

# The meaning of money and the digital money socio-technical network in a low income community in South Africa

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of Witwatersrand in fulfilment of the requirements for the degree of Masters in  
Management by Research**

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## **Abstract**

The use of mobile phones to access banking services potentially overcomes the spatial and cost barriers associated with traditional bank infrastructure, yet questions remain whether low income people will adopt mobile banking and other forms of digital money. Physical money remains the dominant store of value and payment instrument in many parts of the developing world, including South Africa.

The purpose of this research is to gain a greater understanding about what money (physical and digital money) means to low income people in South Africa and to consider “if”, “how”, and under what conditions, digital money may come to be used (and when and where it will not be used) by low income people as a substitute for physical money.

The socio-technical model is the foundation of the conceptual framework informing the research and the research findings can be incorporated into the evolving socio-technical network of digital money. The research assumes an interpretive philosophical paradigm and takes a social constructionist perspective. Qualitative methods are used to obtain the data. The research participants were a group of low income people who live and work in a very specific area of Alexandra, in Johannesburg.

The five themes for the meaning of money that emerged were; Money as Hedonism, Money as Love, Money as Food, Money as Development of Self and Children, and Money as Support Structures. Physical money and digital money have different meanings to the research participants and low income people in Alexandra have a strong and positive relationship with physical money. The research found that low income people will more readily use digital money where the transaction involves goods or services that have “meaning”. They will use digital money if a decree is made to use digital money or if digital money provides utility such as receiving money, transferring money over distance or buying pre-paid airtime.

Illegal activity, low value transactions, and a shortage of digital money are situations where the research participants will not use digital money as a substitute for physical money. These conditions, as well as the cost of digital money relative to physical money, are the impediments to the evolution of the digital money socio-technical system in Alexandra.

**Keywords:** Mobile payments, cell phone banking, digital money, physical money, socio-technical model, meaning of money.

## Declaration

I, Graeme Holmes, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in fulfilment of the requirements for the degree of Master of Management by Research in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

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Graeme Holmes

Signed at .....

On the 12<sup>th</sup> day of December 2014

## **Dedication**

This research is dedicated to the community of Alexandra and specifically the research participants, who, with so little, have so much.

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Thank you to my wife, Vivienne, for her love, support and encouragement throughout this journey. My children James, Alex and Cameron also had less of me than usual.

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## Chapter 1 Context

### 1.1 Problem statement

Half of the world's population lives on less than US\$2.5 per day<sup>1</sup>. In South Africa, approximately 70% of adults receive an income of less than R2,000.00 per month<sup>2</sup>. Poverty is a focus area of the United Nations Millennium Development Goals as well as South Africa's National Planning Commission and should rightly receive attention from all quarters. The focus of this research report is South Africa, and Alexandra in particular, although examples and research from other developing economies will be used where appropriate.

Financial inclusion is often referenced by academics and policy makers as a contributor to overcoming poverty. Chibba (2009) contends that 3 billion people in the world do not have access to financial services and financial inclusion is an "incremental and complementary solution to tackle poverty". In a lecture titled "Taking banking services to the common man – financial inclusion" the Deputy Governor of the Reserve Bank of India made the following statement, "...financial inclusion can truly lift the financial condition and standards of life of the poor and the disadvantaged." (Leeladhar, 2005).

The causal link between financial inclusion and poverty alleviation is most often simply implied or assumed by academics (Donner, 2007), policy makers and influencers (Ivatury & Pickens, 2006) (Porteous, 2006) and the media. The subject has become infused with politics and media hype.

It is not the objective of this research to subject these claims and the causal link between financial inclusion and poverty alleviation to scrutiny. They are presented to highlight that access to financial services, and more specifically banking services, for millions of low income people in South Africa and other developing economies is a subject of intense interest for academics and policy-makers.

Financial inclusion can be defined as the delivery of banking services at an affordable cost to low-income people (Leeladhar, 2005). Chibba explains financial inclusion in a more practical way as having access to a "bank account, credit, insurance, a safe place to keep savings, and a secure and efficient means to receive social benefit payments, through a registered financial institution" (2009, p. 213).

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<sup>1</sup> According to The Hunger Project (Hunger and Poverty: Definitions and Distinctions, 22 April 2008) 2.6 billion people live on less than US\$2 per day. Refer also [http://www.100people.org/statistics\\_detailed\\_statistics.php?section=statistics](http://www.100people.org/statistics_detailed_statistics.php?section=statistics)

<sup>2</sup> Calculated using data in Finscope South Africa 2011. Monthly income is presented for 73% of adults. The balance of 27% refused to disclose income or were uncertain of the amount. 70% of those that disclosed income (or 51% of the total) have income of less than R2,000.00 per month. According to FinScope 2013, the average personal monthly income in South Africa is R3,300.00.

The use of banking services requires that low income people accept the digitisation of physical money. It demands they accept that a physical object (as a representation of value) is exchanged for something intangible that may only be represented by “numbers on a computer screen” (Ferguson, 2009, p. 1). Donner and Tellez contend that “beliefs, misunderstandings, habits, and concerns must be addressed if people who are used to storing money in cash are asked to store it in a handset” (2008, p. 321).

Banking services include deposits, payments and loans. Physical money (notes and coins), when deposited at a bank, is exchanged for digital money in a bank account. The store of value represented by physical money is exchanged for a digital store of value. Digital money can be exchanged for physical money at a later time (cash withdrawal) or transferred to the bank account<sup>3</sup> of a third party. The latter is known as a digital (or electronic) payment transaction.

The complete displacement of physical money by digital money (digitisation) is technically possible<sup>4</sup> and many in business and the technology media assume that the cashless economy or cash-light economy will happen in due course (Carrim, 2014; Matambo & Schaefer, 2013; Ochei, 2013; Writer, 2013). The media hype is not new in the technology field as explained by Kling. His observation is even more pertinent today with the advent of social media, such as Twitter.

“The best pundits are entertaining, provocative, and timely. If an issue arises this week, they can rapidly formulate and articulate opinion, and perhaps even a sound bite” (2007, p. 205).

This research is concerned with the research questions of “if” and “how” digital money may come to be used by low-income people and does not assume that low-income communities desire or need digitisation. Indeed, it is easy to imagine many scenarios where low income communities and broader society would favour physical money over digital money. These scenarios would include many person-to-person low value transactions and transactions where the participants wish to avoid creating an audit trail, such as criminal activity or concerns about privacy.

The use of mobile phones to obtain banking services potentially overcomes the spatial and cost barriers associated with traditional bank infrastructure (ATM’s and branches) yet questions remain whether low income people will adopt mobile banking (Ivatury & Pickens, 2006). Mobile banking represents a significant opportunity for low income people to replace physical money with digital money. Despite a growth in access to financial services, physical money remains the dominant store

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<sup>3</sup> “bank account” is used in its broadest possible meaning so could include a mobile wallet or some other “virtual” or “digital” store of value.

<sup>4</sup> This is based on the simple premise that because some people already use digital money for some transactions it is “technically” possible for all people to use digital money for all transactions.

of value and dominant payment instrument in many parts of the developing world including South Africa. The following evidence is presented to support this statement:

- The growth in cash represented by the growth in ATM transactions. The compound annual growth rate for ATM cash transactions in South Africa between 2006 and 2010 was 11%<sup>5</sup>.
- The Mzansi<sup>6</sup> bank account initiative has not been successful as a result of high costs and low customer utilisation and it remains to be seen whether newer product offerings from banks achieve greater usage and the digitisation of physical money.
- Mobile banking solutions are not having a significant impact on digitisation. This can be seen by the growth in cash and is supported by the evidence of low usage of these solutions (Mas, 2013) and success in a limited number of countries (Diniz, Albuquerque, & Cernev, 2011). The examples of M-Pesa (Hughes & Lonie, 2007) and SMART Money in the Philippines are rightly lauded as successes, yet little attention is paid to more than a hundred other mobile banking initiatives throughout the world that have very low usage (Davidson & Penicaud, 2012).<sup>7</sup>
- A good example is Haiti where a mere 22,000 people regularly use the mobile banking services even though 800,000 people have registered (Daniel, 2012).
- In South Africa, few statistics are available about mobile banking usage and those that are available are vague. For example, in a web article it was reported that there are “about 1m” M-Pesa registrations in South Africa and usage is described as “disappointing” (McLeod, 2012). This was prior to the re-launch of M-Pesa in South Africa in 2014 (Goldstuck, 2014).
- Although a little out of date, Porteous (2005) concluded that virtually all users of mobile banking are from “below the frontier” which he defines as existing users of banking services.

The potential of the mobile phone and other banking technology to digitise physical money has not been achieved.

## 1.2 Knowledge gap

Donner and Tellez (2008) state that there is little scholarly research within the realm of mobile banking systems. They specifically highlight the lack of attention by academics on the “social,

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<sup>5</sup> "Payments Association of South Africa (PASA) Annual Report," 2010)

<sup>6</sup> <http://mg.co.za/article/2012-02-17-mzansi-accounts-reach-dead-end>. The Mzansi bank account initiative was a joint effort by South African banks in response to the financial sector charter and the need for a low-cost basic bank account.

<sup>7</sup> The 52 mobile money service providers who participated in the “State of the Industry: Results from the 2011 global money adoption survey” reported having 60 million registered users but only 6 million active customers at 30 June 2011. Although the survey included M-Pesa in Kenya and SMART money in the Philippines, these service providers did not disclose their number of registered or active users. As at April 2012, there were 123 mobile money service deployments around the world.

economic and cultural contexts surrounding the use of these systems". Pickens and Ivatury (2006) call for research that more deeply explores the perceptions of mobile banking by low income people as these perceptions are seen as important determinants of adoption.

Dahlberg, Mallat, Ondrus and Zmijewska make the following observation that highlights the scarcity of academic research in this area and the knowledge gap:

"The impacts of social and cultural factors on mobile payments, as well as comparisons between mobile and traditional payment services are entirely uninvestigated issues." (2007, p.1)

A significant reason for the lack of research is the pace of mobile technology developments and rapid growth in the number of mobile banking programmes in developing economies (Donner & Tellez, 2008). The academic community has been left behind.

Furthermore, within the limited studies of mobile money, there is a preference for studies located in the positivist paradigm (Luo, Li, Zhang, & Shim, 2010) (Lin, 2011). Yu comments that "research focusing on mobile banking is relative (sic) little and receives underrated attention" (2012, p. 105).

Grint and Woolgar (1995) stress the importance of different theoretical perspectives of technology and it appears that calls from Orlikowski and Iacono (2001) and Kling (2000) for social informatics researchers to adopt interpretivist perspectives have largely gone unheeded by digital money and mobile banking researchers. Donner and Tellez (2008) note that more contextual and use studies of mobile banking systems in the developing world are required. This research attempts to fill that knowledge gap by adopting an interpretivist research perspective of digital money and mobile banking in a low income community in South Africa.

### **1.3 Purpose statement**

The purpose of this research is to:

- Gain a greater understanding about what money (physical and digital money) means to low income people in South Africa.
- Consider "if", "how", and under what conditions, digital money may come to be used (and when and where it will not be used) by low income people as a substitute for physical money.

### **1.4 Research questions**

The research fieldwork was conducted in Alexandra, Johannesburg. Alexandra is a low income community 3km east of Sandton, the financial hub of South Africa. Semi-structured interviews were

conducted with eighteen research participants. The research is interpretivist and qualitative. The socio-technical network model is used as the foundation and the output of the research contributes knowledge that can be incorporated into the evolving socio-technical network of digital money. The research questions are:

- What does “money” mean for low income people?
- How does the digitisation of physical money impact the meaning of money for low income people?
- How may digital money come to be used by low income people as a substitute of physical money?
  - Why would low income people use digital money as a substitute for physical cash?
  - Under what conditions will low income people not use digital money as a substitute for physical cash?

## **1.5 Conclusion**

In this opening chapter, the problem statement, knowledge gap, purpose statement and research questions have been presented. Chapter 2 details the conceptual framework upon which the research is founded and chapter 3 discusses the philosophical assumptions that inform the research approach, methods and design. Chapter 4 explains how the research fieldwork was conducted, introduces the research participants, and details how the data was gathered and analysed. Chapters 5 and 6, respectively, present the analysis and interpretation of the data gathered on the meaning of money to people and the socio-technical network of digital money. Chapter 7 provides conclusions in response to the research questions, lays out the contribution of this research to knowledge, and offers recommendations for practice.



## **Chapter 2      Conceptual Framework**

### **2.1 Introduction**

In this chapter, the academic discipline of social informatics and the concepts of socio-technical networks are introduced. The socio-technical network of digital money is discussed and the chapter concludes with a consideration of the meaning of money to people. These concepts form the foundation for this research.

Maxwell (2004) defines a conceptual framework as the “system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research”. This conceptual framework draws on academic literature on the topic as well as my own experience and interpretive analysis in response to the subtitle of Maxwell’s work, “What do you think is going on?”

The purpose of the conceptual framework is to integrate concepts and theories drawn from the literature with my own interpretation as is appropriate for research conducted in the interpretive paradigm (Bluhm, Harman, Lee, & Mitchell, 2011). The conceptual framework informs the research methodology and research design in my endeavour to gain a greater understanding of what money means to low-income people and how they may come to use digital money.

### **2.2 Social informatics**

Social informatics, as defined by Kling, is “the study of the design, uses and consequences of information technologies and takes into account their interaction within institutional and cultural contexts” (2000, p. 217). Social informatics evolved and gained prominence as computers began impacting organisations in the 1970’s and 1980’s. Initial studies focussed on how computers impacted the work-lives of workers, managers and the work organisations as a whole. These initial studies concerned the computerisation of the business and government work-place. Kling defines computerisation as “the deployment of computer-based systems in social settings” (1991, p. 360).

The growth of the internet and mobile phone networks in society beyond the organisation has broadened social informatics as a field of study. This research is concerned with money and specifically digital money. Computerisation is enabling the digitisation of money and money is evolving from the physical (notes and coins) to the digital (numbers on a screen). Telecommunication technologies, including the internet and mobile phones, have extended the digitisation of money into broader society including low income communities. Until the 1990’s, low income communities in South Africa had little access to banking and telephone communications. The political changes and proliferation of mobile phones changed that and there is now even greater potential for the digitisation of money. Kling conceptualises social informatics as the body of research that examines

the social aspects of computerisation (2000). This research draws on the social informatics body of research as it examines the social aspects of the computerisation / digitisation of money for low income people in their work-place and broader social life.

### **2.2.1 The IT artefact**

An IT<sup>8</sup> artefact can be defined as the hardware and software that constitutes the IT system that is designed, built, programmed and made available to the user. Orlikowski and Iacono define IT artefacts as “those bundles of material and cultural properties packaged in some socially recognisable form such as hardware and / or software.” (2001, p. 121). There are many day-to-day information technology applications that fit the definition of an IT artefact. Consider e-mail, an MP3 player, internet banking or mobile banking. There may be differences in the technologies, product offerings and business models of the different providers but essentially most people should have little difficulty recognising or using the alternative offerings. Within this study, there are numerous IT artefacts encountered, including a bank account, mobile phone, ATM, and debit card. A debit card, as an example, has hardware in the form of the plastic and embedded micro-chip issued by a bank to the user. The software constitutes the data on the magnetic strip and the data and programmes on the micro-chip. The debit card is made available to the user as a piece of plastic yet it is supported by an IT system that has been designed, built and programmed. The debit card is a “bundle of material” and it has cultural properties. People within society have come to know what a debit card is, what it is intended for, and what it means to have a debit card.

A question to consider is whether physical money and digital money are IT artefacts or something different. There is sophisticated technology embedded in physical money to produce it, security features (watermarks etc.) to prevent counterfeiting and authenticate it when using a note-counter. It meets the other definitions of an IT artefact in that it is supported by an IT system, is a “bundle of material” and has cultural properties. This analysis provokes a deeper understanding of the concept of an IT artefact and it would seem that physical money is not an IT artefact because it lacks computerisation (software) within the physical note or coin.

Digital money does not seem to be an IT artefact for a different reason. Digital money is a concept rather than an IT artefact. It includes many different IT artefacts, including internet banking, mobile banking, ATM’s and debit cards.

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<sup>8</sup> Information Technology.

### **2.2.2 The tool view**

Kling initially located his research within the tool view of technology before expanding his conceptualisation into “web models” (Kling, 1991) or the “web of computing” (Orlikowski & Iacono, 2001). Within the tool view, computers are viewed as machines designed and built by engineers and intended to work as designed. A computer system designed and implemented to maintain inventory records in a factory in South Dakota, for instance, was expected to do the same thing in a factory in Des Moines.

In their review of social informatics literature, Orlikowski and Iacono, found that the tool view was represented in four different ways, namely; a tool for labour substitution, a tool for enhancing productivity, a tool for information processing, and a tool for changing social relations (2001, p. 123). In the inventory records example above, the new computer system can be viewed from any of these four different ways. Similarly, one can view the implementation of mobile banking within any one of these four views. Mobile banking is “convenient and innovative” (Gjino & Irollari, 2014, p. 45) and offers a variety of benefits over traditional financial models (Kendall & Voorhies, 2014). Within the tool view, mobile banking could be viewed as replacing labour in that a transaction that previously required a bank branch employee to initiate can now be initiated by the client from his / her mobile phone. The bank branch employee may be replaced by the technology (labour substitution) or may be re-assigned to perform other tasks such as selling the mobile banking product to low income people. This would be an example of enhanced labour productivity. Mobile banking may also be viewed as a tool for information processing (view transaction history, make payments) and as a tool for changing social relations. Mobile banking has an impact on social relations in that clients of a bank have less personal contact with bank service staff.

The problem with the tool view is that the IT artefact is assumed to be fixed, stable and unproblematic and will work as designed (Orlikowski & Iacono, 2001). One can consider a non-IT tool such as a hammer or scythe and assume that it will work as designed. Clearly this is over-simplistic. Different people and communities will have adaptations, unique applications or styles of use for the tool and no designer of a tool can anticipate all of the variations that people may find for the use of what has been designed for a specific purpose. Furthermore, some people and communities may have little or no use for a particular tool as designed and may use it less or discard it. This appears to be what happened with M-Pesa in South Africa. Following its success in Kenya, the IT artefact was implemented in South Africa where it was a failure. Perhaps this was because, unlike Kenyans, South Africans already had multiple other banking and money transfer IT artefacts available to them and M-Pesa was not found to be useful.

### **2.2.3 The social shaping of technologies**

Kling found the tool view inadequate in explaining how technologies come to be used by organisations (2000). His research revealed that government offices in different states incorporated the same information system (IT artefact) into their respective organisations in quite different ways. The existing culture and organisational structure was found to influence the IT artefact introduced, evolving into quite different socio-technical networks. Similarly, digital money IT artefacts have been implemented in different countries and have been adopted by consumers in quite different ways. The case of M-Pesa provides an example of the social shaping of technologies. M-Pesa in South Africa has now been re-launched with substantial changes to the IT artefact and the socio-technical network. I am able to provide these insights from my personal experience working for Nedbank on the M-Pesa project. However, the now vast differences between M-Pesa in Kenya and South Africa will be evident to anyone who examines the respective IT artefacts, socio-technical networks and the IT systems supporting the IT artefacts. In fact, it may now be that M-Pesa in Kenya and M-Pesa in South Africa are substantially different and have little in common other than the brand name they share. An example is that unlike Kenya, M-Pesa in South Africa has a debit card as part of the IT artefact that enables users to draw cash at ATM's and pay for goods and services at merchants. M-Pesa in South Africa has also been re-launched with a new bank (Bidvest Bank) and a new IT system. These changes to the IT artefact were made in response to the failure of the initial launch and feedback from users and potential users providing an example of the social shaping of technologies.

### **2.2.4 The ensemble view and socio-technical networks**

The ensemble view of technology incorporates the vast network of interactions between technology and people (the socio-technical network) during the design, development, deployment and use of large-scale technology innovations (Orlikowski & Iacono, 2001).

Kling evolved his conceptualisation of technology into "web of computing" where the IT artefact is but one element in a package within a socio-technical system. The other elements in the package include the individual people, corporations, business partnerships and contracts, and marketing incentives to customers. All of the elements together enable the "effective management and use" of new technologies (Orlikowski & Iacono, 2001, p. 125).

Kling conceptualised the highly intertwined socio-technical model where the technology in use and the social world are not seen as separate – they co-constitute each other. The mobile phone socio-

technical network is highly intertwined<sup>9</sup>. Although most people in South Africa born before 1990 can remember life before the pervasive use of mobile phones, it is now not possible to separate mobile technology from the social world. As Kling points out, separation can only be done for analytical convenience. This will be useful when considering how digital money comes to be used by people as part of the greater mobile phone socio-technical system.

This research has been strongly influenced by Actor-Network Theory (ANT) (Callon, 1990; Cordella & Shaikh, 2006) and Latour (2002) in particular. In the early stages of compiling this research, the use of ANT was considered as the analytical framework to inform the proposed research. Latour's explanation of the "assembly of forces" as quoted by Orlikowski and Iacono cemented my interest in the subject of social informatics and the appropriateness of socio-technical networks to inform the proposed research. Latour observed that:

"If one takes a tool such as a pestle grinder, ties it to a wooden frame, which is then tied to sails that catch the wind, and, then if the wind can be cajoled to co-operate, one has an "assembly of forces" or what he refers to as a machine." (2001, p. 125)

This powerful analogy is apt when considering the vast socio-technical system of digital money. There are many human and non-human actors within these networks and ANT focusses on the processes through which socio-technical networks are created (Cordella & Shaikh, 2006). This process of translation and the formation of socio-technical networks can be encouraged, or designed for, by "deliverers" of banking services through exploring individual's understandings and subjective experiences.

The evolving socio-technical network of digital money is an almost endless list of actors<sup>10</sup> including banks, mobile network operators (MNO's), card network operators (CNO's), government, South African Reserve Bank (SARB), technology vendors, large and small retailers, and people in society. The socio-technical network is always evolving as new relationships are formed and actors enter and leave the network. The complexity is extended when the actor-networks within the nodes above are also exposed. For example, within a bank there is a network of people (product managers, programmers, accountants, lawyers, credit managers, branch managers) and technology (software programmes, websites, telephones, ATM's, branches).

Orlikowski and Iacono (2001) identified a theoretical split within the ensemble view between Latour and Kling. Latour focusses on how information technologies come to be developed with a secondary

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<sup>9</sup> Kling also refers to a completely intertwined socio-technical model. Perhaps the mobile phone socio-technical model is completely intertwined.

<sup>10</sup> Latour states that an actor or "actant" can be anything (human or technical) provided it is "granted to be the source of an action" (Latour, 1997)

emphasis on use by people. Kling focusses on how information technologies come to be used by people with a secondary emphasis on how they come to be developed. In short, Latour focusses on how information technologies come to be, and Kling focusses on how information technologies come to be used.

It is not the purpose of this research to understand the entire socio-technical network of digital money. While the work of both Latour and Kling provides a suitable and comprehensive theoretical framework for this purpose, these concepts are applied to some brief interpretive analysis in the sections below in response to Maxwell's question, "What do you think is going on?"

The question is to decide which approach to favour for the purposes of this research. The focus of the problem and purpose statement is low-income people and "if", "how" and "under what conditions" they may come to use digital money. Drawing heavily on the work of Kling, Warschauer observed that "human and social systems must change" and access to technology is not enough for technology to make a difference in people's lives (2003, p. 6). He quotes the example of the Information Age Town in Ireland where many unemployed people who were provided with computers worked out how to use them, but importantly missed the socialising opportunities that adopting the computers deprived them of and as a consequence stopped using the computers.

The evolution of the digital money socio-technical network and the various IT artefacts as part of that network is still in its formative stages and has by no means come to be. Latour's Actor-Network Theory (ANT) would be more appropriate for the study of an information technology that has already become black-boxed (Orlikowski & Iacono, 2001). The concept of black-boxing, and specifically unpacking the black-box, refers to the application of ANT to understand how a technology, that we might take for granted or assume away, has come to be. ANT can be applied to any technology. As an example, in unpacking how the mobile phone socio-technical system came to be we would likely start with the invention in 1947 of hexagonal cells for mobile base stations and move through to Dr Martin Cooper, the inventor of the modern mobile phone, who made the first public telephone call from a portable mobile phone on 3 April 1973 from the streets of New York City (Kinder, 2007). A good example of the application of ANT is provided by Bonner, Chiasson and Gopal (2009) in their historical unpacking of the dissemination of the motor-vehicle owner database in Canada over a period of eight decades, notwithstanding increased social pressure for privacy protection.

The socio-technical network model as conceptualised by Kling is thus the main focus of this research report rather than Latour's ANT. The reasons for deciding on Kling, rather than Latour, can be summarised as follows. The information technology in question, digital money, has not yet come to be. It is not yet black-boxed. The focus of the problem and purpose statement is low income people

and “if”, “how” and “under what conditions” they may come to use digital money. Kling’s approach fits more closely with the purpose of this research and the researcher’s own view of “what is going on” and the research methodology is tailored accordingly.

Figure 1 compares the attributes of the socio-technical model to the tool model. The complexity of the socio-technical model is immediately apparent but so too is its usefulness in analysing how digital money may come to be used by a low income community. To demonstrate this, one can consider the many participants in a mobile banking implementation, such as the re-launched M-Pesa in South Africa (Goldstuck, 2014). In addition to Vodacom, Visa and Bidvest Bank and the many employees in those organisations there are 8,000 agents at informal outlets and retail stores. M-Pesa clients have access to 27,000 ATM’s and 240,000 merchants in South Africa. This is a socio-technical network and an ecological view of the entire network is required to fully analyse and understand the complexity of relationships and contexts inherent in delivering the M-Pesa banking and payments product to the end user and to bring about the transformational impact that the CEO of Vodacom is anticipating.

In writing about a discussion with Ed McLaughlin, the Chief Emerging Payments Officer for MasterCard, Webster states that “The payments ecosystem has spent the last five decades building, supporting and evolving an infrastructure” (2014). The words and concepts used resonate with the attributes of socio-technical models below. The subject is payments as an ecosystem. Webster and McLaughlin were specifically discussing the credit card payment system and its evolution as plastic cards in wallets are displaced by the other form factors<sup>11</sup> including the mobile phone. However, the infrastructure and ecosystem they refer to evolved from other payment systems including barter, cash, cheques and IOU’s and elements of those payment systems remain in the credit card payment system today.

This further highlights the appropriateness of using the socio-technical network model as the foundation of analysis of digital money within a community. The tool view is likely not helpful in this task. The attributes of the socio-technical model are used extensively in analysing data and drawing conclusions from the research fieldwork.

The notion of digital money as a socio-technical network will be considered throughout this research. This is the first attribute of socio-technical models in figure 1. The question is whether the socio-technical model is a useful conception and superior to the tool view in analysing how the various technologies are used, and may come to be used, by low income communities. The second attribute of socio-technical models in figure 1 suggests that an ecological view of the environment is required rather than simply having a business model which appears to satisfy a need that people have.

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<sup>11</sup> A form factor is the physical object or artefact used by the client to initiate and authenticate a credit card transaction. The most common form factor is a plastic card with an embedded microchip and magnetic stripe. The form factor could be many objects with an embedded micro-chip including a pen, a watch or a mobile phone.

