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The propensity to adopt mobile banking among the unbanked at the base of the pyramid in South Africa.

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Abstract

The increasing mobile penetration rates in Africa provide an interesting opportunity to mitigate financial exclusion on the continent. Through mobile phone applications that provide an electronic store of value that sits on the mobile phone, the unbanked poor can now access accounts and initiate financial transactions on their mobile phone. The mobile phone presents a more affordable and accessible channel for transacting.

The aim of the research was to determine the inclination for the unbanked at the base of the pyramid in South Africa to adopt mobile banking. In total, 100 individuals were interviewed to determine their propensity to adopt mobile banking if it were made available to them. The criteria for selection were residence in an informal settlement in Gauteng, being unbanked and having access to or ownership of a mobile phone.

Graphical representations of the findings were analysed to determine the proportion of the sample that would adopt mobile banking under the various constructs. It was concluded that mobile banking had a high likelihood of being adopted by individuals at the base of the pyramid on the basis of its low cost, the convenience and security it offered, and the ease of its use. Additional factors in favour of adoption included observability and trialability.

Keywords

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Wadzanai Machena

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Signature

10 November 2010

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1.1   RESEARCH TITLE

The propensity to adopt mobile banking among the unbanked at the base of the pyramid in South Africa.

1.2   INTRODUCTION

1.2.1   MOBILE PENETRATION

There has been an increased usage of mobile phones in developing countries, including South Africa. On a global scale, there are over 3.3 billion mobile phone users, of which 60% of users reside in developing countries (UNCTAD, 2008). The mobile penetration rate in South Africa is 92.67 mobile cellular subscriptions per 100 inhabitants (ITU, 2010). The proliferation of mobile telephony presents an opportunity to reach individuals previously excluded from the formal banking system with financial services (CGAP, 2008).

1.2.2   FINANCIAL ACCESS

2.5 billion individuals, or a little more than half of the world's population, do not use formal or semi-formal financial services. In Sub-Saharan Africa 325 million adults, or 80% of the adult population, do not have access to financial services, compared to 8% in high income OECD countries (Financial Access Initiative, 2009).

The reasons often cited for not being banked include:

- long distances from financial services,

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- intermittent or no income,

- high levels of financial illiteracy

- banking services that are priced out of the reach of low income members of society (Financial Access Initiative, 2009; Cole et al, 2009).

The lives of the individuals at the base of the pyramid (BOP) are characterized by low incomes that are irregular and unpredictable. They do not have a steady cash flow for day-to-day expenses with which to make investments, or to pay for health bills or expenses related to emergency events. However, even with such a limited cash flow, poor households take advantage of multiple different informal financial tools to meet their cash requirements (Collins et al, 2009).

In 2009, 26 out of every 100 South African adults were financially excluded. Of the 64% that are financially included, 10% are reliant on informal financial service products, such as stokvels (savings clubs), burial societies and informal money lenders (Finscope, 2009). This represents a market of 9.1 million adult individuals without a bank account (CIA World Fact Book, 2009).

In the South African context, the Financial Services Charter (FSC) provides an impetus for retail banks to provide financial services for the previously unbanked mass market, PUMM. Amongst the key signatories to the FSC are the South African Government, industry bodies (such as insurance companies, banks and other financial services entities) and labour and civil society representatives (Napier, 2008). Signed in October 2003, the FSC was a contract entered into by the signatories signifying their commitment to bringing about transformation through the increased accessibility of affordable financial services, such as basic savings, insurance, low

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income housing credit and other transactional products, to individuals at the base of the pyramid by 2008 (FSC, 2003).

The most prominent initiative by retail banks to address the needs of individuals at the base of the pyramid was the Mzansi Account. The Mzansi Account was launched in 2004 as an accessible and affordable transactional account to fulfil the requirements of the FSC (FinMark Trust, 2006). Uptake of the Mzansi Account by those in LSM 1-5 was 4% in 2005 and had increased to 18% by 2008 (Bankable Frontier Associates, 2009). Of those at the base of the pyramid who did not open accounts, irregular income and unemployment were cited as reasons for not having an account.

1.2.3   The potential for mobile banking to mitigate financial exclusion

Given that there are 1.44 times more individuals with mobile phones than individuals with bank accounts, the mobile phone may provide a means to reach the previously unbanked in South Africa. Mobile banking allows users to access banking services such as savings and transactions through their mobile phones (Porteous, 2006). Mobile money includes three components: an electronic store of value, a mobile phone application that allows users to access and manage accounts, and a network of distribution outlets where users can deposit and withdraw money from their account (Heyer & Mas, 2009).

M-Pesa, launched in Kenya in March 2007, is the most well known mobile money deployment in Africa (Kimenyi & Ndung'u, 2009). It is a mobile phone service that facilitates various types of financial transactions for its users, such as money transfer, airtime top-ups and bill payments.

Much of the significance of the service lies in the opening and registration of accounts that offer low cost financial services through an extended distribution network that banks in developing countries have been unable to offer in the most recent past. While touted as a means to bank the unbanked, its early experience in Kenya has shown that it is the already banked, wealthier Kenyans that are making the most of the services (Aker & Mbiti, 2010).

M-Pesa met with huge success due to the lack of existing alternatives for money transfer (Mas & Morawczynski, 2009). In a country of 38.5 million (CIA, 2010), over 9 million Kenyans are registered users of M-Pesa (Plyler et al, 2010). The direct and indirect economic effects of M-Pesa on a community level include: increased employment opportunities, increased food security, local economic expansion, security and capital accumulation (Plyler et al, 2010).

In the South African context, the first mobile money deployment to offer banking to the unbanked was WIZZIT, launched in December 2004 (Ivatury & Pickens, 2006; Mas & Morawczynski, 2009). Ensuing mobile money launches include: Standard Bank's Community Banking launched in 2009; First National Bank's eWallet launched in November 2009 and Vodacom/Nedbank's M-PESA launched in September 2010 (GSMA Association, 2010).

Much like the M-PESA's usage patterns, a 2006 CGAP study on WIZZIT pointed to the fact that the majority of mobile money customers were not counted among South Africa's poorest people (Ivatury and Pickens, 2006). These customers tended to have more income and assets than the poorest segment of the population, and were somewhat technologically savvy, in addition to being banked.

FNB's eWallet allows for banked FNB customers to initiate mobile money transfers, which automatically creates an eWallet for the recipient, thus providing the unbanked with access to a transactional store of value FNB, 2010). Standard Bank's Community Banking is essentially an entry level bank account for low income individuals that operates on a mobile platform (Standard Bank, 2010). M-PESA is the only mobile money initiative in South Africa at present that allows unbanked individuals to initiate a mobile money transfer.

1.3   RESEARCH OBJECTIVES

The aim of the research is to determine the inclination for the unbanked at the base of the pyramid in South Africa to adopt mobile banking.

1.4   RESEARCH SCOPE

The study focuses on mobile banking and the likelihood of its adoption by the segment of the population that falls within the fourth tier of the base of the pyramid AND is unbanked. The study excludes the use of the mobile phone as a channel to access an existing traditional bank account. In addition, the study does not include the use of micro-payments for which the mobile number must be linked to a credit card or a bank account. It focuses solely on services that would be available to the unbanked poor.

1.5   RELEVANCE OF THE RESEARCH

With the increase in mobile telephony, the use of the mobile phone to provide financial services to the unbanked poor has become an important policy and business research issue (Heyer & Mas, 2009).

The South African Government is committed to increasing financial access for the marginalised and has put in place legislation such as The Co-operative Banking Act as a means to address the financial exclusion of the poor (Co-operative Banking Act, 2005). The Co-operative Banking Act provides the regulatory framework for deposit taking institutions, and other financial institutions (excluding commercial banks) that serve the poor.

International development actors are also investigating this space as a means of promoting poverty alleviation and macroeconomic growth through integrating the unbanked into formal economic networks (Donner, 2008). As part of the Millennium Development Goals (MDG), the 191 member states of the United Nations resolved "to halve, by the year 2015, the proportion of the world's people whose income is less than one dollar a day" (United Nations General Assembly, 2000, p.5).

Financial inclusion has gained prominence for the international development community as research shows that there is a positive correlation between financial sector deepening and economic development (Cole et al, 2009). In addition, financial sector development benefits the poorer segment of the population (Imboden, 2005).

An in-depth review of the literature on financial development and economic growth to date showed "a strong positive link between the functioning of the financial system and long-run economic growth" (Levine, 2005, p.921). Beck et al (2007) concluded that financial deepening in developing nations disproportionally favoured the poorest segment of the population and that there was a negative correlation between income inequality and financial sector development. In

summary, financial development is found to be good for the poor and to be associated with reduced numbers of those living on under a dollar a day.

Maurer (2008) highlighted the scarcity of scholarly research on the impact and adoption of mobile money in the developing world. A 2009 attempt to survey the existing academic literature on mobile banking in developing countries showed that the pace of research on mobile financial services in developing countries was lagging behind the fast pace at which their application was occurring (Duncombe & Boateng, 2009). In addition, Duncombe and Boateng (2009) found a deficiency in in-depth qualitative studies that offered an analysis of primary data.

2   RELEVANT THEORY BASE

2.1   THE BASE OF THE PYRAMID
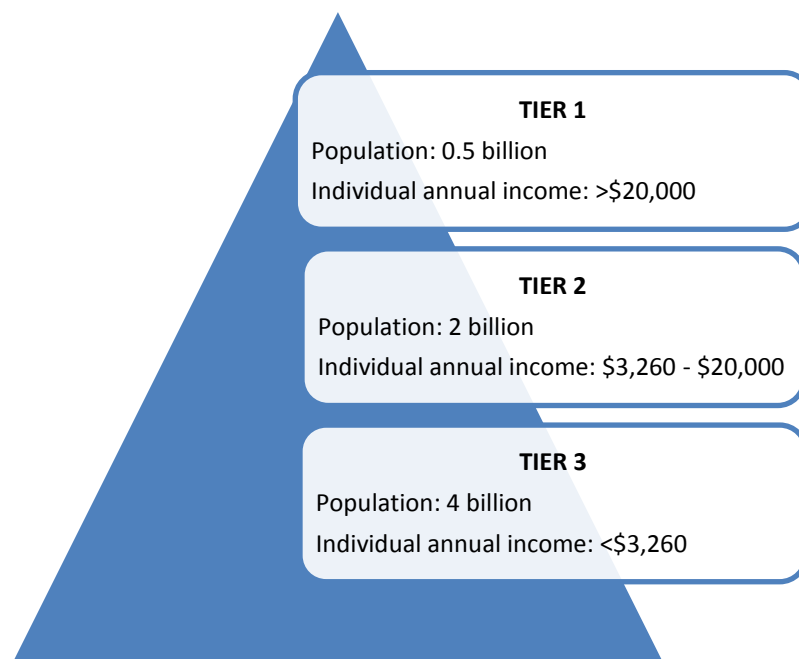
Figure 1 The World Economic Pyramid (Source: Hammond et al, 2007)

The origins of the concept of the Base of the Pyramid (BOP) date back to 2002 and arose out of a need to "draw attention to the 4-5 billion (global) poor who are un-served and underserved by the large organised private sector, including multinational firms" (Prahalad, 2010, pg. 6). Much has been raised in debates around the notion over the years with little agreement on an appropriate definition. References are made to: the Next 4 Billion (Hammond et al, 2007, p.7), the Bottom Billion (Collier, 2007) and "subsistence markets" (Elaydi & Harrison, 2010, p.1). Within the private sector this segment of customers is referred to as "emerging consumer markets" or simply emerging markets (Prahalad, 2010, p.7).

As a subset of the global population, the base of the pyramid constitutes a $5 trillion consumer market by purchasing power parity terms (Prahalad, 2010). This diverse cross section of the population, which is expected to grow to more than 6 billion people over the next forty years, can be characterised as follows (Prahalad & Hart, 2002, p 2-4):

- An annual income per capita of less than $1,500 or less than $4 a day

- Predominantly live in rural villages, or urban slums and shantytowns

- Usually do not have title or deed to their assets

- Very poorly served, particularly by formal businesses

- Reliant on the informal economy

- Low literacy rates

- Limited access to conventional distribution, credit and communications.

If there is no agreement on the appropriate definition of the BOP, there is no one set of characteristics to describe the BOP market. This extreme variety in the BOP market is influenced by geography, for example, such that those classified as being at the BOP have incomes of less

than $3.35/ day in Brazil; $2.11 in China; $1.89 in Ghana and $1.56 in India (Hammond et al, 2007).

In the same way that the composition of BOP markets differs by country, there are marked regional differences regarding which dominates: rural or urban poverty (Hammond et al, 2007). The size of the BOP market differs by geography and by sector. The tables below give relative sizes of the BOP market by geographic region and by sector.

Geographic Region	Total Population	Total income	BOP share of total regional income
Africa	486 million	$429 billion	70.5%
Asia/ Middle East	2,860 million	$3.47 trillion	41.7%
Eastern Europe	254 million	$458 billion	36.0%
Latin America	360 million	$509 billion	28.2%

Table 1 BOP Market by Geographical region. (Adapted from: Hammond et al (2007)

Sector	Size of Market
Water	$20 billion
ICT	$51 billion
Health	$158 million
Transportation	$179 billion
Housing	$332 billion
Energy	$433 billion
Food	$2,895 billion

Table 2 (Global) BOP Markets by Sector. (Adapted from: Hammond et al (2007)

2.2 THE BASE OF THE PYRAMID IN SOUTH AFRICA

Given that the nature of the BOP market differs by geography, especially regarding income levels, it is important to define the South African BOP market. Within the South African context, two scales exist as a means of segmenting the market: the Living Standards Measure (LSM) and the Financial Services Measure (FSM).

Developed by the South African Advertising and Research Foundation (SAARF), the Living Standards Measure (LSM), is a means by which the South African market is segmented on the basis of wealth and the amenities one has access to in the home, such as electricity, running water and a television set (SAARF, 2010). The LSM scale ranges from 1 to 10; with LSM 1 representing a low living standard and LSM 10 being the highest living standard.

The FSM segments the market on select elements that point to financial sophistication, such as financial penetration, physical access to banks, connectedness and optimism, financial knowledge, and lastly financial control and discipline (FinMark Trust, 2009). It segments the South African population into 8 tiers. Tier 1 is the least sophisticated and Tier 8 is the most sophisticated segment.
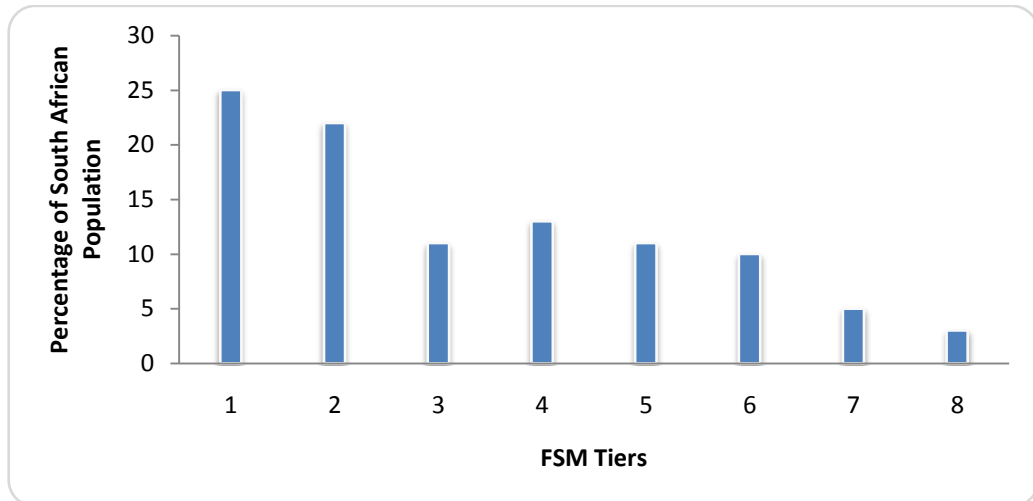
Figure 2 Percent population by FSM Tier (Adapted from: FinMark Trust, 2007)

When the LSM and FSM scales are compared, represented below in graphic form (Figure 4), the difference in the two measures is amplified by the apparent overlaps. Some of the individuals that fall into FSM 1 are clustered into LSM 6-7, with those in FSM 2 falling into LSM 6-7 and LSM 8-10. Of the two measures, the FSM is deemed the more robust financial measure as it takes into consideration more than wealth and amenities to include levels of work experience in addition (FinMark Trust, 2007).
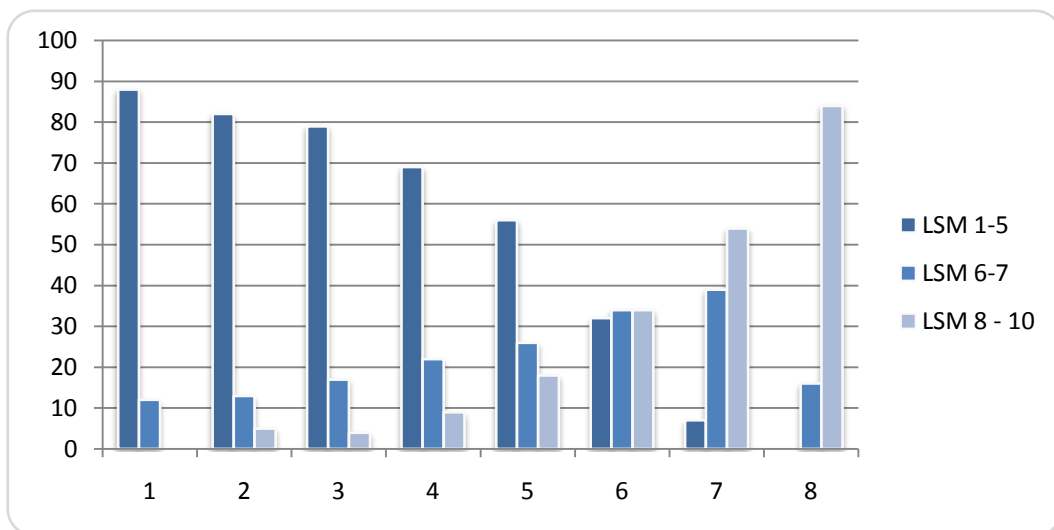
Figure 3 Graphic representation of comparison of LSM with FSM

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The consulting firm, Eighty20, aggregated statistics from various credible sources as a means of adapting Prahalad and Hart's global BOP model to the South African context. These sources included: SALDRU, Stats SA, FinScope, ConMarkTrust and the Unilever Institute (Eighty20 Consulting, 2009). Key poverty measures determined by Eighty20 include: lack of adequately remunerated employment, inadequate and overcrowded housing, food insecurity and the use of rudimentary forms of energy.

