusion of information. The study discounted the first four determinants and thus narrowed down one determinant of usage—the role of networks in influencing acceptability and usage of Bangla-Pesa. Specifically, the study sought out to understand how the type, size, number of networks affect the diffusion of information about BP and how this subsequently affects acceptability and usage.

The study reviewed five theoretical approaches: four main approaches: institutional (Sárdi, 2013; Knapp, 1924), rational choice (Evans, 2009); the value laden approach (North, 2000; Zagata, 2004); and through the network approach (Zagata, 2004; Jackson and Wolinsky, 1996). The institutional approach argues that people use CCs and money because they are backed by the government which creates a sense of legitimacy. The rational choice approach argues that people use CCs to increase their economics gains and therefore it is a rational choice. The value free approach argues that people use CC to pursue social, environmental, political and economic reform objectives which advocate for money reforms in the use and circulation of money. The network approach argues that people use CCs due to pressure and influence from their social networks. This theoretical approach is backed up by the usage of M-Pesa in Kenya which mainly spreads through social networks. However, this study is based on the network theory of diffusions. This is because this theory recognizes that networks alone do not justify usage of

CCs. The adoption of ideas within networks has to do with the type, size, and information discussed within that network.

To conclusively answer this research question, the study used a mixed method approach—triangulation between qualitative and quantitative research methods. The data was collected from 60 users, 25 non-users and 13 KIIs. 60% of the users are women and 60% the non-users are men. The average BP user is a woman, aged between 18 to 35 years and has primary-school level education. The average BP non-user is a man aged between 18 to 35 years and has primary school level education.

The study found out that BP users are generally more trusting, are members at least one network, have more types/categories networks and belong to both large and small networks. The non-users are less trusting, belong to fewer or no networks, and belong majorly to small networks. The study found that user's networks shared a lot of positive information that encouraged usage of BP while the non-users networks either did not discuss BP, or discussed it in negative light in a manner that discouraged the members from using BP.

In summary, the study found that there are four major types of networks in Bangladesh slum. They include: religious, self-help, social support and altruistic networks. While majority of the users belong to religious networks, majority do not trust them and they have never discussed BP in their meetings. Social support networks are the least popular networks, with low levels of trust and they also barely discussed BP. Self-help networks are the most popular networks with a majority of users (85%) belonging to at least one self-help network. BP is most discussed in self-help networks and they are the most trusted by 45% of users. While majority of the users (80%) are members to at least one altruistic network but the levels of trust in altruistic networks are lower as compared to self-help networks. In Bangladesh slum, self-help and altruistic networks are the most influential networks among BP users and they discussed BP fairly well in their meetings.

The study found that small networks are generally more useful in enhancing usage of BP. BP users are members of large religious and altruistic networks but they only serve as the first points of information while small self-help and social support networks are the decision making points. This is because people trust the small networks more and they join the BBN with people they know very well. The non-users are majorly members of small networks and due to lack of

exposure to information from a wide variety of information about BP, they do not understand BP—one of the main reasons why they do not use it.

The study found that those who belong to more networks and networks categories use BP than those in few networks. Belonging to various networks increased the chances of hearing about BP because majority of those in more than two networks know about BP and have discussed it in their various meetings.

### **6.3. Key conclusions**

The study concludes that BP is a “friends’ currency” whose circulation and usage takes place within a complex and intricate network of friends who have multiple relations—belong to similar kinships, go to the same church, take children to a community school, purchase goods (mostly on credit) from a kiosk in the neighbourhood (owned by a friend or relative), are members of similar neighbourhood or church, belong to a neighbourhood merry-go-round group and their spouses are drink together. People belonging to a network use BP more than those that do not.

The analysis showed that the kind of information shared within the networks and the level of trust among members in the networks contributes to usage of BP. Survey data show a significant difference in the level of trust between users and non-users but this was only significant depending on the size and type of networks. Usage of BP was high among people who were trusting, with memberships to both large and small networks, and networks that passed positive information about BP. This study therefore tentatively concludes networks are key determinants of the usage of BP because first and foremost, the type of network one belongs to increases their chances of adopting and using BP. This is because the level of trust varies from one network category to the other, their objectives, leadership structure and organization goes a long way into deciding whether BP will ever be discussed in that given network and whether the network will encourage usage or non-usage of BP.