Financial inclusion presupposes the transition from the usage of physical money (cash) to digital money in its various forms. This research will explore whether the conversion to digital money by people is an ongoing process as suggested by the socio-technical model rather than the tool view which views ICT implementations as a “one-shot” process. Similarly, the effects of the conversion to digital money may be limited to direct effects, as suggested by the tool model, or there may be indirect effects as suggested by the socio-technical model. The role of politics and incentives in the digital money socio-technical network will be examined. These attributes are assumed away in the tool model or, at best, seen to be irrelevant and unproblematic. Furthermore, the tool model assumes that relationships are easily reformed. If this were the case then it is likely that digital money would easily displace physical money following the introduction of many digital money IT artefacts. The socio-technical model holds that relationships are complex. This will be explored in the research within the context of the migration from physical money to digital money.

The potential impact of digital money implementations on social life will be similarly explored in the research. The tool model holds that the social effects are big but isolated and benign. This appears overly simplistic and ignores the profound impact that digital money could have in a manner similar to the mobile phone which has given many low income people their first opportunity to regularly and cost effectively communicate with family and friends in distant locations.

This research will consider the complexity of the context of digital money. The tool model views the contexts as simple and the socio-technical model as complex. The final two attributes of socio-technical models being the “implicit nature of knowledge and expertise within a socio-technical network”, and the “additional skills and work required to be part of the socio-technical network” will be considered in this research together with the concept of social access. The concept of social access (knowledge, resources and skill to use advanced technologies) will also be considered in relation to the degree of social access to digital money that low income people have. The tool view again assumes that attributes such as knowledge and skill are easily made explicit to users of technology. Social access to technologies is not problematic.



### Conceptions of ICT in organizations / society

Standard (tools) model	Sociotechnical models
<p>ICT is a tool.            A business model is sufficient.            One-shot ICT implementations are made.            Technological effects are direct and immediate.            Politics are bad or irrelevant.            Incentives to change are unproblematic.            Relationships are easily reformed.            Social effects of ICT are big but isolated and benign.</p> <p>Contexts are simple (a few key terms of demographics).</p> <p>Knowledge and expertise are easily made explicit.            ICT infrastructures are fully supportive.</p>	<p>ICT is a sociotechnical network.            An ecological view is also needed.            ICT implementations are an ongoing process.            Technological effects are indirect and involve different time scales.            Politics are central and even enabling.            Incentives may require restructuring (and may be in conflict).            Relationships are complex, negotiated, multivalent (including trust).            Potentially enormous social repercussions of ICT (not just quality of work life, but overall quality of life).</p> <p>Contexts are complex (matrixes of businesses, services, people, technology history, location, etc)</p> <p>Knowledge and expertise are inherently tacit / implicit.            Additional skill and work are needed to make ICT work.</p>

Figure 1 – Conceptions of ICT in organisations / society (Kling, 2000).

### 2.3 Mobile banking within the digital money socio-technical network

There is wide-spread agreement that the mobile phone is an ideal technology to access banking services for low income people (Das, 2013; Demombynes & Thegeya, 2012; Donner & Tellez, 2008; Ivatury & Pickens, 2006; Porteous, 2006). Similarly, mobile banking offers banks the opportunity to deliver banking services in a manner that improves customer service, reduces costs and enhances security of transactions (Latzel, Ruppen, & Ultes-Nitsche, 2009; Peevers, Douglas, Marshall, & Jack, 2011).

However, it is simply a channel through which banking services can be accessed by people in much the same way as the Internet, a branch or an Automated Teller Machine (ATM) (Chidindi, Niekerk, & Matiza, 2014; Gjino & Ilollari, 2014). The nature of the banking services and the consortium making these available may change but the essence of the banking service to the end-user remains the same. Whatever the potential, it remains a requirement that the socio-technical system of mobile banking evolves into a “black-box” information technology and comes to be (as conceptualised by Latour) and “comes to be used” by low income people as conceptualised by Kling.

Mwangia and Brown support the view that mobile banking is an effective tool to extend the reach of financial services in developing economies. Their findings were that “culturally tuned legislative and ICT policy reforms, and marketing may still need to be undertaken by stakeholders in order to promote the adoption of mobile banking services among SME’s and low income groups.”(2014, p. 20).

### **2.3.1 The determinants for usage of digital money and mobile banking**

The determinants for the usage of digital money and mobile banking, in particular, are well known from the positivist studies conducted. Donner (2007) observes that researchers employing the theories of Planned Behaviour, Diffusion of Innovation, and Technology Acceptance Model, found high levels of perceived risk to be a barrier to adoption. He also highlights examples of personal networks that serve as transactional networks that satisfy the banking services needs of low income people. Ivatury and Pickens (2006) identified the value placed on human interaction as an impediment to usage, as well as the perception of cost and complication associated with mobile banking.

Bidar et al (2014) investigated seven factors influencing the implementation and adoption of mobile banking in Turkey. These were perceived usefulness, perceived ease of use, security and privacy, compatibility, social influence, facilitating conditions and perceived cost. Mallat (2007) found that consumers would adopt mobile payments because of the relative advantages in terms of availability and avoidance of queues but the barriers included premium pricing and a lack of critical mass. Schierz et al (2010) concluded that in driving towards critical mass, deliverers of mobile banking solutions should develop and advertise solutions in ways that consumers find suited to their individual circumstances and target them where consumers have a strong need to pay for goods and services in their everyday life. They noted that early adopters play an important role in influencing others to adopt mobile payment services. Yu (2012) applied Unified Theory of Acceptance and Use of Technology (UTAUT) and added social influence and perceived credibility to the list of what influences individuals to adopt mobile banking. Lin (2011) in examining why mobile adoption rates were low in Taiwan used Innovation Diffusion Theory and identified various attributes that influence peoples' intention to adopt mobile banking, including perceived relative advantage compared to other banking channels.

Mwangia and Brown (2014) employed ethnographic decision tree modelling in a Kenyan study and found that mobile banking systems are perceived to be expensive and unaffordable and exposed customers to the risk of crime at money agents.

All of these factors identified as influencers and impediments to mobile banking are little different to the issues faced in other forms of digital money such as ATM's (Thatchera, Shaika, & Zimmermanb, 2005). I have observed low income people with bank accounts enter a branch to draw cash when there is an ATM outside that could provide cash quicker and at lower cost. What has been embedded in the design of the ATM socio-technical network that is excluding low income people?

The ATM as a political site is examined by Introna and Whittaker (2006) who claim that “the designers of the ATM cybernetic network configured the user/ATM for the average enabled person, thereby neglecting a significant, already marginalized, community of (dis)abled people”. While I am not suggesting that low income people are disabled, it appears that many of them are excluded from the ATM by the politics embedded in the design of the ATM socio-technical network (Thatcher et al., 2005). It is likely that the politics (power and authority) is not intentionally built into the ATM but rather the needs of low income people are not specifically catered for in the design.

### **2.3.2 The concept of social access**

A slight variation of this is the concept of social access as explained by Kling where people are excluded from using technologies because they do not have the necessary know-how:

“Social access refers to know-how – a mix of professional knowledge, economic resources, and technical skills – for using technologies in ways that enhance professional practices and social life. In practice, social access – the abilities of diverse organisations and people from many walks of life to actually use these services – will be critical if advanced technologies are to move from the laboratories and pilot projects into widespread use where they can vitalise the nation and the economy.” (2000, p. 226)

In a similar way to the branch and ATM cash example, I have observed people drawing cash at ATM’s and making cash payments where they could more securely and conveniently pay using a debit card. What “know-how” do these people require to gain the social access to use these digital banking services so that the nation and the economy can be vitalised by removing or dramatically reducing the use of cash? The concept of social access is an important cornerstone of this research.

### **2.3.3 M-Pesa as a socio-technical network**

The theories and concepts of socio-technical networks can be applied to the very successful M-Pesa mobile banking system in Kenya. For the purposes of this conceptual framework, I have drawn on the informative M-Pesa case study by Hughes and Lonie (2007) and more recent analysis by Baku and Meredith (2013) and Budree and Williams (2013). The insights are then contrasted with mobile banking in South Africa (including M-Pesa) to demonstrate that there are significant differences in how the socio-technical networks have been managed by the various deliverers of mobile banking services in the two geographies.

The elements of the “web of computing” (Kling) for the M-Pesa pilot in Kenya included: the United Nations (Millenium Development Goals); World Summit for Sustainable Development (2003); UK

Government / Department for International Development; senior Vodaphone executives; Safaricom; the pilot partnership between the network operator, micro-finance institute and bank; the dedicated project manager and core team; distribution network of Safaricom airtime re-sellers; customer services and finance teams; the training team; and free incentive cell phones.

All of these elements came together to ensure that the target market of pilot consumers used the system to make their loan repayments using the M-Pesa payment system.

The following quote from the case study further demonstrates the social shaping of technologies: “aside from the standard loan repayments for which we had designed the system, we observed several other applications ...” (Hughes & Lonie, 2007, p. 76). Although the system was designed to make loan repayments, users experimented and improvised in the pilot phase and found their own uses (most notably, money transfer from Nairobi to rural areas) for the system that the designers had not envisaged. The socio-technical system was shaped by the users. M-Pesa is now the most successful mobile payments implementation with one in two mobile payments in the world being on the M-Pesa system in Kenya. The system has reached 65 percent of Kenyan households with 15.2m user registrations and US\$1.4 trillion in electronic money transfers to date (Buku & Meredith, 2013).

M-Pesa was implemented in South Africa in 2008. The “web of computing” from Kenya could not be replicated in the South African context. M-Pesa in South Africa has not come to be used to the same extent as in Kenya with many reasons for this (Goldstuck, 2014; Waal, 2010), including the vastly different social context in which the M-Pesa system has been implemented in South Africa. Kling observed that the social context plays a “significant role in influencing the ways that people use information and technologies ...” (2000, p. 225).

Other reasons for the different outcomes include the effective network of Safaricom distribution agents in Kenya and the effectiveness of the consumer education plans implemented in the respective countries (Budree & Williams, 2013). Porteous (2006) observed that banking legislation in South Africa stifles take-up and usage, and calls for an “enabling environment” to unlock the transformational potential of mobile banking.

Whatever the varied reasons, it is clear that a “web of computing” has not yet been forged in South Africa to deliver mobile banking services to low income people.

## **2.4 The meaning of money to low income people**

On one level money is devoid of meaning. It has no qualities beyond being a unit of measure. There is no good money and no bad money. There is no old money and no new money. It is simply a unit of measure. Money enables trade of goods and services and is a standardised mechanism to reward

people for their labour. It is vital for economic activity and growth beyond what a barter economy can achieve. Different units of economic activity and the value of different objects can be compared by using money as a standard (Mitchell & Mickel, 1999). This is the traditional, utilitarian view of money. It has a functional role in the economy and is also known as “market money” (Zelizer, 1989).

There are alternative views of money held by sociologists and psychologists which are useful when trying to predict how individual people and groups of people will behave in situations which involve money such as in how they may come to use (or not use) digital money in its various forms including mobile banking. Mitchell and Michel (1999, p. 568) argue that understanding the meaning of money to people is important because “people’s attitudes, beliefs and behaviours regarding money are related to other attributes and behaviours that are relevant for the field of management”.

Money is a store of value. This should not alter when the form of that money changes or the circumstances of the people associated with that money change. This is the traditional view. Zelizer (1989) proposes the concept of “special monies” which introduces qualities and attributes to money. Money is socially shaped and not all money is the same.

I have considered alternative forms of money and the impact on the meaning of money to low income people with a story.

*If Peter toiled with pick and shovel for a day he may settle on a wage of R100. At the conclusion of his work he is expecting a R100 note. If this is forthcoming Peter continues on his way. What if the employer instead gives Peter one-hundred R1 coins or perhaps one-thousand 1c pieces? Does it mean the same thing to him?*

*Alternatively, the employer may present Peter with a cheque for R100. That **means** a costly journey to a bank, assuming Peter has a bank account. Then again, the employer could pay Peter with M-Pesa or transfer the money into his bank account or pay him in pre-paid airtime.*

*If Peter is Zimbabwean that R100 (in whatever form) may mean something quite different to the meaning a local attaches to the R100. The R100 means something quite different to Peter if he has a sick child or a daughter getting married.*

Zelizer (1989, p. 343) explains the concept of “special monies” with the following quote.

“We assign different meanings and designate different uses for particular kinds of monies. For instance, a housewife’s pin money or her allowance is treated differently from a wage or a salary, and each surely differs from a child’s allowance. Or a lottery winning is marked as a different kind of money from an ordinary paycheck. The money we obtain and

compensation for an accident is not quite the same as the royalties from a book. Not all dollars are equal.”

The point is that money has different meanings for people depending on the context. Through shared experiences, communities are likely to have shared meanings that they attach to money, which are likely to differ to the shared meanings of other communities.

The emotions, feelings, thoughts (and the expression of these through language and action) that people have about money can be summarised into the concept of the meaning of money to people.

## **2.5 Conclusion**

In this chapter, the concepts that form the foundation for this research were explained. The academic discipline of social informatics was introduced and the concepts of the IT artefact, the tool view and the social shaping of technologies were discussed. The reasons behind deciding to favour Kling’s “web of computing” approach for this research rather than Latour’s ANT within the ensemble view of technology were provided. The socio-technical network of digital money was discussed with focus on the determinants for usage of digital money and mobile banking that are known from other research. The chapter concludes with a consideration of the meaning of money to people and an understanding that money has different meanings for people depending on the context. The next chapter explains the philosophical assumptions and the research approach, methods and design.

## **Chapter 3      Philosophical assumptions and the research approach, methods and design**

### **3.1 Introduction**

In this chapter the philosophical assumptions that inform the research approach, methods are explained. The research methods used and the research design are then detailed. The research design section includes an explanation of the process of selecting the research participants and a consideration of the ethical, reliability and validity issues relevant to this research.

### **3.2 Philosophical assumptions**

The academic process demands that the researcher locates the research in a clearly defined philosophical paradigm that informs the selection of an appropriate research approach and methods. Cunliffe (2011), building on the work of Morgan and Smircich (1980), encourages researchers to “figure out their assumptions about the nature of social reality and what it means to be human (ontology) and the nature and purpose of knowledge (epistemology) before deciding which research methods might be appropriate”. Creswell (2003) contends that knowledge claims, strategies and method all contribute to a research approach that is more quantitative, qualitative, or a mix of these methods.

The research assumes an interpretive philosophical paradigm. Interpretive research assumes that our “knowledge of reality is gained through social constructions such as language, consciousness, shared meanings, documents, tools and other artefacts” (Klein & Myers, 1999, p. 69). Orlikowski and Baroudi (1991), in their review of 155 information system research articles published between 1983 and 1988, noted that the theoretical perspective of most of the articles was positivist and they called for more interpretive studies. They contend that positivism, which has its roots in the natural sciences, is unnecessarily restrictive when it comes to studying information systems in a social context.

This research takes a social constructionist perspective. Social construction is a perspective where reality is the meaning that people attach to the world in which they live as they interact with the world and the people in it. Through interaction with other people shared meaning is created and reality is thus a shared creation and a shared experience. The interpretive researcher attempts to understand the reality people and society have created and the meaning behind that reality.

### 3.3 Research methods

Qualitative methods are used to obtain the data. The interpretive researcher, using qualitative methods to obtain the data, becomes the primary research tool and the research report is thus subjective. I have attempted throughout the report to explicitly state my background, current employment and reasons for doing the research so that my “biases, values and judgement” in my role of the researcher are understood by the reader (Creswell, 1994, p. 147).

There was a risk that the selection of the research method was made without sufficient thought to the philosophical assumptions that contributed to the development of the research method selected (Cunliffe, 2011). This was a relevant risk. Much of what I had read, and many of the conversations I had with fellow students and experienced academics, seemed to be pushing me in the direction of a qualitative study. There seemed to be an uprising against quantitative domination (Bluhm et al., 2011).

The risk was that later in the research process the philosophical assumptions that underpinned the research approach and methodology would be in conflict with my own world view. They would be in conflict with what I really believe the nature of social reality is and what it means to be human (ontological beliefs) and what the nature and purpose of knowledge is (epistemological beliefs) (Cunliffe, 2011). I suspected that this would be an uncomfortable position to be in and the research project would probably unravel and completely collapse.

I am a Chartered Accountant by training and a Banker by profession. These are professions dominated by positivists. A bank is managed with quantitative reports. The lone voice of a single customer or employee is seldom heard. Why then did I want to give voice (Bluhm et al., 2011) to a small selection of low income people in South Africa? It was necessary to ensure sound alignment to the subjectivist meta-theoretical assumptions to sustain me for the research journey (Cunliffe, 2011). It was necessary to address these questions so that the research was properly located and was set up to meet the high standards of qualitative research and to produce good theory (Bluhm et al., 2011).

I have been influenced by observing (and sometimes being intricately involved) in numerous banking technology innovations that were not used (or slow to be used) by low income people. The knowledge contribution from positivist researchers applying quantitative methods to this phenomenon is that the causes include perceptions of risk, ease of use, and complexity.

The phenomenon should be problematized from alternative perspectives with the application of different methods (Bluhm et al., 2011) to uncover fresh insights.



As mentioned, much of the literature (including social informatics) calls for alternative approaches. Orlikowski and Iacono (2001) define five conceptualisations of technology (Nominal, Tool, Proxy, Ensemble and Computational) and although they do not explicitly locate each of these conceptualisations on the objective / subjective / intersubjectivist continuum (Cunliffe, 2011; Morgan & Smircich, 1980), it appears clear they are appealing for more subjective research and particularly, research that adopts the ensemble view of technology. Kling (2000) contends that “the analytical failure of technological determinism is one of the interesting and durable findings from social informatics research” (p. 218) in motivating for more reflexive, contextual enquiries of information technologies in social life. Orlikowski and Iacono (2001, p. 121) noted that information systems research is “premised on the centrality of information technology in everyday life”. Mobile banking could be part of the everyday life of low income people and yet it is not.

ANT has informed my understanding of social informatics and the construct or concept of socio-technical networks is used extensively in this research. However, for a variety of reasons ANT will not be used as the analytical framework for the research. Cordella and Shaikh (2006) highlight that while many interpretivist researchers use ANT as a lens to inform research in Information Systems, the ontological foundations of ANT are not constructivist in nature. This again points to the risk of selecting a research approach that is inconsistent with the philosophical assumptions that underpin the research approach (Cunliffe, 2011). Reality as a social construction is a core ontological assumption underpinning this research. ANT, however, avoids the dualism of technology and society by ascribing equal importance to both and proponents of ANT postulate that reality is created by the interplay between both. This interplay (or processes of translation) between non-human (technology) and human (society) actors results in the formation of the socio-technical system that is reality.

The different philosophical paradigms and conceptualisations adopted by various researchers are discussed throughout this document but it should be clear that this research adopts an interpretivist perspective and draws mostly from the ensemble view concepts and theories espoused by Kling. A further and final reason for favouring the Kling approach is provided by Grint and Woolgar (1992) in their series of academic duels with Kling. Both sides support constructivist narratives of social informatics. However, Grint and Woolgar view the narratives provided by sociologists as social constructs in themselves. They appear to support sociologists providing narratives from a “disinterested” perspective where the narratives of the capacity of technology by people are “transparently” re-described. They criticise Kling’s calls for compelling narratives to be constructed about technology (1992, p. 369). As a researcher in the field, I endeavoured to remove bias from my interpretation of the research participants’ narratives. However, I am of the view that this is a near

impossible objective and this research report is a subjective account of my experience in the field. I have been working for many years with the technologies encountered in the field. The research participants are reflective of people that I have designed banking products for in my working life. Notwithstanding my awareness of this and endeavours to remove bias, my own views and opinions become infused with the narratives of the research participants as they are re-described and analysed in this research report. It seems to me that Kling would not be critical of this approach. I trust that he would view it as a compelling narrative.

### **3.4 Research Design**

The field research was well planned and largely executed to that plan in a disciplined manner. This was necessary to ensure that data was collected and then analysed to enable the report to be written with answers to the research questions. This section provides detail of the planning, how the plan changed in response to conditions in the field and how the plan was executed. The qualitative approach allows for a non-linear research path and the details of the plan are worked out using “logic in practice” (Neuman, 2011, p. 167). This logic, as opposed to the explicit research process of reconstructed logic in quantitative studies, relies heavily on finding one’s way in the field and doing what seems right in the moment. The analogy used by Neuman is that it is like cooking without a recipe (2011). The initial research design detailed the basic recipe but the ingredients and cooking process changed as the field research progressed.

The research design was informed by the steps in field research recommended by Neuman (2011, p. 427) and these are documented in the following sections.

#### **3.4.1 Reconfirming the research methodology and approach**

Kling (2000, p. 228) wrote of the failure of technological determinism and the need for social informatics researchers to “develop reliable knowledge about information technology and social change based on systematic empirical research, to inform both public policy debates and professional practice”. The socio-technical network of digital money as designed is not actually workable for all people in all instances. If it was then there would be no physical cash. In response to the call by Kling, the research questions of “if” and “how” (and under what conditions) digital money may come to be used by low income people was researched from the interpretive social science perspective. The approach is qualitative with a constructionist orientation. The constructionist orientation “assumes the beliefs and meaning that people create and use fundamentally shape what

reality is for them” (Neuman, 2011, p. 102). And the only way to discover the beliefs and meaning of people is to get into the field and study them.

### 3.4.2 Research Population

The research population is low income people in South Africa. This is very broad and low income is a subjective term. Rather than attempt an exact definition in the South African context, I decided to declare the income group I targeted in selecting the research participants and to guide readers of the research report. Consider the following<sup>12</sup> :

- The older persons grant in South Africa according to [www.services.gov.za](http://www.services.gov.za) is R1,220.00 per month.
- There are an estimated 1 to 1.5 million domestic workers in South Africa. The Department of Labour minimum wage for these workers as reported by [www.mywage.co.za](http://www.mywage.co.za) is R1,626.00 per month.
- According to the Mail and Guardian – 16 September 2011 – almost half of South African’s are living below the poverty line of just over R500.00 per month (2011).

Furthermore, and as referenced in the introduction, 70% of South African adults receive income of less than R2,000.00 per month. Refer to Figure 2 (FinScope, 2011). 32% receive less than R1000.00 per month or have irregular income. 17% receive between R1,000.00 and R1,999.00. A further 9% receive between R2,000.00 and R3,999.00. This excludes the 27% who were uncertain or refused to disclose their income. According to FinScope’s report in 2013, the average personal monthly income in South Africa was R3,300.00 (FinScope, 2013).

The initial intention was to target research participants with income between R1,000.00 and R1,999.00. However, the first forays into the field revealed that in the context of Alexandra (and certainly the specific location chosen) this level of income is very low. Had I ventured into other parts of Alexandra, such as the shack-dwellers on the banks of the Jukskei River or selected a rural area, then I may have encountered people with income less than R2000.00. However, I did not wish to confine my research to this group and as stated, they were not prevalent in the area I selected. The target population is thus adults with income between R1,000.00 and R4,000.00.

Where possible and appropriate, I asked research participants to tell me the amount of their income. It was often possible to ask less direct questions to approximate their income. Contrary to some of the ethical considerations at the research proposal stage, I found the research participants very

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<sup>12</sup> This information was sourced from the internet on 30 September 2012.

comfortable discussing their personal financial affairs. Refer to section 4.2 for further information on the monthly income for the research participants.

**HOW IS THE BANKED/UNBANKED POPULATION DISPERSED?**

	Total (n=3900)	Currently banked (n=2671)	Previously banked (n=146)	Never banked (n=1083)
<b>Race</b>	%	%	%	%
Black	77	70	80	88
White	11	16	5	1
Coloured	10	10	11	9
Asian	3	3	5	2
<b>Province</b>	%	%	%	%
Eastern Cape	13	12	10	15
Free State	6	5	5	7
Gauteng	24	29	22	13
KwaZulu-Natal	20	17	31	24
Limpopo	10	8	8	14
Mpumalanga	7	6	5	10
Northern Cape	2	2	4	3
North West	7	6	5	8
Western Cape	11	13	12	7
<b>Area definition</b>	%	%	%	%
Urban formal	57	66	52	41
Urban informal	9	9	12	9
Rural formal	5	5	6	5
Tribal land	28	20	30	45
<b>Gender</b>	%	%	%	%
Male	47	49	47	45
Female	53	51	53	55
<b>Monthly household income</b>	%	%	%	%
No income	0	0	0	0
Irregular monthly income	2	2	1	3
Obtain money, but not monthly	1	0	1	1
R1 – R999	6	4	8	9
R1 000 – R1 999	13	11	16	18
R2 000 – R3 999	13	13	20	13
R4 000 – R6 999	9	11	5	6
R7 000 – R9 999	4	6	0	2
R10 000 – R14 499	3	4	4	1
R14 500 – R19 499	2	3	0	0
R19 500+	3	5	0	0
Refused/Uncertain	43	41	43	47
<b>Monthly personal income</b>	%	%	%	%
No income	10	4	20	20
Irregular monthly income	6	4	5	9
Obtain money, but not monthly	2	1	5	4
R1 – R499	8	6	5	11
R500 – R999	6	5	8	8
R1 000 – R1 999	17	16	31	18
R2 000 – R3 999	9	13	2	3
R4 000 – R7 999	8	12	2	1
R8 000+	6	9	0	0
Refused/Uncertain	27	29	23	25

Figure 2 – Extract from 'FinScope South Africa 2011'.

### 3.4.3 Selecting the research community: Alexandra

There are millions of people and thousands of communities that were potential candidates for the research. In selecting Alexandra as the research location I considered a number of factors. Alexandra is close to my home and work thus enabling the maximum time possible in the field. I was also raised in Buccleuch (3kms from Alexandra) during the dark days of Apartheid and had no concept of the conditions under which people, geographically so close to me, lived. The divides still remain and this was a unique opportunity to research a community that has a rich 100 year history and has many social and economic problems to be solved. I am passionate about the topic and believe Alexandra was the ideal community for me to conduct the research with an “attitude of strangeness” and obtain insights to contribute to the design of a digital money socio-technical system for low income people in Alexandra and similar communities in South Africa (Neuman, 2011, p. 437).

Through my work at Nedbank, I identified a group of people who were able to assist me in gaining access to Alexandra and as Neuman (2011) advises, it is important to assume a social role in the community. I introduced myself as a Nedbank employee and Wits University researcher trying to understand how people in Alexandra earn, receive, save and spend money in the tough economic environment. This social role was more than acceptable and I never felt uncomfortable in the community and, provided they had the time, people were willing to participate in the research. Education is highly valued in Alexandra as is covered in more detail in the analysis. Suffice to say that my credentials as a (middle aged) student with research participant information sheets and consent forms were sufficient to achieve the required social acceptance. There were amusing incidents as the excerpt below highlights.

#### *Interview 2*

*GH: So what are the ... people walking past, what do they think of me sitting here?*

*Maxwell: Oh, they call you white guy.*

*Vusi: That you're a policeman.*

*GH: Yah?*

I made a point of wearing the same clothes (black cap, golf shirt and jeans) every time I visited Alexandra so that people would recognise me and become used to my presence. The community may have known me as the “white guy” and some may even have had a perception of me as a policeman. Nevertheless, I believe my credentials as a researcher were accepted by the research participants and the broader community. I base this on the fact that I had visited the homes of Vusi and Patience (both respected leaders in the community) and each one could have provided a

consistent narrative should a member of the community have asked what my purpose in Alex was. Patience could refer questions back to my Nedbank colleague, and former Alexandra resident, Gilbert Mogale who could vouch for my credentials. Although speculative, I am confident that my presence in the community was questioned and discussed in the manner described.