For the South African context, the BOP is defined to be Tier 4 of the South African Economic Pyramid. This represents individuals who earn less than R20 a day and accounts for 18.2 million individuals or 41% of the total population (Eighty20 Consulting, 2009). As a market, the South African BOP represents of 30.9% of the total national income and $19.1 billion in expenditure (Hammond et al, 2007).
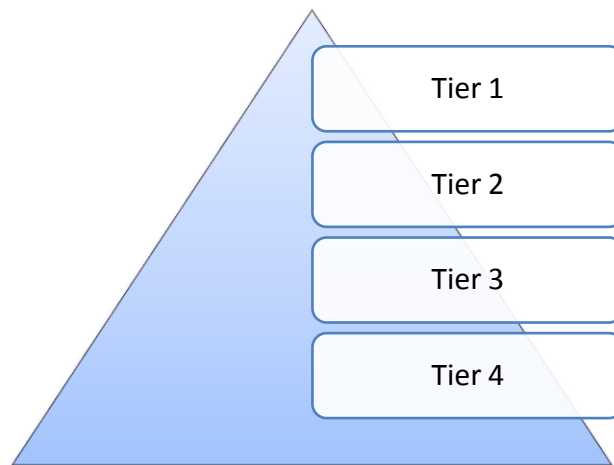
Income		Tier	Population	
Per annum/ ZAR	Per day/ ZAR		millions	Percentage
> 20,000	> 280	1	1.7	4%
10,001 - 20,000	140 - 280	2	3.9	9%
1,501 - 10,000	20 - 140	3	20.9	46%
< 1,500	< 20	4	18.2	41%

Figure 4 South African Base of the Pyramid. (Source: Adapted from Eighty20's presentation)

Though differing in the specific details pertaining to the populations financial profiles captured, each of the two models has its own merits. As a means of maintaining comparability with global poverty models, and in particularly the BOP paradigm, this paper draws on the South African Base of the Pyramid as a method of categorising income levels. Tier 4 of the South African Base of the Pyramid roughly corresponds to LSM 1-5 or FSM 1-4. (Because each segmentation method measures different variables, only an estimation can be provided for how each scale relates to the other).

2.3   ACCESS TO FINANCIAL SERVICES FOR THE POOR - GLOBAL

Financial exclusion refers to the lack of access to formal financial services by certain segments of society. There are an estimated 3.5 billion adults globally that do not have access to formal financial services (CGAP 2008). While households with access to financial access in Western Europe and North America exceed 80%, the majority of African countries have a financial services penetration of 20%. The exceptions are Botswana, Gambia and South Africa; whose financial services penetration rate exceeds 60% (Demirgüç-Kunt et al, 2008).

2.4 ACCESS TO FINANCIAL SERVICES FOR THE POOR – SOUTH AFRICA
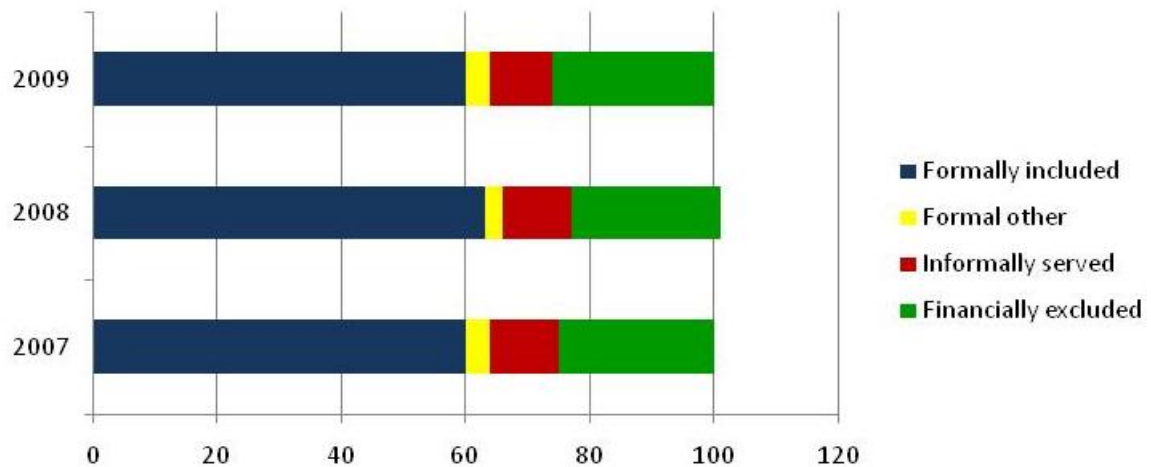
Figure 5 Access to financial services in South Africa (adapted from Finscope 2009)

As many as 26% of South African adults were not served by a formal financial services institution in 2009 (Finscope, 2009). Among the reasons cited for financial exclusion were: unemployment, seasonal employment opportunities, lack of access to formal financial services due to remote location – often rural, costly banking fees, and the presence of monthly bank charges in the absence of consistent income streams (Porteous, 2006).

The formal sector intervention to address financial inclusion in South Africa, the Mzansi Account, met with mixed results after its initiation. The majority of Mzansi Account holders used what has been described as the "dump and pull" usage pattern (Bankable Frontier Associates, 2009, p 44). This usage pattern describes account holders who receive electronic transfers (e.g. salaries) into their account and immediately withdraw all funds from their account, preferring the utilisation of cash as a means of transacting over the use of debit cards linked to their accounts.

While those paying into the accounts of Mzansi Account holders used electronic channels to deposit money into accounts, the account holders predominantly used branches and ATMs (over 90%) as their chosen channels to withdraw cash (Bankable Frontier Associates, 2009). Additionally, as many as 42% of Mzansi Accounts were inactive in 2008 i.e. of 6 million opened accounts opened, 3.5 million remain active. Mzansi Accounts had reached 18% of the unbanked population by 2008 (Bankable Frontier Associates, 2009).

2.5   CHARACTERISTICS OF THE UNBANKED

The unbanked (and under-banked) are more than likely poor and often lack titled assets to offer as surety for loans (Murdoch, 2009). Additionally, most of the unbanked want to make transactions that are deemed too small to attract much interest from profit-seeking institutions (Johnston & Murdoch, 2008). The financial activities of individuals at the base of the pyramid are most often driven by a basic set of needs—e.g., food security, dealing with medical emergencies, paying for school fees (Collins, 2009).

According to Finscope (2009), the unbanked at the base of the pyramid in South Africa share the following characteristics:

- Low formal sector employment.

- Irregular income, 28% of those in LSM 1-5 who receive income have an irregular income profile.

- The median personal income is less than R500 per month. The average income is R758 per month.

- An estimated 3 million individuals in this segment live on less than R5 (US$1) a day

- Typically do not have any form of transactional account

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- 19% have never had a bank account

- Typically have no formal evidence of credit history in any form

- High levels of financial literacy

- High illiteracy levels.

2.6   BARRIERS TO FINANCIAL ACCESS

Beck et al (2007) found that physical access, affordability and eligibility were the most significant barriers to financial access and that these barriers are negatively correlated with economic development. The same study also found that, in general, barriers to banking are highest in economically and financially underdeveloped economies.

Affordability is affected by costs associated with opening an account, transaction fees and high minimum balances. In a study of 257 banks from 88 countries, Beck et al (2007) found that maintenance fees for checking accounts prevented as many as 30% of the population from using financial services. Genesis (2005) found that in South Africa, cost was the most cited reason for not having access to a bank account. From a bank's perspective, barriers related to cost may be a reflection of the requirement of physical infrastructure and regulatory requirements. These, none the less, exclude most poor people from the financial system (Beck et al, 2007).

Customer due diligence carried out by banks as a regulatory precedent makes the majority of low income individuals ineligible. The requirement to provide a physical address is difficult to fulfill for individuals who reside in informal settlements. The requirement of a form of identification that forms part of the 'know your customer' (KYC) regulations precludes many people at the base of the pyramid. Genesis (2005) noted that documentation requirements prevent the large majority of

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the population in many Sub-Saharan African countries who are not formally employed, live in rural areas without registered addresses, and do not have IDs or passports from accessing financial services.

Regarding physical access to banking services, Beck, Demirguc-Kunt and Martinez Peria (2007) found that financial access was hampered by long distances to bank branches. Other factors included inefficient infrastructure and the lack of free media.

2.7 MOBILE BANKING

Mobile Banking refers to the use of the mobile phone to carry out basic financial transactions, through technological platforms that allow users of mobile phones to store value in an account linked to their mobile phones, access their bank accounts, or access insurance and micro- credit products (Donner & Teller, 2008).

Of the two forms of mobile banking, additive models and transformational models, this study focuses on transformational mobile banking. Additive models refer to mobile banking in which the use of cell phone is that of an additional channel attached to a bank account, whereas transformational mobile banking makes reference to a virtual financial product linked to a cell phone for use by the unbanked (Porteous, 2006). Within the transformational mobile banking category, mobile money has emerged in a handful of African countries as a popular alternative for domestic remittances (Bowen and Goldstein, 2010).

Among the benefits of mobile banking are: the speed with which transfers occur (instantaneous) compared to other alternatives, the ease of access provided by the mobile phone as a channel and the safety offered in comparison to travelling with cash (Morawczynski & Pickens, 2009). Of 1,042 surveyed mobile banking users in the Philippines, 90% felt that they money was safe when stored in virtual form on their mobile phones (Pickens, 2009).

2.8   ADOPTION OF MOBILE BANKING

The three most prominent theoretical paradigms for studying adoption of information systems are the Diffusion of Innovations Theory (Rogers, 2003), the Theory of Planned Behaviour (Azjen, 2002) and the Technology Adoption Model, TAM (Davis, 1989; Davis et al, 1989). Augmentations to the TAM include the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003); the Combined TAM and Theory of Planned Behaviour (TPB). The TAM predicts acceptance of information technology by individuals in organizational settings, whereas the Diffusion of Innovations Theory is ideal when the subjects are consumers, not organizational users (Mallat, 2007).

Thus, this study draws on Rogers' (2003) Diffusion of Innovations Theory, which posits that the characteristics determining an innovation's adoption rate are: relative advantage, complexity, trialability, observability and compatibility.

2.8.1   Relative Advantage

Relative advantage is defined as the extent to which a new product is perceived as being better than the one it replaces (Rogers, 2003). Mallat (2007) includes cost as a construct in the study of

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information system adoption as part of relative advantage. A study of mobile banking by banked individuals in the South African context points to the need for a significant saving in cost in order for individuals to switch to new mobile technologies (Brown, 2005).

In developing countries, the unbanked are excluded for various reasons including remoteness to formal banking institutions and pricing that is out of reach for the world's poorest (Financial Access Initiative, 2009). Bricks and mortar bank branches and the costs associated with holding and transacting from a bank account often make banking prohibitive to low income earners. Consumers at the base of the pyramid often incur transportation costs in order to access banks that are located at a great distance to their homes. With regards to the adoption of mobile banking, cost and accessibility are two important variables to study under the construct of relative advantage.

One of the most significant advantages of mobile banking is that it provides users with ubiquitous and real-time services (Dahlberg, Mallat, Ondrus, & Zmijewska, 2008; Mallat, 2007). The ubiquity and convenience offered by mobile banking, compared with traditional banking services, makes it more advantageous for mobile users. In addition to accessibility and cost, convenience was another studied variable.

PROPOSITION 1: **An individual is more likely to adopt mobile banking if it offers relative advantage over existing technologies.**

2.8.2 Compatibility

Compatibility describes the level to which an innovation is seen as being consistent with the existing values, societal norms and past experiences of potential adopters (Rogers, 2003). The more easily an innovation fits into a society, the faster the rate of adoption (Olatokun & Igbunedion, 2009). Agarwal and Prasad (2000) describe it as the degree to which an innovation fits in with an individual's lifestyle, needs, and values'. In the context of the study, compatibility can thus be taken to be the extent to which mobile banking is familiar to the user so that its use fits in with the day-to-day life of the user.

Medhi et al (2009) suggest that with this innovation being a recent technological phenomenon, the use of m-money is not likely to be consistent with past experience of the unbanked. The concept of virtual money could prove to be an elusive concept for low-literate, low-income consumers to wrap their minds around as it is not a concept that exist in their past experience. However, in the South African context, mobile phone users may be exposed to other mobile commerce initiatives such as the purchasing of music, games and ring tones (Porteous, 2006).

PROPOSITION 2: **An individual is more likely to adopt mobile banking if it is compatible with his lifestyle.**

2.8.3 Complexity

Complexity refers to the extent to which an innovation is deemed as being difficult to use (Rogers, 2003). Given that low income consumers at the lower end of the poverty spectrum also have, more often than not, high levels of illiteracy (Medhi et al., 2009) the adoption of mobile banking in

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this segment of the population has to be seen to be less complex relative to other means of storing financial value and transacting. If user interfaces and the means of accessing and retrieving mobile money are deemed as complex, this would be a deterrent to adoption of mobile banking by the unbanked.

***PROPOSITION 3*: An individual is less likely to adopt mobile banking if it is perceived as being too complex.**

2.8.4   Trialability

Trialability refers to the extent to which an innovation can be experimented with on a limited basis (Moor & Benbasat, 1991). Field agents can provide a means for customers to ascertain the usefulness of the product through a demonstration of how it works – trialability - (Heyer & Mas, 2009). In the adoption of cell phone banking by banked participants in South Africa, Brown (2005) found that survey participants would be more willing to use cell phone banking if they had the opportunity to watch someone else use it successfully.

PROPOSITION 4: An individual is more likely to adopt mobile banking if trialability is a factor in the decision making process.

2.8.5   Observability

Observability defines the extent to which one can see other individuals within one's community utilizing an innovation. Mobile banking, as exemplified by the proliferation of M-PESA in Kenya and Wizzit in South Africa, has increased its customer base, in part, on the basis of word of

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mouth from existing customers (Heyer & Mas, 2009). Social influence (observability) via the use of a new product by members of one's community can contribute to adoption (Venkatesh et al, 2003).

PROPOSITION 5: An individual is more likely to adopt mobile banking if he can observe someone in his community use it.

3 RESEARCH PROPOSITIONS

3.1 PROPOSITION 1: AN INDIVIDUAL IS MORE LIKELY TO ADOPT MOBILE BANKINGIF IT OFFERS RELATIVE ADVANTAGE OVER EXISTING ALTERNATIVES

The survey questions associated to this proposition sought to determine how notions pertaining to relative advantage would influence the intention of adopting mobile banking as a service. Concepts relating to the construct that were tested included:

i.   convenience,

ii. affordability,

iii. the perceived ease the product would introduce to a users life, and finally

iv. perceived increase in security (or diminished risk) presented by money in electronic form compared to cash.

3.2 PROPOSITION 2: AN INDIVIDUAL IS MORE LIKELY TO ADOPT MOBILE MONEY IF IS COMPATIBLE WITH HIS LIFESTYLE

Respondents were presented with questions regarding their use of mobile commerce services such as the downloading of music, ring tones, and music; in addition to the use of 'please call me's. These mobile services, though not identical to mobile banking, were similar in how they were accessed and transacted on the mobile handset. They are virtual goods for which airtime value is exchanged and are not unlike virtual money. In ascertaining the compatibility of mobile money to the lifestyle of participants, these downloadable virtual goods were the closest approximation to mobile money.

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The construct of compatibility was then tested by cross tabulating QUESTION I with QUESTION II. The biggest assumption regarding the compatibility construct was that individuals who were familiar with other forms of mobile commerce would know how to use mobile banking.

3.3 PROPOSITION 3: AN INDIVIDUAL IS LESS LIKELY TO ADOPT MOBILE MONEY IF IT IS PERCEIVED AS BEING TO COMPLEX.

Respondents were asked whether or not they would adopt mobile money if it was easy to do.

3.4 PROPOSITION 4: AN INDIVIDUAL IS MORE LIKELY TO ADOPT MOBILE MONEY IF TRIALABILITY IS A FACTOR IN THE DECISION MAKING PROCESS.

Respondents were asked under this proposition whether or not they would adopt mobile money if they could experiment with it on a trial basis, and also if they would adopt it if someone could demonstrate to them how to use it.

3.5 PROPOSITION 5: AN INDIVIDUAL IS MORE LIKELY TO ADOPT MOBILE MONEY IF HE CAN OBSERVE SOMEONE IN HIS COMMUNITY USE IT.

Mobile banking is a service that was not available to the unbanked in South Africa at the time of the study, thus the role of social influence in its adoption would have been difficult to ascertain. A question was asked, however, regarding whether or not survey participants knew someone who had received money on their cell phone as a means of gauging the extent to which social influence may already exist. This is a possibility given that the existing mobile banking products were utilised by the banked to send remittances to individuals of whom some may have been unbanked.

The assumption was made that individuals who knew someone in their community who had used mobile money (observability) would be more likely to adopt mobile banking. The related question was cross-tabulated against the questions pertaining to whether or not a person would use their cell phone to send and receive money.

3.6   SUMMARY OF RESEARCH PROPOSITIONS AND THEIR RELATED QUESTIONS

PROPOSITION 1: **An individual is more likely to adopt mobile money if it offers relative advantage over existing technologies.**

- I would use my cell phone to send and receive money, if I could do it anytime any where.

- I would use my cell phone to send and receive money, if it was affordable.

- I would use my cell phone to send and receive money, if it would make my life easier.

- I would use my cell phone to send and receive money, because carrying money on my cell phone is safer than carrying cash

PROPOSITION 2: **An individual is more likely to adopt mobile money if it is compatible with his lifestyle.**

I. Do you know how to send or receive money using your cell phone?

The above question was cross-tabulated against the following questions:

II.   Which of the following do you do on your cell phone:

   a. Download ring tones

   b. Download games

   c. Download music

d. Send "please call me's"

PROPOSITION 3: **An individual is less likely to adopt mobile money if it is perceived as being too complex.**

- I would use my cell phone to send and receive money, if it was easy to do. (agree/neither agree nor disagree/agree)

PROPOSITION 4: An individual is more likely to adopt mobile money if trialability is a factor in the decision making process.

- I would use my cell phone to send and receive money, if I could test it first.
- I would use my cell phone to send and receive money, if someone could show me how to do it first.

PROPOSITION 5: An individual is more likely to adopt mobile money if he can observe someone in his community use it.

- Do you know anyone who has received money on their cell phone?

The above question was cross-tabulated against the following questions:

- I would use my cell phone to send and receive money, if I could test it first.
- I would use my cell phone to send and receive money, if someone could show me how to do it first.
- I would use my cell phone to send and receive money, if I could do it anytime, anywhere.

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- I would use my cell phone to send and receive money, if it was affordable.

- I would use my cell phone to send and receive money, if it would make my life easier.

- I would use my cell phone to send and receive money, if it was easy to do.

- I would use my cell phone to send and receive money, because carrying money on my cell phone is safer than carrying cash.

4 RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter describes the chosen research design and method to explore this descriptive study. This section also highlights the limitations of the research method and design.

4.2 CHOICE OF METHODOLOGY

4.2.1 Research Design

A literature review was conducted to ascertain the gaps in the existing literature on mobile money, as well as to draw on any highlighted directions for future research. The explored literature included research on:

- Financial access globally, in developing countries and in South Africa.

- Characteristics of the Base of the Pyramid globally and the Base of the Pyramid in South Africa

- The use of mobile technology to provide financial services in developing countries.

- Adoption of mobile banking as an innovation

Duncombe and Boateng (2009, p.1238) make reference to 'a lack of primary research and a lack of conceptualisation' regarding mobile phones and the provision of financial services through them in the developing world. While there is a growing body of research regarding the adoption of mobile devices for financial inclusion, very little of this research design is built on a solid theoretical underpinning. Research design in this area typically follows the Action Research paradigm and has been carried out by development practitioners as opposed to academicians.

Through their review of existing literature on mobile money, Duncombe and Boateng (2009) identified that the majority of research was commercially driven (versus academic) and technology-led and does not take into consideration the larger context of financial services for the poor (Duncombe & Boateng, 2009). In addition, the sample size of studies was very small, undermining the reliability of the results for rigorous scientific inquiry (Duncombe and Boateng, 2009).

The proposed methodology for this study is a descriptive study utilising a quantitative research approach. This approach is defined by Creswell (2003) as being one where the researcher makes use of "post-positivist claims" for developing knowledge, such as reduction to specific variables or cause and effect. Zikmund (2003) defines quantitative research as being ideal when one needs to measure the extent or quantity of a described "phenomenon in the form of numbers".