Secondly, the information diffused with in networks determines whether one will accept or reject BP. This is because the trusted networks that portray BP positively encouraged usage while trusted networks that negatively portrayed BP dissuaded their members from using it.

Thirdly, people use BP because they get information and pressure from more networks while those in fewer or no networks have never discussed BP and mostly do not use it. This is because

people with more networks get more pressure to use BP as compared to people with few networks. People with more networks began using BP in the first phase and were the earliest adopters of BP. Those with few networks are still reluctant to use BP because they do not have enough links to explain how BP works and pressure them into using BP.

Lastly, the type and size of networks that one belongs to also influences the chances of whether one will adopt and use BP or not. This is because people who had both large and small networks used BP more as compared to those with small networks only. Though large networks do not have the strongest connections, they are an important source of information which is then discussed and deliberated upon in small networks.

#### **6.4. Recommendations**

While trying to understand how networks have influenced usage of BP in Bangladesh slum, the study also revealed gaps in knowledge which future research may seek to fill. Due to time and resource constraints, the study recommends that further research be done on a comparative basis in Kenya to try and replicate the issues, especially if it is done in Nairobi where slums tend to be more homogeneous. One can try to establish the nature of networks to be established and whether they will form along similar lines.

Independent researches on patterns and extent of usage of BP are critical to ascertain the impact the currencies have on the users. Other studies on CCs should be on sustainability issues and potential to solve persistent development problems in developing countries such as wage strikes, salary inequalities, funding devolved health programs, food and nutrition programs, environmental pollution and free education programs. Specialized studies on monetary governance are still lacking and these are especially important to guide policy making and legislation on the use of CCs in Kenya.

In future, to enhance usage of CC in Kenya, this study recommends that CC practitioners should penetrate small networks, which are isolated but key decision making points especially in Bangladesh slum. This study recommends that community currencies should be tailored to be introduced with the most popular and most trusted networks with in a community and messages should be carefully tailored to capture various interest groups.

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## APPENDICES

### Appendix I: Survey Questionnaire 1: Users Questionnaire

Hello. My name is Janet, a post graduate student at the Institute for Development Studies (IDS) of the University of Nairobi. I am carrying out research on *Networks as Determinants of Usage of Complementary Currencies in Kenya's Informal Sector* and your enterprise has been selected for the survey. The complementary currency in question is the Bangla-Pesa and your views as a user of this currency are highly valuable and will be useful in the completion of this study. I would appreciate if you spare about 40 minutes to answer some questions. Your identity and the information you volunteer will remain confidential. The data collected will be used to inform my Master of Arts project and therefore your cooperation is highly appreciated.

#### A. BIOGRAPHICAL DATA ON THE RESPONDENT

1.	Name	
2.	Age	<input type="checkbox"/> 18-25 <input type="checkbox"/> 26-30 <input type="checkbox"/> 31-35 <input type="checkbox"/> 36-40 <input type="checkbox"/> 41-45 <input type="checkbox"/> 46-50 <input type="checkbox"/> over 50
3.	Gender (Observe)	<input type="checkbox"/> Female <input type="checkbox"/> Male
4.	Profession—source of income (List at most 3)	
5.	Highest level of education	<input type="checkbox"/> No education <input type="checkbox"/> Primary School <input type="checkbox"/> Secondary school <input type="checkbox"/> Diploma <input type="checkbox"/> University

		<input type="checkbox"/> Other (Name)_____
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**B. USAGE OF BANGLA-PESA**

6.	When did you begin using Bangla-Pesa?	
7.	What is your experience while using Bangla-Pesa?	<input type="checkbox"/> <b>It is easy to use</b> <input type="checkbox"/> <b>It is hard to use</b> <input type="checkbox"/> <b>I having been saving a lot</b> <input type="checkbox"/> <b>Nothing</b> <hr/> <hr/> <hr/>
8.	Is using Bangla-Pesa beneficial?	<input type="checkbox"/> Yes (How?) <hr/>
		<input type="checkbox"/> No (Why) <hr/>

9. Where did you hear about the Bangla-Pesa?

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**C. NETWORKS**

Type of networks, size and Membership to various networks

10. I am going to ask you questions about you and membership to some group for each one of them, please tell me the name of the grouping, number of members, kind of membership (whether you are an official or ordinary member).