#### **3.4.4 Gaining access to the Alexandra community**

I am employed by Nedbank. My colleague, Kevin Palmer<sup>13</sup> (Divisional Executive: Strategic Sales & Alliances), is responsible for channel infrastructure including Nedbank's presence in Pick n Pay and Boxer stores as well as the Mobile Sales Teams (MST's). Kevin introduced me to Wendy Selebi (Senior Manager: Strategic Relationships) and I met with her on 23 January 2013 to explain my objectives and requirements. She displayed a keen interest in the topic.

Wendy recommended Gilbert Mogale (Regional Sales Co-ordinator) as the ideal person to assist me. He was born and raised in Alexandra and introduced me to members of the community, including Patience<sup>14</sup> shown in Figure 3. He also advised me, on one occasion, not to go into Alexandra as there was trouble with the "Plasma Screen Gang". I met Gilbert at a plush Nedbank office in Killarney on 8 May 2013. It was surreal talking about going into Alexandra in that Nedbank office. Gilbert is a passionate and caring man. He grew up in Alexandra and has a deep interest and long history in community development within Alexandra. He lives nearby in Lombardy East now but retains deep ties with the Alexandra community. Gilbert agreed to take me into Alexandra to introduce me to some of his friends and relatives, including Patience.

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<sup>13</sup> All Nedbank colleagues who assisted with access to the community provided their permission for their names to be used in the report.

<sup>14</sup> Research participant's names have been anonymised.



Figure 3 – Patience<sup>15</sup>

I met Patience on 16 May 2013 at her home in Alexandra. The meeting with Patience and the people that I met as a result of Patience’s kindness and hospitality enabled me to complete the research fieldwork. Patience’s home would not be out of place in some of the middle-class suburbs of Sandton. The home has a kitchen, dining room, lounge and bedrooms for Patience and the various family members who live with her. However, down the road there are shacks.

The objective was to find a specific community to focus the research on. I considered seeking out a community such as elders at their meeting place or a Christian group. I also considered a performing arts group or the men who congregate at taverns. Professor Dickinson warned against taverns and shebeens. The prospect of listening to and analysing drunken ramblings did not appeal. Similarly, I wanted a broader perspective than a performing arts or Christian group. As it transpired, my research participants were a selection of people I met in the vicinity of the corner of Alfred Nzo and 11<sup>th</sup> Avenue in Alexandra, just down the road from Patience’s house and on the same corner as Joe’s Butcher.

On the afternoon of 11<sup>th</sup> September 2013, after conducting a practice interview with Patience, I ventured out of her property and down the road in the direction of Joe’s Butcher. I felt very uncertain. The “non-linear research path” and “cooking without a recipe” approaches described by Neuman (2011) were put to the test.

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<sup>15</sup> Permission was obtained from all research participants to use photographs of them in the research report.

I had walked barely 50m and turned left into 11<sup>th</sup> Avenue. A group of young men (20 year-olds) were sitting on the corner. They responded warmly to my greeting. I approached them and we talked. Vusi, as the leader of the group, invited me to sit with them. After explaining my reason for being in Alexandra, they agreed to be interviewed. They read the participation information sheet and signed the consent form<sup>16</sup>. Figure 4 is a photograph taken on 11 September 2013 of some of the research participants with Vusi signing the consent form.

This chance meeting with Vusi and the group had a profound impact on my field work experience. Vusi became my friend. He was my guide and interpreter. He made me feel welcome in Alexandra. I visited his home and ventured into streets and down back alleys that I would not have gone down on my own. Figure 5 is a photograph of Vusi taking me down some of those back alleys amongst the shacks. Vusi introduced me to a number of other people who became research participants. After my second afternoon with him, he shyly confided that he had looked me up on Facebook and now we are Facebook friends. I was exceptionally fortunate to have met Vusi and I am indebted to him for his willingness to help me.



Figure 4 – from left Siyanda, Vusi, Mbongeni (standing back), Maxwell, and Thabo<sup>17</sup>

<sup>16</sup> Clean copies of the participation information sheet and data collection consent form are included in the appendices. Signed copies were received from all research participants.

<sup>17</sup> Thabo disappeared after this photo and Themba joined the group for the interview.



### **3.4.5 Data collection methods**

Various data collections methods were used. Observations of people and their interactions were important and I recorded (audio / photographic) what I heard and saw in an attempt to make preliminary interpretations of the meaning as it relates to money inherent in these interactions. I took numerous photographs and made voice notes of my observations and thoughts. I usually made a voice recording as I was driving into Alexandra and then as I left after the field work was complete for the day. Some of this material has been included in the research report.

I also had informal conversations with people in the course of my interactions with the community. I am naturally inquisitive and interested in people and I made a point of asking thought provoking questions relevant to the topic. I observed how people reacted and listened to their responses. My thoughts were recorded in field notes or as part of the voice recordings.

These methods were complementary to the semi-structured interviews with the research participants which was the primary data collection method. Thomas (2004, p. 150) states that “with people, questioning is the most important way of discovering the contents of their inner world.” The interviews were less formal than envisaged at the research proposal stage. The research participants were interviewed in their natural setting rather than in a quiet interview room where a structured interview may have been possible. They were mostly conducted while seated on the pavement on a cement brick or upturned paint tin or similar informal chair. The interviews took place in the natural environment of the research participants and I believe this contributed to the quality of the data collected. There are problems associated with questioning as a data collection method (Thomas, 2004). Questions may be interpreted in different ways by the research participants and the meaning of the question to the researcher may be different to the meaning that the research participant has when answering the question. However, the semi-structured interview was the most practical way of obtaining data from the research participants and it enabled me to “explore topics in depth” and gain an understanding of the context and the meaning of the answers to the questions (Cornford & Smithson, 1996, p. 101).

The research participants were given a copy of the participation information sheet and I explained it to them. They also signed the consent form and agreed to the use in the research report of the photographs taken. A protocol consistent with the data collection procedures advised by Creswell (1994, p. 148) was established which covered observations, recorded interviews, field notes and photographs.

### 3.4.6 Ethical, practical and personal safety considerations

Neuman (2011, p. 143) provides the following advice, “Ethics begins and ends with you, the researcher. Your personal moral code is the best defence against unethical behaviour”.

I did not encounter any major ethical dilemmas. The following quote captures the approach adopted.

“In research, our credibility is linked to our ethics. If we respect our respondents, if we feel the research conclusions are worthy, we will value honesty and integrity in research. We will protect our respondents because we recognise they are people – heroes in their own stories and not just side characters in ours.” (Badenhorst, 2008, p. 189).

The ethical issue that the panel and I were most conscious of was the ethics of discussing money and the impact that it has on people. Neuman (2011, p. 146) writes of placing research members in “stressful, embarrassing, anxiety-producing, or unpleasant situations”. I can state without hesitation that none of the research participants displayed any discomfort during the interviews. The discussion of money and many other very personal matters was not a concern for them. I was moved when Morena (Interview 10 – 20 September) confided that discussing her sad story had been therapeutic.

#### *Interview 10*

*GH: Cool, thank you very much, hey. Let's turn this off.*

*Sindi: Ja, that's nice hey, I enjoyed ...*

*Morena: You know, expressing ...*

*Sindi: Expressing things and ...*

*Morena: Because we only talk to each other.*

*Sindi: Ja.*

*Morena: And actually that felt like therapy.*

*GH: Ja*

*Morena: I think just to express our mind, like our ... you know, talking about stuff.*

*Graeme: You know what you should do, is talking is good, talking to a friend, but oftentimes we don't talk the serious stuff.*

*Sindi: Yes.*

*Graeme: You know*

*Morena: And the thing is, ja, so around here, you know, Alexandra Township, you know there there's no therapy.*

Something happened in the interview with Morena and Sindi that highlights an “ethical issue” relevant to the field-work. The interview dealt with sensitive and very personal information. Vusi

arrived during the interview and made as if to join the conversation. Morena made it clear that it was a private conversation and he left with a meek apology. Many of the research participants knew each other and I made absolutely certain that I did not divulge information to other research participants. Badenhorst's (2008) advice above rang true.

At the start of each interview I provided each research participant with a participant information sheet and a data collection consent form. These forms are included as appendix 2 and appendix 3 respectively. The forms make it clear that participation is voluntary and research participants have the right to withdraw at any time. Permission was obtained to take photographs and use them in the research report and research participants were informed that their names would be anonymised in the report. Each interview was recorded on my phone and then transferred to my work computer which was used for the purposes of writing the research report. The research recordings were then transcribed into text by a professional transcriber. These Microsoft Word documents were then stored on my computer. My computer is password protected and no other copies of the voice recordings or transcriptions were made.

Personal safety was a consideration. To mitigate personal safety concerns I was sensible and vigilant. I dressed and transported myself in an understated manner and was respectful at all times. I remained clear of trouble spots, such as shebeens. Although I was on guard at all times, I never felt threatened but I was fortunate to have Vusi as my companion.

### **3.4.7 Reliability and validity in qualitative studies**

In the Collins English dictionary, reliability means "able to be trusted, predictable, or dependable" (1982, p. 1233). Neuman's definition is "dependability or consistency" (2011). Validity is "having some foundation; based on truth" (1982, p. 1599) and Neuman's definition is "truthfulness". Klein and Myers (1999) provide a set of principles for evaluating the quality of interpretive research and I drew on these in ensuring the reliability and validity of the research.

The first issue to reflect on is the ethics, integrity and diligence of the researcher in the field and how this contributes to the validity of the field research. The researcher should try to be fair, honest, truthful and unbiased (Neuman, 2011). A risk to the reliability and validity was the assistance provided by Vusi. He was both research participant and assistant and was paid R200 per day for four day's work. We walked the streets together and accessed places I would not have gone alone. He arranged a number of the interviews and translated where necessary but I have no reason to believe he impacted the reliability and validity of data gathered.

Diligence, awareness and openness are required in the research process. There is a need to be sensitive to biases and distortions that the research participants may introduce into the research

interviews (Klein & Myers, 1999). For example, at the time of the interview with Thembi I was struck by his confidence and his awareness of the subject. I am sure Vusi told him about me, the topic and the nature of the questions I would ask. To mitigate this risk, where data collected from Thembi has been used, I have included more of the data than normal (i.e. longer excerpt of the transcript) and provided additional contextual information to give a broader view of the data collected. Furthermore, as Neuman advises “instead of evaluating each statement to see whether it is true, you may find statements useful in themselves” (2011, p. 456). In trying to “capture the inside view” (Neuman, 2011, p. 214) and understand the beliefs and feelings of the research participants it is important to be aware of preconceived ideas and potential conflict with actual findings in the data collected (Klein & Myers, 1999).

I consider validity in terms of ecological validity, natural history and member validation (Neuman, 2011, p. 456). Ecological validity concerns whether the data collected and described in this research report would have occurred without my presence. Klein and Myers (1999) suggest reflection on the researchers’ role in the construction of the data gathered. Could similar data have been collected had a different researcher been in the field? To aid the reader in an understanding of the research I provide a reasonably thorough description of how the research was conducted and the social and historical background of Alexandra as the research setting (Klein & Myers, 1999). I considered whether the research participants would corroborate my description of their social world. Finally, I considered whether the research report is plausible and the data fits together in a coherent manner to meet the requirements of internal consistency (Neuman, 2011, p. 455) and whether accuracy is enhanced when considering the meaning of the interdependent parts of the data collected and whether they make sense when considered as a whole. The other component of reliability is external consistency and I considered whether the data collected and my analysis and interpretation of the data would withstand verification or cross-checking by other researchers.

The results of the research were presented at a PhD colloquium and two other participants who have themselves been members of the Alexandra community or similar communities, corroborated my analysis and interpretation of the data and indicated that it was plausible. This note is added to demonstrate that the findings of this research have validity.



Figure 5 – Vusi, taking me to places I would not have gone alone.

### 3.4.8 Preparation for fieldwork

The preparation routine for fieldwork and data collection was standardised.

- Select a day for field work.
  - o Phone Patience and Vusi in advance.
  - o Notify my wife and work colleague for security reasons.
- Pack the field work folder.
  - o Pens and paper.
  - o Participant information sheets and consent forms.
- Fully charge the cell phone.
  - o Cell phone served as voice recorder and camera.
  - o Note - selecting the best voice recording application, successfully recording interviews, and making them available for transcription proved to be one of the major challenges of the research process.
- Mental preparation.
  - o Sit quietly in office and look out towards Alexandra as shown in figure 6.
  - o Read previous fieldwork notes and interview transcripts.
  - o Set clear objectives for the day.
  - o Consider any improvements on previous fieldwork.

- Change into jeans, golf shirt, trainers and black cap.
- Drive across the valley to Alexandra.
  - o Make a voice recording of my thoughts for the upcoming day.

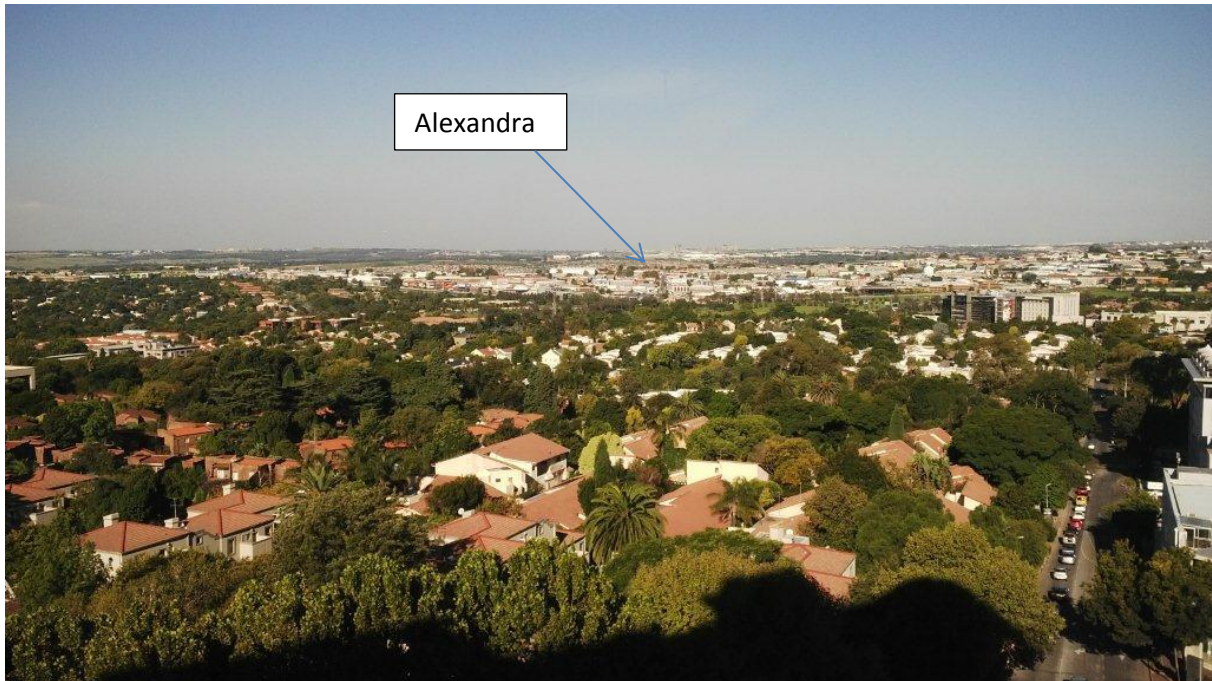


Figure 6 – the view across to Alexandra from my office window.

### 3.5 Conclusion

The interpretivist philosophical assumptions that inform the research approach, methods and design have been explained in this chapter, as well as the qualitative research methods used and the research design. The research design section detailed various aspect of the research planning including gaining access to Alexandra and selection of the research participants. A consideration of the ethical, reliability and validity issues relevant to the research and the process of preparation for the fieldwork were also covered as part of the research design section. The next chapter details how the research fieldwork was conducted, introduces the research participants and discusses the method of analysis,

## **Chapter 4      Research field work**

### **4.1    Introduction**

I went into Alexandra on five occasions after Gilbert had introduced me to Patience. Each time I parked inside Patience's yard or on the pavement outside her home. Sometimes we would talk about the community, her church or the vegetable garden which was being raided by birds and then I would go on my "walkies" as she termed my fieldwork. This chapter explains the unit of analysis, being the individuals who participated in the research. Semi-structured interviews were conducted with eighteen research participants. A template of questions asked is provided as appendix 4. The chapter includes an explanation of the location, structure and questions asked during the research interviews and how the interviews were recorded, transcribed in to text and analysed.

### **4.2    Research participants**

Table 1 shows the interviews conducted with the eighteen research participants. I have included actual monthly income or a best estimate of monthly income for the research participants where it was possible to obtain the required data to provide the information. Where an approximation of monthly income has been made, this is explained in the sub-sections. Where no attempt has been made to approximate the monthly income, I have stated that income is unknown.

I have also provided information about whether the research participant has a bank account and cell phone. All research participants, except Nkulu, had a cell phone. Eight of the group had a bank account that I knew about.

Vusi was present at some of the interviews. His level of participation varied. He was an active participant in interview 2. He provided full translation services in interview 5 and occasionally in interview 11. For the remainder of the interviews at which he was present he was a silent participant.

Interview #	Interview Date	Name (anonymised)	Vusi present	Bank Account	Cell Phone	Approx. monthly income (R)
1	11-Sep-13	Patience	N	Y	Y	unknown
2	11-Sep-13	Vusi	Y	Y	Y	4,000
2	11-Sep-13	Themba	Y	unknown	Y	unknown
2	11-Sep-13	Siyanda	Y	unknown	Y	unknown
2	11-Sep-13	Maxwell	Y	unknown	Y	unknown
2	11-Sep-13	Mbongeni	Y	Y	Y	unknown
3	18-Sep-13	Nkulu	Y	N	N	1,250
4	18-Sep-13	Thulani	Y	N	Y	1,800
5	24-Oct-13	Tsiko	Y	N	Y	unknown
6	24-Oct-13	Thembi	N	Y	Y	3,400
7	24-Oct-13	Portia	N	Y	Y	unknown
8	24-Oct-13	Mpho	Y	Y	Y	unknown
9	26-Oct-13	Griffiths	N	N	Y	3,200
10	20-Nov-13	Sindi	N	Y	Y	unknown
10	20-Nov-13	Morena	N	N	Y	unknown
11	20-Nov-13	Wandile	Y	N	Y	2,600
11	20-Nov-13	Paulina	Y	N	Y	2,400
12	20-Nov-13	Rodney	Y	Y	Y	3,000

Table 1 – Research participants

#### 4.2.1 Patience

Patience was an unusual research participant. Patience is certainly not low income. As mentioned, Patience lives in a home that would not be out of place in some of the middle class suburbs of Sandton. However, all the other research participants (except Griffiths) were interviewed within 300m of her home. Her grand-daughter has a full bursary to St Stithians College. At our first meeting, I was served Black Forest cake, her grand-daughter's left-over birthday cake. Patience has a Masters' Degree and, prior to her retirement, was employed by SAB and the Development Bank. Her children all appear to be in professional jobs. She receives an Old Mutual Pension every month. I have made no attempt to estimate Patience's income.

#### 4.2.2 Vusi

Vusi is not employed full-time, but he has regular work and gets paid quite well within the context of Alexandra. He works as a Community Liaison Officer, which is a middle-man between the contractor and the community when an infrastructure project (e.g. new road or bus depot) is being implemented within the community. He could get "like R6,000.00 for a three week period" but then he has long periods of no work and he finds other things to keep him busy. Vusi is on the local ANC Youth League committee. I have estimated his income at R4,000.00 per month.



### **4.2.3 Themba**

Themba is a softly spoken young man who made some notable contributions to the group interview. I did not establish how he earns his income. He spends much of his time sitting on the corner observing the people of Alexandra pass by. He provided insights into the usage of drugs and alcohol in the community and observed that “kush” damages the lungs. Kush is the street name for marijuana and it was Themba who introduced the word into the conversation. He says he does not smoke.

### **4.2.4 Siyanda**

Siyanda was the quiet one. He said very little during the interview. When we greeted I said “nice to meet you” and he responded, “nice to meet you too”. He then kept very quiet and listened intently. He can be seen in figure 4 sitting gently on his haunches. His main contribution was to introduce the theme “no money, no love” which emerged as one of the five themes for the meaning of money.

### **4.2.5 Maxwell**

Maxwell is a young man with swagger in his demeanour. This can be seen in the photograph in figure 4 and heard in the voice recording when he introduces himself. Like Themba, he spends much of his time on the corner and I did not learn how he obtains his income. He commented on the crime situation in Alexandra, alcohol preferences of various age segments and agreed with Siyanda that in Alexandra, it is a case of “no money, no love”.

### **4.2.6 Mbongeni**

Mbongeni is still at school. He gets a monthly allowance from his mother. I did not ascertain the amount of the allowance. He says he is lucky he is still at school otherwise he would not get an allowance. He receives his allowance in his bank account every month and spends his money on food at school, marijuana and alcohol. His mother is a policewoman who is studying towards a law degree.

### **4.2.7 Nkulu**

Nkulu is a scrap collector. His work is menial but almost freely available to anyone who is able bodied. He is part of the unique value chain of waste recycling in South Africa. People like Nkulu can be seen across the country in the cities, suburbs and the townships pushing a trolley of one form or

another. There is a high degree of specialisation, demand for the various scrap materials, and well understood pricing. Nkulu specialises in metal.

The excerpt below from Interview 2 is the first conversation I had in the field. I was sitting with Vusi and the group of 20-year olds. A scrap-collector was sifting through the over-flowing bin across the road. It may have been Nkulu or someone else.

*Interview 2*

*GH: Okay. We're talking about money, we're talking about what money means to you. So we were talking about that guy, there. How much does he earn a day?*

*Vusi: He earns round about roughly R50 to R100 maximum, depending on the material he gets, which means either if he's trading in bottles, or metal for scrap.*

*Mbongeni: Basically scrap, because they take like used metal, like geysers, broken gates, ya broken stands, anything, anything they can weigh, just take.*

The following week I interviewed Nkulu who said that he earns between R30.00 and R70.00 per day with a maximum of R100.00. Assuming an average of R50.00 a day and a 25 day working month then his income is R1,250.00 per month.

#### **4.2.8 Thulani**

Thulani is 20 years-old and I interviewed him on my third visit to Alexandra. On the previous visit I met Vusi and his friends on the corner near Patience's house. I had established contact with the group. We sat on the corner and another friend, Thulani, joined the group and I took the opportunity to interview him.

I estimate that Thulani earns R1,800.00 per month. He works as a labourer installing marquee tents used for weddings and funerals. Using the data from interview 4 below, assume he works for 15 days per month and is paid R120.00 per day. Vusi provided the estimate for Thulani's daily wage.

*Interview 4*

*GH: So how many days a month do you think you work?*

*Thulani: How many days a month? Probably ..... twelve or ..... or fo ... fourteen days ... or eighteen days. Ya, twelve or eighteen days, ya.*

#### 4.2.9 Tsiko

Tsiko is an illegal immigrant from Zimbabwe. He has a clothes tailoring business. He has a foot-pedal powered sewing machine which he operates from a street corner. He charges R20.00 to fix a tear in a pair of jeans. I made no attempt to estimate his income although he does send R5000.00 back to Zimbabwe every two or three months.

#### 4.2.10 Thembi

Thembi, shown in figure 7, earns most of his income from washing cars. I have written a short contextual piece about Thembi. In it, I explain how I estimate his income at R3,400.00 per month.

*Thembi's work is full-time employment. Yes, it is not "employment" in the sense of formal employment with a boss and a pay-packet at the end of the week or a salary deposited into a bank account. He has flexibility. He can come and go as he wishes and he has a "partner" in the form of the "old lady" but the "old lady" is a sharp business woman who owns the car wash and the shebeen and should Thembi not pull his weight then she will find some other young guy to wash cars on a 50/50 split basis. Thembi's words are full of respect, "She owns this place, everything you see here .... everything, even the stoep that you're sitting on, she's the one who owns it". It is also clear that he knows that the "old lady" is the boss, "She's the one I work for".*

*Thembi's use of the term "work frequently" tells the story of his full-time employment. Fortunately Thembi wants to work frequently. It suits him. He needs the money (lobola to marry his girlfriend) and his passion is cars. He refers to his co-worker as a "colleague". It's as if he is raising the dignity of the car wash to a place of formal full-time employment.*

*To estimate Thembi's monthly income assume he works 24 days a month. Using the estimates provided by him assume that on half of those days he washes 10 cars and earns R15 a car. On the other 12 days (the weekdays) he washes four cars at R14 a car. His total income for the month is thus  $(12 \times 10 \times R15) + (12 \times 4 \times R15) = R2520$ . He also does other ad-hoc work like driving and cleaning people's houses so R3400 per month is probably a good estimate. This compares favourably to a matriculant earning R2800 (net) at Pick n Pay, Thembi is pretty well off considering he has no transport costs, flexibility, and no taxation. Perhaps there are other benefits (medical aid, etc.) that he doesn't enjoy but for a 21 year-old (with no rent cost) he is doing well. Thembi is proud of his work and "his business".*



Figure 7 – Thembi

#### **4.2.11 Portia**

Portia has a business manufacturing and repairing furniture. She has been operating out of the garage opposite her flat since 2000. Before that she worked for a large furniture manufacturer for thirty years. The major problem in her business is that her clients and potential clients are in Pretoria and Sandton and she is renting a small space in Alexandra. She says people looking at her premises cannot believe that “nice things” will come out of that garage. Portia has between four and eight people working in her business. She pays them what she can afford every week. She says, “sometimes I give them seven, six, five”, by which she means they may earn between R500.00 and R700.00 per week or roughly between R2000.00 and R3000.00 per month. I made no attempt to estimate Portia’s business income or net income. It would appear to be more than R4,000.00 per month but it seems that whatever income is earned by Portia is spent on her children and extended family.

#### **4.2.12 Mpho**

Mpho, shown in figure 8, owns a small shop and sells beer, cold drinks and tinned food. She also offers a photo-copying service. Mpho values education. She says she, “Push so hard, hard, hard in order to go to school” when talking about her four children. Mpho is a single parent. The children’s father passed away in 2001. The money earned from her shop has enabled Mpho to send one child

to university to study electrical engineering and another to the “technical”. The other two are still at school. She says, “My children go to school with the smallest money I get”. I have made no attempt to estimate her income.