The approach utilises inquiry techniques such as surveys and the collection of data through predetermined research instruments. In this instance, the factors that influence adoption of mobile banking among the unbanked in South Africa can be determined through a quantitative research survey.

Factors determining the adoption of information technology have been ascertained in numerous texts. The study utilises already identified and defined concepts (compatibility, complexity, trialability, observability and relative advantage) to determine adoption of an innovative adaptation of mobile technology for a specified target population.

4.3   POPULATION OF RELEVANCE

Zikmund (2003) defines a population as a complete grouping of entities that have a certain set of characteristics in common. For the purposes of this study, the population consisted of the individuals in South Africa who fall within Tier 4 of the economic pyramid. The target group within this population consisted of urban or peri-urban, unbanked adults at the base of the pyramid in Gauteng Province, South Africa who own or have access to a mobile phone.

The unit of analysis, thus, was determined to be an adult individual who met the following characteristics:

- Low income earner at the Base of the Pyramid

- Owned, rented or had access to a mobile phone

- Did not have access to formal financial services.

- Resided in an informal settlement.

The locations chosen for the study were three informal settlements in Gauteng Province, South Africa:

1.   Diepsloot

2.   Winnie Mandela Park (Tembisa)

3.   Freedom Park (Soweto)

These sites were selected as they were areas of Gauteng where it is likely to obtain a representative sample of participants at the base of the pyramid.

4.4   SAMPLING METHOD AND SIZE

Zikmund (2003) makes reference to four kinds of non-probability sampling: judgement sampling, convenience sampling, quota sampling and snowball sampling. Judgement sampling refers to sampling in which the researcher predetermines appropriate characteristics and selects for the necessary participants based on these classifications (Zikmund, 2003).

Given that the survey participants must be South African, fall within LSM 1-5, and must be unbanked, judgement sampling was deemed as the most appropriate form of sampling for the purposes of this study. Individuals were drawn from low-income dwellers of urban and peri-urban informal settlements in Gauteng Province.

Due to resource constraints, the sample size was limited to 100 respondents residing in *urban* informal settlements in only one province: Gauteng. The researcher accepts that that the experiences of the rural poor might be different from those of urban respondents and that the urban poor in other South African provinces might have different experiences.

4.5   DATA GATHERING AND RESEARCH INSTRUMENT

By Zikmund's (2003) definition, a survey is a research technique that utilises a questionnaire to gather data from a sample of the population. Surveys are deemed as being efficient, accurate, quick and inexpensive (Zikmund, 2003). Surveys allow for assurances of confidentially and facilitate more truthful and accurate responses from survey participants (Leedy and Ormond, 2005).

Among the disadvantages of using survey questionnaires are:

- Biased responses based on the respondents levels of understanding and comprehension (Leedy and Ormond, 2005)

- Social bias in responses due to the 'awe factor' that is elicited when marginalised and often ignored participants are solicited by formal entities for their opinion

- Surveys with closed ended questions are unable to provide an in-depth understanding of respondents' opinions (Cooper and Schindler, 1998)

The survey was administered through a research institution with relationships in the selected community. Field agents carried out door-to-door exercises, after a preparation phase to educate the community was held at the community centre. Residents of the community were notified in advance of the research efforts. It was communicated that households would be selected at random and that being selected or not selected did not represent favour or disfavour with regards to the inhabitants of the respective households. A preparation period was necessary in the communities in order to alleviate concerns and fears, as well as preventing misunderstanding regarding the purpose and the nature of the exercise.

The survey was administered via face-to-face interviews as this was deemed the most ideal way to obtain an adequate response rate from the selected segment of the market. In addition, due to low connectivity rate amongst the target community (ITU, 2009), administration over the internet was deemed inappropriate as it would limit the response rate of the survey.

The research instrument was a structured Survey Questionnaire that utilised a three point scale to obtain responses to closed-ended questions related to the constructs under investigation. The

three point scale was used to mitigate concerns about the meaning of terms from being lost in translation since the survey was translated into Zulu, Xhosa and Sesotho.

In addition, there was a need to accommodate the literacy levels of survey respondents. Shrivastava (2010) conducted a similar study amongst previously unbanked and banked Absa clients in the low income segment and found that the Likert Scale, when applied, became "lost in translation", and needed to be simplified, to "Yes", "No" and "Maybe".

The questionnaire was constructed around each of the five constructs that determine the adoption of technological innovations: relative advantage, compatibility, complexity, trialability, and observability. The research questions were adapted from prior studies to ensure the validity of the content of the questionnaire (Shrivastava, 2010; Mallat, 2007; Olatokun & Igbinedion, 2009).

The questionnaire was divided into two sections:

- Section A: Demographic Profile
- Section B: Questions aimed at deriving data on the constructs.

Literacy levels were taken into consideration in the design of the research instrument. It was deemed necessary for the survey to be as simple and uncomplicated as possible to ensure that participants with low literacy levels could be accommodated.

To minimise certain concepts such as mobile banking or "virtual store of value" being misunderstood or lost in translation, the concepts were simplified to "sending and receiving money on your cell phone" in the questionnaire. A translation company, Adventeck Services, translated the survey instrument from English to IsiZulu, IsiXhosa and Sesotho.

4.6   RESEARCH LIMITATIONS

As the study considers the research question from only five constructs of a distinct theoretical framework for information technology analysis, there will be many other variables that are by necessity excluded. Utilising the TAM (Davis, 1989) or UTAUT (Venkatesh et al., 2003) could augment the existing constructs, providing a different outcome.

The studied population consists of the unbanked, urban poor in a defined region: Gauteng Province. It is possible that the experiences of the rural poor might be different. It is also possible that the urban poor in other South African provinces might have different experiences. In addition, the findings of the study are context specific and do not offer a national perspective.

The study was cross-sectional and offers a snapshot of one point in time in a context where the few mobile banking that exist, are in their nascent stages. A study conducted once the innovation becomes more mainstream would yield different results. It would be worthwhile to develop a different model for pre-adoption study, such as this one, where respondents had had limited or no access to mobile money.

The study drew on a sample of 100 individuals drawn from three different informal settlements. This meant that there were 3 samples of 21 (Freedom Park), 45 (Diepsloot) and 34 (Winnie Mandela Park). It would have been more ideal to have obtained all 100 individuals from one informal settlement or increase the sample size in order to control for discrepancies in responses that arise from using respondents from such diverse residential areas.

5   RESEARCH RESULTS

5.1   INTRODUCTION

This chapter highlights the results of the survey. A presentation of biographical information is provided before stating the outcomes of the survey instrument. Survey responses are clustered around their respective propositions, with corresponding graphic representation of each result.

5.2   SAMPLE SIZE

The sample size was one hundred individuals drawn from informal settlements in Gauteng. Of these, 48 were female and 52 were male.

5.3   BIOGRAPHICAL INFORMATION
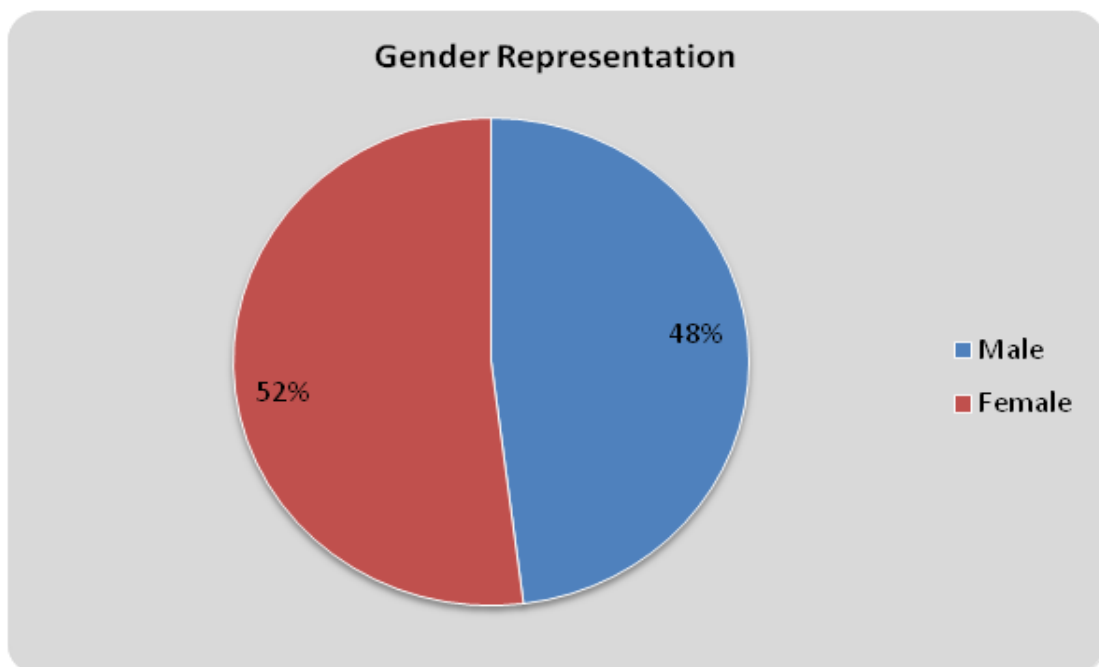
Figure 6 Gender representation of sample

The survey respondents consisted of 52 males and 48 females. In terms of geographic location of residences: 21 resided in Freedom Park, another 45 resided in Diepsloot and the remaining 34 were from Winnie Mandela Park.
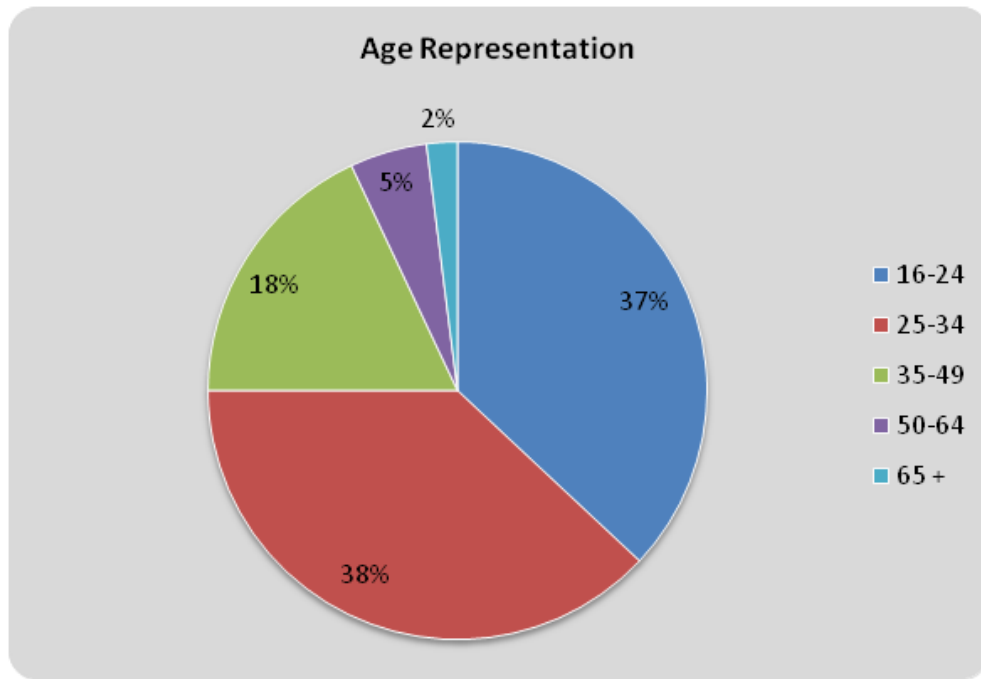
Figure 7 Representation of sample by age

When evaluated by age, the sample included:

- 37 respondents aged between 16-24 years old.

- 38 respondents aged between 25-34 years old.

- 18 respondents aged between 35-49 years old.

- 5 respondents aged between 50 – 64 years old.

- 2 respondents equal to or over 65 years in age.
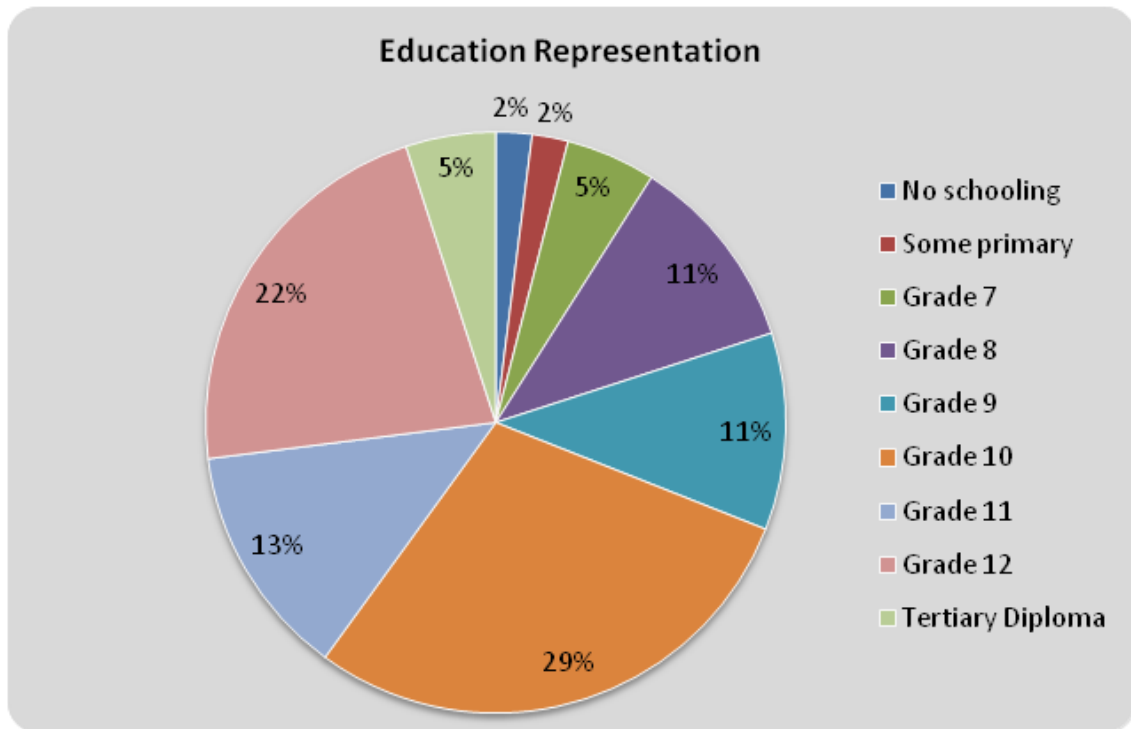
Figure 8 Representation of sample by educational level

The largest group of respondents, at 29%, was that of individuals who had attained at least Grade 10. 2% of the respondents had no formal schooling. The same percentage of students had some primary school education.

Survey participants with Grade 7 came to 5%. Those with at least a Grade 8 education stood at 11%. The same percentage had attained at least a Grade 9 education. Respondents with Matric qualifications were 22% of the sample. Individuals who had attained a tertiary qualification accounted for 5%, but none of the respondents had a university degree.
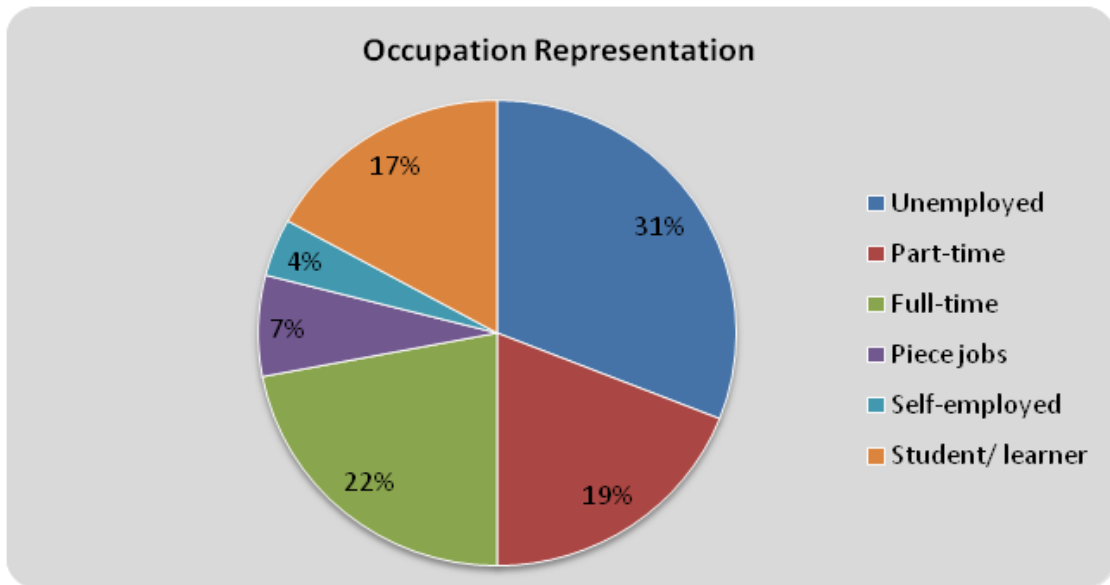
Figure 9 Representation of sample by occupation.

The number of respondents that were employed fulltime stood at 22% of the sample, while 19% were employed part-time. 17% were students. Of the remainder 31% classified themselves as unemployed, while the final 21% were participants in the informal economy either as self-employed individuals or doing piece jobs.
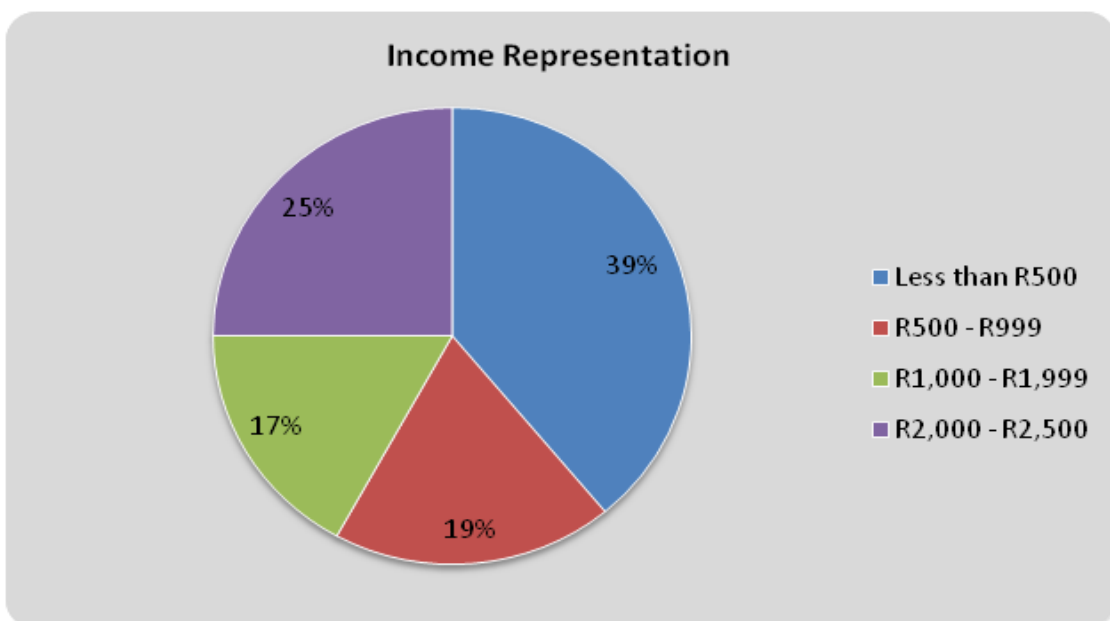
Figure 10 Representation of survey participants by income level.