Groups	Tick all that apply	Name if any	Kind of membership (official or ordinary member)	Size of group
Church/Religious (specify)				
Community (specify)				
Agricultural (specify)				
Merry go round(specify)				
School (specify)				
Table Banking/Money				

Ethnic groups				
Lending/ Sacco's/ credit unions networks				
Social groups,ie friends				
Widows and Divorcees groups				
People Living With HIV/AIDS groups				
Environmental conservation groups				
Family /kinship groups				
Economic vyama-colleagues, acquaintances				
People in the same trade/commodity/ service such as commercial sex workers				
Businesses in Same geographical area				
Others (specify)				

11. Do you consider yourself:

- Trusting
  Not trusting  
 Very trusting
  Not trusting at all

12. Do you trust members of your network?

- Yes
  A little  
 No

13. Which network do you have the most trust in?

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14. Do you attend the meeting or activities of these networks?

- Yes
  No

15. Have these groups discussed Bangla-Pesa in their meetings?

Yes

No

16. Please explain what were the messages given about...

The advantage of using Bangla-Pesa	
Its compatibility of Bangla-Pesa to the existing system	
The use of Bangla-Pesa as a political statement	
The ease of using Bangla-Pesa	
Observability of the results of using Bangla-Pesa	
The rules pertaining the usage of Bangla-Pesa	

17. What other issues regarding Bangla-Pesa were discussed?

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18. Did the message encourage usage of Bangla-Pesa?

Yes  No

19. Did the messages discourage usage of Bangla-Pesa?

Yes  No

20. Why did you begin using Bangla-Pesa?/ How did you make a decision to join the BBN?

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21. Please tell me, who guaranteed you to get Bangla-Pesa and what is your relationship with them? Please also tell me whether you are in the same groups/networks as your guarantors? If yes, please list all the groups you have in common with the four guarantors and where do you interact with them?

Guarantor	Type of relationship	Common membership to groups	Where they mostly meet
		<input type="checkbox"/> Yes <input type="checkbox"/> No <hr/> <hr/> <hr/>	

		<input type="checkbox"/> Yes <input type="checkbox"/> No	

22. What do you use your BP to buy most? (list at least 5 key items.)

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23. Who do you frequently exchange Bangla-Pesa with and do belong to the same networks? (list about of five in the table below)

Most frequent exchangers	Same networks? ANSWER (Yes)/(no)	Which network?

24. Do you have any link/relationships with these businesses/owners? If yes explain.

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25. a.) Have you introduced any people to using Bangla-Pesa

Yes  No

b.) If yes, who are they and what relationship do you have with them and are they members of the same groups as you. (list about of five in the table below-Maximum 5 people)

People introduced	Type of relationship	Common membership to groups(Yes/No)	Which group?

**Thank You for taking your time and patience to participate in this study!**

**Appendix II: Survey Questionnaire: Non-Users Questionnaire**

Hello. My name is Janet, a post graduate student at the Institute for Development Studies (IDS) of the University of Nairobi. I am carrying out research on *Networks as Determinants of Usage of Complementary Currencies in Kenya’s Informal Sector* and your enterprise has been selected for the survey. The complementary currency in question is the Bangla-Pesa and your views as a non-user of this currency are highly valuable and will be useful in the completion of this study. I would appreciate if you spare about 40 minutes to answer some questions. Your identity and the information you volunteer will remain confidential. The data collected will be used to inform my Master of Arts project and therefore your cooperation is highly appreciated.

**A. BIOGRAPHICAL DATA ON THE RESPONDENT**

1.	Name	
2.	Age	<input type="checkbox"/> 18-25 <input type="checkbox"/> 26-30 <input type="checkbox"/> 31-35 <input type="checkbox"/> 36-40 <input type="checkbox"/> 41-45 <input type="checkbox"/> 46-50 <input type="checkbox"/> over 50
3.	Gender (Observe)	<input type="checkbox"/> Female <input type="checkbox"/> Male
4.	Profession—source of income (List at most 3)	
5.	Highest level of education	<input type="checkbox"/> No education <input type="checkbox"/> Primary School <input type="checkbox"/> Secondary school <input type="checkbox"/> Diploma <input type="checkbox"/> University <input type="checkbox"/> Other _____