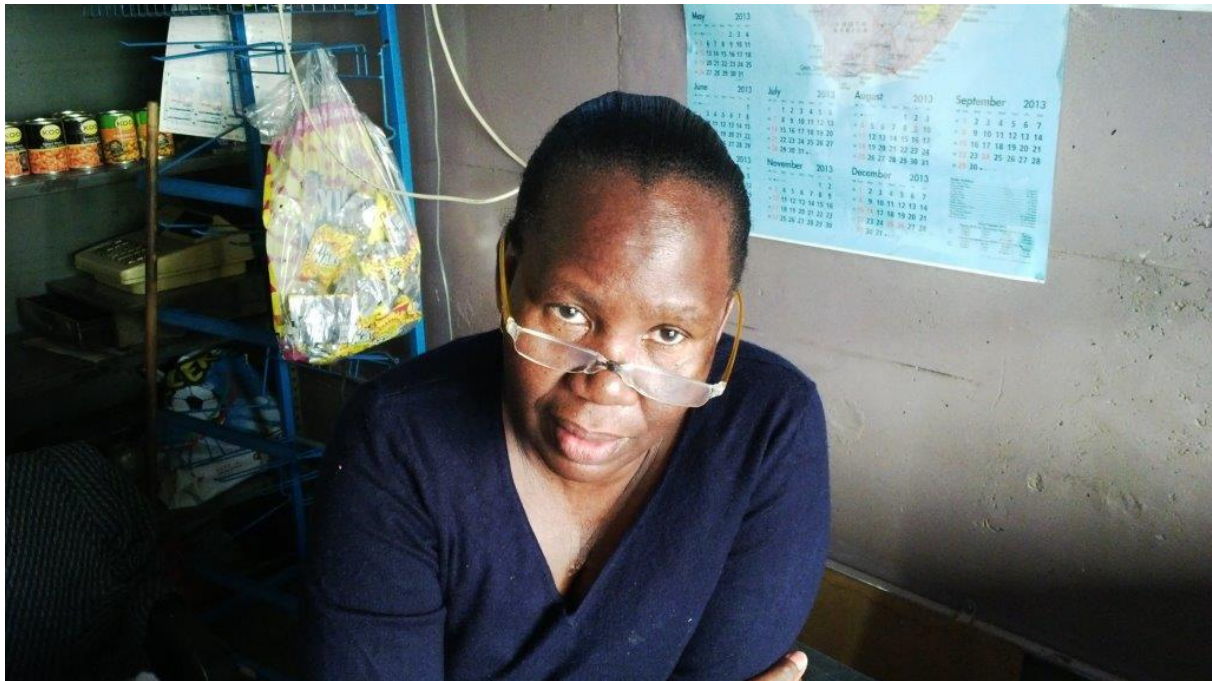


Figure 8 – Mpho in her shop

#### 4.2.13 Griffiths

Griffiths is from Zimbabwe. He was born in 1955 and came to South Africa in 1974. I noticed he had a scar on his arm and asked him what happened. He answered, “Mmm ... is a time when in Zimbabwe, it was a war ... it’s a bullet”. Griffiths explains what happened to the Matabele people in 1982.

*Interview 9*

*Griffiths: No, it’s a time for Guraundu, when Mgagwa was launching a fifty brigade at Matabele, so those people, they were shooting at anyone, when they find you, they say you are a dissident or something, they calling a dissident they shoot you. It’s the time when they injured me.*

Griffiths explained how thousands of people were killed. He says he was lucky.

*Interview 9*

*GH: And when you got injured like that, why did they not kill you?*

*Ernest: I don’t know. I was lucky. Like ...*

*GH: Did you see the guy that shot you?*

*Ernest: Yes, I see him, and then he pass, he shoot me, and then he pass, then I went to the next door, my neighbour.*

Griffiths works as a gardener but for many years he had no work. He would fill in when friends went back to Zimbabwe on holiday. I asked him how much he earns and he told me, "It's about three point two". R3,200.00 equates to R145.00 per day assuming a 22 day working month. This provides a comparison to some of the other research participants who earn their money on a daily basis.

Griffiths owns a house in Alexandra. It cost him R3,000.00 in 1997 and he thinks it may be worth R8,000.00 today.

#### **4.2.14 Sindi**

Sindi began the interview by saying that she did not want to talk a lot but then told the painful story of the past two years. Her source of income is a boyfriend.

*Interview 10*

*Sindi: I earn my money through my boyfriend, I have a boyfriend take care of me, he gives me money and I spend the money on drugs, that's it.*

Sindi has been off cocaine for two months. Before that she was spending "like 1.5 a day". That is R1,500.00 per day on cocaine.

#### **4.2.15 Morena**

Morena was interviewed with Sindi.

*Interview 10*

*Morena: Sindi told her story, mine is even ... ja, it's actually they actually precise our stories, they're the same.*

Morena and Sindi's stories are similar but they are not the same. Morena wasted R200,000.00 inherited from her father and she is pregnant. She is no longer with her boyfriend and she lives with her mother.

#### 4.2.16 Wandile

Wandile is a hairdresser. I had the following conversation with Wandile and used this to estimate her monthly income.

*Interview 11*

*GH: Okay. And how many customers do you have a day?*

*Wandile: It depends, when it's month end it's better, you'll have about maybe ten, but during the month it's one, two, three, one two three.*

*GH: And how much does it cost to have hair done?*

*Wandile: A relaxer we charge about R60 and to wash your hair it's R30, and a cut is R20.*

I estimate that Wandile receives a net cash income of R2,600.00 per month calculated as follows. Assume Wandile works 22 days a month. On four of those days (month end) she has 10 people per day at R50.00 each. That's R2,000.00. On the remaining 18 days she has two at R50.00 each. That's R1,800.00 giving a total of R3,800.00. Remember that she is running a business so has to purchase equipment, hair products and pay rent. R1,200.00 (R40.00 per day) has been attributed for these expenses.

#### 4.2.17 Paulina

Paulina sells fruit and vegetables and mud-cakes for R1.00 to people that pass her home. She lives on a busy thoroughfare. I have little idea how much she earns per month other than she is able to repay a loan at R1,000.00 per month. Typically an informal trader is able to make about R100.00 profit per day. Hence the estimate of R2,400.00 per month. The R100.00 per day aligns well with the estimate for Thulani's daily labour rate (R120.00) and Nkulu's average of R50.00 per day with a maximum potential of R100.00.

#### 4.2.18 Rodney

Rodney is 47 years old and he is from Zimbabwe. He cuts hair and sells sweets, crisps and loose (individual) cigarettes. His place of business is at the roadside under an FNB branded tarpaulin which serves as a cover from rain and sun. He charges R10.00 for a haircut and R5.00 to shave a beard and he has seven or eight customers a day. He sells a sweet (lollipop sucker) for R2.00.

*Interview 12*

*Rodney: Some sweets, ja, I'm selling some sweets to make some money. If I didn't sell this thing I'd suffer.*

I estimate that Rodney earns R120.00 per day and approximately R3,000.00 a month allowing for a few days off every month.

### **4.3 Research Interviews – location, structure and questions**

As mentioned previously, the research interviews were far less formal than initially envisaged. I had initially planned to use the Nedbank branch or a quiet place such as a library or church. Rodney was interviewed at his street-side hawking spot during a torrential thunderstorm. The heavy rain and flooded roadway disrupted the steady flow of people walking past his shop and the conditions for the interview were not ideal. He was also eating a packet of Nik-Naks and talking at the same time so some of his words are inaudible.

*Interview 12*

*GH: The rain has stopped. It looks like a river there hey.*

*Vusi: That's what always happens, because we don't have enough drains.*

*GH: Do the drains get blocked?*

*Rodney: Yes.*

Portia gracefully, but reluctantly, agreed to switch off her noisy wood-working machinery soon after the interview started. Thembi was interviewed at his work place which has two lines of business - car wash and beer sales. The clientele consume their beer on site so it too was rather noisy.

Some of the interviews were conducted in groups. Sindi and Morena were interviewed together at the roadside, sitting on the pavement. They were sitting together when I started talking to them. It would have been unnatural and rude to ask one of them to leave so that I could interview the other. In any event they are friends and their sad story is a shared story. This is reflected in the quality of the data collected.

Vusi, Mbongeni, Themba, Maxwell and Siyanda were interviewed together. In reality most of the data collected was from the first two and Themba to a lesser extent. Again, the context favoured this method of interview and data collection. Notwithstanding his minor part, Siyanda contributed one of the big insights in the research fieldwork.

Vusi was present at many of the interviews. His contribution was usually limited but in two of the interviews he translated extensively. Tsiko and Paulina (Mozambican Mud-Cake Seller) understand



very little English. This says a lot about the isolation of Alexandra. A rural Zimbabwean and Portuguese speaking Mozambican have lived in Alexandra for four and thirteen years respectively and both have managed quite well without English. Their South African language of choice is SeSotho and IsiZulu respectively. Paulina's interview was with Wandile (the hairdresser) who also assisted with translation.

I was determined to do all my research interviews in the area around Joe's Butchery in Alexandra. I did not want to interview people living in Alexandra but working near my home or place of work. However, I made an exception in the case of Griffiths. My wife had recently employed him to work in our garden. One Saturday morning, I asked him if I could interview him for my research. He agreed and we sat on my patio. I think it is one of the most interesting research interviews.

The first interview I conducted was with Patience. As stated, Patience is not low income as defined but the data collected is used as appropriate, particularly where she corroborates or contributes to a thought or concept highlighted by one of the other research participants.

The interviews were quite informal. I have provided a selection of key statements I made and questions asked to facilitate the conversations and data collection. This should provide the reader with an understanding of the interview structure together with the template of questions in appendix 4.

The structure was reasonably consistently applied to all interviews and the opening line below was a well-rehearsed speech as can be seen from the comparison between the Thulani interview and the Wandile / Paulina interview.

*Interview 4*

*GH: And I'm talking to Thulani and we talking about money. Where you get it, how you spend it what it means to you. We also talking about banks, we talking about cell phones, we talking about mobile money ... eh, electronic money, all those sorts of things.*

*Thulani: Ok*

*Vusi: Banks*

*Thulani: Like EFT's whatnot ... and whatnot. ok.*

*GH: So just talk. Just tell me a story.*

*Thulani: Eh, a story?*

*Interview 11*

*GH: Okay we're starting to record, and I'm sitting with Wandile and Paulina, and it's the 20th of November, it's a nice hot afternoon, summertime, and we're sitting at the shop, and we're going to talk about money, we're going to talk about what money means to you, how you earn money, how you spend money, all those sorts of things. We're also talking about banks, banking, cell phones, all those sorts of things. So what I want you to do is I want you to just tell me a story.*

*Wandile: What about?*

I loved Thulani's "Eh, a story". It was one of my favourite moments of the fieldwork. From that point on, "just tell me a story" became a standard line of the first part of the interview. I was still using it at Interview 11 on 20 November 2013 and Wandile's "What about?" was met with a very calm re-telling of the well-rehearsed speech with perhaps greater emphasis and further explanation.

I asked age (where appropriate) and school level achieved. The level of education achieved emerged as a major theme in the research field work so I consistently asked the question and pursued the subject to its natural conclusion. Often, the subject of education led to interesting insights into people's attitude to concepts such as "hard work" and their determination to find work.

*Interview 4*

*GH: How old are you?*

*Thulani: I'm ... twenty.*

*GH: Twenty?*

*Thulani: Ya*

*GH: And, what school did you finish at? What ... what grade?*

*Thulani: To grade 12*

*GH: Did you ... pass grade 12?*

*Thulani: Ya*

*GH: So you've got a matric?*

*Thulani: Ya, I do have a matric.*

*GH: Jeez, that's good, eh?*

*Thulani: Ya, but it's still tough. Even with ... even with your matric, ya, jobs are scare around here. Don't get them just like that. Ya, you have to, ya, you ... really have to look hard. Go there, go here, go here, travel, over there ... ya. Go to all these places, you know. Fix this, do this, get this, ya.*

The most obvious question was simply to ask the research participants how they earned their money. Everybody gets their money from somewhere and the most extraordinary data was gathered by asking this simple question. And, of course, the equally obvious question, “what do you spend your money on?”

*Interview 12*

*GH: And what do you spend your money on, apart from sending it home to Zim?*

*Rodney: How I spend it?*

*GH: Ja.*

*Rodney: I got some brother who's got a bank account like me, but I don't use mine, I give to him to keep that money.*

Sometimes, as in the case with the question to Rodney, the answers were not straight replies to the question asked but provided useful information. Rodney reminded me that banking and savings is about trust. His banker is his brother, someone he has known all his life.

As above, I asked direct questions about banking, cell phone usage, and mobile banking. I also asked some seemingly off the wall questions such as this one to Paulina (the Mozambican) who was being assisted by Vusi?

*Interview 11*

*GH: And what is this here, this sand here?*

The answer to this question led me to discover that pregnant women in Alexandra share something extraordinary with pregnant women in Haiti (Carroll, 2008). Eating clay or mud-cakes (Geophagy) has

been practiced since ancient times and is still prevalent in tribal and traditional rural societies. Pregnant women eat the mud-cakes in the belief they are a source of calcium for the baby.

*Interview 11*

*GH: What do you use it for?*

*Vusi: You eat it.*

*Vusi: The people who eat it most is pregnant women.*

*GH: Really?*

Of course there were many questions asked and no two interviews were the same. Rich data was gathered from all interviews. To conclude this section, I will end with my other favourite question.

*Interview 6*

*GH: And if I gave you R500 right now.*

*Thembi: Mm hmm.*

*GH: What would you do with that money?*

*Thembi: Fifty percent I'll buy groceries, and the other fifty percent ... and the other I'll spend for ... for my girlfriend, for in fact for my child.*

This question was often a fast track to the most important meaning of money to that individual. In the case of Thembi he is deeply in love with his girlfriend. Making her happy and saving money for Lobola so that he can marry gives his life meaning.

#### **4.4 Interview transcripts**

The recordings were transcribed into text. I transcribed the interview with Thulani which was a useful but very time consuming exercise. The remainder were transcribed by a professional transcriber and checked by me. This was necessary to ensure accuracy but listening to the voice recordings was important in itself. I listened to parts of the interviews many times to better understand what was being said.

## 4.5 Method of data analysis

The method of data analysis was purely inductive in the tradition of grounded theory. After transcribing the Thulani interview I started experimenting with coding by colour highlighting sections of the text. It soon became evident that using colour coding would become unmanageable. ATLAS TI<sup>18</sup> was a far superior method for coding and grouping the codes into themes or code families. The ATLAS TI report of all 183 codes from the texts is provided in appendix 5 which includes the report of the codes grouped into seven code families or themes.

General themes were noticed while conducting the interviews but it was not until all the interviews had been transcribed into text that the real analysis commenced. Each interview transcript was read line by line and allocated a code to the particular issue identified in the analysis of the text. The voice recordings were listened to many times while going over the text to better understand what was being said. Often the meaning of what was in the text became clear with the support of the voice recording. It is equally true that often what was not understandable in the voice recording became clear in the analysis of the text.

There was an attempt to keep the number of codes to a minimum by grouping common issues in the texts of the research participants into codes with broad headings such as “school attendance” or “transport to school”. When the coding had been completed, the 183 individual codes were then grouped into seven code families or themes. This was an iterative process of experimentation and trial and error. When the codes had been grouped into themes, the themes were named in a way that best described the group of codes. These themes are presented in chapters 5 and 6. The five themes relating to the meaning of money are presented in chapter 5 and the three themes relating to the socio-technical network of digital money are presented in chapter 6. In both cases, the themes were broken into sub-themes. The sub-themes are a number of codes grouped together as part of the bigger theme.

The theme “Money as development of self and children” is used to demonstrate how the data analysis process worked in practice. In the interviews, the researcher became aware that the research participants valued education. The texts were studied and various codes were used for sections of text that referred to education. Some of these codes were “educating children”, “education level”, “school attendance”, “transport to school” and “school education bursary”. Many of the research participants had these codes in the transcriptions of their interviews. It became clear when looking at what each research participant had said as part of these codes that the group valued school education because obtaining a matric certificate is an important determinant of an

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<sup>18</sup> ATLAS TI is a computer programme that enables the coding and analysis of data. Refer <http://atlasti.com/>

individual's income earning potential. These codes made up the sub-theme "Money as Matric". Other codes were "furthering education" and "scarcity of employment opportunities", "unfulfilling work" and "young woman careers". These codes make up the sub-theme "Money as Tertiary education". It became clear that to find better work and improve income earning potential a tertiary education is beneficial. The other sub-themes within the theme of "Money as development of self and development of children" are "Money as Development of children", "Money as Hard work", "Money as Resisting crime", "Money as Personal and business ethics" and "Money as Own business". These come out of the codes in appendix 5 for "Money as development of self and children". All of the sub-themes and the codes within the sub-themes are part of the broader theme that encompasses the personal growth of an individual and their children as an avenue to increased income and a better life.

The same process as described for "Money as development of self and children" was followed for the other seven themes and the codes and sub-themes within the seven themes.

## **4.6 Conclusion**

This chapter introduced the eighteen individuals who participated in the research and explained the location, structure and questions asked in the semi-structured interviews. The process of recording and transcribing the interviews was explained. Chapter 5 details the analysis and interpretation of the data and the five themes for the meaning of money that emerged from the inductive method of data analysis described in this chapter.

## **Chapter 5      Analysis and interpretation of data – the meaning of money to low income people**

### **5.1 Introduction**

This chapter considers the first part of the research question being, what does “money” mean for low income people? The data gathered is analysed and interpreted which is congruent with interpretive research methods. The five themes for the meaning of money that emerged from the analysis process described in the previous chapter were; Money as Hedonism, Money as Love, Money as Food, Money as Development of Self and Children, and Money as Support Structures. This ordering of the themes is not indicative of any priority that the research participants attach to the meaning of money. The order is rather the sequence in which the themes emerged in the twelve interviews conducted with the eighteen research participants. It may also be true to say that the order reflects the sequence in which the themes became clear to me as the researcher during the field work and the analysis of the data.

In terms of priority, “Money as Food” is the first priority for the research participants. The research participants as a group are clear that without food there is no life and money is the most direct and surest way of obtaining food and sustaining life. Money as food was explored and the concept of Money = Food = Energy = Work = Life emerged from the analysis of the data.

Thereafter, the priority for the group is less clear. Each of the research participants had their own priorities but no attempt is made to determine the priority sequence for each research participant or the group as a whole.

Before presenting the analysis of the themes, a short reflective piece is included on Alexandra and the researcher’s experience entering Alexandra to conduct the interviews with the research participants.

### **5.2 Alexandra**

Alexandra (Alex for short) is about 4 km from Sandton where I work at Nedbank’s head office. The contrast is stark. The view east from my 5<sup>th</sup> floor office window overlooks leafy suburbs, the Sandpruit river valley and the block houses on the dusty East Bank of Alex in the distance. The sun glares off the ridge upon which Pan Africa Mall sits. It is quiet and cool in the office. Within 20 minutes I have changed into jeans, golf shirt and cap, and I’m inching my old Volvo forward through a mass of cars, hawkers and goats. A taxi hoots and cuts me off. I wait while passengers going to the Mall disembark. People are shouting and the hooting of taxi’s never stops. The road narrows and bends right. Like a river channelled in a gorge the cars and taxi’s and old ladies on foot move along

with the stream. Goats bob along in every direction. On the right bank there is a row of shops owned by the Indian community selling goods at discount prices. On the left I can see into a dusty and cavernous shebeen. Men are hunched in rows clutching quarts of beer. I cut left and drop eastwards down Alfred Nzo towards the Jukskei river. It is relatively peaceful as I descend into the valley. I am now hidden from the view from the 5<sup>th</sup> floor office window. I am in the next Valley. I am in Alex.

*GH voice notes – 18 September 2014, 10:57am.*

*So as I drive down Alfred Nzo, there's people walking along, someone eating an ice-cream over there, and an umbrella, and a stray goat on the side stop street, which I'm observing, going across Sixth Avenue, there's a chap, well dressed, with a Nedbank hat on, colourful shirt, it's all very relaxed here. On the right hand side is a building site, barbed wire on the top, building with broken windows, and a clothes line on the top of the building, a prefabricated green house on my right hand side, another chap with an umbrella, reminds me that I've got thousands of ... not thousands, but I've got many extra umbrellas, which I should bring into Alex, the rain will be coming soon.*

*Traffic lights are not working, that's interesting, but I notice the traffic are not observing the one stop, one go rule, it's he who pushes furthest into the traffic, but it works. In fact, there's not a lot of traffic today, there will be, much later on. Some ladies walking down the hill with babies on their backs, the hill that was referred to by Patience in my last text, that she takes the taxi up, and walks down, meets her friends.*

*Well here's Joe's Butchery on my left, that means that I turn right. There was a bit of a big bump. Hopefully Vusi is going to be there, I do hope he is, I don't see him, but we'll see. I'm coming up to Patience's house now.*

### **5.3 Money as Hedonism**

The analysis of this theme is discussed under the sub-themes of; Money as the all week-end party; Money as Booze (alcohol); Money as Fast-food; Money as Kush (Marijuana); Money as Fashionable clothes; Money as Hard drugs; and Money as Clubbing

This excerpt below is from the first proper interview conducted in the field on 11 September 2013.

*Interview 2*

*GH: So when it's pay day, is that a big day for you?*

*Vusi: Yeah! I get fast-food, get clothes, food, alcohol, just to celebrate, yeah, some dope.*

*GH: Yeah?*



Vusi:	<i>Yes, to lighten the mood.</i>
GH:	<i>And then on those days will you share with your friends?</i>
Vusi:	<i>Yeah!</i>
GH:	<i>You have a party?</i>
Vusi:	<i>Yeah, do something, go to a club, maybe, spend some money, buy a few bottles.</i>
GH:	<i>Yeah?</i>
Vusi:	<i>Yeah.</i>

Vusi is not a pure hedonist. None of the research participants is a pure hedonist but many spend a considerable fraction of their waking hours and money in the pursuit of pleasure. Vusi works for his money and has fun spending it on fast food, fashionable clothing and a good party with his friends. This research report features Vusi prominently and I trust the richness of his character and breadth of his interests is properly captured. However, for this section, I will focus on money as a path to hedonism for Vusi and other research participants.

### 5.3.1 Money as the all-weekend party

Vusi enjoys a good party. Sometimes those parties last all weekend and could involve spending as much as R500.00 on the extended party. The quote below summarises the thematic code.

<i>Interview 2</i>	
Vusi:	<i>Yah. Even better if we'll all working for that month, when month end arrives, he has five hundred bucks, I have five hundred bucks, he has five hundred, got a lot of money to spend we can spend it over the weekend, Friday, Saturday, Sunday, you know, and just have fun.</i>

Spending five hundred Rand on an all-weekend party is surprising for people who do not appear to have that sort of money to “waste”. Thulani explains the anomaly best in the quote below. As young people they receive support from family in the form of a place to live, food to eat and clothes to wear. Money earned by them is thus largely available to have fun.

<i>Interview 4</i>	
Thulani:	<i>But most of the time, you know, you young so, when you use the money, just spending on nice things, you know, for a nice time. Ya, to have fun, like buying booze, you know, ya, going to parties, you know like that. So that's how I spend most of my money.</i>

### 5.3.2 Money as Booze (alcohol)

Money “to have fun, like buying booze” is for Thulani’s account and appears to be where most of his money goes and hence the thematic sub-theme.

#### *Interview 4*

*Thulani: Ya, right now I live with my family, right now.*

*GH: Ya*

*Thulani: So, I don’t have to worry about much, really.*

*GH: So ... what ... what expenses do they provide for you? Or what, that you don’t have to buy, food and, rent, place to live.*

*Thulani: I don’t have to buy food, ya, rent, ya. And if I was living alone I would have to buy my own food, my own rent. Some of my guys buy clothes, ya. Because they do buy me some clothes, I do buy myself some things, ya. I have to do a lot if I was living alone. That’s where most of my money would be spent if I was living alone. So, I wouldn’t have much fun.*

The excerpt above is interesting in the context of Thulani’s coupling of fun and booze and the relationship with money. He equates fun with alcohol.

Thembi, the car-washer, adopts a different approach to alcohol. He is surrounded by beer drinkers at his car wash but he confines himself to two or three parties a year. The excerpt below highlights that while Thembi has a large quantity of alcohol when he does drink, he drinks less frequently than his peers. This is probably due to the fact that he has more responsibilities and less support than the other young men in the research participant group.

#### *Interview 6*

*GH: Alright, and what do you spend your money on?*

*Thembi: I spend money on food, drinks, clothes, and I also have a child, nine months, year old Baby.*

*GH: Ja?*

*Thembi: So I have to buy him clothes, Pampers, you know, etc. those kind of things, and also myself, ja, I like to party you know, so I drink sometimes, on occasionally, but not every time, but when I’m happy, ja, when I’m happy, when I feel good, like, you know, because sometimes it’s boring to be sober, you know, sometime, but I don’t just drink*

*too much, maybe four, five, it's enough, then I go home and sleep.*

*GH: Four or five?*

*Thembi: Four or five quarts.*

*GH: Quarts?*

*Thembi: Quarts, ja, I don't like dumpie, dumpie ai.*

*GH: And how often do you party?*

*Thembi: Ah, maybe once every four months, or five months. Since now, maybe I started last, maybe when, on March.*

*GH: Ja?*

*Thembi: That was the last time. Since from now I didn't even go to party now, because I have to look after my child, and also my girlfriend, you know, mm.*

*GH: So you haven't had a beer for how long?*

*Thembi: Oh, it's quite a while, from March until now I haven't, I haven't, and now it's October.*

*GH: And when is your next party?*

*Thembi: On the 23 December.*

Thembi is almost a rarity amongst the other research participants of similar age for his moderate approach to partying and booze. In the excerpt below, Themba, Vusi and Mbongeni are clear that they spend money on alcohol.

*Interview 2*

*GH: And what else do you spend money on?*

*Themba: Alcohol.*

*Vusi: Alcohol.*

*Mbongeni: Yes, alcohol and clothes.*

Maxwell is another of the young men who appears to enjoy alcohol. We discussed the various popular alcohol brands and the nicknames for these brands.

*Interview 2*

*Mbongeni: Here in Alex, either Heineken will come first, or otherwise you go for the ciders, your Smirnoff Double Black.*

*Maxwell: Yah, Guarana. Guarana. It's for the ladies.*

*Vusi: And also for us, not only for the ladies, nice to drink.*

*Mbongeni: It's a nice beer, it's nice, it's a nice cool drink, it's like a cool drink, it's like a sweet.*

<i>Vusi:</i>	<i>Mostly a lot of people drink Hunters Dry, like the majority of people, it's Hunters Dry.</i>
<i>Maxwell:</i>	<i>Ferrari.</i>
<i>GH:</i>	<i>Ferrari, is that a Hunters Dry?</i>
<i>Maxwell:</i>	<i>Yes.</i>
<i>Vusi:</i>	<i>Because it's got that horse that resembles the Ferrari.</i>
<i>Maxwell:</i>	<i>It's got the stallion symbol on it.</i>

Hunters Dry and Ferarri do indeed both have a horse in their brand logo. It appears that the young men have a strong affinity for alcohol and have given their favourite drinks nicknames that have association to glamorous consumer products such as Ferrari. Later in the same interview, the group discussed a drink called “mashesha”, which apparently means “fast”, as it gets you drunk very fast.

Returning to Thembi, at the rate mentioned, it appears that he may have two parties that include drinking alcohol in 2013. One in March and one planned for 23 December. He says he has a party once every four or five months. He will drink four or five quarts<sup>19</sup> (750ml) which is a large quantity of beer in a day / evening by most standards. It is little wonder that he does not like dumpies (340ml). Nevertheless he is a strong young lad and that quantity of beer at his bi-annual party certainly does not put him into the same binge-drinking, hedonistic group as some of his friends. To get a sense of the quantity of beer had by others (perhaps he is referring to his friends) Thembi says that he does not drink “too much”. He then says "maybe four, five, it's enough, then I go home and sleep". He also makes the confession that "sometimes it's boring to be sober". One wonders if his hedonistic friends concur with him on the need to drink to overcome boredom. Is life for these young men "boring"? Would they drink, drug and party less if they had meaning elsewhere in their lives such as in fulfilling jobs, opportunities for tertiary education, and more complete romantic relationships?

As a mature man, Griffiths’s great pleasure in life is spending an evening talking with his brothers and enjoying a couple of quarts of beer. In fact, his brothers do not drink beer so he says, “I just buy them some cold drinks”. This is an occasional event that is pursued if he has a little extra money.