A large group of the respondents (39%) earned less than R500 a month, with 19% earning between R500 and R999. 17% earned or received R1, 000 – R1, 900 and 25% earned between R2, 000 – R2, 500. The cut-off point was R2, 500, as this is considered the mean income that is representative of individuals at the base of the pyramid.
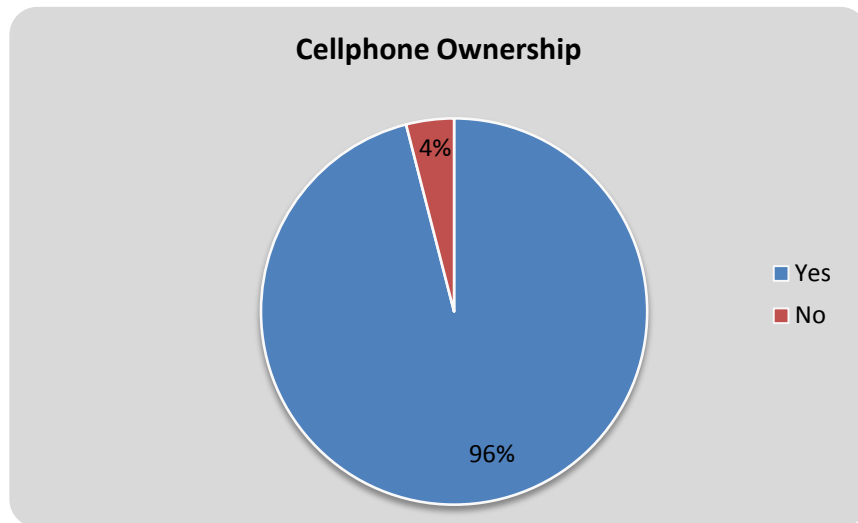
Figure 11 Percentage of surveyed individuals who own a cell phone.

One criterion for the selection of survey respondents was access to a mobile phone, which included individuals who own a cell phone, own a SIM card or have access to a cell phone that they can borrow. 96% of the respondents owned a cell phone and the remaining 4% had access to a cell phone even they did not own one.

40
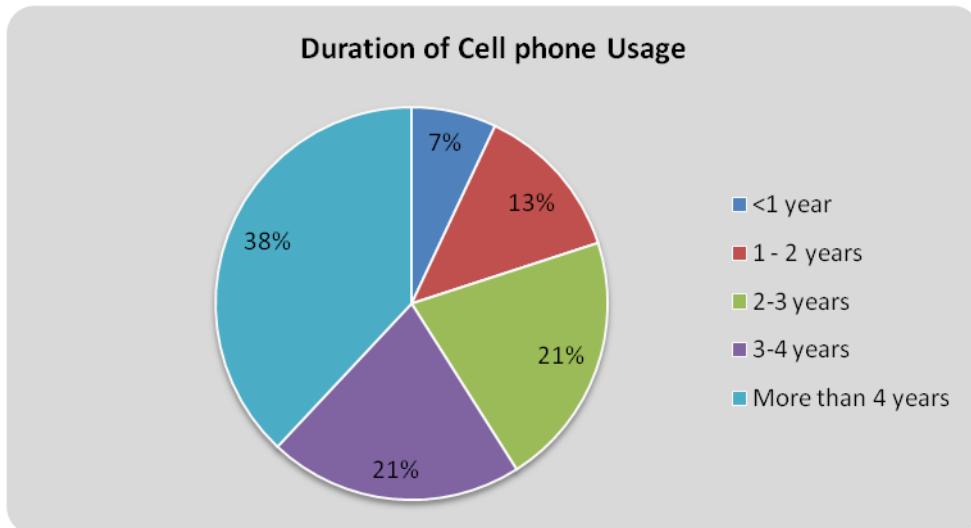
Figure 12 Duration of cell phone usage.

The majority of respondents had used a cell phone for over 4 years (38%), 21% for 3-4 years, another 21% for over 2-3 years. 15% of the survey participants had used a cell phone for a period ranging 1-2 years and 7% had used their cell phone for less than 7%.

5.4   RESPONSES RELATED TO THE USE OF THE MOBILE PHONE

5.4.1   Familiarity with cell phone banking
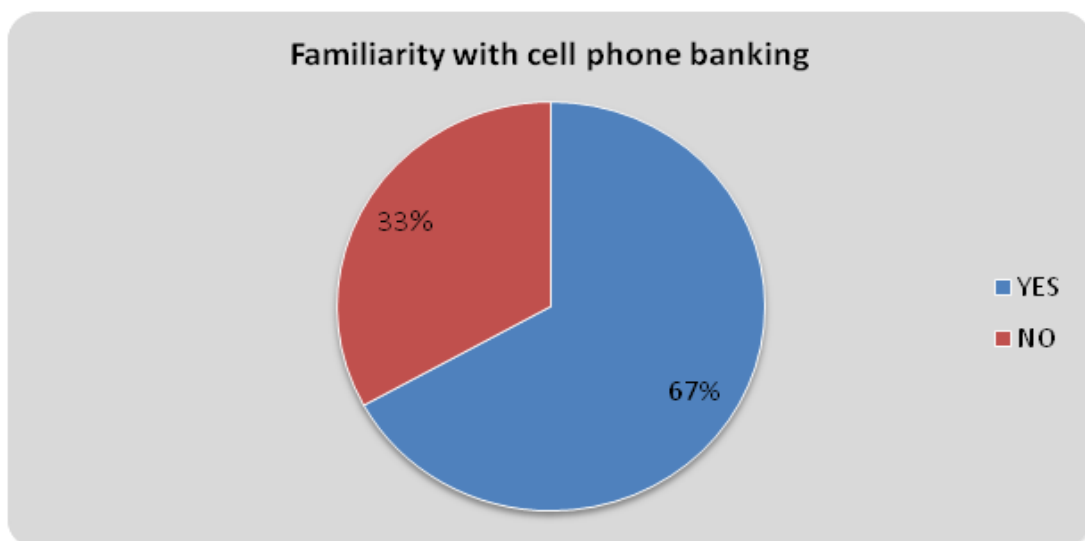
Figure 13 Percentage of respondents who have heard of cell phone banking

67% of respondents were familiar with the concept of cell phone banking, a service that is available to banked individuals. With the exception of individuals whose income was R500 or less, there were more individuals who indicated that they had heard about cell phone banking than those who had not.

5.4.2 Familiarity with mobile money transfer
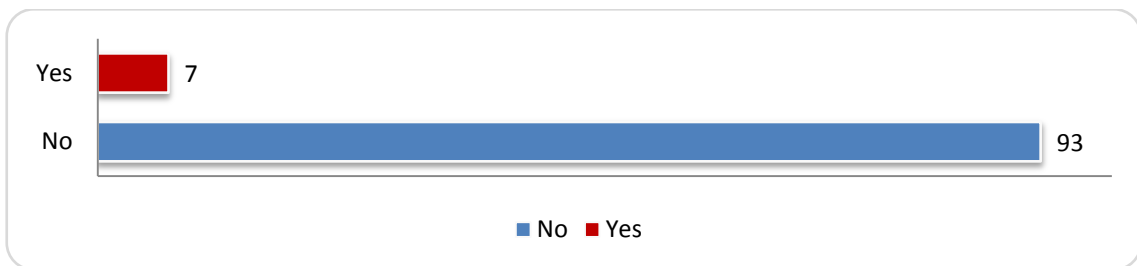
Figure 14 Percentage who know how to conduct a mobile money transfer
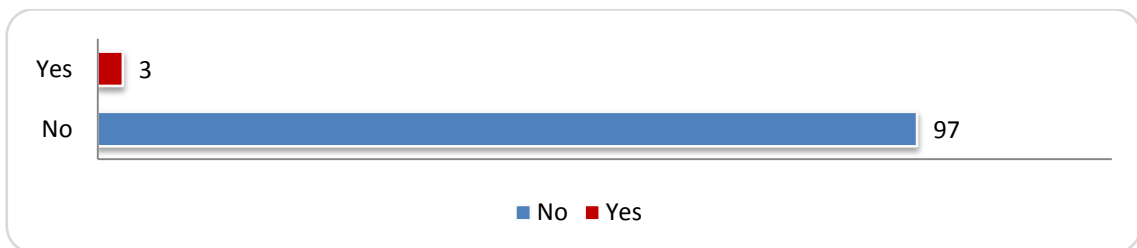
Figure 15 Percentage who have received a money transfer on their cell phone.
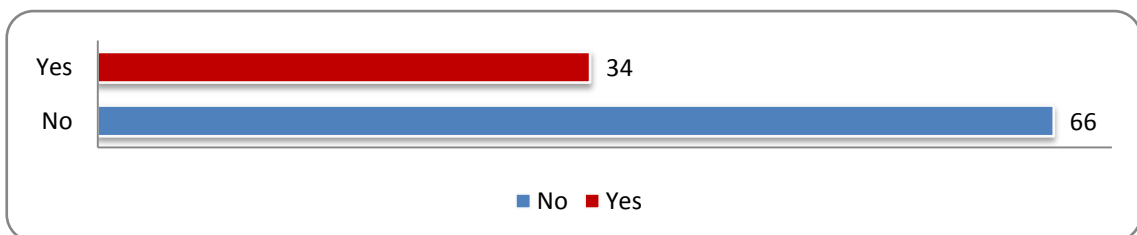
Figure 16Percentage who know someone who has received money on their cell phone

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7 out of 100 surveyed individuals knew how to conduct mobile money transfers. 3% of individuals had received a remittance through a mobile money transfer, while 34% knew of someone who had received a remittance through a similar channel.

5.5   RESPONSES RELATED TO EACH PROPOSITION

5.5.1   PROPOSITION 1: An individual is more likely to adopt mobile money if it offers relative advantage over existing alternatives
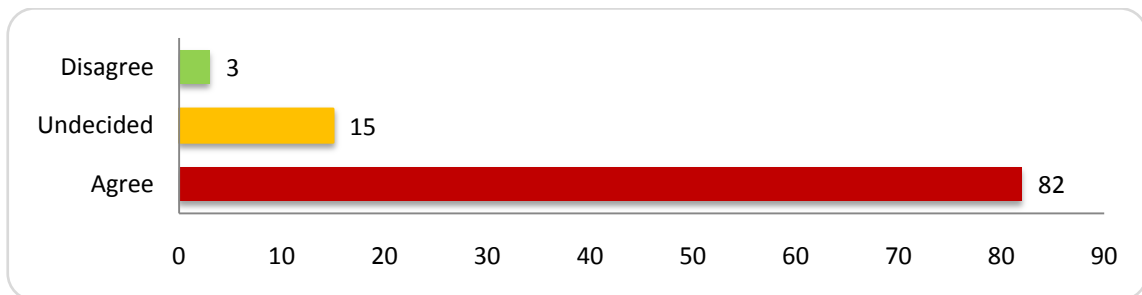
Figure 17   Percentage of respondents who would use mobile money transfer if they could do it anytime anywhere.

82% percent of respondents stated that they would utilise mobile money transfers if it was convenient, while 15% were undecided and 3% would not adopt the technology.
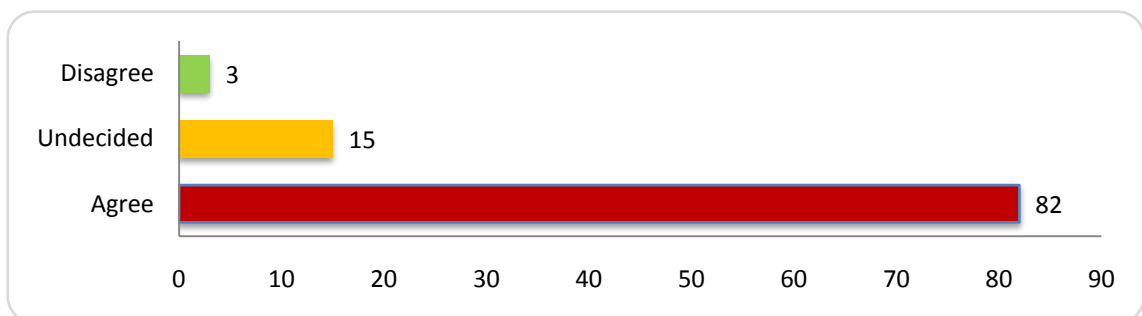
Figure 18 Percentage of respondents who would use mobile money transfer if it was affordable

43

82% of respondents would use mobile money transfer services if they were affordable. 15% were undecided, while 3% would not adopt it.
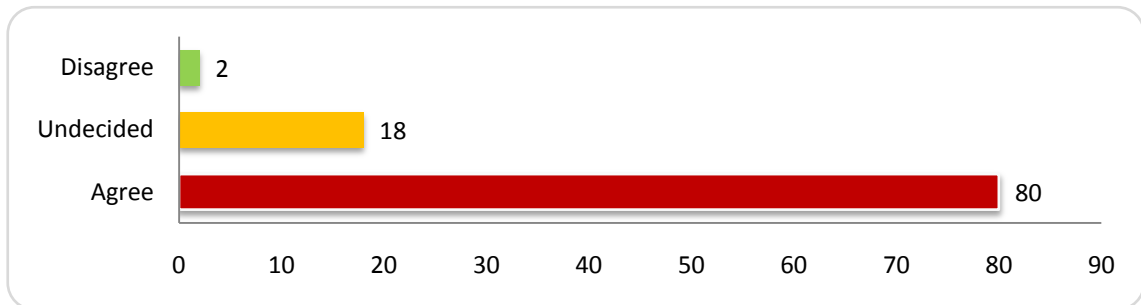
Figure 19 Percentage of respondents who would use mobile money transfer if it would make their lives easier

80% of the survey participants stated that they would use mobile money transfer if it would make their lives easier. 18% were undecided and the remaining 2% would not use the service if it made their lives easier.
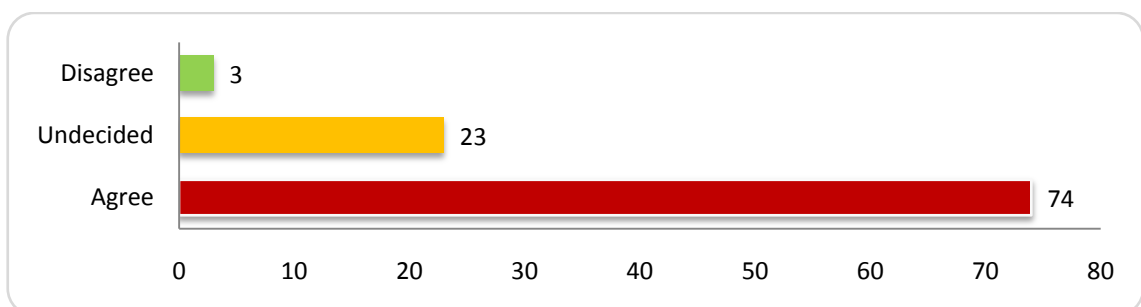
Figure 20 Percentage of respondents who would use mobile money transfer if it was safer than carrying cash.

74% of survey participants stated that they would use the service if it proved to be more secure than carrying cash, while 23% were undecided. 3% stated that they would not use the service if it was safer than carrying cash.

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5.5.2 PROPOSITION 2: An individual is more likely to adopt mobile money is if is compatible with his lifestyle
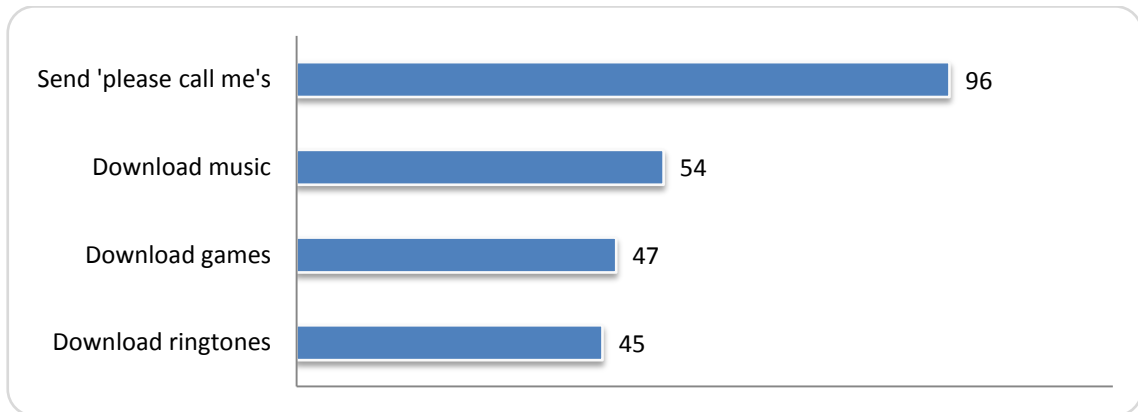
Figure 21. Percentage of respondents who use of mobile related value added services.

An overwhelming majority of survey participants used their cell phone to send 'please call me's (96%). Those who downloaded music, games and ring tones were 54%, 47% and 45% of the sample respectively.

Testing the construct of COMPATIBILITY by cross-tabulating the responses related to use of the cell phone for mobile commerce against responses regarding knowledge of how to send and receive mobile money.