**B. KNOWLEDGE ON BANGLA-PESA**

		YES	NO
6.	Have you ever heard of Bangla-Pesa? (If YES, proceed, If NO, terminate the interview)		
7.	Do you know what is Bangla-Pesa?		
8.	Do you know of people who use the Bangla-Pesa?		
9.	Have you used Bangla-Pesa before?	<input type="checkbox"/> Yes, in the first phase but I no longer use it <input type="checkbox"/> Yes in the second phase but I no longer use it <input type="checkbox"/> Never. Not at all	
10.	If you have ever used Bangla-Pesa, here did they get it?	<hr/> <hr/>	
11.	What was the experience of using Bangla-Pesa?	<hr/> <hr/>	
12.	Have you qualified to receive Bangla-Pesa?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13.	If YES, why are you not accepting it? Why have you never thought of using Bangla-Pesa?	<input type="checkbox"/> I don't want to go against the government/it is not legal <input type="checkbox"/> I don't understand the rules on using it <input type="checkbox"/> I have no people to exchange it with <input type="checkbox"/> I know no one who uses it <hr/> <hr/>	

14. Where did you hear about the Bangla-Pesa?

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### C. NETWORKS

#### Type of networks, size and Membership to various networks

I am going to ask you questions about you and membership to some group for each one of them, please tell me the name of the grouping, number of members, kind of membership (whether you are an official or ordinary member).

Groups	Tick all that apply	Name if any	Kind of membership (official or ordinary member)	Size of group
Church/Religious (specify)				
Community (specify)				
Agricultural (specify)				
Merry go round(specify)				
School (specify)				
Table Banking/Money				
Ethnic groups				
Lending/ Sacco's/ credit unions networks				
Social groups. ie friends				
Widows and Divorcees groups				
People Living With HIV/AIDS groups				
Environmental conservation groups				
Family /kinship groups				
Economic vyama-colleagues, acquaintances				
People in the same trade/commodity/ service such as commercial sex workers				
Businesses in Same geographical area				
Others (specify)				

15. Do you consider yourself:

Trusting

Not trusting

Very trusting

Not trusting at all

16. Do you trust members of your network?

Yes

A little

No

17. Which network do you have the most trust in?



18. Do you attend the meeting or activities of these networks?

Yes

No

19. Have these groups discussed Bangla-Pesa in their meetings?

Yes

No

20. Have these groups discussed Bangla-Pesa in their meetings?

Yes

No

21. Please explain what were the messages given about...

The advantage of using Bangla-Pesa	
Its compatibility of Bangla-Pesa to the existing system	
The use of Bangla-Pesa as a political statement	
The ease of using Bangla-Pesa	
Observability of the results of using Bangla-Pesa	
The rules pertaining the usage of Bangla-Pesa	

22. What other issues regarding Bangla-Pesa were discussed?

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23. Did you make a decision after that?

Yes

No

24. What decision did you make?

To accept Bangla-Pesa

To not accept Bangla-Pesa

25. Did the messages encourage usage of Bangla-Pesa?

Yes

No

26. Did the messages discourage usage of Bangla-Pesa?

Yes

No

27. What features of Bangla-Pesa appeal to you?

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28. What features of Bangla-Pesa discourage you from using it?

- The rules that limit having more than 400BP
- It cannot be exchanged to the Kenyan shilling
- It cannot be used outside the slum
- It cannot be banked—there is so Central Bank
- It cannot be used to store value

Others/explanation:

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29. If the features that ‘do not appeal to you’ were changed, would you accept Bangla-Pesa?

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30. a.) Have you introduced any people to using Bangla-Pesa

- Yes
- No

31. b.) If yes, who are they and what relationship do you have with them and are they members of the same groups as you. (list about of five in the table below-Maximum 5 people)

People introduced	Type of relationship	Common membership to groups

***Thank You for taking your time and patience to participate in this study!***

**Appendix III: Key Informants Interview Guide: Academics**

Hello. My name is Janet, a post graduate student at the Institute for Development Studies (IDS) of the University of Nairobi. I am in the final stage of my MA—writing my dissertation. My research is on *Networks as Determinants of Usage of Complementary Currencies in Kenya’s Informal Sector* and you have been selected as a Key Informant.

The complementary currency in question is the Bangla-Pesa and your views of this are highly valuable and will be useful in the completion of this study. I would appreciate if you spare about 40 minutes to answer some questions. Your identity will remain confidential as well as everything you tell me. The data collected will be used to inform my Master of Arts project and no other purpose. Your cooperation is highly appreciated.