<i>Interview 9</i>	
<i>GH:</i>	<i>Ja. So you enjoy that, being with your family, your brothers, you talk.</i>
<i>Griffiths:</i>	<i>Ja, too much.</i>
<i>GH:</i>	<i>That is for you.</i>
<i>Griffiths:</i>	<i>They like that, because we discuss, we discuss with the family issues, and fix the lot of things when we sit together.</i>

<sup>19</sup> Quart is a misleading term. A 750ml bottle of beer is known as a “quart” in South Africa. Quart is probably a term derived from England for a big bottle of beer. In England a quart is two pints which is 1,136ml. A “pint” is 568 ml (20.0 imp fl oz)

### 5.3.3 Money as Fast-food

It was evident that a number of the research participants do not drink alcohol at all. Mpho abstains (although her kids are educated on the proceeds of beer sold from her shop) and Rodney prefers a healthy life-style as well as the cost savings of not drinking.

#### *Interview 12*

*Rodney: I'm not doing anything for that, I'm not smoking, I'm not drinking, I'm a person, healthy person.*

*GH: You save your money that way, hey.*

*Rodney: Ja.*

The teetotallers find other ways to have fun.

#### *Interview 2*

*GH: And does he spend money on having fun, and what does he do for fun?*

*Vusi: Okay.*

*Tsiko: [Speaks own language]*

*Vusi: He says, um, when he ... he, he wants to have a good time, he buys himself takeaways from KFC, so, um, he doesn't drink, so his money is save, because he .. he doesn't drink at all, he just buys takeaways, at times.*

Tsiko's idea of the pursuit of pleasure is KFC. Mpho enjoys pizza and Thembi specifically mentioned Debonairs, the take-away pizza franchise. Other research participants similarly mentioned "fast food" as a source of pleasure.

### 5.3.4 Money as Kush (marijuana)

Vusi is not just an all-weekend party-animal. He is also something of a street philosopher.

#### *Interview 2*

*Vusi: A lot of people smoke for creativity. It opens the mind to things that they normally wouldn't think about. Like you know when you're sober, some things you do not see, you know, but when you're on kush, then there's like gaps in the market that you see, and then you can fill those gaps with a business plan, or either you can become creative in many ways.*

He is a quiet, peaceful and respectful young man. Some of his money earned is spent on "kush", the Alexandra street name for "dope" or marijuana. Kush is pronounced "cushion" without the second

syllable. “Money as Kush” is a thematic code applicable to most of the young men within the group of research participants. Passing a “kush” cigarette amongst a group of young men on the street corner was quite normal.

If still at school then Mom and Dad may provide some extra spending money but it appears to be the source of family tension in the case of Mbongeni. Mbongeni’s mother is a policewoman who is also “studying for law, she wants to become a lawyer.”

*Interview 2*

*GH: And you guys, where does your money come from?*

*Mbongeni: Me, I go to school, so obviously I gotta get my money [indiscernible].*

*GH: Where does it come from?*

*Mbongeni: From my mother.*

*GH: Your mother?*

*Mbongeni: Yes, she gives me an allowance.*

*GH: Okay*

*Mbongeni: I’ve got an allowance from my mother, lucky, because I’m still at school. If I wasn’t in school, I wouldn’t get an allowance from my mother.*

The transcript above is Mbongeni’s explanation of how he gets his income. His sense of entitlement to a monthly allowance is interesting given that he is hanging around on the street corner in the afternoons after school smoking dope with the older boys.

*Interview 2*

*GH: What do you spend your money on?*

*Mbongeni: It’s either school or dope. It’s either school or marijuana.*

Mbongeni, at seventeen, is a few years younger than the other young men. He appears to be a handful for his mother.

*Interview 2*

*Mbongeni: I wouldn’t say she’s got money, because then she complains a lot to me, she brags a lot about the money she earns, so sometimes I have to beg for her when I want something, she can’t give me that, so, yes, that’s the way it is.*

This quote from Mbongeni demonstrates the family tension that arises when Mbongeni needs money from his mother because he “wants something”. We know from Mbongeni that his mother is a policewoman and that she is studying law. Assuming his mother is also hard-working, underpaid and battling to make ends meet then we can get a sense that she may be disgruntled with her son and tight on the purse strings when he asks for money that she suspects (she is a policewoman after all ) he is spending on drugs, alcohol and (fashionable) clothes.

*Interview 2*

*GH: And what else do you spend money on?*

*Themba: Alcohol.*

*Vusi: Alcohol.*

*Mbongeni: Yes, alcohol and clothes.*

### **5.3.5 Money as Fashionable clothes**

It appears that Vusi rationalises Kush on the basis that it not only gives him a pleasurable high but that he will be able to spot money making business opportunities thereby making more money to spend on things that he values, like clothes and particularly sneakers.

*Interview 2*

*Vusi: I love clothes, I always buy clothes. I love sneakers, so if I have money, I'll buy sneakers, if I have money all the time I'll buy them all the time.*

*GH: But you only need one pair of shoes.*

*Vusi: Okay, you do, but ...*

*GH: Yah, you don't.*

*Mbongeni: Yah, you don't.*

*Vusi: With me having a like for sneakers, I love sneakers, so for me, buying a sneaker wouldn't be a waste of money, because it's something I love, so, yeah, buying them all the time, I could have thirty pairs, I wouldn't care.*

Vusi appears to have a sneaker fetish. His desire for sneakers is clearly something that drives him to get up every day and earn money. His sneaker fetish is part of a broader phenomenon of Alexandra youth spending their money on fashionable clothes. Many of the younger research participants took pride in their clothing and appearance in general. They reference clothing in the interview texts as something they spend money on. The photographs included in the research report demonstrate this. Figure 4 in particular, shows a group of the young men wearing Uzzi, Addidas and Diadora which are fashionable clothing labels.

Consider how serious Vusi is when he says, “If I have money all the time I’ll buy them (sneakers) all the time”. What is driving him to purchase more and more shoes? Is he addicted to the feeling he derives from wearing a new pair, or a particularly loved pair, of sneakers? Is he addicted to (or simply striving for) something else he derives as a result of wearing a new pair of sneakers? These questions will be considered under the thematic heading “No Money No Love”. To highlight the point of his obsession with shoes the transcript below demonstrates the extent of his money (and his efforts to obtain that money) invested in shoes.

*Interview 2*

*GH: So those shoes you’re wearing now, how long have you had those for?*

*Vusi: I’ve had these for two months, three months.*

*GH: Did you buy them new?*

*Vusi: Yah.*

*GH: And how much did those cost?*

*Vusi: These cost eight hundred bucks.*

*GH: Eight hundred bucks!?*

*Vusi: Yeah.*

*GH: Sjo! And the laces?*

*Vusi: The laces, these I took them out of my Timberland boots*

*GH: How many pairs of shoes have you got?*

*Vusi: [indiscernible] shoes.*

*GH: Ten pairs of shoes, and you wear them all?*

*Mbongeni: And that’s the point of money.*





Figure 9 – A billboard on the M1 motorway near the Marlboro off-ramp which is very close to Alexandra.

Mbongeni’s closing remark, “and that’s the point of money” sums up the sentiment. The point of money is to acquire ten pairs of shoes, or more broadly, the meaning of money is to acquire things (physical or experiential) that give one pleasure. That pleasure could be sneakers or Kush or Booze or a KFC meal. Figure 9 shows an advertisement for sneakers on a billboard just outside Alexandra.

### 5.3.6 Money as Hard drugs

Vusi’s pursuit of pleasure is in the apparently harmless form of a sneaker. Other research participants were not so fortunate.

#### *Interview 10*

*Sindi: Okay, um you know what, you how to spend my money, like I don’t want to talk a lot, but you know, money comes and goes. I spend my money, I was spending my money through drugs, understand ...*

The interview with Sindi and Morena was conducted on my fifth visit to Alex. I had arranged to meet Vusi but I arrived early at our meeting place on the street corner. I sat chatting with some of the other young men I had previously met. A young woman sitting with her friend about ten metres away called out something and waved. It was not clear what she wanted. One of the young men said she wanted R2.00 from me to buy a cigarette at the tuck-shop across the road. I said to him that I would give her the R2.00 if she and her friend agreed to be interviewed for my research. They agreed

and I moved over and sat with Sindi and Morena. I acknowledge that that this could have introduced bias into the research but I honestly do not think they perceived the R2.00 cigarette I purchased for Sindi as payment for being interviewed.

Sindi and Morena have a tragic story. Morena inherited R200,000.00 at a young age after the death of her father. Sindi is an attractive young woman who successfully generates significant income from a series of eager boyfriends. Both of them became drug addicts. They are now recovering drug addicts trying to re-build their lives. They have been drug-free for two months. Morena has blown her inheritance, lost the respect of her sisters, dropped out of school, and she is pregnant. Her drug addict boyfriend is gone. Sindi and Morena are both 22 years old.

The transcript below is a summary of Sindi's story in three parts.

- Going "out to Sandton and to clubs" (Money as clubbing) was the highlight of her hedonistic voyage. This was the start. She was a "glamour girl" and had a boyfriend funding her party life-style which likely exposed her to drugs.
- Then she got heavily into "cats and coke" and stopped going out to the clubs. She was "burning her money to a Nigerian guy". In a later transcript she explains that during this time she and Morena would spend the day at home (or the boyfriend's home) drugging. This is "Money as Hard drugs".
- And now she is clean and starting to take care of herself again. Now she says, "I can do my hair".

*Interview 10*

*GH: And what do you spend your money on now that you don't spend it on ...?*

*Sindi: Now I just buy my ... now I just buy what I want, like now I just buy food and then I can go, like I just buy grocery and cosmetics and clothes and now I can do my hair, because of before I didn't even do my hair, I didn't even go out, you understand, I didn't even go out, like ... because of I used to out to Sandton and to clubs, I used to spend money in clubs, what, what, so now since cats and coke, ai ... I don't know [indiscernible] it's a very dangerous drug, because of getting addicted and you don't even sleep, you want it like each and every day, every day, every day every day, it's burning your money to a Nigerian guy, every day, every day, every day, every day, every day ...*

The hedonistic voyage is over. How did it end for Sindi? When Morena found out she was pregnant, she had the good sense to stop the drugging and drinking and smoking, and Sindi followed suit.

*Interview 10*

*GH: How long did this last for?*

*Morena: This, I've been using cat for ... it's been three years.*

*GH: And are you still using it?*

*Morena: I was using it and then I found out that I was pregnant, because my boyfriend and I ... okay we we we both ... we were in the same place, same time, and the same issue, and we both used it, and then I found out I was pregnant, so then I stopped using it because I was pregnant, so I am pregnant at the moment and I stopped using it for that certain reason.*

### **5.3.7 Money as Clubbing**

Wandile, the hair-dresser, likes to go clubbing for fun but her brief and occasional outings are quite different to the clubbing experience of Morena and Sindi.

*Interview 11*

*GH: What do you do for fun?*

*Wandile: Clubbing, I go clubbing.*

*GH: Here in Alex.*

*Wandile: No, in Rosebank.*

*GH: Oh, so you do leave Alex?*

*Wandile: Yes.*

*GH: Rosebank is the place.*

*Wandile: I wouldn't say I leave, because I go for two to three hours.*

### **5.3.8 Conclusion**

Vusi and his band of young men and the friends Sindi and Morena demonstrated hedonistic tendencies. For them, a large part of the meaning of money is the use of money in the pursuit of pleasure. I am reluctant to go further than that. They are not pure hedonists. For them, the pursuit of pleasure is important but it is not the highest or only good.

Vusi has admirable qualities. His pursuit of pleasure is easily trumped by an unselfish dedication to the development of the Alexandra community. Morena and Sindi are reformed hedonists. Their pursuit of pleasure was physically, emotionally and financially unsustainable. And Mbongeni is just a schoolboy. He does not work hard for his money. At most it is a fight with his mother. One does not wish to speculate how his meaning of money will change when he leaves school and the monthly allowance does not hit his bank account. If we examine the attitudes and behaviours of some of the other research participants, we see that the degree of hedonism decreases as people's

responsibilities increase and / or they have other passions which override the desire to go out and engage in alcohol and drug fuelled parties.

Rodney is an extreme case. He has two wives (one in Zimbabwe) and three children in their early twenties. Although his children are now adults it is likely that he has become accustomed to a life-style designed to support them and his new (young) wife is now consuming what he is saving on the children.

Tsiko also lives a non-hedonistic life. He has a family structure in Zimbabwe to support and a sweet-heart girlfriend at home that he is looking forward to marrying. He does not drink alcohol at all. A trip to KFC is his greatest extravagance in the pursuit of hedonistic pleasures.

## 5.4 Money as Love

The excerpt below is from the 26<sup>th</sup> minute of Interview 2 on the 11<sup>th</sup> of September 2013.

### *Interview 2*

*GH: Anything else? Anything else about money? What does money mean to you? Give me one line, what does money mean to you?*

*Mbongeni: It means a lot, it means a lot. Money is your life, basically.*

*Siyanda: Here in Alex, no money no love (softly)*

*GH: Say that into the recorder.*

*Siyanda: Here in Alex, no money no love (louder)*

*GH: Yah. (hand clapping in the background)*

*Vusi: True, okay, that's also ...*

*Themba: That's true.*

*Maxwell: That's true.*

This was the birth of the theme “No money, no love” or “Money as Love”. I could sense that the interview was coming to an end. I was running out of questions and Vusi and his friends were tired of talking about parties, clothes, alcohol and kush. They had been telling me about the various cooking methods for chicken feet and the best sauces to complement braai'd chicken feet which can be purchased for R1.00 each.

And suddenly, in response to my “last gasp” question, the quiet one, Siyanda, said something that caught my attention. I asked him to repeat what he had said and there it was. Everyone jumped in to agree and add to Siyanda's insight. Someone started clapping their hands in agreement. I knew I was onto something but what did they mean by, “No money no love”?

This will be answered in two parts:

- Firstly, what do they mean by “love”. Do they mean love in the spiritual (Agape), physical (Eros), mental (Philia) or affection (Storge) sense?
- Secondly, what do they mean by “no money” and more specifically how does a man demonstrate that he has money? And how does a woman know that a man has money?

The questions will be answered by the research participants. Importantly, many of the research participants had something to say related to the topic and Sindi and Morena corroborated the entire “theory” when I interviewed them on 20 November 2013. Sindi did this without any specific prompting from me. She earns her money “through my boyfriend, I have a boyfriend take care of me”.

#### 5.4.1 The meaning of Love

The young men had the following to say about love which suggests they are interested in physical love.

*Interview 2*

*Vusi: In fact, when you don't have money, then you have a rare chance of ...*

*Mbongeni: Dating?*

*Maxwell: Pulling chicks here.*

*Vusi: If you don't have money then you getting her would be kinda hard. So if you've got cash, then ahhh, all the ladies want you, just because you've got money.*

Vusi is searching for the right word. Mbongeni helps out with “dating” and Maxwell’s “pulling chicks” gives some clarity on his objectives. What Vusi means by “getting her” suggests that the young men are more interested in the physical aspects of love. One aspect that is lost in the transcripts is the tone, laughter and body language that accompany the words. The energy levels present during this discussion were significantly higher than when discussing braai'd chicken feet with a chili sauce.

*Interview 2*

*Mbongeni: Chicks want you for the money.*

*Vusi: Yah, don't have money, oh! (ha ha ha)*

The words above do not capture the clear message that comes across in the sound recording. The meaning of love is very clearly sex. And in the transcript below this is made explicitly clear. The arrangement between young man and young woman is very clear. The comment “sleep without

eating” and wearing fancy clothes and nails and “they don’t have food” aligns with the data collected from Sindi and Morena.

*Interview 2*

*Mbongeni: It’s all about the hustle.*

*Vusi: ... they sleep without eating, some of those.*

*Mbongeni: It’s all about the hustle.*

*Vusi: You might see her wearing fancy clothes, passing here with the nails done but then it’s all, jo they don’t have food. She knows if she sleeps with you, then you are influenced to give her money, otherwise she’ll leave you, and then you’ll complain anyway, because she won’t be giving you none of ...*

The story above was played back to me from the young woman’s perspective by Sindi and Morena. The comment “sleep without eating” and “wearing fancy clothes” is very similar to what Sindi said.

*Interview 10*

*GH: And are you still spending your money on drugs?*

*Sindi: Ai, not now, I used to spend my money on drugs, not buying myself food, not buying myself even clothes, I lost all my clothes, all my things, you understand, I didn’t even do my hair, I used to do drugs a lot with the money.*

The young men acknowledge that not all the girls in Alexandra are like this.

*Interview 2*

*Vusi: Yah, they want ....*

*Mbongeni: For the money.*

*Vusi: Because you know ...*

*Maxwell: But not all the girls are the same.*

*Vusi: Most.*

*Mbongeni: Most.*

*Maxwell: Yes, most.*

*Vusi: They’re gold diggers.*

*GH: Yeah?*

Before getting to other transcripts that deal with the meaning of “love,” I will briefly deal with the reason why so many young women in Alexandra get their money from their boyfriends. It is the perfect storm. Young women who have lost their parents (Aids orphans perhaps) are forced to become breadwinners, and they do not finish schooling so their choices are limited. Those with

matric compete for jobs at retail stores which pay R2,800.00 per month. Those without matric simply “can’t get a job”. Their choices then become rather limited. It is either selling braai’d chicken feet or find a boyfriend with money.

*Interview 2*

*Vusi: So, and most ... not that they’re really gold diggers, some girls really date us for money, because the parents are not working, maybe if her parents are not working, or she lost her parents, and she’s the breadwinner, and she doesn’t have matric so, or she can’t get a job, so push comes to shove, they just want that money, just to, you know ... because you know, sometimes ...they sleep without eating ...*

A number of the male research participants were in more stable relationships with young women and look forward to marrying their girlfriends. Tsiko appears set to live a life mostly apart from his girlfriend in Zimbabwe who he is already supporting.

*Interview 5*

*Vusi: Ja, for him, um, himself, his mom, and then his ... his girlfriend.*

*GH: Is the girlfriend in Zimbabwe?*

*Vusi: [Speaks ethnic language]*

*Tsiko: [Speaks ethnic language]*

*Vusi: Ja, his ... his lady lives in, in Zimbabwe.*

*GH: And does he hope to go and live in Zimbabwe, full time, sometime?*

*Vusi: [Speaks ethnic language]*

*Tsiko: [Speaks ethnic language]*

*Vusi: Okay, he says, um, he wishes to live in Zimbabwe, but because in Zimbabwe there’s no money, he’s forced to come to Jo’burg to work and get money.*

The meaning of “love” as a part of the “No money, no love” concept in the context of Tsiko’s existence is something much deeper than the physical love expressed by Vusi and his friends. He is thousands of kilometres from home and his girlfriend. He is working eleven hours a day and treating himself occasionally to KFC. He returns home for a month a year which is either in July or December. His love with his girlfriend certainly appears to be a spiritual and mental love. His opportunity for affection and physical love are restricted to occasional telephone calls and his annual visit home. The

path he is treading is a noble one and it appears that the concept of “No money no love” applies to him.

Thembi, the car-washer, has a similar form of love with his girlfriend. He lives in his flat alone. His girlfriend has a job and he gets to see her on weekends. He is clearly in love with his girlfriend. At a bare minimum they have affection for one another and he enjoys spending time with her. There are two aspects where money and love are connected for Thembi. On one level, he provides financial support to his girlfriend (and child) and at another level, he is saving up so that he can buy her a ring, pay lobola to her family and get married.

*Interview 6*

*GH: And what else do you spend your money on?*

*Thembi: Uh, mostly I only spend it on food, and ... and me and myself and my girlfriend. That's the thing.*

*GH: And what do you do for fun?*

*Thembi: For fun? For fun I watch movies now, or buy Debonaires pizza, and take my girlfriend and watch horror movies, or romantic movie, or action movie, we'll see, but me, I like action movies.*

*GH: And are you going to get married one day?*

*Thembi: I want to, definitely.*

*GH: When are you going to get married?*

*Thembi: The way I see it, I only think I'm going to get married next year, before December I'm going to get married, no matter what, I'm going to make sure.*

*GH: Why don't you get married now?*

*Thembi: I don't have money to get married now.*

*GH: Why do you need money to get married?*

*Thembi: You do need money to get married. The ring, it's costly, engagement ring, the money for her family, that I'm ... she want to move with me, because it's our tradition, you know, when you're going to marry a girl, you have to pay damage to that other girl's family, because you're going to take her to be your wife, to lobola her.*

Again, this fits neatly into the “No money, no love” concept provided one properly defines love for each individual. For Thembi, his ultimate dream of love is marriage to his girlfriend. That is not going to be possible unless he has the required money. Thus, “No money, no love” is true for him.



## 5.4.2 Show me the money

The second part of the “No money no love” concept is analysing how a man demonstrates that he has money? And from the woman’s perspective, how does a woman know that a man has money? There is also the perspective that men value women who have money. There are three thematic codes. “Money as a car”, “Money as fashionable clothes”, and “Money as work”.

Again, I will let the research participants provide the answers.

### *Interview 2*

*Vusi: Most of the times, really, if your true worth for ladies, if you have a car, then they alternatively think you have money, just because you have a car, not knowing that that car is ...*

*Mbongeni: Stolen.*

*Vusi: ... stolen, or you’re paying monthly instalments for that car, but they still think you’ve got a lot of money.*

### *Interview 2*

*GH: So let’s ... let’s play a game. I’m going to ask you the price of things, and you tell me how much things cost. How much is a pair of shoes?*

*Mbongeni: It depends, R500.*

*GH: What did you say? A thousand bucks?*

*Mbongeni: A thousand bucks, five hundred to a thousand.*

*Vusi: Get a pair of [Turks] for a thousand five. Depending on your taste, you know, a lot of us have this expensive taste, you know, because most of the time when you’re wearing expensive clothes, then ladies are going to ... you attract yourself to the ladies, because now they think you’ve got money, so now you can get to date.*

The answer is thus simply provided. Drive a car and wear fashionable clothing and “you attract yourself to the ladies”. This alone is a tough assignment given the amount of money (R500.00 - R1,500.00 for a pair of shoes) is the starting point to achieve a date. The arrangement, however, is clear. The car (however acquired) and the fashionable clothes may attract a girlfriend but if money is not provided on an ongoing basis then “she’ll leave you” as stated by Vusi in a previous transcript.

Work is valued. Someone who has work has money. For Thembi, his work means he has a girlfriend that he is determined to marry. Without his work this would not be a reality. Thulani also values work in a life-partner as he explains in the following quote.

*Interview 4*

*Thulani: And obviously ... I can't marry someone who doesn't work, so, gotta marry someone who works, has an income.*

The “No Money no love” concept is a powerful force for the research participants. It appears to be the driving force behind Vusi’s love of sneakers and Tsiko’s dedicated work so far from home. In the case of Thembi, he works hard and lives within his means as he strives to marry his girlfriend.

## **5.5 Money as Food**

I became very interested in listening to the research participants talk about food. They spoke with as much relish about buying, preparing and eating food as I have witnessed on reality television cooking programmes.

*Interview 2*

*GH: Okay, do you like fish?*

*Mpho: Joh, too much.*

*GH: Really?*

*Mpho:: It's my favourite.*

*GH: And how do you cook it?*

*Mpho: Oh, I take a fish, open it, put some ...*

*GH: Do you buy a whole fish?*

*Mpho: Yes.*

*GH: Okay.*

*Mpho: Any kind of fish.*

*GH: Any, ja?*

*Mpho: You can open it inside, put the onion inside, spice, take a foil.*

*GH: Ja?*

*Mpho: You can wrap it, put in the oven.*

*GH: Gee, that sounds good.*

*Mpho: Yes.*

*GH: My mouth is watering, hey. So you cook a lot?*

Paulina’s Mozambican Carapau fish dish on Friday’s sounds tasty and healthy too.

*Interview 11*

*GH: Once a month, hey. And do you buy pieces of fish or can you buy a whole fish?*

*Wandile: No, I buy pieces, and Paulina makes this Carapau fish, it's nice, she always does it on Fridays.*

<i>GH:</i>	<i>What is that?</i>
<i>Wandile:</i>	<i>It's a fish that Carapau fish.</i>
<i>Vusi:</i>	<i>I don't know ...</i>
<i>Wandile:</i>	<i>No, it's fish but you eat it with the head and everything.</i>
<i>GH:</i>	<i>Does she buy the whole fish?</i>
<i>Wandile:</i>	<i>No, it's pieces, then she cut them inside, she makes them with green salad.</i>

The details of the recipe or the actual fish species are not clear. Carapua is the Portuguese name for the Atlantic Horse Mackerel (*Trachurus trachurus*) which looks like a sardine or pilchard. It is best cooked on open coals with lots of coarse salt, olive oil and lemon juice. Fishing for King Mackerel (or Couta) in Mozambique is an entirely different undertaking. Couta is a big, good eating fish popular with anglers. It is not clear from the transcript above whether the Carapau dish is made with small whole fish or a bigger fish cut into pieces. It seems most likely that “Carapau” refers to a method of cooking fish derived from the Portuguese in Mozambique that has now found its way into Alexandra. Whatever, it is clear that Wandile enjoys it. I wanted to understand more about the research participant’s deep interest in food.

### 5.5.1 Money as Food as first priority

The research participants had much to say about food within the context of the money discussion. It was typically the first and most important item on the expense budget. Thembi is a young man, strong and fit and very keen on his girlfriend, but food comes first.

<i>Interview 6</i>	
<i>GH:</i>	<i>And if I gave you R500 right now.</i>
<i>Thembi:</i>	<i>Mm hmm.</i>
<i>GH:</i>	<i>What would you do with that money?</i>
<i>Thembi:</i>	<i>Fifty percent I'll buy groceries, and the other fifty percent ... and the other I'll spend for ... for my girlfriend, for in fact for my child.</i>

For Wandile, food and her children are her highest priorities.

<i>Interview 11</i>	
<i>GH:</i>	<i>Okay, and what do you spend your money on?</i>
<i>Wandile:</i>	<i>Money? On food.</i>
<i>GH:</i>	<i>And the children?</i>
<i>Wandile:</i>	<i>Yes.</i>

Mpho has four children. Most of her money is spent on her children. She is very proud of the fact that her little shop has got them to university and the “technical”. However, food is important as this one-liner indicates.

*Interview 8*

*Mpho: Yes. Then the smallest change I get, I buy food.*

Patience explains how Alexandra residents purchase food using the smallest change by shopping at the informal traders on Watt Street.

*Interview 1*

*GH: And are they cheaper than going to ...*

*Patience: Yes, because they cut, they cut, you'll find the lady has cut the whole cabbage into half or into quarters ... so when I get there, I see a R3, maybe she has quartered it, and there's a R3, the halves are R5.*

In the context of her struggling furniture manufacturing business, Portia provides the following input which highlights the importance of food to her workers.

*Interview 7*

*Portia: Sometimes I give them seven, six, five. It's like that, because if we didn't get job, I can't pay them. I will give them five hundred, just that they must get food.*

Why is Portia so interested that her workers get some money to buy food? Why is food the number one item on the budget for most of the research participants? There are likely to be a variety of explanations. I did not ask the direct question of the research participants but I imagine they would have looked at me in a confused way and explained that real hunger is an unpleasant feeling.

### **5.5.2 Money as “filling the tummy”**

Patience told me the story of the “Ash Grey Man”. He was clearly very hungry.