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A. DOWNLOADING RINGTONES & KNOWING HOW TO SEND AND RECEIVE MOBILE
   MONEY
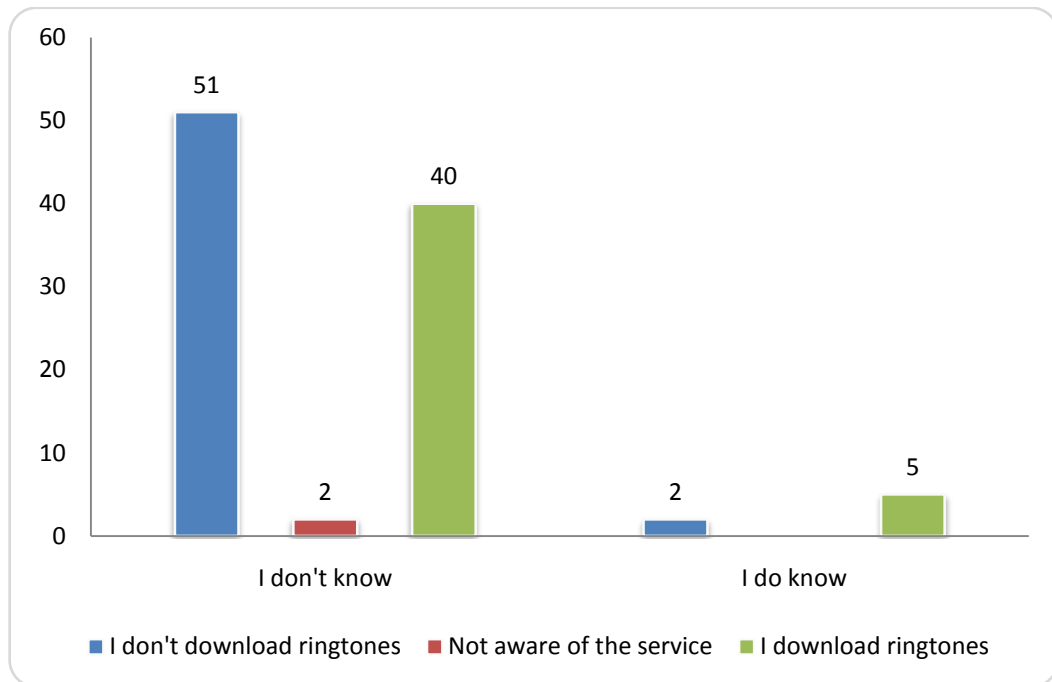
B. DOWNLOADING GAMES & KNOWING HOW TO SEND AND RECEIVE MOBILE
   MONEY
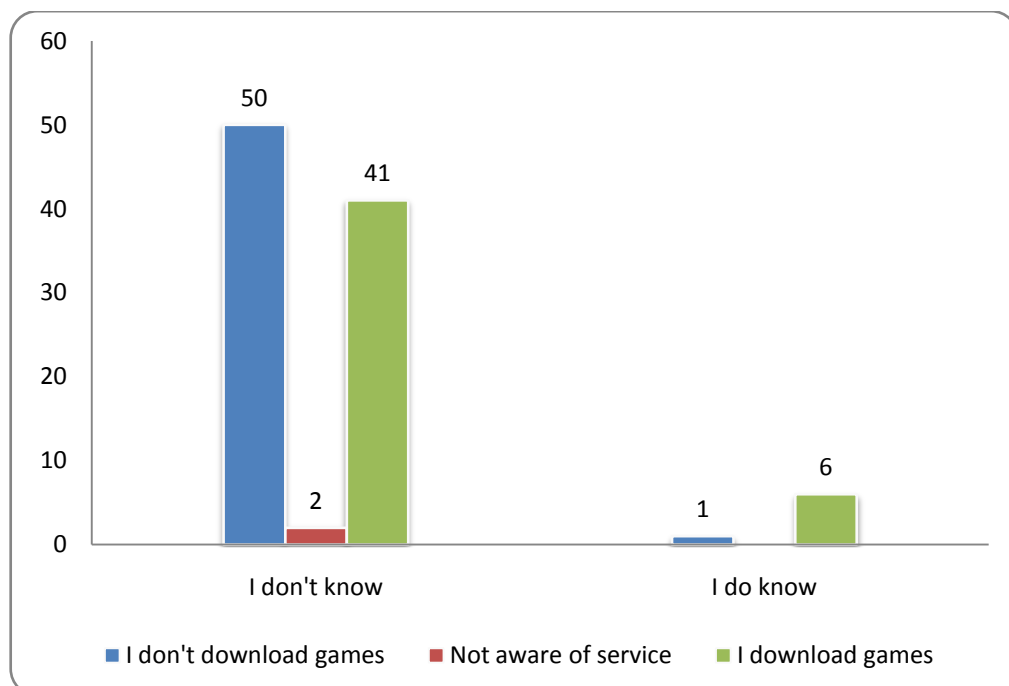
C. DOWNLOADING MUSIC & KNOWING HOW TO SEND AND RECEIVE MOBILE MONEY
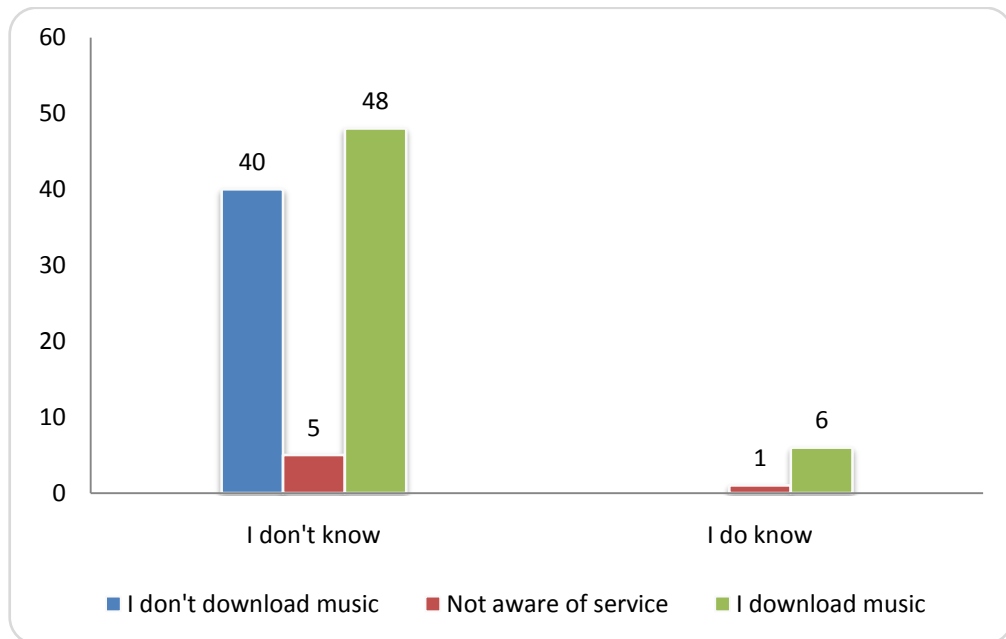
D. SENDING 'PLEASE CALL ME'S' & KNOWING HOW TO SEND AND RECEIVE MOBILE MONEY

47
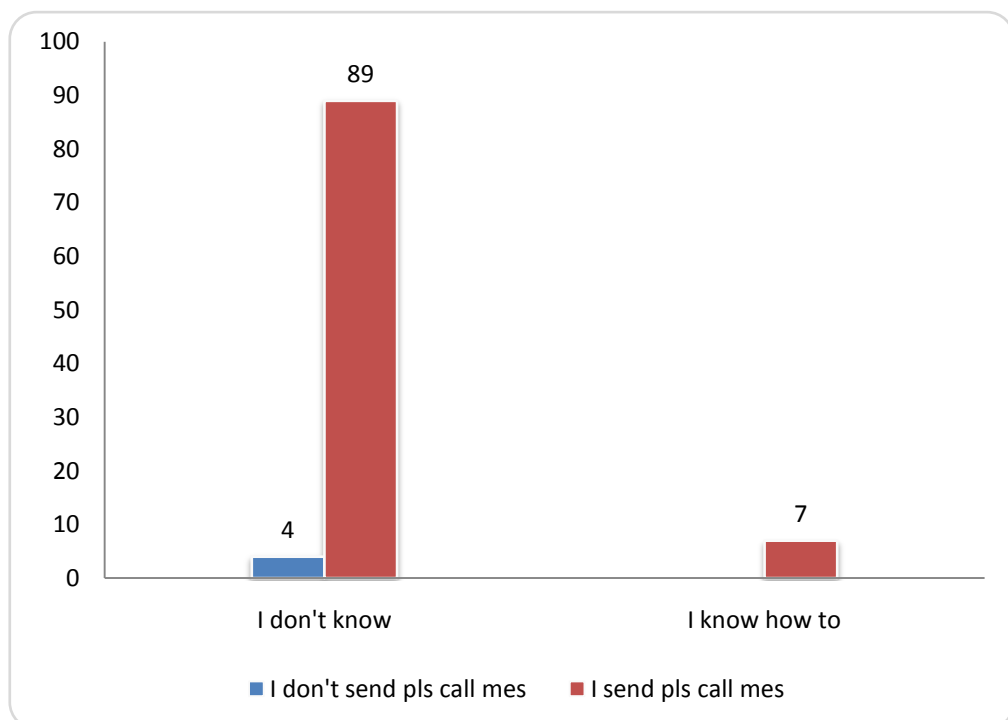
5.5.3 PROPOSITION 3: An individual is less likely to adopt mobile money if it is perceived as being too complex.
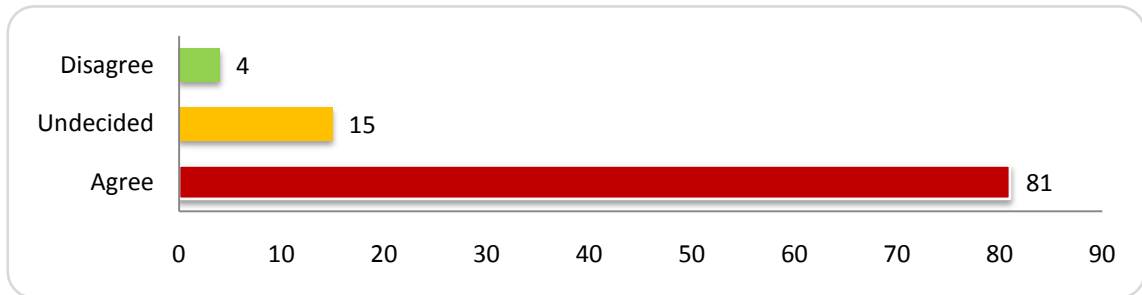
Figure 22 Percentage of respondents who would use mobile money transfer if it was easy to do

If it proved not to be a complex procedure, 81% participants in the survey would use mobile money transfer. 15% of respondents were undecided, while 4% would not use it.

5.5.4 PROPOSITION 4: An individual is more likely to adopt mobile money if trialability is a factor in the decision making process.
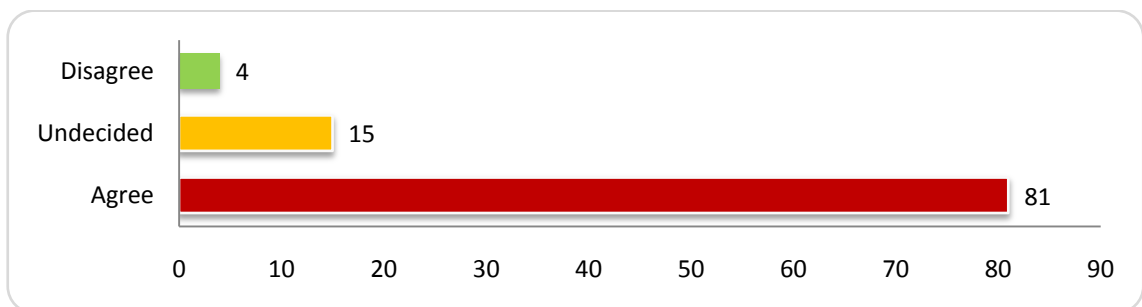
Figure 23 Percentage of respondents who would use mobile money transfer if they could test it first.

48

If they had the opportunity to try out sending remittances using their mobile phone, 82% of survey participants stated that they would use the service. 3% stated that they would not use it and 15% were undecided.
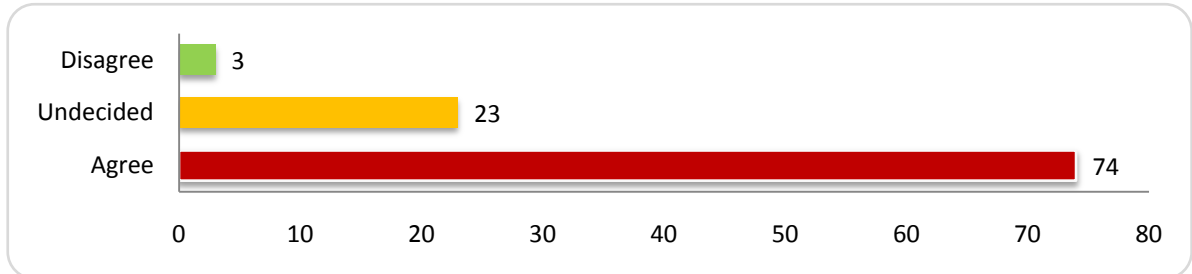
Figure 24 Percentage of respondents who would use mobile money transfer if someone could show them first.

Provided that there was the option of observing someone demonstrate the use of mobile money, 79% of survey respondents would utilise the service. 19% were undecided and the remaining 2% would not use the service.

5.5.5   PROPOSITION 5: An individual is more likely to adopt mobile money if he can observe someone in his community use it.
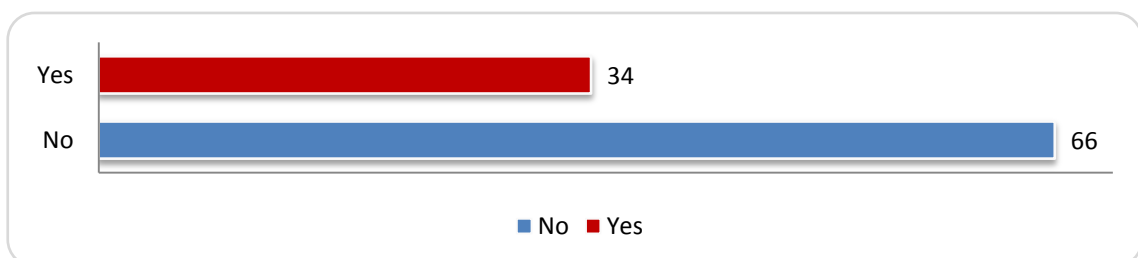
Figure 25 Percentage who know someone who has received a mobile money transfer.

34% of the respondents knew someone in their community who had received a mobile money transfer. The remaining 66% had not.

CROSS TABULATIONS OF OBSERVABILITY QUESTION & RESPONSES TO ADOPTION

UNDER DIFFERENT CIRCUMSTANCES

A. IF I COULD TEST IT FIRST & I KNOW SOMEONE WHO HAS RECEIVED MONEY ON
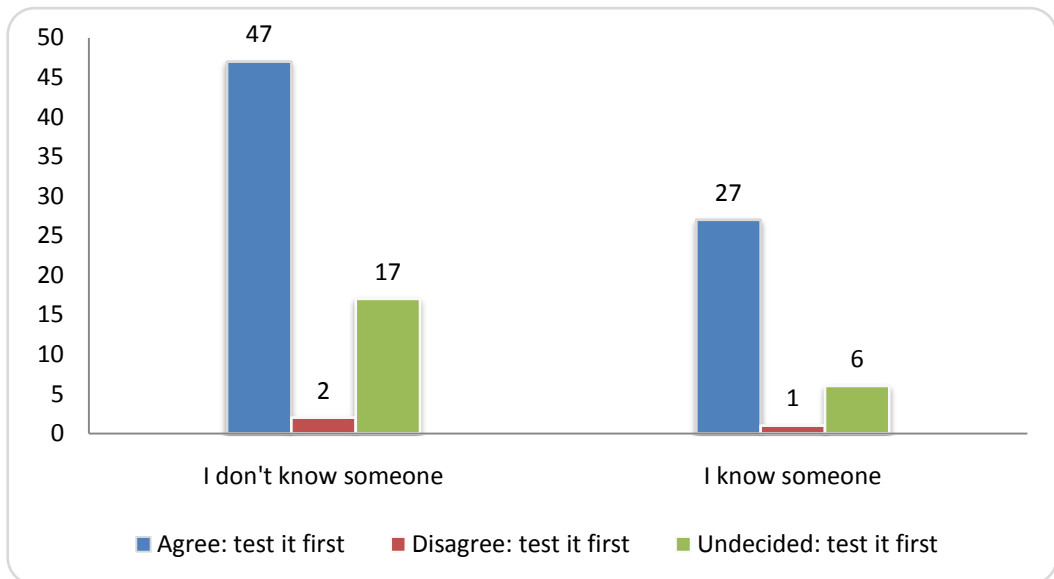
     THEIR CELLPHONE

B. IF SOMEONE COULD SHOW ME HOW TO DO IT FIRST & I KNOW SOMEONE WHO

     HAS RECEIVED MONEY ON THEIR CELLPHONE
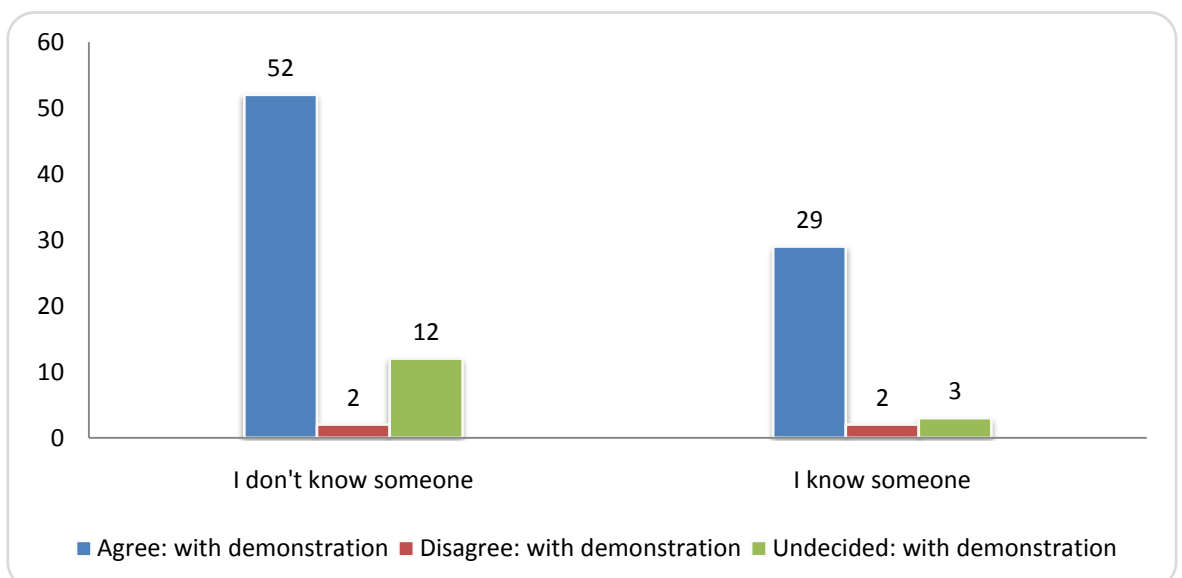
C. IF IT WAS CONVENIENT & I KNOW SOMEONE WHO HAS RECEIVED MONEY ON
THEIR CELLPHONE
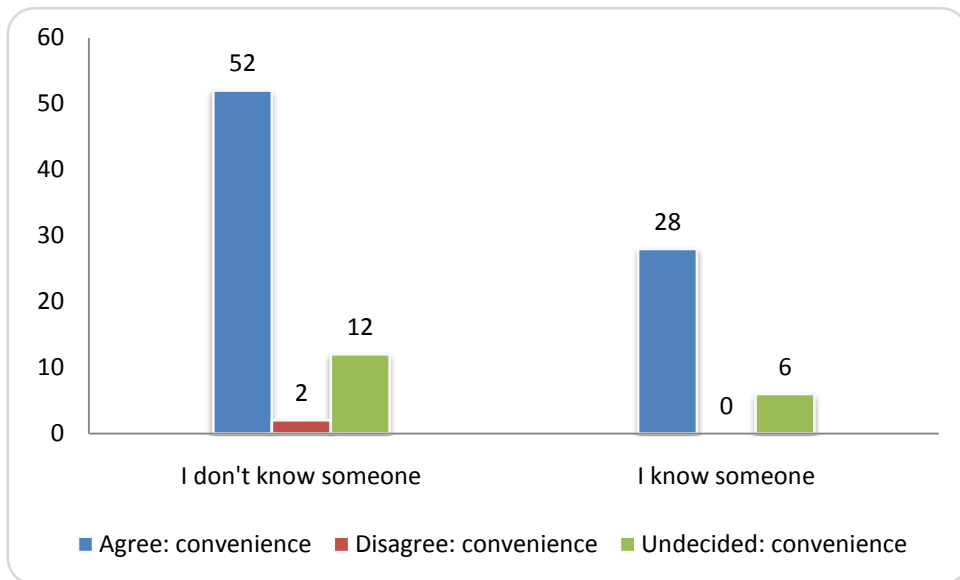
D. IF IT WAS AFFORDABLE & I KNOW SOMEONE WHO HAS RECEIVED MONEY ON
THEIR CELLPHONE