**Details of the Key Informant**

Name	
Profession/position	
Job Description	
Contact	

**Interview Guide**

1. I am trying to understand the usage of Complementary Currencies (CCs) in developing countries. Could you please tell me why CCs are introduced?
2. Are you aware of Bangla-Pesa (BP) in Kenya?

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YES  NO

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3. If YES, please comment about its introduction and usage
4. What factors led to its introduction?
5. Could you comment on the impact of the introduction or usage of BP or CCs?

Social implications	Economic implications	Political implications

6. What are the benefits of using BP or CCs?
7. What limitations of using Bangla-Pesa/CC?
8. What is the future of complementary currencies in Kenya?

**Thank You for taking your time and patience to participate in this study!**

#### **Appendix IV: Key Informants Interview Guide: Government Officials**

Hello. My name is Janet, a post graduate student at the Institute for Development Studies (IDS) of the University of Nairobi. I am in the final stage of my MA—writing my dissertation. My research is on *Networks as Determinants of Usage of Complementary Currencies in Kenya's Informal Sector* and you have been selected as a Key Informant.

The complementary currency in question is the Bangla-Pesa and your views of this are highly valuable and will be useful in the completion of this study. I would appreciate if you spare about 40 minutes to answer some questions. Your identity will remain confidential as well as everything you tell me. The data collected will be used to inform my Master of Arts project and no other purpose. Your cooperation is highly appreciated.

#### **Details of the Key Informant**

Name	
Profession	
Job Description	
Contact	

#### **Interview Guide**

1. Please tell me what your (and government's) position is on CCs in general.
2. What is the government's perception of Bangla-Pesa?
3. The DPP instructed the CBK and the treasury legal departments to formulate laws that govern complementary currencies in Kenya. Please tell me the government has so far done.
4. Please comment about Bangla-Pesa's policy/legal operating framework/environment.
5. What are the social implications of the introduction or usage of BP?
6. What are the political implications of the introduction or usage of BP?
7. What are the economic implications of the introduction or usage of BP?
8. Does the government intend to get involved in promoting the usage of complementary currencies, as other countries have adopted them to solve environmental/education/or health crises in various countries?
9. Comment briefly about the usage of Bangla-Pesa in Kenya
10. Does the government have any intentions of expanding use of CCs? Why do you think people are willing use Bangla-Pesa and other complementary currencies together with the official currency?

**Thank You for taking your time and patience to participate in this study.**

**Appendix V: Key Informants Interview Guide: Bangla-Pesa Officials**

Hello. My name is Janet, a post graduate student at the Institute for Development Studies (IDS) of the University of Nairobi. I am carrying out research on Networks as Determinants of Usage of Complementary Currencies in Kenya’s Informal Sector and you have been selected as a Key Informant.

The complementary currency in question is the Bangla-Pesa and your views of this currency are highly valuable and will be useful in the completion of this study. I would appreciate if you spare about 40 minutes to answer some questions. Your identity will remain confidential as well as anything you tell me. The data collected will be used to inform my Master of Arts project and therefore your cooperation is highly appreciated.

**Details of the Key Informant**

Name	
Profession/ source of income (List all)	
Job Description	

**Interview Guide**

1. Please tell me how BP works/operates?
2. Why did you introduce Bangla-Pesa/ why was Bangla-Pesa introduced and whom does it target?
3. I understand some people/business use it while others don’t, could you tell me what determines who uses and who does not use? (Ask follow up questions depending on the answer: if it is the officials who determine who uses/doesn’t, ask how that decision is made?)
4. Why did people join the BBN?
5. Why does BP rely on introductions?
6. Why do people use Bangla-Pesa?
7. Why do you think the BP s highly used?
8. What is the most common use of the Bangla-Pesa?
9. What was the key factor in establishment and usage of Bangla-Pesa?
10. What issues affected the introduction of Bangla-Pesa?
11. How do networks contribute to the usage of Bangla-Pesa
12. Could you comment on the impact of the introduction or usage of BP or CCs?

Social implications	Political implications	Economic implications

13. What are the benefits of using BP?
14. What are the limitations of using Bangla-Pesa?
15. Why was it re-introduced as a voucher and not as a currency and are there any legal implications to this status?
16. Is a Bangla-Pesa operating in a policy vacuum?

**Thank You for taking your time and patience to participate in this study!**