*Interview 1*

*Patience: One Sunday afternoon a guy came in here, he was ash grey. I didn't know because he was careless or because he was needy, but his first cry was that since this morning I haven't had any food.*

Patience's explanation about "filling the tummy" also gives a sense that real hunger pangs are not pleasant.

*Interview 1*

*Patience: A lot of people, even nutrition wise, they don't eat right, not because they don't know the right food, but we eat cheap, pap and spinach, pap and chicken livers or gizzards for example. Sometimes the food is not so much nourishment, but filling the tummy, if you understand.*

I certainly got a sense of this from many of the research participants. Avoiding or overcoming hunger is a powerful force. It is a powerful force that drives them to action to find food (the Ash Grey Man) or to get money to buy food. Nkulu, the scrap metal collector, falls into the latter category. His daily grind walking the streets is primarily about food. The transcript below is a conversation I had with Vusi and his friends about the concept of pride. I put forward the argument that Nkulu has pride. He works a full day and earns R50.00 a day. He could resort to crime. The point is that the majority of his money is used to buy food. He has few other expenses.

*Interview 12*

*GH: But don't you think it's a proud thing that that guy was doing?*

*Vusi: No.*

*Mbongeni: He's not proud.*

*GH: He's not proud of that?*

*Mbongeni: He's not proud, he's trying to make money so he can eat.*

Nkulu's story is tragic, but avoiding hunger and "filling the tummy" took on new meaning when I talked to Paulina and Patience.

*Interview 2*

*GH: And what is this here, this sand here?*

*Vusi: Oh.*

*GH: What is it?*

*Vusi: It's sand.*

*GH: Is it for skin?*

*Vusi: No.*

*GH: What do you use it for?*

*Vusi: You eat it.*

*Vusi: The people who eat it most is pregnant women.*

*GH: Really?*

*Vusi: They crave for that.*

*GH: Where does it come from?*

*Vusi: From the ground. This sand ... but then it's processed, I don't know how.*

*GH: Oh, you don't just dig it out here. How do you make it?*

*Vusi: I don't know how do they make it.*

*GH: Who makes it?*

*Vusi: But it's been long since they made it. She buys it from Pan Africa, so she doesn't know exactly where it does come from, but it's been in Alexandra for long, our grans and our moms ...*

*GH: And so people eat it?*

*Vusi: Yes.*

*GH: Pregnant women eat it?*

*Vusi: Yes.*

*GH: And what's it supposed to do?*

*Vusi: She doesn't know what it's for, she just buys it and sells it because it's in huge demand.*

I was surprised to learn that the "mud cakes" sold for R1.00 by Paulina are actually eaten by people. I had initially thought they were for colouring the skin. Vusi explains that they are especially craved by pregnant women. I obtained no evidence that people in Alex eat the mud-cakes to suppress hunger. However, Patience did comment that some people in Alex eat the most un nourishing food simply for "filling the tummy".

### **5.5.3 Money as the Ace Cook**

Patience talked about the township women being "Ace Cooks". This became the concept name for producing a tasty meal from cheap ingredients.

*Interview 1*

*Patience: Well people have gone back to eating, for example, spinach and other greens. You know, traditionally, apart from spinach, there was leaves of the pumpkin family, pumpkin squash, butternut, etc. those things, people used to ... instead of spinach, we cook those, we also do, my daughter also does, when ... especially in the summer, because at the back there we have our little garden, and then the young pumpkin and butternut leaves, we collect them and use as greens, and then people, for example, will eat lots of cabbage, and it will surprise you to see how the township women is ace cook in her kitchen.*

*GH: Ace cook.*

*Patience: Ace.*

*GH: Ja?*

*Patience: She'll turn that cabbage into something. That's one thing good about the township.*

*GH: They can cook.*  
*Patience: Or the township mother.*

An “Ace Cook” turns “cabbage into something”. An Ace Cook takes cheap ingredients, and using spices, special tried and tested recipes, and other tricks (Knorr stock cubes is a favourite), turns those ingredients into a tasty meal.

Being an “Ace Cook” is not just the province of the township mother. Patience herself acknowledges that men can cook when she talks about giving food to the “Ash Grey Man”. More about him later but for the moment he is the first indication in the data that men in Alexandra cook.

*Interview 1*

*Patience: So that’s what I did, gave him the tomato and the onion and the baked beans, moreover, he would prepare the food the way he likes it.*

The men in Alexandra also buy food, even if it is only for the Sunday braai.

*Interview 11*

*Wandile: I don’t know, whole fish, because I know my husband likes to buy whole fish.*

*GH: Where does he buy it from?*

*Wandile: I don’t know, because he always comes on Sunday with it, they wrap it in foil, braai it, I don’t know where does he buy it, and he’s the one who likes fish, [indiscernible].*

Rodney cooks. There are two aspects of particular interest from this transcript. Firstly, he upholds the “Ace Cook” concept of turning basic food into something nice. Secondly, he is hygiene conscious.

*Interview 12*

*Rodney: Ja, I’m eating meat but not every time, the things which I like is some vegetables, like there is another vegetable, they call it Chomolia, the one which I like.*

*GH: What is that?*

*Rodney: Chomolia.*

*GH: Chomolia?*

*Rodney: Ja, it’s like a wrap, you know wrap, ja, it’s look like a wrap but it’s not wrap, the one which I like.*

*GH: How do you cook that?*

*Rodney: I put it in water, in warm water, and I wash it just because I don’t know who’s holding it, how his hand is look like, I put it in warm water, I put fish oil on the pot ...*

*GH: Fish oil?*

Rodney:	<i>Fish oil.</i>
GH:	<i>In the pot?</i>
Rodney:	<i>Ja, and while the fish oil is hot, I take that vegetable out of water, and I put it there. I think I put it for twenty minutes, and I put tomato and spices [indiscernible].</i>

The question that particularly interests me is “Why is being an Ace Cook so valued and how, if at all, does it relate to the topic and the research questions?” What is the relationship between food and money beyond the obvious fact that food is (usually) exchanged for money?

I have considered the extent to which people in Alex will go to avoid hunger. I will now consider the consequences of hunger and under-nourishment. What would the consequences be if Portia did not give her workers “five hundred, just that they must get food”?

For the purposes of this thought experiment, assume that the workers do not do the seemingly obvious and look for another job or rise up against Portia. Furthermore, assume that instead of R500.00 a week, Portia steadily decreases the amount to R400.00 and then to R300.00 and so on. Also assume that the workers have no other expenses to pay from their R500.00.

The obvious answer is that the quality and quantity of the workers’ food would steadily decrease as their weekly wage was decreased. At a point it would be insufficient to sustain them and they would starve to death. Long before that their physical and mental well-being would be impacted. Alternatively stated, they would not have the energy to work a full day.

#### **5.5.4 Money as Energy**

Setting aside the fact that Portia may be a caring, empathetic and honourable citizen, we cannot exclude the simple fact that Portia pays her workers an amount of money so that they can consume food, obtain energy and come back to work for the good of Portia’s business.

Similarly, each of the research participants understands that the first and most important item on the expense budget is food. If food is not consumed today then there will be no (or less) energy for work tomorrow and a slow and painful descent to death is clear. To avoid this, there must be enough money to buy enough food for the energy requirements of tomorrow. It reminds me of the line from the Lord’s Prayer. “Give us today our daily bread”.

Daily bread does not include a “Mud-cake”. Daily bread should include some nourishment and the tastier that bread the better.



And thus we can include “energy” and “work” in the relationship between food and money. Money = food = energy = work = money and so on.

### 5.5.5 Money as Life

To conclude this section, I am going to attempt to argue that the underlying reason for the importance of being an Ace Cook is to ensure that Alex residents obtain as much energy as possible from the available food. Alternatively stated, if one can maximise the energy input from the available food then one can rely on less work / money / food to sustain life.

I accept that there are many reasons for wanting to prepare and eat tasty food. It is important to consider the question from the perspective of a low income Alexandra resident and specifically using the data gathered from the research participants. One cannot consider this question with an image of a fine-dining restaurant in mind. I will start with the complete story of the Ash Grey Man.

#### *Interview 12*

*Patience: One Sunday afternoon a guy came in here, he was, ash grey. I didn't know because he was careless or because he was needy, but his first cry was that since this morning I haven't had any food.*

*GH: Mm*

*Patience: I had to open my cupboards and share with him.*

*GH: And who was he? You didn't know him at all.*

*Patience: It was the first time that I saw him, but the reason why, because of this difficult times now in the townships, I accepted him and gave him something, it's because he gave a neighbour of mine up the road as a reference, he gave the name of a neighbour up the road as a reference. But because he was so ash grey, from negligence, neglect, and I wasn't sure whether he was genuinely hungry, or what. But he had a very beautiful story, a heart-breaking story, but you are always cautious, because then you give him the R10, and you are not sure that he's going to use the R10 for the food, so I rather gave him food because he said he was hungry, and he had two nephews that live with him. And so I said, okay, I said to myself, I won't give him R10, but I'll give him food, so I always keep tinned food, like beef, you know tinned fish, baked beans, and things like that, and I gave him level scoops from my own mieliemeal, I gave him nice big onion and two tomatoes, and a tin of beef, a tin of pilchards, and a tin of baked beans.*

*GH: Did you give that to him directly, or did you ... did he eat it while here?*

*Patience: Oh, I gave it to him [indiscernible].*

*GH: You gave it to him and he ...*

*Patience: I gave it to him directly, because he said he has two nephews that stay with him. So moreover, we had had our Sunday lunch, that's why we didn't give him a plate, because we had had our*

*Sunday lunch already, so I said to him, okay, I'll give you this and you can go and prepare at home.*

*GH: Yes.*

*Patience: So that's what I did, gave him the tomato and the onion and the baked beans, moreover, he would prepare the food the way he likes it.*

The food that Patience gave him was fairly basic. Apart from the mielie meal and the onion, all of the food could have been eaten directly from the tin. The tomato could be eaten raw and whole. Provided there is no wastage, the energy content remains the same pre- and post-cooking. However, let's assume Patience gave him a week's supply of mielie meal instead of "level scoops" from her own mielie meal. Pap without gravy is difficult to eat. A week with pap and no gravy would be hell. A week with pap, and a small helping of a tomato / onion gravy or a share of a tin of pilchards makes a world of difference. An Ace Cook could make the Patience donation feed a family of three for days. Add a supplement of further mielie-meal and smart portioning and food preservation and that family could have energy for a week. That is time and energy enough to continue the search for more food, or work and money to buy food to continue life.

Consider the following transcript.

*Interview 6*

*Thembi: Okay, money, to me, is very important, you know, because without that, there's no reason for us to live, you know. It makes our life better, easier, and faster in efficiency, you know. It's good to have money, because sometimes when you don't have money, eish, you feel like the world is on top of your shoulders, you know. At least when you have money, you could do ... you could buy food, you could do this and that, and make your family happy, and also yourself happy, you know.*

*GH: Ja.*

I was initially confused (and dismayed) by the direct link between money and a reason to live. But then with an understanding of the full sequence of Money = Food = Energy = Work = Life, and the important part that the Ace Cook plays in the cycle, it can be seen in a more positive light. Perhaps Mbongeni says it best.

*Mbongeni: It means a lot, it means a lot. Money is your life, basically.*

Affluent families are now less concerned with a child not finishing his food but it would not have happened at the table of my grandparents' generation who knew the value of food after experiencing food rationing in World War II.

## 5.6 Money as Development of Self and Children

During coding and the analysis of the data it became clear that education, skills and experience was often discussed by the research participants in the context of money. Data was also collected about hard work, entrepreneurship and ethics. This theme I named "Money as Development of Self" and to incorporate the important role that parents play in the development of children, I expanded the family to include this aspect of the data.

The theme is discussed with reference to the main thematic codes identified during the analysis of the transcripts being: Money as Matric; Money as Tertiary education; Money as Development of children; Money as Hard work; Money as Resisting crime; Money as Personal and business ethics; and Money as Own business.

### 5.6.1 Money as Matric

Almost all of the research participants communicated to me that one's level of formal education had a direct relationship with one's income earning potential. Vusi explained in fairly precise terms how much a person with a matric could expect to get paid working in one of the large national retail stores in Alexandra. The thematic code is best explained using the following excerpt.

#### *Interview 2*

*Vusi: Speaking, most people work at retail shops, so a retail shop, when you have a matric, you earn about two point eight.*

*GH: Two point eight?*

*Vusi: Yah. That's the average pay.*

*GH: Yah.*

*Vusi: That's if you never furthered your education, so you earn about two point eight, three point two.*

The salary range for a matriculant at Pick n Pay, Shoprite and Boxer is R2,800.00 per month. He later adds an upper range of R3,200.00 and then indicates that people at Woolworths may get a bit more than at the other retailers. He also makes it clear that this range is for matriculants who have not

furthered their education. The implication is that those who have furthered their education get more.

I have not checked the accuracy of Vusi's salary estimation. That is not important. What is interesting is the manner in which he provides the information as a fact in a manner similar to the way he might report to his friends that the price of beer is R11.50 a quart (750ml) at Mantombe's Inn and R15.00 a dumpie (340ml) at Joe's Butcher.

The only criteria Vusi stipulates to earn the salary of R2,800.00 – R3,200.00 at a "retail shop" is to have a matric. He is silent on experience, performance, tenure or whether it is possible to get a job at a retail shop without a matric. These issues will be kept in mind when examining the rest of the data.

One could get the impression from the excerpt that a salary of R2,800.00 is available to any person who has a matric certificate and submits a job application. I later questioned Vusi on this and he acknowledged it is not quite so simple. He said that Pick n Pay are "choosy" and that nepotism is prevalent.

A number of the other research participants provided data relevant to "Money as Matric". Morena went to multiple shopping malls looking for a job in a retail store but was unsuccessful.

*Interview 10*

*Morena: I actually did ... it's not that I didn't try, I did go to shopping malls to go look for a job, like retail, but I mean my qualifications are so bad, they are so bad, you know.*

Morena does not have a matric certificate and could not even get a job as a nanny.

*Interview 10*

*Morena: ... and you see now I don't even have qualifications or any sort of even getting a job as being a nanny, you know, because you have to have your matric*

Thembi does not have a matric either.

*Interview 6*

*GH: How old are you?*

*Thembi: I'm twenty one years old, going to twenty two.*

*GH: And what was your schooling, did you finish school?*

*Thembi: Uh, I didn't finish school. I last attended standard eight, grade ten.*

*GH: Ja?*

*Thembi: Ja, because I tried and repeat, I failed, and I tried once again, and I failed. Eish, that's why my*

*reason I didn't finish school ... with schooling. Ja, but right now I'm at home, I'm washing cars, ja, I do side ... some jobs here, you know.*

The regret at not having passed matric is evident. He is aware that the consequence of having tried and failed is that he has a job washing cars.

Thulani only has part-time work.

*Interview 4*

*GH: How do you earn your money?*

*Thulani: Wha ... ta ... I ... I put in tents. Ya, like a, you know, I get a call, they tell me, there's work. I go. Put in tents around here, you know, ya, tables, ya. Ya, but the money is not much, eh. Small money. So, ya, I'm still ... I'm looking for a job. You can say that, ya, because, the job that I'm working in right now, it's nothing, doesn't even, ya ... it's nothing. Money is too ... too ... too little.*

*GH: So, is it part time work?*

*Thulani: Ya, you can say it's part time.*

Thulani works for "one guy" who has a business hiring out tents (marquees). He describes his work as part-time and hard labour, and payment comes in physical cash.

*Interview 4*

*GH: And ... the guy you work for ... he pays you in cash?*

*Thulani: Ya. Ya, it's all in cash. These part time jobs, you know, like these jobs you work, hard labour. Most of the time they pay you cash. They don't do the ... ah ... EFT's and whatnot.*

Not a particularly glamorous career for one of the few research participants who actually has a matric certificate. Thulani passed matric yet, contrary to what others appear to believe, he does not have formal employment. He seems to have found the experience of "looking for a job" challenging. Perhaps he has no relatives or close friends that can help him with a permanent job at one of the major retailers.

*Interview 4*

*Thulani: Ya, I do have a matric.*

*GH: Jeez, that's good, eh?*

*Thulani: Ya, but it's still tough. Even with ... even with your matric, ya, jobs are scare around here. Don't get them just like that. Ya, you have to, ya, you ... really have to look hard. Go there, go here, go here, travel, over there ... ya. Go to all these places, you know. Fix this, do this, get this, ya*

Thulani does not appear to have a tolerance for administration and bureaucracy. He is short on the “go there and go here” enthusiasm required to find formal employment. He does not exhibit the “money as hard work” code to be discussed later.

It is a reasonable assumption that the person getting their ID photocopied in Mpho’s shop is engaged in Thulani’s “go there and go here” process.

*Interview 8*

*GH: What’s the photo copy for?*

*Mpho: Oh, she wants to take her CV to Pick ‘n Pay, so she wants a job.*

Many of the research participants placed significant emphasis on passing the matric exams and obtaining the certificate. They perceive the matric certificate as a ticket to success or at least a ticket to a formal job, money in the form of a monthly salary, a family and status in the form of cars and a home in the suburbs. Thulani’s story is evidence enough that merely having a matric is not enough to set one neatly on this path, although his aspirations remain unfettered.

*Interview 4*

*GH: Mmm ... What would ... your ... perfect job be?*

*Thulani: Tss ... my perfect job? Job where I get a lotta money. Ya, job where I get a lotta money, maybe like, ya, round about, ya, thirty thousand ... twenty thousand. Ya, then I can do something, I can buy a house, buy a car, have a family somewhere ... in the suburbs, ya.*

Sindi’s sister is a couple of steps down that path.

*Interview 10*

*Sindi: I'm living with my sister, ja. We both together.*

*GH: Does your sister work?*

*Sindi: Ja, she is working now.*

*GH: What does she do?*

*(Some vernacular greetings.)*

*Sindi: Right now she’s working ... I don’t know, she used to work at Woolworths but now she’s working ... wedding planner, or what.*

*GH: Wedding planner.*

*Sindi: Yes, a wedding planner, ja.*

*GH: How much money does she earn a month, do you know?*

*Sindi: I don’t know, because of she started like she’s got like two weeks, she started like two weeks, so she’s happy about her work, because of she say they will pay her like too much, more than,*

*like they'll pay her more than Woolworths, [indiscernible] so ...*

*GH: So how much do you think that she would earn in a month?*

*Sindi: I don't know, maybe three thousand or four thousand.*

## 5.6.2 Money as Tertiary Education

The concept of tertiary education is well understood amongst the research participants. Vusi referred to it as “furthering your education”. Thulani believes that his life mission would be made easier with a “what you call? Eh, tertiary education”

### *Interview 4*

*Thulani: But then, if I choose to ... go out and maybe like find a job that pays well, I still won't make it. Because I still have to save for, maybe I'll have to work for years, before I can ... get out of jail, buy a house, you know. And especially with no ... what you call? Eh, tertiary education.*

What exactly he means by “... before I can ... get out of jail ...” is not clear. My best guess is he is referring to Alexandra as a “jail” rather than he sees a stint in a real jail for himself before progressing on to buy a house in the suburbs.

Thembi may not have a matric but that does not prevent him from wanting to obtain a qualification. The qualification he has in mind is a code 14 driver's licence.

### *Interview 6*

*Thembi: That's what I like, that's my passion, and I like outdoors adventure, I don't like indoors, I like going out, seeing people, you know, because I ... right now a code ten, but I want to upgrade it to make it a code fourteen, so I could go out, internationally, Botswana, Cape Town, Durban, you know, ja, that's what I want to do.*

*GH: Is there good money in that?*

*Thembi: Ah, ah very nice money. Ah, you get more money, more than doctors and the nurse, ja.*

Patience, Portia, Mpho also have a firm grasp of the meaning of a tertiary education and Wandile is likely to encounter the meaning in the next few years. This may be speculative but it is highly likely that Wandile's 16 year-old daughter will get the opportunity to go to university.

### *Interview 11*

*GH: And how are they doing at school?*

*Wandile: No, they're doing fine.*

*GH: Very important, hey, must get their matric.*

<i>Wandile:</i>	<i>Yes, they must, because the other one is at LEAP School of Maths and Science, the one they local [indiscernible].</i>
<i>GH:</i>	<i>The LEAP School of Maths and Science?</i>
<i>Wandile:</i>	<i>Yes.</i>
<i>GH:</i>	<i>Gee, where's that?</i>
<i>Wandile:</i>	<i>Linbro Park.</i>
<i>GH:</i>	<i>Is it a private place?</i>
<i>Wandile:</i>	<i>Yes, it's a private school, but we've got a bursary.</i>

There are six LEAP schools in South Africa<sup>20</sup>. Their website says they "expect excellence - particularly in mathematics, science and English - and so guide young people to a successful future". The schools provide free education to students with potential from high-need communities. LEAP in Linbro Park has 167 students and is partnered with Redhill High School, a private school in Sandton. Wandile's daughter must be very bright and is extraordinarily fortunate to have received (and achieved) this opportunity. This opportunity could be life-changing for the whole family.

### 5.6.3 Money as Development of children

Mpho's story is even more heart-warming than Wandile's.

<i>Interview 8</i>	
<i>GH:</i>	<i>How long have you had this small business for?</i>
<i>Mpho:</i>	<i>I've got five years now, yes, and I've got four children, one is at the university, one is there at the technical, I spend most of money to them.</i>
<i>GH:</i>	<i>To your children?</i>
<i>Mpho:</i>	<i>To my children.</i>
<i>GH:</i>	<i>Ja. What are your children doing at university? What's your child doing?</i>
<i>Mpho:</i>	<i>The other one is doing engineering, electrical and engineering.</i>
<i>GH:</i>	<i>Wow.</i>
<i>Mpho:</i>	<i>Yes.</i>
<i>GH:</i>	<i>Which university?</i>
<i>Mpho:</i>	<i>University of Johannesburg.</i>
<i>GH:</i>	<i>Gee.</i>
<i>Mpho:</i>	<i>Yes</i>
<i>GH:</i>	<i>That's outstanding, you must be very proud, hey?</i>

<sup>20</sup> <http://leapschool.org.za/schools/> accessed 9 November 2014



*Mpho: No, not yet.*

*GH: Why?*

*Mpho: After three years.*

*GH: After three years?*

*Mpho: Yes. Then ...*  
*The smallest change I get, I buy food.*

*GH: So this shop has sent a child to university?*

*Mpho: Yes.*

*GH: And another one to technical ...*

*Mpho: Yes.*  
*He does know that. (pointing at Vusi)*

*GH: He knows your children?*

*Mpho: Yes.*

*GH: Okay, that's amazing.*

*Mpho: Yes.*

Mpho is quietly determined. She understands that a university degree is a minimum of three years. She is quietly proud of her achievement in sending her children to university and is proud of her children. Vusi lives across the street. It is likely that her children and Vusi were childhood playmates. The part of the excerpt that is most interesting is what Mpho was going to say before she reverted to telling me her story about money. We were talking about what would happen to her children after three years and then she paused and said, “The smallest change I get, I buy food”. Again this is speculative but it is possible she was going to say something about the (good paying) job that her child, the university graduate, would get.

Mpho has worked extraordinarily hard to get her children through school and into university.

*Interview 8*

*Mpho: They were still young. This one, this boy was still young. I push so hard, hard, hard in order to go to school.*

*GH: And what work do you think your children are going to do when they grow up?*

*Mpho: I can't choose for them.*

Mpho will not choose the work that her children will do when they grow up and have completed their education but she will deserve to be well cared for by them and her grandchildren as she grows older.

#### 5.6.4 Money as Hard work

Thembi is not afraid of hard work as demonstrated in his straightforward answer to my question about what he would do if he urgently needed R500.00.

##### *Interview 6*

*GH: If you urgently needed R500 ...*

*Thembi: Mm hmm?*

*GH: ... how would you get it?*

*Mpho: How would I get it? Ai, I had to bend down and wash cars, that's how I'm going to get it.*

It is appropriate to examine the thematic code of hard work with Sindi and Morena in mind. A tough road lies ahead of them. They did not complete their schooling. Now that they are off the drugs and re-building their lives they realise the impact of this. They describe their current reality and plans in the excerpt below.

##### *Interview 10*

*Sindi: Ja, so it's just ... I don't understand, like it's that ... you know ...*

*Morena: I just have to go back to school, I need to go back to school, hey, there's nothing I can do.*

*GH: Now the drugs is gone, you can.*

*Sindi: I can, I can. Ja.*

*Morena: I just have to ... I'll be giving birth next year in February, so hopefully after that I'll be rushing myself to school.*

*Sindi: 2014 I want to go back to school, I want to do my thing.*

*Morena: Because it's actually heart-breaking, hey, you'd see people our age driving, you know, and stuff, and especially with me, because I had everything around me, you know, all the riches, the glamour and everything, so they went all to nothing, and look, now I'm here in Alexandra, and I never thought I'd live in a township*

Most of the research participants share Sindi and Morena's lack of a matric certificate. For these research participants the opportunity to earn money excludes the benefits of having a matric certificate on the CV. Many of them apply hard work in one form or another to earn the income they require to live.

Mpho is a single mother with four children. She also spends 13 hours a day in her shop.

##### *Interview 8*

*GH: Do you stay open late?*

*Mpho: I open at approximately ten o'clock, until eleven o'clock at night.*

*GH: Eleven o' clock at night?*

*Mpho: Yes, yes, yes.*

*GH: Sjo, so you're working hard?*

*Mpho: To raise my children.*

*GH: Ah.*

*Mpho: Yes, I'm a single parent.*

*GH: Your children are lucky, hey?*

*Mpho: Hey?*

*GH: Your children are lucky.*

*Mpho: Yes, they are still lucky. Their father passed away in 2001.*

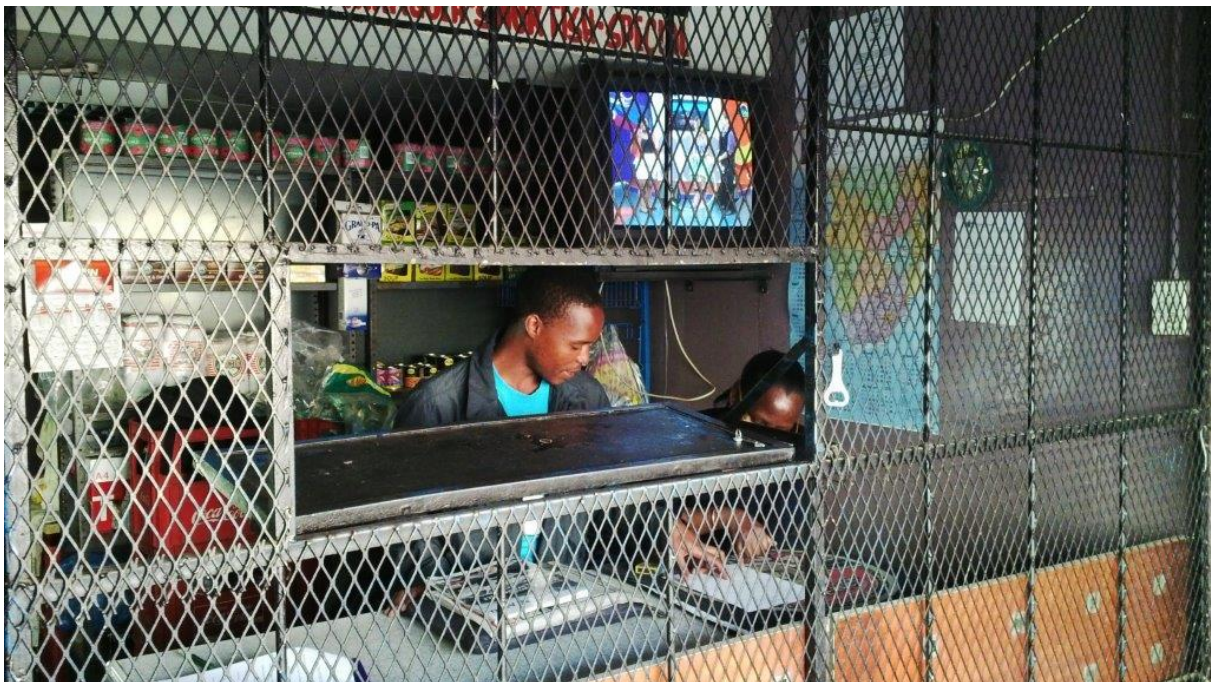


Figure 10 – Vusi assisting Mpho in her shop.