51
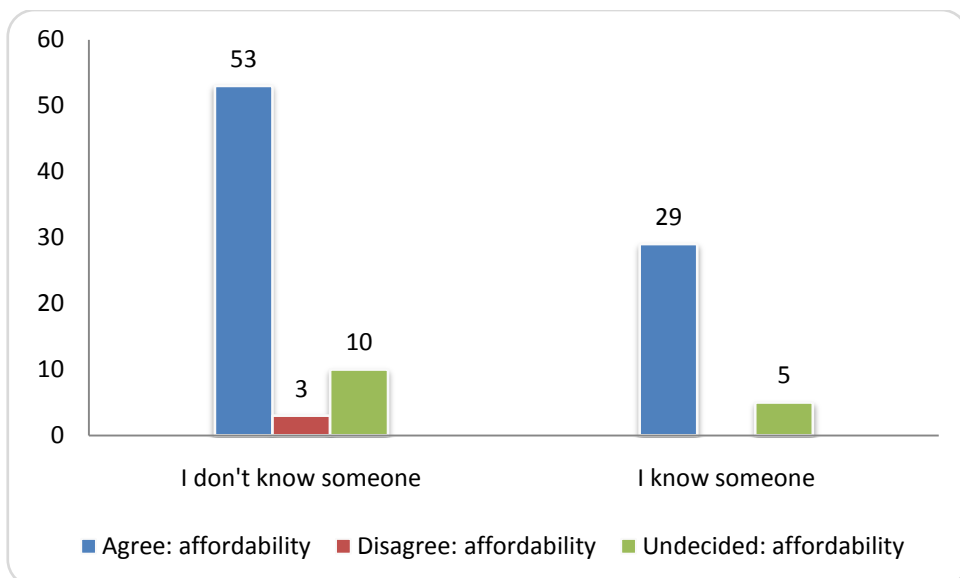
E. IF IT MADE MY LIFE EASIER & I KNOW SOMEONE WHO HAS RECEIVED MONEY
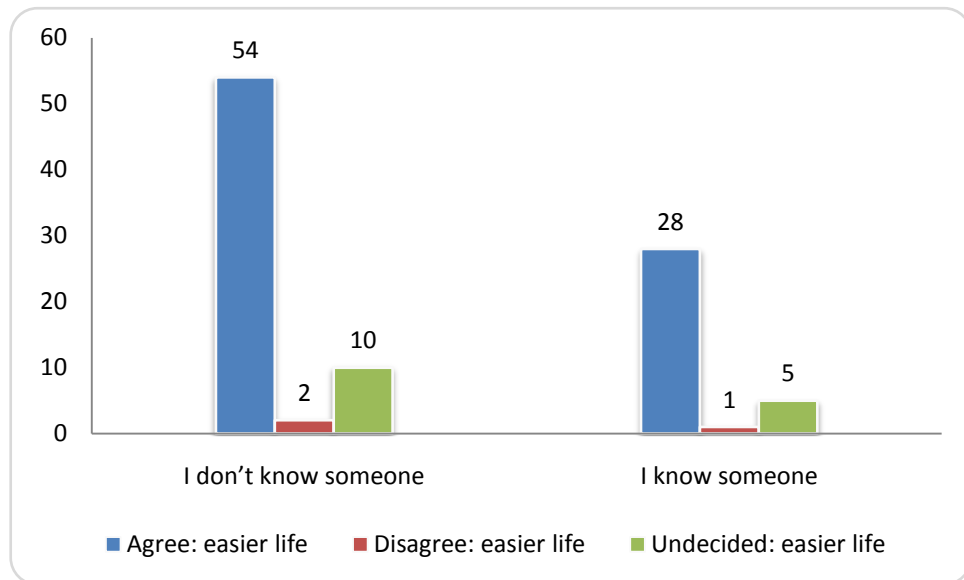
ON THEIR CELLPHONE

F. IF IT WAS EASY TO DO & I KNOW SOMEONE WHO HAS RECEIVED MONEY ON
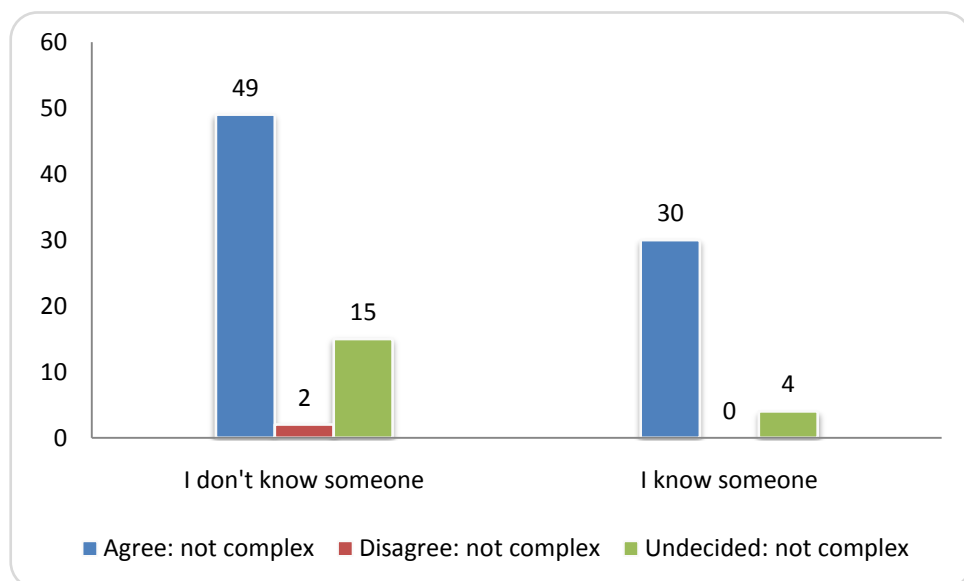
THEIR CELLPHONE

G. IF IT WAS SAFER THAN CARRYING CASH & I KNOW SOMEONE WHO HAS

RECEIVED MONEY ON THEIR CELLPHONE
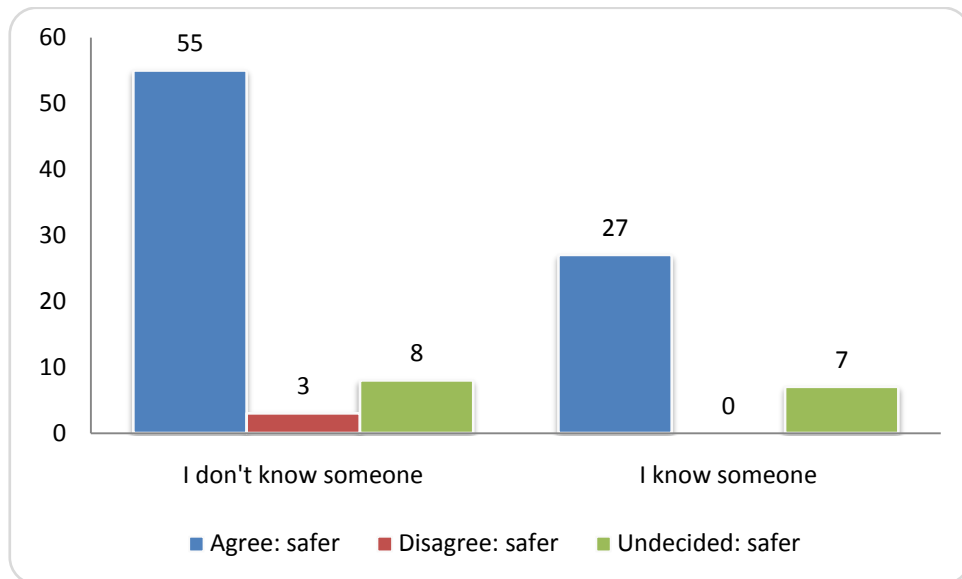
5.6   SUMMARY OF FINDINGS

5.6.1   BY COUNT

Principle	Variable	Agree	Undecided	Disagree	Sample Size
Relative Advantage	Convenience	82	15	3	100
	Affordability	82	15	3	100
	Life made easier	80	18	2	100
	Safety	74	23	3	100
Observability	a	27	1	6	34
	b	29	2	3	34
	c	28	0	6	34
	d	29	0	5	34
	e	28	1	5	34
	f	28	1	5	34
	g	27	0	7	34
Complexity		81	15	4	100
Trialability	myself	81	15	4	100
	someone	74	23	3	100
Compatibility	Ringtones	2	0	5	7
	Games	1	0	6	7
	Music	0	1	6	7
	Pls call me's	0	0	7	7

Table 3 Summary of findings (count)

5.6.2 BY PERCENTAGE

Principle	Variable	Agree (%)	Undecided (%)	Disagree (%)	Sample Size
Relative Advantage	Convenience	82	15	3	100
	Affordability	82	15	3	100
	Life made easier	80	18	2	100
	Safety	74	23	3	100
Observability	a	79	3	18	34
	b	85	6	9	34
	c	82	0	18	34
	d	85	0	15	34
	e	82	3	15	34
	f	82	3	15	34
	g	79	0	21	34
Complexity		81	15	4	100
Trialability	myself	82	15	3	100
	someone	79	19	2	100
Compatibility*	Ringtones	-	-	-	7
	Games	-	-	-	7
	Music	-	-	-	7
	Pls call me's	-	-	-	7

Table 4 Summary of Findings

*Test inconclusive as sample size was too small of 7 was too small.

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6 DISCUSSION OF RESEARCH RESULTS

6.1 INTRODUCTION

This chapter gives an in-depth analysis of the findings detailed in the previous chapter. Four out of the five principles were predictive of the intention to adopt mobile money transfer. The remaining one, compatibility, proved to be inconclusive. The findings confirmed Rogers' theory that: relative advantage, trialability, observability, and (the lack of) complexity contribute positively to the adoption of innovations.

Responses in favour of adoption under each of the four constructs ranged from 74% to 85%. The test for compatibility proved to be inconclusive as there were too few individuals who used other mobile commerce services AND knew how to use mobile money for the findings to be statistically significant.

CONSTRUCT	FINDINGS
Relative advantage	Confirmed theory
Observability	Confirmed theory
Complexity	Confirmed theory
Trialability	Confirmed theory
Compatibility	Inconclusive

Table 5 Summary of findings

This section begins by giving an overview of the findings for each construct that confirmed the underlying theory (relative advantage, complexity, trialability and observability). Additionally it delves deeper into the results on the basis of income and employment status.

It is to be noted that there was very little variance in the data. The overwhelming majority of respondents were in favour of the adoption of the technology should it be made available to the unbanked. The researcher considered various statistical means of introducing variance into the data. There was no instance in which there was correlation of data, or in which there was an investigation of independent variables against dependent ones. Therefore, the only appropriate analysis for the data was descriptive statistics. The researcher relied on cross-tabulation, in addition to bar graphs and pie charts, to analyse the data.

6.2   FINDINGS FOR EACH OF THE PROPOSITIONS

6.2.1   *PROPOSITION 1/* RELATIVE ADVANTAGE*: An individual is more likely to adopt mobile banking if it offers relative advantage over existing technologies.*

Questions under this proposition made reference to: convenience, cost, the easing of one's life and the security provided by money in virtual form as compared to carrying cash. The findings under the proposition supported Rogers' (2003) theory regarding the diffusion of innovations. Rogers (2003) stated that if a given innovation is deemed to be advantageous relative to existing alternatives, there is a high likelihood for the adoption of that innovation.

As indicated on the graph below, over 74% of the respondents would adopt mobile money under each variable testing the construct of relative advantage. Respondents indicated that if mobile banking offered convenience, safety (diminished risk), affordability, and made their lives easier, they would be willing to adopt its use.
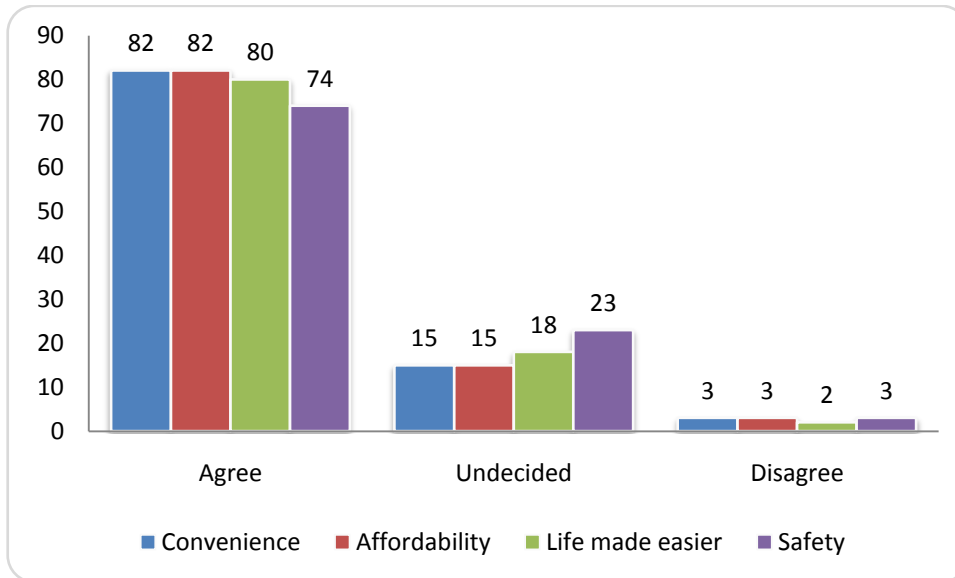
Figure 26 Graph showing results for each variable under the 'relative advantage' construct

82% of respondents stated that they would adopt mobile money if it was affordable. The literature around reasons for financial exclusion shows cost as a very important consideration for individuals at the base of the pyramid (Brown, 2005; Financial Access Initiative, 2009). Mallat (2007) also makes reference to cost as an important factor in the adoption of mobile banking regardless of segment. The base of the pyramid is highly price sensitive as there is much less by way of financial resources to go around (Collins et al, 2009).

Another important factor for consumers at the base of the pyramid is accessibility (Financial Access Initiative, 2009; Ramussen, 2009). The findings around convenience are supported by prior theory on the importance of the ease of accessibility. 82% of respondents indicated that they would adopt the innovation if they could use it anytime and anywhere. In keeping with the theory, the possibility that mobile money could make their lives easier prompted 80% of participants to indicate that they would adopt mobile money. With regards to safety, 74% of the respondents indicated that they would adopt mobile money if it was safer than carrying cash.

6.2.2 PROPOSITION 2 / COMPATIBILITY: An individual is more likely to adopt mobile banking if it is compatible with his lifestyle.

Findings under this proposition proved inconclusive in determining whether or not they support Rogers' (2003) Diffusion of Innovations Theory. The construct of compatibility was tested by cross-tabulating the responses related to the use of the cell phone for mobile commerce against responses regarding knowledge of how to send and receive mobile money. There were only 7 individuals who knew how to use mobile money out of 100 survey participants. No conclusive findings could be drawn from a sample of such a small size. They would not have been statistically significant.

Within the South African context, cell phone users are familiar with:

- The use of 'please call me's' – an SMS (short messenger service) that communicates to the recipient that he or she must call the sender). Typically the sender needs to have a conversation with the recipient, but cannot afford to make a voice call, so they request that the recipient respond to a 'please call me' by calling them back. Most cell phone bundles come with a standard number of free 'please-call-me's.

- Downloading ring tones for a fee.

- Downloading music for a fee.

- Downloading games for a fee.

It was presupposed that if an individual used any of the above virtual mobile services, they would be more likely to adopt mobile money transfer, another virtual service, as it requires similar capabilities. Olatokun and Igbunedion (2009) point to a more rapid uptake of an innovation if it fits easily into a society. The incidence of a positive response for the construct of compatibility,

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however, was quite low in this study. This can be attributed to the fact that this is a pre-adoption study of an innovation that is presently not available to the segment of the population targeted by this study, thus there were not enough respondents to whom mobile money was familiar.

6.2.3 *PROPOSITION 3/ COMPLEXITY:* An individual is less likely to adopt mobile banking if it is perceived as being too complex.

Findings under this proposition support Rogers' (2003) theory regarding the diffusion of innovations. The proposition around complexity was tested with a question related to the ease with which transferring mobile money could be done. 81% of respondents indicated that they would adopt the innovation if it was not difficult to do so. This response is in keeping with Roger's (2003) theory around the role of complexity in the adoption of an innovation. Individuals are less likely to adopt an innovation if its use is perceived to be complex. 15% of the respondents were undecided, with 4% stating that they would not adopt the innovation under this construct.

Medhi et al (2009) state that mobile money must be seen to be less complex by consumers at the base of the pyramid, with lower literacy levels, in comparison to other means of value and transacting. Because survey participants were required to provide a response prior to adoption, based only on whatever knowledge they held of a technology that the majority had not used, it is possible that their responses would differ after user interaction with a mobile money service.

6.2.4 PROPOSITION 4/ TRIALABILITY: An individual is more likely to adopt mobile banking if trialability is a factor in the decision making process.

The findings under this proposition support Rogers' (2003) theory regarding the diffusion of innovations. As indicated below, regardless of whether respondents could try it out themselves or had someone demonstrate the technology for them, the majority agreed that they would adopt mobile money if trialability was a consideration in the decision making process.
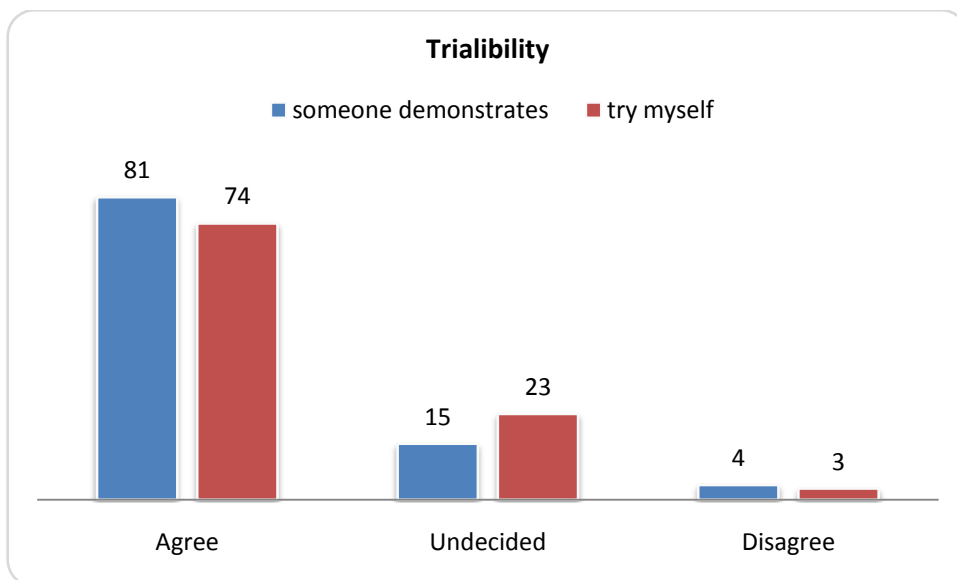
Figure 27 Graph showing the responses for variables under the construct of trialability

81% would do so if someone else could demonstrate how the technology worked, while 74% of respondents indicated that they would adopt mobile money if they could try it out themselves. The number of those who would adopt the technology if someone else could demonstrate it, is greater than the number of those who would adopt it after trying it themselves. It can be deduced from

the 7% difference that for a product to succeed in this consumer segment, it is important to have a sales team available that can demonstrate the use of the new service.

23% of the respondents were undecided regarding the decision to adopt mobile money if they could try it out themselves, while 15% were undecided if they could have someone else demonstrate the use of mobile money. Given the option to try it out themselves, 3% of the respondents stated that they would not adopt the technology, and 4% would not if someone else would demonstrate it. The figures of the undecided and those who disagreed are significantly lower than the figures for those who agreed. This supports the theory that trialability is indeed an important consideration in the decision to adopt an innovation.