Mpho is battling with a problem that is making her business life more difficult than it should be. She demonstrates grit and determination to continue working every day in her shop as shown in figure 10.

*Interview 8*

*Mpho: Yes, but now, on behalf of this water here, everything, my business stands still.*

*GH: Because of this water?*

*Mpho: Yes.*

*GH: Where is the water coming from?*

*Mpho: It's coming from the back. You see?*

*GH: Oh there?*

*Mpho: Yes. So we are still waiting for them to come and put some pipe here, and other stuff, and in front of that side.*

*GH: Sjo.*

*Mpho: So, all my machine ...*

*GH: Ja?*

*Mpho: ... they're upstairs. I took them to upstairs.*

*GH: So why, why has it been difficult for your business, the water?*

*Mpho: I can't, when they come in, soon they're going to come and dig here, in order to put some pipe, in order to drain the water, because the water is coming down, down, down, down. Here we are.*

*GH: Ja.*

*Mpho: There was a river.*

Mpho has a river flowing through her shop. Ground water is seeping from the back of her shop and out the front door. Mpho believes it is natural ground water but it is also possible that it is as a result of a damaged water pipe.

Tsiko also works a long day. Occasionally his brother, Theodore, relieves him for a morning or afternoon but otherwise he works every day. That's a 70 hour working week for Tsiko.

*Interview 5*

*GH: Sjo, and how many hours a day does he work?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Okay, so, um, he opens at seven, and then he closes at six, so it's round about eleven hours that he works, each and every day.*

Portia is a hard worker and a fighter. Even when she gets to sleep she is thinking about a new furniture design to keep her customers from getting bored of her products.

*Interview 7*

*Portia: I must see that those kids, they eat on that money, and I must pay the transport, their satisfy them. So I try all means that they must be, everybody must be right. I tried to explain them, the job is not always the same. The other month is down, it's like a pop dice, you know the dice? You never win every day. Sometimes it's down, sometimes it's up, but it's fight. The business is not easy thing, and you must always try to make the new thing. People they're getting bored to see old thing every time.*

*GH: Ja.*

*Portia: Every time when you sleep, you must think of a new designer, and the new things that they don't know, yes.*

When discussing the job prospects for her children, Portia highlights the challenge that many of the research participants and other youngsters in Alexandra face.

*Interview 7*

*GH: Is it difficult for them to find work?*

*Portia: Yes, it's difficult for them to find work, because they think this job I'm doing is too hard.*

*GH: It's hard work?*

*Portia: It is hard, I know, myself, it is hard, but it's the people who's doing that job.*



Figure 11 – Portia sitting on a piece of furniture her team has manufactured.

The work Portia and her team do is physically demanding. It is long hours. The equipment is noisy and the space (a rented single garage) cramped. Much of the tools and work-in-progress stock is carried outside (shown in figure 11) to make space for work during the day and then carried back inside the garage at night. It is not glamorous and it does not pay well. Thulani's work (putting up tents) is also hard labour. "Bending down" to wash cars is physically demanding work. I imagine that hairdressers are prone to neck pain, back-ache and sore feet. Nkulu, however, gets the prize for hard work and low wages. He pushes his trolley day after day in all weathers. He is testament to a simple theory. Almost any able-bodied Alexandra resident can, through hard work alone, make R50.00 a day. Alex has litter of every description to be collected and delivered to re-cycling depots. There are

cars to be washed, houses to be cleaned and cases of beer to be carried. There are the signs of money, (piece) jobs and own jobs all across Alexandra, and many make the daily walk to nearby Marlboro and Sandton to find work. “Own job” is similar to “Own business” except there is no “business”. There is no “employer” but there is a potential income stream which an individual can secure with some perseverance, almost no skill requirement, and a significant amount of hard work. Thabang has a job (really regular piece work from the same person). Thembi (car washer) has an “Own job” and Tsiko (Zimbabwean tailor) his “Own business”. R50.00 a day may appear scant reward for a day of labour but R1,250 per month is slightly more than the government pension grant. I am not for a moment suggesting that these are fulfilling careers. I am sure in most cases they are quite the inverse but without a matric certificate or some form of tertiary education (or skill and experience) the options are limited. On a positive note, I did observe some job satisfaction and pride in their work in most of the research participants and most notably in Thembi and, amazingly, Nkulu. Morena, it seems, has a realisation that many years of hard work are ahead of her. She has a dream to drive a big car one day.

*Interview 7*

*GH: How are you going to get that big car?*

*Morena: Through working hard, but it takes time, you know.*

### **5.6.5 Money as Resisting crime**

Vusi, while talking about Nkulu, describes the trap that is waiting for those whose aspiration for money exceeds their willingness to work hard.

*Interview 7*

*Vusi: ... when push comes to shove, it's kind of a bad ... because I mean some of us have prayed, I wouldn't pushing around a trolley to get a lousy R50, like push a trolley for the whole day, and it's heavy with metal and you get no time to bath and be clean, you're always ... you're constantly hustling, so for you to get like five hundred bucks, you have to work extra hard, even at night, so some people that have too much pride to do that, rather go steal a car, get money.*

The trap is crime. The choice is simple. An Alexandra resident can earn a legitimate income through simple hard work or she can “rather go steal a car” and “get money”.

Within the code family of “Money as development of self” I have included the data gathered on crime and ethics. In some respects, crime is viewed by the research participants as simply a sub-set

of “money as hard work”. In the excerpt below, Thulani talks about people doing “illegal things” and he considers this to be work when he says, “he never work for anything, he never did anything”.

*Interview 4*

*Thulani: Because, you know. There are some people, like, who are like ... don't do ... things like .... legal things, you know, they do illegal things. So, they won't necessarily put his money in the bank. Because, you know, when he get caught, that money is gonna be frozen and he can't use it. It's like ... he never work for anything, he never did anything. So, some, ya, people who do illegal stuff they want the money at home, so that even when they get caught ... someone can come there, take that money, ya, and use it. When they in jail, maybe like in jail, like, maybe need something over there, just like that, send this person to go there in his house, get the money from there ... and buy him this and that and this, and take it to him in jail or somewhere else, you know. So, people... most people wouldn't use [a bank account].*

However, Thulani is accepting of the fact that for criminals it is not a question of “if” but “when” they get caught. On the whole, the research participants were anti-crime. Mbongeni even confronts the difficult ethical dilemma of stealing to feed a needy baby and pronounces it “very wrong”.

*Interview 2*

*Mbongeni: And most of the time that influences a lot of guys, when you get a baby from a kid that goes to school, that influences some of them to go rob, child hustles.*

*GH: Yah.*

*Mbongeni: Yah, so they try everything, they steal cars, do anything just for the baby to get food, the baby to sleep. They don't take it as the mother needs food, they take it as the baby needs food, it's not the mother that matters anymore, it's the baby now.*

*GH: And is it wrong to do that, go and steal a car if you need money for a baby?*

*Mbongeni: It's very wrong, it's very wrong.*

I acknowledge that he may have provided this answer because of the impression of me being an undercover policeman. Nevertheless, this was the answer provided and, as stated previously, I believe my credentials as a researcher were accepted.

### **5.6.6 Money as Personal and business ethics**

Moving on from criminal activity there were a number of very interesting views on ethics collected in the data. Tsiko, the Zimbabwean tailor, keeps all clothing not collected until the customer comes back to collect the item. He has kept some items for three to four years. Again, the impression that I

may be a policeman may have influenced his answer, but at the time I did not doubt the sincerity of his answer.

*Interview 5*

*GH: And what happens if they don't come back to collect the clothes?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Oh, he says he keeps them, he doesn't throw them away. Even now, he's ... he has a lot of clothes that people haven't fetched yet, so he just puts them away until the person finally comes back to fetch them.*

*GH: And what's the longest he's ever had some clothes for?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: He says for three to four years he's kept things.*

*GH: And he doesn't sell them?*

*Vusi: [Speaks own language]*

*Tsiko: Ja*

*Vusi: Ah, he says he doesn't sell them, he just keeps them.*

How did an uneducated, illegal immigrant from a rural village in Zimbabwe acquire such a moral compass? How did Tsiko (perhaps in collaboration with his brother, Theodore, and the other members of their family) apparently come to the conclusion that the foundation of their business model is trust?

### **5.6.7 Money as Own business**

Tsiko has a profitable tailoring business. He has set up station with his pedal-powered sewing machine on the corner of Alfred Nzo and 11<sup>th</sup> Avenue, diagonally opposite Joe's Butcher. He is shown in figure 12 sitting at his sewing machine.

*Interview 5*

*GH: Ask him how much he earns for fixing that pair of pants that he's doing now, the jeans.*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Oh, he says he's going to receive R20.*

*GH: And what is ... how much work is it that he's doing, how long will it take him?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*



Vusi: *He says, approximately three to four minutes.*  
GH: *He's got a good business, this guy.*  
Vusi: *Yeah, he does.*



Figure 12 – Tsiko

Twenty Rand for three to four minutes work is impressive. Granted he does not work at that rate all day but he is able to send home a tidy sum of money every three months. Significantly, given his business model built on trust, he sends the money (and a parcel of clothes) home via a trusted personal network.

*Interview 5*

GH: *Ah, and how does he get the money back to Zimbabwe?*  
Vusi: *[Speaks own language]*  
Tsiko: *[Speaks own language]*  
Vusi: *Okay, he says um, he takes the money and he puts it into a little purse that he gives to someone he trusts, to take it back home, and then ... Ja?*  
GH: *And how much money does he send home at a time?*  
Vusi: *[Speaks own language]*  
Tsiko: *[Speaks own language]*  
Vusi: *Okay, he says when he sends money, he sends R5,000, but the last time he sent money, he sent R4,000.*

Tsiko, his brother Theodore, and various other siblings appear to have cornered the tailoring market in Alexandra. They have built up their business by hard work, sewing skills, experience (Tsiko has been in Alexandra for four years), and a business model based on trust.

*Interview 5*

*GH: Ask him how many of these machines him and his brother have got?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Oh, he says a lot. He doesn't know the ... the exact number, because now he says each and every avenue, they have someone that's sewing clothes.*

*GH: Does his brother ... is his brother the main guy, the owner of the business?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Okay, um, he says this one is theirs, but then the other ones from the other avenues, are their siblings, from, um, Zimbabwe.*

*GH: Ah, I see. So everybody owns their own machine, and the money that they get from this machine is for them.*

*Vusi: Ja.*

Tsiko learnt his sewing skills from his brother, Theodore.

*Interview 5*

*Vusi: Oh, um, he says, eh, he was taught by his brother, the guy that we had to do the interview with him, um, his name is Theodore, he's the one that taught him.*

Theodore is not on the interview list and I never met him. He was simply referenced as Tsiko's brother and the person who taught him to sew.

Portia has also built up her business on hard work, skills and experience.

*Interview 7*

*Portia: Since 2000, I did start here in 2000.*

*GH: And where did you learn to do this?*

*Portia: I did work for Gerald Josh, did you hear about Gerald Josh?*

*GH: Gerald George?*

*Portia: Ja, Gerald Josh.*

*GH: Okay.*

<i>Portia:</i>	<i>They call him now Coricraft.</i>
<i>GH:</i>	<i>Ah, yes.</i>
<i>Portia:</i>	<i>I did work for that company for thirty years.</i>
<i>GH:</i>	<i>Okay.</i>
<i>Portia:</i>	<i>The man, he was taking us to the school that we must learn the job properly.</i>

Based on my observations and analysis of the data, the addition of skills and experience to hard work enables the progression from “piece work” to “job” to “own job” to “own business”. Tsiko and his brother (and other Zimbabwean relatives) have built up a small business with assets (sewing machines, secure locations, debtors book (in the form of uncollected clothes) and a fairly predictable stream of future income. The business may not be saleable in the conventional sense but it would appear that the objective of the business is to provide a steady stream of income to a group of related Zimbabweans and their families at home in Zimbabwe. Perhaps they are family members or simply from the same village or region. New members (like Tsiko four years ago) arrive in Alexandra to replace others who return to Zimbabwe.

## 5.7 Money as Support Structures – “stuff for free”

A benefit of being in the field with an “attitude of strangeness” (Neuman, 2011, p. 437) is that one notices the ordinary. In Alexandra, it is noticeable that there is plenty of “stuff for free”.

*Interview 4*

*Thulani: But then over here, mostly things are ... are ... are cheap. Mostly things are for free.*

*Interview 10*

*Morena: No we don't pay for electricity or for water, we don't pay.*

*Interview 2*

*Mbongeni: It's food at school. I don't pay for books, because then we get books free at school.*

How is people’s meaning of money affected who live in an environment where, “mostly things are for free”? Consider the following.

- If there is plenty of “stuff for free” the perceived cost of goods and services that are paid for is higher.

- Goods and services that have no cost have no value.
- If the financial loss from an event is zero then there is no logical reason to pay anything to mitigate the loss?

“Money as support structures” includes the following thematic codes; “Money as Family”; “Money as Friends and the community”; “Money as Government”; “Money as Church and charity”; and “Money as the unknown donor”.

### 5.7.1 Money as Family

Family is a vital support structure in the Alexandra community. The family group pool resources and the shared resources are made available to individual members of the family.

Mbongeni is fortunate to receive an allowance from his mother. The terms of the arrangement are clear.

#### *Interview 2*

*Mbongeni: I've got an allowance from my mother, lucky, because I'm still at school. If I wasn't in school, I wouldn't get an allowance from my mother.*

Similarly, Thulani, is reliant on his family for food, clothing and a place to sleep at night. He “wouldn't have much fun” without the support of his family unit or “his guys” as he calls them.

#### *Interview 4*

*GH: Ya ... and do you live with your family?*

*Thulani: Ya, right now I live with my family, right now.*

*GH: Ya.*

*Thulani: So, I don't have to worry about much, really.*

*GH: So ... what ... what expenses do they provide for you? Or what, that you don't have to buy, food and, rent, place to live.*

*Thulani: I don't have to buy food, ya, rent, ya. And if I was living alone I would have to buy my own food, my own rent. Some of my guys buy clothes, ya. Because they do buy me some clothes, I do buy myself some things, ya.*

*I have to do a lot if I was living alone. That's where most of my money would be spent if I was living alone. So, I wouldn't have much fun.*

The ever industrious brothers, Tsiko and Theodore, pool their resources and Tsiko receives food and accommodation “for free”. As discussed in the previous chapter, there is possibly a more complex financial arrangement underpinning the agreement. Perhaps Tsiko is required to contribute a set

amount to the money being sent back to Zimbabwe. Nevertheless, the pooling of resources and sharing of expenses is efficient and cost effective.

*Interview 5*

*Tsiko: [Speaks own language]*

*Ja.*

*Vusi: Okay, so he says the money that he gets, um, he buys clothes for him, his mom, and his girlfriend, and then the rest he sends back home, and then clo ..., um, food, he doesn't buy, because his brother provides for the food.*

Theodore provides Tsiko with food and a place to live.

*Interview 5*

*GH: And where does he live, and does he pay rent to live there?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Oh, so he says he lives in his brother's shop.*

*Tsiko: His brother's shop?*

*Vusi: Ja, down the road, so he doesn't pay anything.*

Vusi provides evidence that these arrangements are reciprocal.

*Interview 2*

*GH: And if I gave you R5,000 now, I don't have R5,000, no, but if I gave you R5,000 now, what would do with it?*

*Vusi: R5,000! Let me see. A thousand bucks, I would use it for ...*

*Mbongeni: Clothes.*

*Vusi: No, not necessarily clothes, a thousand bucks first goes to my house, so that we can buy groceries, and then another thousand bucks, share it between my family members, for just ... just for them to buy something they'd want to have, like food, or, you know, stuff like takeaways, or, you know, and then save a thousand bucks, no, a thou' five, and then another thousand five, I'd spend R1,000 on food, no not food, clothes, and the five hundred bucks pocket money.*

Families are also the lender of last resort. Many of the research participants resort to family in an emergency.

*Interview 11*

*GH: So what do you do for a rainy day? What happens if you have a child get sick, or hospital, or ...*

*Wandile: I've got my mom.*

The extended family is vital in times of crisis.

*Interview 6*

*GH: And where did you ... where were you born?*

*Thembi: I was born right here, in Alex.*

*GH: In Alex, and you've lived here in Alex all your life?*

*Thembi: All my twenty one years. I was born here, and brought up here.*

*GH: And your parents are still here?*

*Thembi: My parents passed away, both of them, I only live with my grandmother now.*

Thembi's story is sad but the tragedy of losing both parents at a young age could have had far greater consequences were it not for the support of his family. Thembi is keenly aware of how fortunate he has been.

*Interview 6*

*GH: How much is the most money you've ever had in your bank account?*

*Thembi: Thirty seven thousand.*

*GH: Thirty seven thousand?*

*Thembi: Ja, thirty seven thousand.*

*GH: How did you get so much?*

*Thembi: I had a trust fund, which my mum had done before she passed away, which, when I reach a certain age, I'm going to get that kind of money, you know.*

*GH: Ja.*

*Thembi: Ja, that's why.*

*GH: And, and what did you use that money for?*

*Thembi: Buy stuff at home, tiles, you know, to fix my mother's house.*

*GH: Ja.*

*Thembi: TV, a new bed, microwave, you know, food also, clothes for me and for myself, you know, and also look after my grandmother, and also give my grandmother at least five thousand, so she could be, you know?*

*GH: Ja.*

*Thembi: Ja, that's what I did.*

*GH: And is that money gone now?*

*Thembi: That money is all gone now, to tell you the truth. It's all gone now, but at least it's gone, I'd done some useful things, also done my license with that money, I've done a lot of things with that money.*

*GH: Gee, it's fantastic that your mother left you that money, hey?*

*Thembi: Ja, bless her, God bless her, thank you, I thank her very much. I'm fortunate to have a mother like that.*

*GH: Ja.*

*Thembi: Very fortunate. Some people don't even have a mother like that. Some people, when their parents passed away, they don't even get a cent. Some people live in the streets, homeless, so it's a privilege for me to have a shelter at the end of the day. It's a very privilege. I thank God for that.*

In complete contrast to Thembi, Morena made some really bad choices when she was left an inheritance.

*Interview 10*

*GH: And where did you ... where were you born?*

*Morena: It's all gone, it's all gone. I used to score, I used to score in private schools, everything's gone, I don't have not even a cent, so, ja, now I'm here at home.*

*GH: And it's maybe a personal private question, but I mean, how much did you blow?*

*Morena: I actually ... it was um R200,000, ja, R200,000.*

*GH: Sjo!*

*Morena: Ja, it was R200,000. So it all went.*

### **5.7.2 Money as Friends and the community**

The boundaries between family and friends and the broader community are sometimes blurred.

*Interview 7*

*Portia: Yes. I spend the money, that little I'm getting here, I give these people, I buy the food in my house, and I've got the kids, about five children, hey, two they are the orphan, they don't have both parents, and three they are mine.*

Portia, the furniture manufacturer, has taken on responsibility for two orphan children. Her strained financial resources are seemingly elastic. Alternatively, Portia manages to make her financial resources seem elastic.

There is also the story of Aunt Peggy, the owner of two local crèches who gave Paulina (the Mozambican vegetable and mud-cake seller) an interest free loan to enable her to buy her home.

*Interview 7*

*GH: And how much did it cost to buy the place?*

*Vusi: R10,000.*

*GH: R10,000 cash? Where did you get the R10,000? That's a lot of money, hey.*

*Vusi: She got it from Aunt Peggy, she's the lady from the crèche here [indiscernible], she's a giving person, she's a family friend, she's very generous.*

*GH: So does Paulina have to pay Aunt Peggy back?*

*Vusi: She's paying it in instalments, little by little.*

*GH: How much is she paying back?*

*Vusi: Every month she gives her R1,000.*

*GH: Whew, okay. So when will she finish paying back?*

*Vusi: She started paying her in February, she was going to finish the instalment in December, but then because in December she has to go back home, so she asked for that month to not pay, and then pay in January to finish the ...*

*GH: To finish it off.*

*Vusi: Ja.*

*GH: So has she paid any interest, or she just paid back the R10,000?*

*Vusi: There's no interest, it's just R10,000.*

*GH: So this Aunt Peggy person is a very kind, generous person, hey?*

*Vusi: Yes.*

The concept of interest free loans between friends and members of the community appears to be the norm.

*Interview 6*

*GH: Will she charge you interest or not?*

*Thembi: I don't think so, she won't, she won't, that R500 is going to come straight R500.*

*GH: And you have to give it back to her, how long?*

*Thembi: Ah, let's say thirty one days is enough.*

*GH: Thirty one days.*

*Thembi: Thirty one days is enough, you know. If I'm alright, I could give her maybe with R10 extra, and say thank you, just R10, go buy yourself a cold drink, you really helped me, and thank you.*



Thembi, is explaining the likely arrangement with his business partner should he need to urgently borrow R500. Earlier he explained that she would do such a favour because he occasionally drives her children to school.

Sharing money with friends and members of the community extends beyond providing interest free loans. Vusi and his friends will share money with one another depending on who has work at the time.

*Interview 2*

*Vusi: So the other thousand, five will go to my savings, R1,000 for clothes, another five hundred, spend it just ... because you know we spend for each other. If I work this month and I get money, I spend for my friends, when they have money they spend for me. So even if I don't have a job for that month, but one of my friends ...*

Job sharing, or at least filling in for a friend, is something Griffiths did during an 8 year period when he had little work.

*Interview 9*

*Griffiths: Actually I spent maybe for nearly eight years without working.*

*GH: Eight years and you were doing two days a week, at most.*

*Griffiths: Yes.*

*GH: And what work were you doing?*

*Griffiths: Gardening. Sometimes did I do a part time job, temporary, for my friends, once a year, when he's going to leave, I'm going to hold the job for him.*

*GH: Yes.*

*Griffiths: And then when come back, go back to stay again.*

Job sharing is practiced by Thembi (car washer) and Thulani appears to have a socialist approach to work.

*Interview 4*

*Griffiths: And how many guys do you work with putting in these tents?*

*Thulani: Ah, I work with one guy, there's only two of us. Ya, sometimes three, but then, depends on how much work there is. When there's lot of work, more people. Less work, there's only just the two of us.*

The capitalist approach would be to volunteer to work harder and split the cost saving of the additional employee 50/50 with the business owner.

### 5.7.3 Money as Government

The advent of pre-paid electricity put a stop to free electricity, but water is free.

*Interview 10*

- Morena: And how many guys do you work with putting in these tents?  
now we pay ... there's a box, like a meter box, we do pay that with a card for electricity.*
- GH: Who pays that?*
- Morena: But we never used to pay for electricity.*
- Sindi: But now we're going to pay like electricity, ja.*
- GH: And water?*
- Morena: No.*
- GH: Water is free?*
- Morena: Water is free, ja.*

The excerpt below demonstrates how foreign the concept of paying for water is to the young men.

*Interview 2*

- GH: But what do you mean the water is for free?*
- Mbongeni: No one pays for water.*
- GH: No one pays for water? Who pays?*
- Mbongeni: Not here in Alexandra. Not here.*
- Themba: You pay for electricity.*
- GH: You pay for electricity, not water?*
- Vusi: Water is free. We believe water is God- given.*
- Mbongeni: The world was built on water.*
- GH: Yah.*
- Vusi: The government doesn't own water, they found it here, so why should ...*
- GH: Where does it come from?*
- Mbongeni: From oceans. Seas, from lakes.*
- GH: But your drinking water, where does that come from?*
- Vusi: It comes from the taps.*
- GH: How did it get in the tap?*
- Vusi: Rain water, oceans, seas.*
- Mbongeni: Through reservoirs.*
- GH: Yeah?*
- Mbongeni: Yah.*

Vusi: *And then city, the City of Jo'burg, Johannesburg Water, they clean the water for us.*  
GH: *Yes.*

Government also provides emergency relief in the event of disasters.

*Interview 2*

Vusi: *But then at least the government provides for their needs when any such an event ...*  
GH: *Yah.*  
Vusi: *They always have ... because we have, what can I say, we have community, what are these, places where ... like homes, and like homes that we have all around Alexandra, and NGO's that provide whenever things like this happen.*  
GH: *What, like a fire?*  
Vusi: *Yah. They give them gas stoves to cook mielie meal, meat, what else, maybe blankets, and then they give them a place to sleep at, mainly maybe our community halls.*

There are conflicting stories on the provider of the housing developments in Alexandra.

*Interview 6*

Thembi: *No, the whole building the government owns it, no one owns it.*  
GH: *Okay.*  
Thembi: *Just the government. You just own where you live, you know.*

*Interview 10*

Morena *Because these are ... Mandela built these flats for us, so ...*

*Interview 2*

Vusi: *These were flats that were constructed by the apartheid regime.*

The Alexandra community does have access to a very good sports facility (shown in figure 13) provided by the government.

*Interview 12*

GH: *And what is here? I see a tennis court.*  
Vusi: *It's a sports complex.*  
GH: *For who?*  
Vusi: *For everyone.*

Rodney: For government.

Vusi: It's for our community.

GH: Do people use it?

Vusi: Yes.

GH: A lot, hey?

Vusi: If you want to go run, you use this place, if you want to play tennis, soccer, you play here.

GH: Anybody can use it?

Vusi: Anybody can use it. There's a skate park, there's ramps just here, when you go by the gate, just round there, so all the skaters can just skate and [indiscernible].



Figure 13 – the sports complex is up to the right on the other side of the wall.

#### 5.7.4 Money as Church and charity

I thought that “Money as Church” would be a prevalent theme. This thought was influenced by the extensive time I spent with Patience before the other research interviews were conducted. However it was not a significant theme. Aside from Patience who is very involved in church and Mabule who made passing mention of it, there was only one other mention of it from Thulani. Patience explains in this excerpt from interview 1 how the amount of the church collection is influenced by the particular group of people that attend each service.

*Interview 1*

*Patience: Maybe it's the level of the people who come to the New Mass, my parish is called New Mass. We have two services on Sunday, the eight o'clock, the first service in the morning is the younger people, the professional, younger, I'm going to say 'can afford people', then the second one, service, it's mostly the older people, because once a month we have a thing where, apart from the plate money, then people once a month come up and give whatever, this Sunday, the first service people, the eight o'clock service people, in half an hour they gave R5,000 and something.*

Thulani is not a church-goer but he did convey a sense of the money that churches spend and is spent as part of church related activities.

*Interview 4*

*Thulani: But then it depends on most months, eh, like, maybe, you get like December time, most people are getting married, so, ya. There there's a lotta work, right. Most people getting married there lot of parties and stuff like that. And also in the in the Easter time when these churches are doing their ... events around and they need he tents, and what not.*

Similarly, "Money as Charity" was not particularly prevalent. Vusi and his friends had little charitable to say about Nkulu, let alone providing him charity in the form of money or food.