6.2.5   PROPOSITION 5/ OBSERVABILITY: An individual is more likely to adopt mobile banking if he can observe someone in his community use it.

Findings under this proposition supported Rogers' (2003) theory regarding the diffusion of innovations. Observability is indeed an important factor in determining the adoption of a new innovation. To determine the role of observability in the decision to adopt mobile money, the initial exercise embarked on was to ascertain members of the sample that had observed a member of their community utilising mobile money. 34% of the respondents indicated that they had observed someone in their community using mobile money, 66% indicated that they had not. Each of these samples was then cross-tabulated against responses to questions for which respondents could indicate whether or not they would adopt mobile money (see Figure 29).
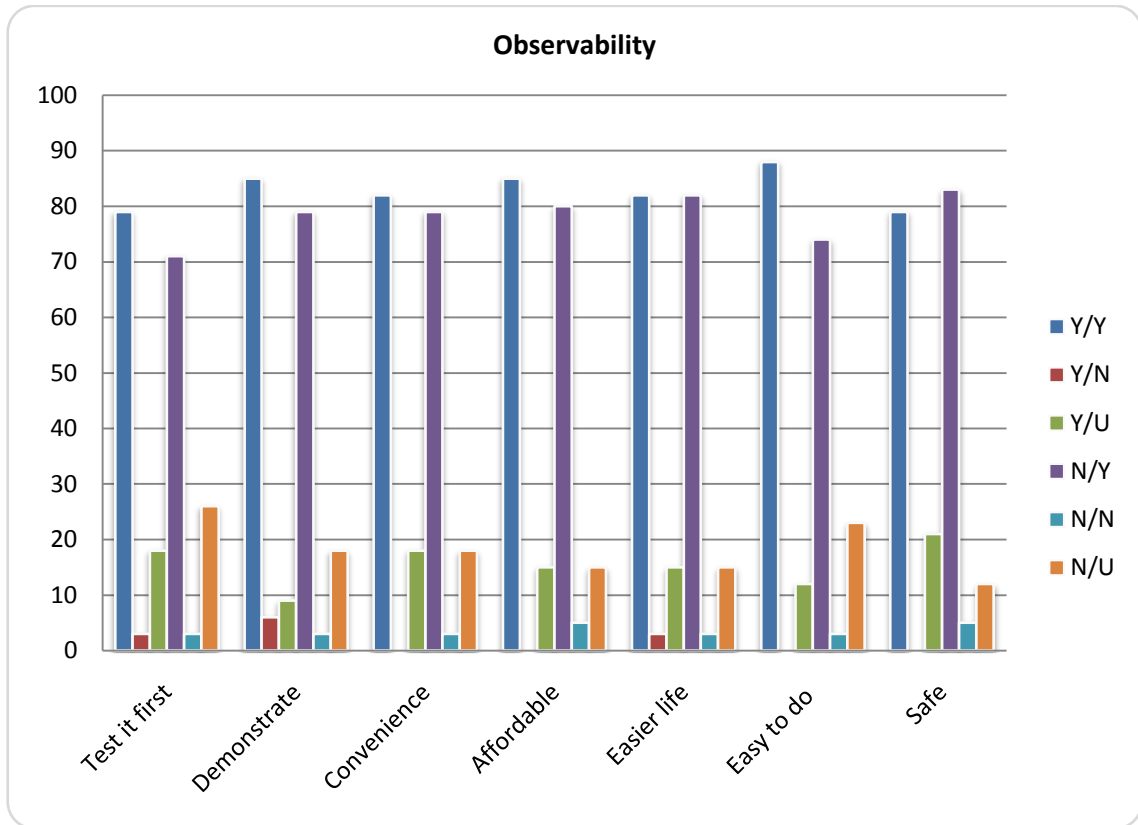
Figure 28 Testing the construct of observability

	KEY
Y/Y	Respondents who had observed a member of his community using mobile money AND would adopt mobile money under tested construct.
Y/N	Respondents who had observed a member of his community using mobile money AND would not adopt mobile money under tested construct
Y/U	Respondents who had observed a member of his community using mobile money AND were undecided about adopting mobile money under tested construct
N/Y	Respondents who had *not* observed a member of his community using mobile money AND would adopt mobile money under tested construct.
N/N	Respondents who had *not* observed a member of his community using mobile money AND would not adopt mobile money under tested construct
N/U	Respondents who had *not* observed a member of his community using mobile money AND were undecided about adopting mobile money under tested construct

For 5 out of the 7 variables, it was more likely for a respondent to adopt mobile money if he had observed a member of his community using mobile money, than if he had not. These variables were: trialability – self, trialability – with a demonstration, convenience, affordability and the absence of complexity. Responses were equal under the variable "would make my life easier". In the case of increased safety, there was a greater likelihood for adoption from individuals who had not observed a member of their community using the technology.

Regardless of whether or not respondents had observed community members using mobile money, the propensity to adopt mobile money was higher than not. However, observing the use of the service within one's community led to a higher intention to adopt mobile money.

In the same way that there is a greater likelihood for the adoption of a new product or service offering when it is accompanied by a demonstration, this segment of the market is more likely to adopt a product offering if they are able to observe people that they trust using the technology.

6.2.6 The relative Importance of the various variables in the decision to adopt mobile banking.

There were three constructs that were tested through direct questions (trialability, relative advantage and complexity). The respondents could agree, disagree or indicate that they were undecided about their choice to adopt the technology. These were presented graphically as a means to determine the relative importance of each variable in the decision to adopt mobile money.
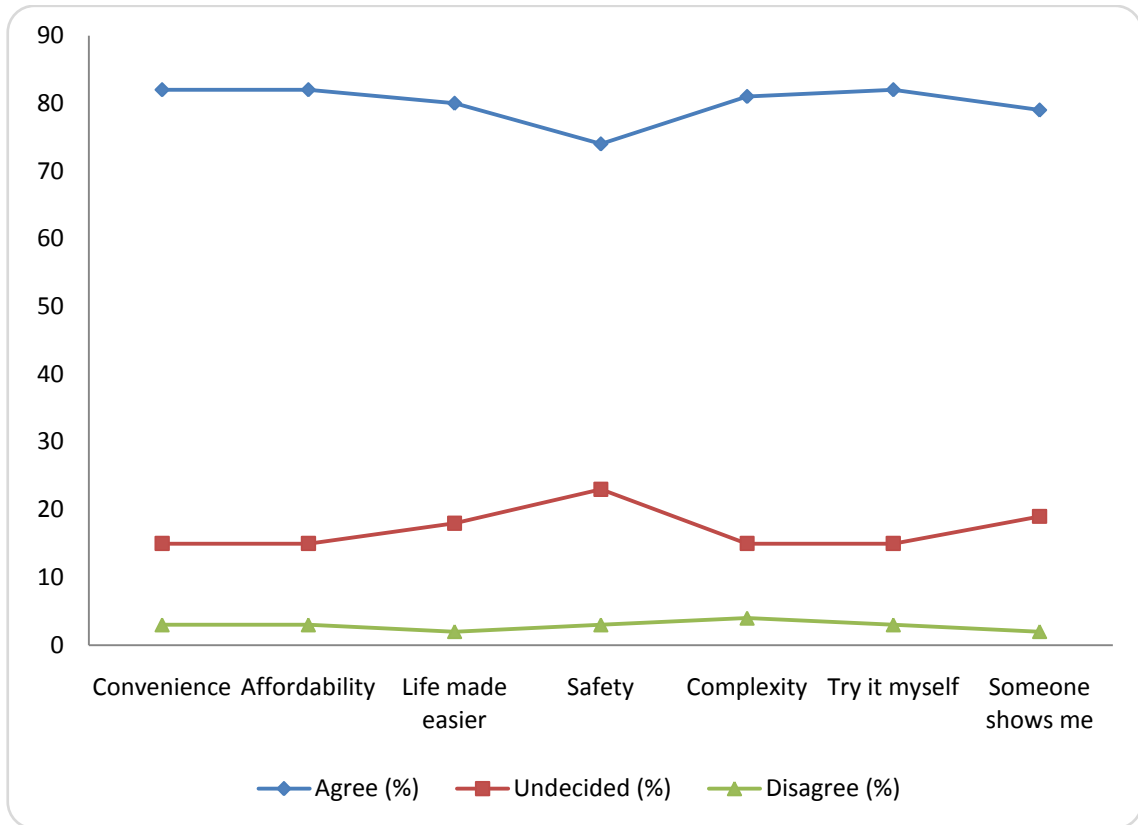
Figure 29 Graph showing the relative importance of each variable

In the decision regarding whether or not to adopt mobile money, the following variables were considered important by respondents:

Variable (in order of importance)	Agree (%)
Affordability	82
Convenience	82
The ability to have someone demonstrate product	82
Ease of use	81
The extent to which it makes life easier for respondent	80
The ability to try it oneself	79
Safety or diminished risk versus cash	74

It can be deduced from these findings that when considering the development of a mobile money offering for this base of the pyramid, the five most important considerations should be: affordability, convenience, demonstration of the use of the product, ease of use, and the extent to which it makes a person's life easier.

6.3 EXPLAINING DIFFERENCES IN RESPONSES BY INCOME LEVEL AND EMPLOYMENT STATUS
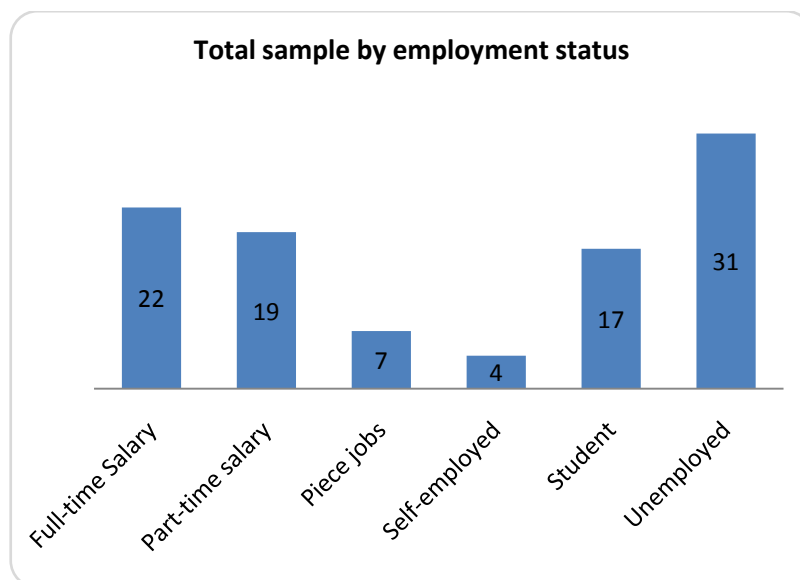
Figure 30. Employment status of survey participants

Crosstabulation of employment status against income
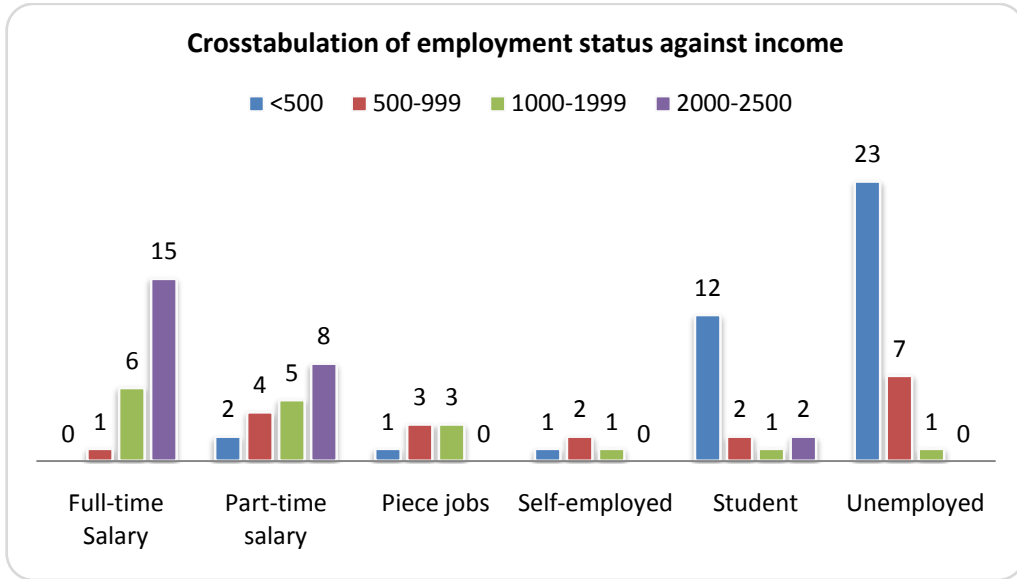
Figure 31 Cross-tabulation of employment status against income

The cross-tabulation of employment status and income levels highlighted important findings about the characteristics of the survey participants. In particular, the cut-off point between the categories below R1, 999 and the R2,000 – R2,500 pointed to a watershed of sorts amongst the sample.

Crosstabulation of income against employment status
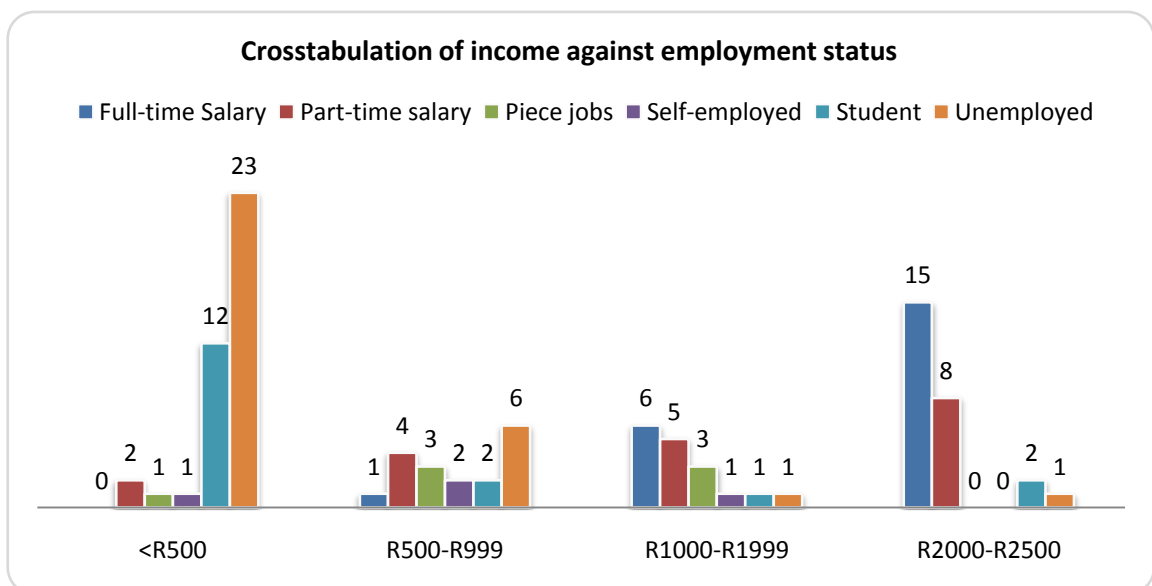
Figure 32 Cross-tabulation of income against employment status

All respondents in the R2,000 – R2,500 income category selected to adopt mobile money under every scenario except for the proposition for trialability in which one individual declined. There were 25 individuals that participated in the survey that were in the income category R2.000 – R2,500. Cross-tabulated against employment status, this income category showed that in the sample:

- 15 of the sample were individuals who were in <u>full-time employment</u> AND had income in the R2,000 – R2,500 category.

- 8 of the sample were individuals who were in <u>part-time employment</u> AND had an income in the R2,000 – R2,500 category.

- None of the individuals in the R2,000 – R2,500 category were unemployed, nor self employed, neither did they do piece jobs in order to earn an income.

- There were, however, fully employed individuals((7) whose income fell between R500 and R1,999; and part-time employees across the entire income range.

When income was cross-tabulated against employment status, the vast majority of the unemployed (23) were in the category of those with a monthly income of less than R500. 7 of the sample was in the R500 – R999 AND unemployed, while 1 individual was in the R1, 000 – R1, 999 income category AND unemployed. Another employment status category that dominated the 'less than R500' category was the full-time student category.

It can be drawn from the findings that a means of transaction among the **employed AND unbanked** is a very important need that present formal financial services are not meeting. There is a strong appetite and a desire for alternative banking products among this segment and that could be met by mobile banking which is a less expensive financial services offering for both the

employed poor and the banks. Given that affordability was amongst the most important factors for adoption under the relative advantage proposition and that the base of the pyramid consists a large proportion of the South African population, the assumption can be made that this segment represents a large enough market to generate the volumes required to make mobile money profitable at scale.

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7 CONCLUSION

7.1 KEY FINDINGS AND BUSINESS APPLICATIONS

The key findings of this study were:

i. the confirmation of price sensitivity at the base of the pyramid,

ii. the importance of demonstration of a product and community influence for the successful diffusion of the product,

iii. the importance of accessibility of a given product or service as the base of the pyramid.

iv. Insight into the needs of an important segment at the base of the pyramid: the working poor.

v. a window into the size of market and imperative for financial service offerings & other products

The findings of the study around relative advantage point to the importance of pricing products and services at the base of the pyramid. Affordability emerged as the most important consideration for survey participants. In addition to cost, the need for a marketing and sales component of any product launch that includes demonstration of a product or service emerged as an important consideration.

In the same vein, observing members of one's community using a service increases the likelihood of its adoption. An additional consideration could be a distribution strategy that utilises community influencers as the sales force. Informal settlements are high density residential areas, which by virtue of the high population density lend to relationships being a driving force in determining community dynamics. From the researcher's own observations, one street in an informal

settlement could consist of several informal traders. These traders generate sales through relationships and trust built with their neighbours. Leveraging these relationships to elevate the observability of a product or service would facilitate its adoption.

Accessibility, and in particular convenience, was another emerging theme that commercial players at the base of the pyramid would need to consider. There was a strong interest in adopting mobile money because of the accessibility it presented. The mobile phone by virtue of the fact that it is carried by its owner constantly presents an excellent opportunity to extend services to the base of the pyramid that would otherwise be difficult to reach through established bricks-and-mortar points of presence.

Amongst the most important findings of this study is the highlighting of a key segment of the BOP market that financial services institutions would do well to consider: the working poor. 22% of the survey respondents were employed on a full time basis and unbanked. Every one of them, except for one individual, indicated great interest in mobile banking.

This segment of the population typically cannot afford to open and maintain a bank account. In addition, very few bank branches are located close to informal settlements – the only places in which they can find affordable housing. A mobile money offering for this segment of the population would place financial services within the reach of the unbanked, working poor at a reasonable cost to financial institutions and to the customer.

A further insight that emerged from the study is that BOP market players must be aware that mobile money is a technology in its nascent stages and it will therefore take time for the innovation to diffuse through this segment of the market. Successful proliferation of the product can be augmented by BOP specific marketing interventions that address observability and trialability.

7.2   RECOMMENDATIONS FOR FUTURE RESEARCH

Future research would need to consider a longitudinal study that measures the propensity to adopt of mobile money over an extensive portion of its product lifecycle. Longitudinal studies would provide insight into attitudes towards adoption of mobile money as it becomes more familiar to consumers at the base of the pyramid.

This study was limited to the constructs determined by Rogers (2003) Theory on the Diffusion of Innovations. A qualitative study is recommended in future studies. This would assist in ascertaining additional factors that may be influential in the propensity to adopt mobile banking.

This study was conducted in urban and peri-urban informal settlements. A study conducted in rural South Africa would provide insights into the unique needs and challenges of a rural population. Additionally, a cross-country study would also provide additional insights that may provide nuances that a one country study may not be able to convey.

8   CONSISTENCY MATRIX

Title: The propensity to adopt mobile banking among unbanked, low income consumers in South Africa.

Proposition	Literature Review	Data Collection Tool	Analysis
Proposition 1: Relative Advantage	- Venkatesh, V et al., 2003 - Mallat, 2007 - Rogers, 2003 - Financial Access Initiative, 2009 - Brown ,2005 - Dahlberg, Mallat, Ondrus, & Zmijewska, 2008 - Mallat, 2007 - Ramussen, 2009.	Survey Questionnaire	Descriptive Statistics
Proposition 2: Compatibility	- Rogers, 2003, - Medhi et al, 2009 - Olatokun and Igbunedion,2009 - Agarwal and Prasad, 2000 - Porteous, 2006.	Survey Questionnaire	Cross-tabulation
Proposition 3: Complexity	- Rogers, 2003 - Medhi et al, 2009	Survey Questionnaire	Descriptive Statistics
Proposition 4: Observability	- Rogers, 2003 - Medhi et al, 2009 - Heyer and Mas, 2009 - Venkatesh et al, 2003	Survey Questionnaire	Cross-tabulation
Proposition 5: Trialability	- Heyer and Mas, 2009 - Moor and Benbasat, 1991 - Brown,2005	Survey Questionnaire	Descriptive Statistics

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Good day, my name is …………………… and I work for Quest Research Services, an independent market research company. We have been commissioned by an MBA Student at the University of Pretoria's Gordon Institute of Business Science to conduct a study on mobile banking among unbanked consumers in Gauteng. This research is purely for academic purposes and any information you provide will be kept confidential and results will not be linked back to you.

Respondent Information

Respondent name:

Contact details:

Day of interview:

SECTION A

Do you own a cellphone?

Yes	1	**Skip Q3**
No	2	**Ask Q2**

If no, do you have access to a cellphone?

Yes	1	**Continue**
No	2	**Thank respondent and close the interview**

How long have you been using a cellphone?

Less than 1 year	1
1 – 2 years	2
2 – 3 years	3
3 – 4 years	4
More than 4 years	5

Interviewer record gender

Male	1
Female	2

What is your current marital status?

Single	1
Married	2
Separated	3
Divorced	4
Widowed	5
Living with partner	6

In which of the following age categories do you fall into? **READ OUT**

16-24 years	1
25-34 years	2
35 – 49 years	3
50 – 64 years	4
65 years +	5

Which of the following best describes your current employment status? **READ OUT**

I am unemployed	1
I work part-time for a salary /wages	2
I work full-time for a salary/wages	3
I do piece jobs for money	4
I am self-employed	5
I am a full-time student/learner	6
Pensioner	7

What is the income category that best describes your personal gross monthly income before tax?

Less than R500	1
R500 – R999	2
R1 000– R1 999	3
R2 000 – R2 500	4

Have you ever heard of cell phone banking?

Yes	1
No	2

Do you know how to send and receive money using your cell phone?

Yes	1
No	2

Have you ever received money on your cell phone?

Yes	1
No	2

Do you know someone who has received money on their cell phone?

Yes	1
No	2

Which of the following do you do on your cell phone:

	Yes	No	Not aware
Download ringtones	1	2	3
Download games	1	2	3
Download music	1	2	3
Send 'please call me's	1	2	3

To what extent do you agree or disagree with the following statements about **you using your cell phone to send and receive money**.

I would use my cell phone to send and receive money:	Disagree	Neither agree nor disagree	Agree
a) If I could test it first	1	2	3
b) If someone could show me how to do it first	1	2	3
c) If I could do it anytime, anywhere	1	2	3
d) If it is affordable	1	2	3
e) If it would make my life easier	1	2	3
f) If it was easy to do	1	2	3
g) Because carrying money on my cellphone is safer than carrying cash	1	2	3

THANK YOU FOR PARTICIPATING IN THIS SURVEY!

I hereby declare that this interview has been completed to the best of my ability according to training instructions.

Interviewer name:………………………………………………………………….

Signed:……………………………………………….

Supervisor ………………………………………………………….

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Back checked by:……………………………………………………………

Dumela, lebitso la ka ke ……………………… mme ke sebeletsa Quest Research Services, e leng khamphani e ikemetseng e etsang diphuputso. Re laetswe ke MBA Student ya University of Pretoria's Gordon Institute of Business Science hore re fuputse malebana le ditshebeletso tsa ditjhelete tse mabapi le mehala ya thekeng hara batho ba rekang ba sa kenyeng tjhelete bankeng ba dulang Gauteng. Phuputso ena e sebediswa ke univesithi feela mme lesedi leha e le lefe leo o tla fana ka lona e tla ba lekunutu mme sephetho sa yona se ke ke sa amahanngwa le wena.

Lesedi la Motho ya Arabang

Lebitso la motho ya arabang:

Lesedi la hore na ho ka buisanwa le yena hokae:

Letsatsi la puisano:

KAROLO YA A

Na o na le mohala wa thekeng?

E	1	**Feta Potso ya 3**
Tjhe	2	**Botsa Potso ya 2**

Haeba o re tjhe, na o sebedisa mohala wa thekeng?

E	1	**Tswela pele**
Tjhe	2	**Leboha ya arabang mme o kgaotse puisano**

Ho se ho fetile nako e kae o sebedisa mohala wa thekeng?

Ka tlase ho selemo se le seng (1)	1
Dilemo tse 1 – 2	2
Dilemo tse 2 – 3	3
Dilemo tse 3 – 4	4
Dilemo tse fetang tse 4	5

Ya botsang dipotso o ngola bong

Monna	1
Mosadi	2

Boemo ba hao ditabeng tsa lenyalo ke bofe?

Lesoha	1
Lenyalong	2
Karohano	3
Tlhalo	4
Mohlolohadi	5
Dula le monna/mosadi	6

O dilemong dife ho tse latelang? **MO BALLE**

Dilemo tse 16-24	1
Dilemo tse 25-34	2
Dilemo tse 35 – 49	3
Dilemo tse 50 – 64	4
Dilemo tse 65 +	5

Maemong a latelang, ke bofe bo hlalosang boemo ba hao ba mosebetsi ka tsela e loketseng? **MO BALLE**

Ke hiruwe	1
Ke etsa mosebetsi wa nakwana o lefshwang / mokgolo	2
Ke etsa mosebetsi wa nako e tletseng o lefshwang / mokgolo	3
Ke etsa mesebetsi ya dikoropo hore ke fumane tjhelete	4
Kea itshebetsa	5
Ke moithuti/morutwana wa nako e tletseng	6
Ke kgola phentjhene	7

Tjhelete yohle ya hao e kenang kgwedi le kgwedi e ka hlaloswa jwang ka tsela e loketseng ka ho fetisisa pele ho ntshwa ya lekgetho?

Ka tlaase ho R500	1
R500 – R999	2
R1 000– R1 999	3
R2 000 – R2 500	4

Na o kile wa utlwa ho buuwa ka ho banka ka mohala wa thekeng (*cellphone banking*)?

E	1
Tjhe	2

Na o tseba tsela ya ho romela tjhelete le ho e amohela o sebedisa mohala wa thekeng?

E	1
Tjhe	2

Na o kile wa amohela tjhelete ka mohala wa thekeng?

E	1
Tjhe	2

Na ho na le motho yeo o mo tseba ya kileng a fumana tjhelete ka mohala wa hae wa thekeng?

E	1
Tjhe	2

Ke efe ho tse latelang yeo o e etsang ka mohala wa hao wa thekeng:

	E	Tjhe	Ha ke e tsebe
Ho kopitsa medumo ya fono Inthaneteng	1	2	3
Ho kopitsa dipapadi Inthaneteng	1	2	3
Ho kopitsa mmino Inthaneteng	1	2	3
Ho romela melaetsa ya *'please call me'*	1	2	3

Na o dumellana le dipolelo tse latelang mabapi le **tsela yeo o sebedisang mohala wa hao wa thekeng ka yona ha o romela tjhelete le ha o e amohela** kapa ha o dumellane le tsona.

Nka sebedisa mohala wa ka wa thekeng ho romela tjhelete le ho e amohela:	Ha ke Dumellane le seo	Ha ke nke lehlakore	Ke dumellana le yona
a) Haeba nka e leka pele	1	2	3
b) Haeba motho e mong a ka mpontsha pele hore na e etswa jwang	1	2	3
c) Haeba nka e etsa neng kapa neng, kae kapa kae	1	2	3
d) Haeba ho sa je tjhelete e ngata	1	2	3
e) Haeba ho ka nolofatsa bophelo ba ka	1	2	3
f) Haeba ho le bonolo ho e etsa	1	2	3
g) Hobane ho ba le tjhelete selefonong ho molemo ho feta ho tsamaya ka kheshe	1	2	3

REA LEBOHA HA O KENTSE LETSOHO PHUPUTSONG ENA!

Ke hlapanya hore ke entse sohle se matleng a ka ho phetha phuputso ena ho latela ditaelo tsa kwetliso yeo ke e fumaneng.

Lebitso la ya botsang dipotso:……………………………………………………………….

Mosaeno:………………………………………….

Mookamedi …………………………………………………….

E SEBEDISWA KE OFISI FEELA
Ya laolang lenane………………………………………………………….
A thuswa le ho hlahlojwa ke:……………………………………………………

Sawubona, igama lami ngingu- ……………………. futhi ngisebenzela i-Quest Research Services, inkampani ezimele yocwaningo. Sithunywe umuntu ofundela iziqu ze-MBA kuyi-Gordon Institute of Business Science eYunivesithi yasePretoria ukuba senze inhlolo-vo ngendlela abantu abangayifaki imali ebhange abasebenzisa ngayo omakhalekhukhwini eGauteng. Lolu cwaningo lwenziwe ngenjongo yemfundo kuphela futhi konke ozokusho kuzogcinwa kuyimfihlo futhi ngeke uthinteke emiphumeleni esiyitholayo.

Imininingwane yomuntu ophendulayo

Igama lomuntu ophendulayo:

Ikheli nenombolo zocingo:

Usuku lwengxoxo:

SECTION A

1. Unaye yini umakhalekhukhwini?

Yebo	1	**Weqe umbuzo 3**
Cha	2	**Buza umbuzo 2**

2. Uma ungenaye, uyakwazi yini ukuwusebenzisa umakhalekhukhwini?

Yebo	1	**Qhubeka**
Cha	2	**Bonga oxoxa naye bese uphetha ingxoxo**

3. Usunesikhathi esingakanani usebenzisa umakhalekhukhwini?

Singaphansi konyaka	1
Unyaka owodwa kuya kwemibili	2
Unyaka kuya kwengu-2	3

Iminyaka engu-3 – 4	4
Singaphezu kweminyaka engu-4	5

4. Ubulili bomuntu oxoxa naye

Owesilisa	1
Owesifazane	2

5. Okwamanje siyini isimo sakho ngokuphathelene nomshado?

Awushadile	1
Ushadile	2
Uhlukanisile	3
Udivosile	4
Ungumfelwa/Umfelokazi	5
Uhlala nomuntu	6

6. Uneminyaka emingaki yobudala? **FUNDA NGOKUZWAKALAYO**

Uneminyaka engu-16-24	1
Uneminyaka engu-25-34	2
Uneminyaka engu-35 – 49	3

Uneminyaka engu-50 – 64	4
Uneminyaka engaphezu kwengu-65	5

7. Kulezi zinkulumo ezilandelayo, iyiphi esichaza kangcono isimo sakho somsebenzi wokuziphilisa?
FUNDA NGOKUZWAKALAYO

Angisebenzi	1
Ngisebenza izinsuku ezithile futhi ngiyahola	2
Ngisebenza isikhathi esigcwele futhi ngiyahola	3
Ngibamba amatoho ngihole ngaleso sikhathi	4
Nginebhizinisi	5
Ngiyafunda isikhathi esigcwele	6
Ngihola i-*pension*	7

8. Kule mali engezansi, iyiphi echaza umholo wakho ngenyanga ngaphambi kokuba kudonswe intela?

Ingaphansi kuka-R500	1
Ingu-R500 – R999	2
Ingu-R1 000– R1 999	3
Ingu-R2 000 – R2 500	4

9. Wake wezwa ngokusebenzisa umakhalekhukhwini ukuze ufake imali ebhange?

Yebo	1
Cha	2

10. Uyakwazi yini ukuthumela imali nokuyithola usebenzisa umakhalekhukhwini?

Yebo	1
Cha	2

11. Wake wayithola imali kumakhalekhukhwini wakho?

Yebo	1
Cha	2

12. Ukhona yini umuntu omaziyo owake wathola imali kumakhalekhukhwini wakhe?

Yebo	1
Cha	2

13. Kulezi zinto ezilandelayo, iziphi ozenza ngomakhalekhukhwini:

	Yebo	Cha	Bengingazi
Ukopisha ama-*ringtone*	1	2	3
Ukopisha imidlalo	1	2	3

Ukopisha umculo	1	2	3
Uthumela imiyalezo ethi *'please call me'*	1	2	3

14. Kulezi zinkulumo ezilandelayo, iziphi ovumelana noma ongavumelani nazo **ngendlela osebenzisa ngayo umakhalekhukhwini ukuthumela nokuthola imali.**

Ngingawusebenzisa umakhalekhukhwini ukuthumela nokuthola imali:	Ngiyaphika	Angiqiniseki	Ngiyavuma
a) Uma ngingayihlola kuqala	1	2	3
b) Uma othile engaqale angibonise ukuthi kwenziwa kanjani	1	2	3
c) Uma ngingakwenza noma nini, noma kuphi	1	2	3
d) Uma kungabizi kakhulu	1	2	3
e) Uma kwenza ukuphila kushelele	1	2	3
f) Uma kulula ukukwenza	1	2	3
g) Ngoba ukuba nemininingwane ephathelene nemali kumakhalekhukhwini kuphephile kunokuphatha imali ngesandla	1	2	3

NGIYABONGA NGOKUTHI UBE NESANDLA KULE NHLOLO-VO!

Ngiyaqinisa ukuthi le ngxoxo ngiyenze ngokusemandleni ami futhi ngizilandele zonke iziqondiso engizithole lapho ngiqeqeshwa.

Igama lomuntu oxoxa nomuntu:……………………………………………………………….

Isignesha:……………………………………………….

Umhloli …………………………………………………….

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Bhota, igama lam ngu ……………………… yaye ndisebenzela iQuest Research Services, inkampani ezimeleyo yophando lwezentengiso. Siye sacelwa nguMfundi owenza iMBA kwiGordon Institute of Business Science kwiYunivesithi yasePretoria ukuba siqhube uphando ngenkqubo ezihambahambayo zokugcina imali kubathengi abangenazibhanki eRhawutini. Olu phando lwenziwa ngenjongo yokufunda yaye nayiphi inkcazelo oyinikelayo iya kugcinwa iyimfihlo yaye iziphumo azisayi kubuyiselwa kuwe.

Inkcazelo yalowo uphandwayo

Igama lakhe:

Iinkcukacha zokuqhagamshelana naye:

Usuku lodliwano-ndlebe:

<u>ICANDELO A</u>

Ngaba unayo iselfowuni?

Ewe	1	**Mtsibe uQ3**
Hayi	2	**Buza uQ2**

Ukuba uthi Hayi, ngaba kukho apho unokuyifumana khona iselfowuni?

Ewe	1	**Qhubeka**
Hayi	2	**Mbulele lowo umphandayo uze uvale udliwano-ndlebe**

Unexesha elingakanani usebenzisa iselfowuni?

Ngaphantsi konyaka omnye	1
Iminyaka e-1 – 2	2
Iminyaka e-2 – 3	3
Iminyaka e-3 – 4	4
Ngaphezu kweminyaka e-4	5

Lowo ubuzayo ubhala ubuni

Yindoda	1
Ngumfazi	2

Ithini imeko yakho yomtshato ngoku?

Akutshatanga	1
Utshatile	2
Nahlukene	3
Niqhawule umtshato	4
Ungumhlolo/Umhlolokazi	5
Unomntu ohlala naye	6

Ukubuphi ubudala? **MFUNDELE**

Uneminyaka eli-16-24	1
Uneminyaka engama25-34	2
Uneminyaka engama-35 – 49	3
Uneminyaka engama-50 – 64	4
Umalunga neminyaka engama-65 years	5

Yiyiphi kwezi zilandelayo eyichaza kakuhle imeko yakho yengqesho yangoku? **MFUNDELE**

Andiphangeli	1
Ndisebenza ixeshana ukuze ndifumane umvuzo	2
Ndisebenza ixeshana ukuze ndifumane umvuzo	3
Ndenza izingxungxo ukuze ndifumane imali	4
Ndiyazisebenzela	5
Ndifunda ixesha elizeleyo	6
Ndidla umhlalaphantsi	7

Liliphi izinga eliyichaza kakuhle imali oyifumana ngenyanga ngaphambi kokuba kutsalwe irhafu?

Ngaphantsi kwee-R500	1
R500 – R999	2
R1 000– R1 999	3
R2 000 – R2 500	4

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Ngaba ukhe weva ngokubhankisha ngeselfowuni?

Ewe	1
Hayi	2

Ngaba uyakwazi ukuthumela nokufumana imali usebenzisa iselfowuni?

Ewe	1
Hayi	2

Ngaba ukhe wayifumana imali yakho ngeselfowuni?

Ewe	1
Hayi	2

Ngaba ukho umntu omaziyo okhe wafumana imali ngeselfowuni?

Ewe	1
Hayi	2

Yiyiphi kwezi zinto zilandelayo oyenza ngeselfowuni yakho:

	Ewe	Hayi	Ayikho endiyaziyo
Ukukhuphela iiringtones	1	2	3
Ukukhuphela imidlalo	1	2	3
Ukukhuphela umculo	1	2	3
Ukuthumela oo'please call me'	1	2	3

Ukusa kuwuphi umkhamo ovumelana okanye ongavumelani ngawo nezi nkcukacha zilandelayo **ngokusebenzisa kwakho iselfowuni ukuthumela nokufumana imali**.

Ndingasebenzisa iselfowuni yam ukuthumela nokufumana imali:	Andivumi	Anditsho ukuba ndiyavuma okanye andivumi	Ndiyavuma
a) Ukuba ndingaqala ndiyihlole	1	2	3
b) Ukuba kungakho umntu oqala andibonise indlela okwenziwa ngayo	1	2	3
c) Ukuba ndingayenza nanini na, naphi na	1	2	3
d) Ukuba kuyafikeleka	1	2	3
e) Ukuba kuya kwenza izinto zibe lula	1	2	3
f) Ukuba bekulula ukukwenza	1	2	3
g) Ngenxa yokuba ukufaka imali kwiselfowuni kukhuselekile kunokuyiphatha ngesandla	1	2	3

SIYABULELA NGENXAXHEBA YAKHO KOLU PHANDO!

Ndivakalisa ukuba olu dliwano-ndlebe luye lwazaliswa ngeyona ndlela ibhetele ndinokwenza ngayo ngokuvisisana nemiyalelo yoqeqesho.

Igama lalowo ubuzayo:………………………………………………………………….

Utyobelo:………………………………………………….

Umphathi …………………………………………………………………….

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