*Interview 2*

*GH: But don't you think it's a proud thing that that guy was doing?*

*Vusi: No.*

*Mbongeni: He's not proud.*

*GH: He's not proud of that?*

*Mbongeni: He's not proud, he's trying to make money so he can eat.*

*Vusi: Those of the people that don't have pride, because now he's ... it's an alternative. Rather than him going to steal a car and going to jail, he'd rather suffer and pick up bottles and metal for scrap.*

Patience provided the "Ash Grey Man" with food and she told an amusing story about the Parish Priest and his charity.

*Interview 1*

*Patience: No, some ... like one time when father said he went down to the church to pray, it was a cold winter evening one night, and he saw this man huddled in one of the corners of the church ground, and he went up and he say, he always makes a joke, he took out his old jersey and old*

*blanket to come and give to this man, and the boy said, why do you give me an old blanket and an old jersey, so he felt guilty, and went back and took his best jacket, lumbar jacket, or whatever, and a blanket from his bed, he stood his bed and took one of his best blankets, and gave them back to that man. But we also have an old age home there, where people stay, so sister also gets a lot of things, so people who come to beg and ask for food and things like that, then they also get, they also get.*

Church and charity did not feature prominently in the transcripts of the research participants for this qualitative study. To conclude this section and highlight the near ambivalence (or taking for granted) to charity I will revert to the example of the LEAP school of Maths and Science and the bursary provided to Wandile's daughter.

#### *Interview 11*

*GH: Okay, and how much do you think the bursary's worth? That's worth a lot of money, hey.*

*Wandile: Well they say it's about R35,000 when you go straight, it's 35.*

*GH: How did she get that bursary?*

*Wandile: From school, the other school where she was in [Pulusho] doing Grade 8 there.*

*GH: Where?*

*Wandile: In [Pulusho]*

*GH: Okay. And who gave her that bursary?*

*Wandile: I don't know, it was from school, she just called and she just phoned me and tell me that my daughter has got a bursary and you must come to the school and find out what's going on.*

*GH: Gee, I wonder who put that money up. Do you think it's the school where she is, or do you think it's somebody else, a company, or ...*

*Wandile: I think it's a company, because there were about 20 of them from that school, then 20 from the other school. They're only taking from Grade 8 and then next year, they're taking other Grade 8's again from the schools.*

## **5.8 Conclusion**

This chapter provided the analysis and interpretation of the data and the five themes for the meaning of money that emerged. The five themes were; Money as Hedonism, Money as Love, Money as Food, Money as Development of Self and Children, and Money as Support Structures. The next chapter considers whether the digitisation of physical money impacts the meaning of money for low income people and how digital money may come to be used by low income people as a substitute of physical money.

## Chapter 6 Analysis and interpretation of data – the socio-technical network of digital money

### 6.1 Introduction

In this chapter, the second part of the purpose statement in 1.3 and the second and third research questions are considered.

- How does the digitisation of physical money impact the meaning of money for low income people?
- How may digital money come to be used by low income people as a substitute of physical money?
  - Why would low income people use digital money as a substitute for physical cash?
  - Under what conditions will low income people not use digital money as a substitute for physical cash?

I consider these questions from three perspectives. These are; the themes that emerged, the meaning of different types of money, and the socio-technical network model.

In the previous chapter, an analysis of the data collected was presented without focussing on the form of that money and whether the research participants attach any difference in meaning to physical money and digital money. In this chapter, the three themes relating to the socio-technical network of digital money is discussed, which are; “Money as physical money”, “Money as digital money” and “Money as cell phones”.

The literature and theory of the meaning of money and the concepts of “market money” and “special monies” is drawn on in an attempt to understand whether the research participants have specific assumptions, attitudes and behaviours towards different forms of money. Whether digital money and physical money have distinct qualities and attributes is also considered.

Importantly, the data gathered is reflected on and tied back to the literature and theory of socio-technical networks presented in chapter 2. The data gathered within the context of Kling and Lamb’s conceptions of socio-technical models, shown in figure 1 and reproduced below as figure 14, and how particular evidence supports the notion of digital money as a socio-technical network is specifically considered. The themes of digital money and physical money are discussed and linked to the attributes in Kling and Lamb’s model. The short-comings of the standard (tools) model are highlighted where appropriate. There are eleven attributes of socio-technical models in figure 14. The themes of “Money as physical money”, “Money as digital money” and “Money as cell phones” are presented within the analysis of digital money as a socio-technical network.

## 6.2 Money as physical and digital money and money as cell phones

The themes emerged as a result of direct and indirect questions asked during the interviews. As explained in 4.3, and shown in the interview template in appendix 4, each interview was started with a very similar positioning statement along the lines of “we’re going to talk about money, what it means to you, how you earn it, how you spend it, we’re talking about banks and cell phones, all those sorts of things”. Although this may have introduced bias in that it influenced the research participant to consider alternate forms of money, the interview had to be opened with a positioning statement of some sort. It was necessary to ensure the research participants understood what the interview was about. This is the reason for starting each interview with the same opening statement. Each research participant was then encouraged to tell their story and later in the interview, direct questions about physical money, digital money and cell phones were asked. Questions such as “Do you have a bank account?” and “... do you use mobile banking?” were asked. Neutral questions were also asked. In interview 6, Thembi was asked if he had any savings and in the follow up conversation whether he had ever had no money. Both of these questions were neutral on the form of the money but from that the researcher learnt that “savings” to Thembi meant digital money in a bank account while having “no money” meant money in its physical form.

On other occasions the themes emerged via indirect questions such as when discussing shack fires with Vusi and Mbogeni in interview 2. In this instance the threat of fires and the loss of identity documents was discussed. In response to the question about what else people lose in shack fires, Mbogeni responded by saying, “Sjo, they lose it all, money saved”. From this it is clear that “savings” can also mean physical money. These are examples of the direct and indirect questions asked. Other questions are contained in the excerpts of interviews throughout the research report and the standard questions in appendix 4.

The themes are broken down into sub-themes:

- Physical money - “Money as physical cash receipts and payments” and “Money as physical cash savings”.
- Digital money - “Money as digital payments”, “Money as digital receipts”, and “Money as digital savings”.
- Cell phones - “Money as cell phones” and “Money as mobile phones”.

All of the research participants, except Nkulu, own cell phones. Eight of the research participants have bank accounts, including Rodney and Sindi, who no longer use their accounts. Seven are unbanked and three of them are unknown.

Banked Group (8):       Patience, Vusi, Mbongeni, Thembi, Portia, Mpho, Sindi, Rodney.



Unbanked Group (7): Nkulu, Thulani, Tsiko, Griffiths, Morena, Wandile, Paulina.

Unknown Group (3): Themba, Siyanda, Maxwell.

Only six of the research participants are known to still use bank accounts. This is the banked group, but excludes Rodney and Sindi who no longer use their bank accounts. In addition to the evidence gathered below, this small group of bank account users highlights that the physical money network is strong. Compelling rationale is required for people to stop using physical money and start using digital money thereby contributing to the evolving network of digital money.

The reasons for not being part of the digital money socio-technical network and the reasons for being part of that network that emerged from the data are presented in this chapter. It is important to remember that the research conducted is qualitative. The reasons provided below have been derived from an analysis of the transcripts of the research interviews. The reasons provided are not direct answers to questions asked in the interview in a manner suggestive of a quantitative study. It will also be noticed that some research participants are included in more than one category. This is the case for research participants who appear to have more than one reason for having a bank account or not having a bank account. Thulani is such an example. He receives his wage in cash every week but he also considers the quantum of his money insufficient to have a bank account. The costs associated with having a bank account are also a deterrent to Thulani.

It should also be noted that the reasons provided are a guide to understanding why the physical money network remains so strong and a “cash-less” society is unrealistic<sup>21</sup>. Many of the research participants operate in both the physical money and digital money networks. The reasons provided below for not being part of the digital money network are the reasons those already in the digital money network do not migrate more of the physical money they earn, save and spend to digital money. For example, Thembi has a bank account but he receives his income from washing cars in physical money at the time that he washes each car. He then uses that physical money to buy the food that he eats every day.

The reasons for not being part of the network (or increasing usage within the network) are summarised as follows:

- Income is received in physical money on a daily basis (Nkulu, Wandile, Paulina).
- Income is received in physical money on a weekly basis (Thulani, Griffiths).
- Income is not enough to warrant having a bank account (Nkulu, Thulani, Griffiths, Wandile).

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<sup>21</sup> This statement assumes a time horizon of a life-time within the context of the socio-technical network of digital money as it is today and how it may evolve within a life-time.

- Income is required for daily expenses payable in physical money (Nkulu, Thulani, Griffiths, Wandile).
- Income is required for other payments that are made in physical money (Griffiths).
- Bank charges too high (Mpho, Thulani and as discussed by Thembi).
- Illegal immigrant without required documentation to open a bank account (Tsiko).
- Source of money is illegal activity (as discussed by Thulani).

The reasons for being part of the network are:

- Income is received in digital money (Patience, Vusi, Portia, Griffiths<sup>22</sup>).
- Saving excess digital money for a time when there is no work (Vusi).
- Saving excess physical cash for a planned future expense (Thembi).
- The need to make digital payments (Mpho, Thembi).
- Having a bank account on behalf of someone else (Sindi).

Physical money and digital money also have different meanings and attributes for the research participants. These are also presented in the chapter and are summarised as follows:

- Physical money
  - o Receive payments from customers (Wandile, Nkulu, Mpho, Paulina, Rodney).
  - o Receive weekly wage (Thulani).
  - o Make payments to suppliers (Wandile, Nkulu).
  - o Free (i.e. no cost associated with receiving, storing and paying with it).
  - o Small amounts of money (Wandile, Thulani).
  - o Small daily payments (Mpho).
  - o Anonymous (inferred from the discussion with Thulani).
  - o Savings for those that do not have bank accounts (Nkulu, Thulani, and people who lose their savings in shack fires).
  - o Money in pocket for daily expenses (Thembi).
  - o Informal sector (All).
- Digital money
  - o Savings for next month when there may be no work (Vusi).
  - o Savings for next year for a planned event (Thembi).
  - o Store of value for excess physical money not required today (Wandile).
  - o Cost associated with receiving, storing and paying with it.

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<sup>22</sup> Griffiths will be opening a bank account because his employer wishes to pay him in digital money rather than physical money.

- Large amounts of money (Wandile, Thulani).
- Large payments to suppliers (Mpho).
- Traceable (as discussed by Thulani).
- Formal sector (All).

### **6.3 Digital money as a socio-technical network**

The concept of a socio-technical network was explained in chapter 2. Section 2.2.4 specifically explains the ensemble view of technology which incorporates the vast network of interactions between technology and people in the deployment and use of large-scale technology innovations. In this chapter, how the evidence gathered from the research participants supports the notion of digital money as a socio-technical network is considered. Kling's concept of the "web of computing" is also considered where the IT artefacts (cell phones, debit cards, ATM's, POS devices, etc.) are elements in a package and together with other elements, the use of these technologies by people is enabled. These other elements include people such as the research participants, banks, SARB, government and non-government organisations that are part of the network.

The evidence gathered does support the notion of digital money as a socio-technical network rather than simply a tool. This is the first attribute of socio-technical models in figure 14. The network was found to be highly intertwined and the social world and the technology used by people co-constitute each other. From the evidence gathered, it is clear that the socio-technical model is a useful conception and superior to the tool view in analysing how the various technologies are used, and may come to be used, by the research participants. This approach and the findings from the research will be useful to business people and other participants in the network such as government, policy makers, and others such as the Gates Foundation, who are interested in furthering the objective of financial inclusion. These participants are well advised to take an ecological view of the environment in which they participate rather than simply having a business model which appears to satisfy a need that people have for digital payments. An ecological view as an attribute of socio-technical models is the second attribute in figure 14. The others that follow are discussed in the remainder of this section.

### Conceptions of ICT in organizations / society

Standard (tools) model	Sociotechnical models
ICT is a tool. A business model is sufficient. One-shot ICT implementations are made. Technological effects are direct and immediate. Politics are bad or irrelevant. Incentives to change are unproblematic. Relationships are easily reformed. Social effects of ICT are big but isolated and benign.  Contexts are simple (a few key terms of demographics).  Knowledge and expertise are easily made explicit. ICT infrastructures are fully supportive.	ICT is a sociotechnical network. An ecological view is also needed. ICT implementations are an ongoing process. Technological effects are indirect and involve different time scales. Politics are central and even enabling. Incentives may require restructuring (and may be in conflict). Relationships are complex, negotiated, multivalent (including trust). Potentially enormous social repercussions of ICT (not just quality of work life, but overall quality of life).  Contexts are complex (matrixes of businesses, services, people, technology history, location, etc)  Knowledge and expertise are inherently tacit / implicit. Additional skill and work are needed to make ICT work.

Figure 14 – Conceptions of ICT in organisations / society (Kling, 2000).

#### 6.3.1 Conversion to digital money as an ongoing process

Financial inclusion presupposes the transition from the usage of physical money (cash) to digital money in its various forms. As the socio-technical network of digital money evolves it erodes the socio-technical network of physical money. The socio-technical network of physical money does not erode away without resistance and it was found that the conversion to digital money by people is an ongoing process. Some of the research participants are not yet part of the digital money socio-technical network (i.e. they are unbanked) while others are active participants in various parts of the network in that they have digital money receipts, use digital money as a store of value, and they make digital payments.

Wandile explains her reasons for not having a bank account.

*Interview 11*

*Wandile: I would say money means a lot to me because I have children to feed, and especially in banking, I wouldn't say banking, because my business is like hand to mouth. I can't bank because in my business, you have two people coming, and our prices are very low, you get about ... maybe my relaxer let's say is R50, from that R50 I have to feed the kids and I have to give the kids money to go to school here.*

Wandile does not have a bank account because her income is earned on a daily basis, it is received in cash, and it is all required for daily living expenses which are payable in cash.

Wandile is firmly entrenched within the socio-technical network of physical money and forms no part of the socio-technical network of digital money. This is likely due to a combination of two

factors. Firstly, Wandile's clients pay her in physical money rather than digital money. They have cash on hand and use this to pay Wandile. They may also have digital money but Wandile does not have any digital mechanism to receive this. A digital mechanism would include a bank account to receive an Electronic Funds Transfer (EFT) or a card Point of Sale (POS) device to accept card payments. It could also include a mobile money product such as M-Pesa, FNB's e-Wallet or Nedbank's Imali, which is really just an EFT initiated by a mobile phone. The fact that Wandile does not have the ability to accept digital money negates the possibility of a digital receipt even if some of her clients could make digital payments. The only way this could change is if Wandile enables herself to receive digital payments. She could do this in response to demand from her clients or a desire to remove cash from her business because of the security threat.

Secondly, Wandile could elect to deposit the cash received from her clients into a bank account, thereby converting it into digital money. This is possible, notwithstanding the fact that it is likely to be inconvenient and costly. Again, Wandile would require a bank account and a place such as a bank branch, ATM or retailer to deposit the physical money and convert it to digital money. Wandile does not elect this option because the cash received is immediately required for daily food and transport for her and the children. It would make little sense for Wandile to deposit the cash received and then withdraw it shortly thereafter so that she can buy food or pay for transport. The only way this could change is if Wandile enables herself to convert physical money to digital money and she is able make digital payments for food and transport.

The above two factors demonstrate the practical issues Wandile must overcome to move (or partly move) from the physical money network into the digital money network. The incomplete or imperfect nature of the digital money socio-technical network is also evident. The "web of computing" as conceptualised by Kling does not include Wandile and her business. Wandile's reasons for being unbanked and not part of the digital money socio-technical network can be further analysed with reference to the attributes of socio-technical models and specifically ICT implementations as an ongoing process.

It is clear that Wandile is not yet part of any digital money ICT implementation. She does not have a bank account of any form. However, she is aware of banking and she owns a phone. Although speculative, some of her clients, family and friends (including Vusi and Thembi who she knows) are part of the digital money socio-technical network. Within this context, it is possible that Wandile will at some stage join the digital money network and become part of the ongoing process of a digital money ICT implementation. The question is what will have to change in Wandile's life or in the socio-technical network for Wandile to become part of the socio-technical network of digital money. What relationships will have to be formed and how will they be formed for Wandile to be incorporated

into the socio-technical network of digital money? These questions will be considered throughout this chapter.

There were numerous reasons for having a bank account that were evidenced in the data. A number of the research participants have a bank account so that they can receive money from their employer. Vusi is an example of this but he also uses his bank account to save for times when he has no work. In the excerpt below, Vusi explains the nature of his work as a community liaison officer. The work is project based and not permanent but it is for a “company” which suggests that his payment is a digital receipt into his bank account.

*Interview 2*

*Vusi: I, in fact, I liaise with the community on how they feel the project is effecting them, or do they feel that the project is something they really want to get involved in, and I also do recruitment, I recruit people, I also ... I could also liaise with the workers and the company I'm working for at that moment. Maybe if there's labour issues, like financial ...*

Vusi is saving for times when he has no work. His time horizon for savings is “next month”. Digital money is thus savings for next month when he may not have work.

*Interview 2*

*GH: But do you save money now?*

*Vusi: Yah, I do. I save because I know I worked this month, maybe next month I don't have a job, so I have to have money saved so that I can live through the other month that I don't work.*

*Vusi: So where is that money? How do you save it? Do you put it in the bank?  
Put it in the bank.*

Thembi has a bank account and he uses it to save so that he can get married.

*Interview 6*

*GH: And do you have any savings?*

*Thembi: Yes, definitely, I do have. I use ABSA bank.*

*GH: Oh, ja?*

*Thembi: Mm, savings account.*

*GH: You're saving for a rainy day?*

*Thembi: Ja, for a rainy day, and for my family, you know, because I want to marry my girlfriend, so I'm now.*

Thembi's time horizon for marrying his girlfriend is one year. Digital money is thus savings for next year. Thembi explains that getting married will be costly for him.

*Interview 6*

*GH: When are you going to get married?*

*Thembi: The way I see it, I only think I'm going to get married next year, before December I'm going to get married, no matter what, I'm going to make sure.*

*GH: Why don't you get married now?*

*Thembi: I don't have money to get married now.*

*GH: Why do you need money to get married?*

*Thembi: You do need money to get married. The ring, it's costly, engagement ring, the money for her family, that I'm ... she want to move with me, because it's our tradition, you know, when you're going to marry a girl, you have to pay damage to that other girl's family, because you're going to take her to be your wife, to lobola her.*

There are two aspects of Thembi's financial affairs that are of interest. Although he has a savings account, he had previously been asked if he had ever had no money. This was meant in the broadest sense including savings. He clearly differentiates between (digital) savings in the bank for a planned future event from physical cash in his pocket for current expenses. He will not buy anything today until he has washed a car.

*Interview 6*

*Thembi: Ja, because it's not nice not having money, because this was now, it involves money. No money, no nothing, you know. It's much better when you have money, things become easier, and anything that you have, you can buy via money.*

*GH: Have you ever had no money?*

*Thembi: Like today, yes. This is a bad day, today. Like today, but not ... not ... not every time.*

*GH: So you have no money today?*

*Thembi: Ja, for today, for now, in fact.*

*GH: For now?*

*Thembi: Ja, because there's no car came in right now.*

He answers the question about why more people do not have bank accounts by explaining that people have a perception of high bank charges.

*Interview 6*

*Thembi: I think they're scared of bank charges, they think the bank is going to eat their money, which is not true. Instead, banks help you, in fact, which your money gets save. Just imagine, you're living in a shack and you have ten thousand grand in there, and that shack burns. That means your ten thousand grand is also burned, your ten thousand, you see. Better, then, if you have a card, your card could be burned, but don't forget you have money in the bank, they're going to only charge you R50, and it's much safer, R50, unlike ten thousand, you know.*

It would appear that the ongoing process of conversion from physical money to digital money could be encouraged by changing the perceptions of people who do not see the value of saving money in a bank account rather than keeping it in their shacks. If people understand that the risks they are exposed to, such as loss of savings in shack fires, can be mitigated by paying to save that money in a bank account, then they may be more inclined to migrate to the digital money network. The conversion to digital money may have indirect effects such as the ability of family members living in far-away places to eat.

### **6.3.2 The effects of the conversion to digital money are indirect**

Griffiths and Tsiko send money back to Zimbabwe. This is a physical cash remittance across the border and is thus a form of physical cash payment. They are both currently part of the physical money socio-technical network.

*Interview 9*

*Griffiths: Zimbabwe. So sometimes I send to the taxi, I got taxi to Alex, there, if you send like one thousand, you pay like two hundred, and then they take that money, then you phone at home, they go to the office for those people, and then they take that money.*

Griffiths uses a taxi service to transport physical cash back to Zimbabwe. He phones his family and they travel from their rural home to Bulawayo to collect the money.

*Interview 9*

*Griffiths: I phone at home, they take a taxi from home, rural area, and then they go to town, Bulawayo, then they go to the taxi offices, and then they get the money.*

Griffiths' family is dependent on the money he earns and sends them to buy the food they need to sustain them.



*Interview 9*

*Griffiths: There was no rain this year, so no food, they depend on the shop, but if you plough, if there's a rain, sometimes you'll have some mielies, and other things.*

Tsiko sends R5,000.00 cash home in a "little purse". He also sends a big bag of clothes and pays R1,200.00 for transporting both to his family. In this case, unlike in the case of Wandile, there is most certainly a cost associated with cash payments.

*Interview 5*

*Vusi: Okay, he says um, he takes the money and he puts it into a little purse that he gives to someone he trusts, to take it back home, and then ... Ja?*

There are more efficient ways of sending money back to Zimbabwe using the socio-technical network of digital money. Griffiths will ask his brother how it is done when he has his bank account and a new cell phone.

*Interview 9*

*GH: And if you had a cell phone and a bank account, would you do cell phone banking?*

*Griffiths: Yes.*

*GH: You happy with that? And if you could send money to Zimbabwe, not cash, but on your phone, would you do that?*

*Griffiths: I hear the people, they did ... they do that, but myself, I didn't do it.*

*GH: Will you try it?*

*Griffiths: Ja.*

*GH: When you've got your bank account?.*

*Griffiths: Ja, my young brother is always doing that, if he send my mother money.*

*GH: How does he do that?*

*Griffiths: I don't know how he's doing that. There's somebody with the shop there, I don't know how he did, I'll ask him information how he did it.*

*GH: Okay, but he sends money back to your mother as well.*

*Griffiths: Yes. Same time.*

*GH: Same time.*

*Griffiths: Yes.*

*GH: And where does your mother get it in Zimbabwe?*

*Griffiths: When he did that, he phoned my mother, and go and collect the money to the ... to that man, so I don't know how he did.*

<i>GH:</i>	<i>Does that man in Bulawayo, or in the rural area?</i>
<i>Griffiths:</i>	<i>Rural area.</i>
<i>GH:</i>	<i>Jeez, that's clever.</i>
<i>Griffiths:</i>	<i>He's got a shop, ja, he's got a shop at home.</i>

There are likely to be two indirect effects of Griffiths' migration to the digital money network. In the first instance, he will save himself the difference in the cost of transporting physical money and the cost of the digital money transaction. This will enable him to buy more food for himself and his family in Zimbabwe or to use the money for some other purpose that has meaning to him. It could have a transformational impact on him and his family.

Second, his participation in the network will also bring other people into the network and further erode the physical cash network. His family in Zimbabwe will join the digital network (even if they withdraw the cash directly from an ATM or at a retailer) and the taxi operator who currently earns a fee of R200 for transporting the physical money will have one less client.

In addition to the conversion to digital money being an ongoing process, Griffiths' migration from the physical money network to the digital money network also highlights that within socio-technical networks the "technological effects are indirect and involve different time scales". The contrast to the conceptions of the standard tool model where ICT implementations are made in "one-shot" and technological effects are direct and immediate is stark and Griffiths' example amply demonstrates the superiority of socio-technical models in understanding the evolution of ICT implementations within society.

Two examples that highlight the centrality of politics to socio-technical networks have already been discussed. These were the inability of Tsiko to open a bank account because he is an illegal immigrant and the potential to convert people to digital money by changing their perceptions of the value and benefits of bank accounts. Further examples in the next section will highlight the centrality of politics and the role of incentives in socio-technical networks.

### **6.3.3 Politics and incentives in sociotechnical networks**

Wandile regards her business as hand-to-mouth and therefore she "can't bank". From this it is understood that she means she does not earn enough to warrant having a bank account. Her understanding of the purpose of a bank account (i.e. digital money) is a store of value for excess physical money not required today and, given that she does not have excess money, she does not require a bank account. Furthermore, it appears that Wandile does not regard a bank account as a

mechanism to receive payments from customers and to make payments to suppliers. This is speculative but it appears that something has been built into the socio-technical network of digital money that has informed Wandile's understanding, perceptions and assumptions about the network. It is clear that digital money and physical money have distinct qualities and attributes for Wandile. Digital money means savings and physical money is for receipts and payments.

Other research participants demonstrated similar understanding, perceptions and assumptions about bank accounts and the digital money socio-technical network. Thulani explains that he does not need a bank account because he "don't earn that much" and Griffiths says "my money was very little." Nkulu takes it for granted (or accepts) that he does not earn enough to justify having a bank account. His income is also received on a daily basis. He carts his scrap to the depot in Orange Grove where it is weighed and he is paid in cash. Nkulu uses this cash (low value notes and coins) to make his daily purchases.

Politics and incentives could be used by business and government to change these research participant's understanding, perceptions and assumptions and thus bring them into the digital money socio-technical network. The marketing campaigns by banks (the purpose and benefits of a bank account) and the infrastructure projects of government (payment of transport fares and water using digital money) could influence them to change from physical money to digital money. As matters stand, there is no incentive (or the incentives are too weak or in conflict) for them to move from physical money to digital money. In fact, they may perceive that there are only disincentives to move from physical money to digital money. Excluding costs such as ownership of a purse to store physical money and the value of cash ever lost or stolen, it is fair to assume that they do not incur any cost for operating within the physical money socio-technical network. Physical money is free. Cash receipts, cash storage and cash payments are free as far as they are concerned. Should they move to the digital money network they would incur incremental cost because there is no bank account that one is aware of that allows free digital receipts, free digital storage and free digital payments. This is a further distinguishing attribute between physical and digital money. Physical money is free while digital money has a cost associated with it. Thulani confirms this in the excerpt below.

*Interview 4*

*GH: Why don't you open a bank account and tell him to pay you in ... in ... into your bank account?*

*Thulani: Bank account? Fees, the charges! When you go and draw your money ... you ... you gotta pay to draw ... just to take out your money from the ATM, ah. It's a cost to me ... to open a bank account, because I don't have money. Because, I know, put in the money. It's like, I put in, like, maybe a thousand. Take out five hundred today. I have to ... I go to the ATM. Ah, the ATM's*

*gonna charge me. Let's say, I'm using ABSA ... Standard Bank ATM. It's gonna charge me to take my money out. So, I can't ... I can't afford that.*

A further factor to consider in the analysis of Wandile and others like her is whether they would join the socio-technical network of digital money if their physical cash receipts increased. Their underlying assumption is that they are not part of the digital money network because they do not earn enough money. If they had excess money over and above their daily requirements and moved beyond a hand to mouth existence it is possible they would open a bank account and join the digital money socio-technical network. Thulani believes that if you “get a lotta money you gotta open a bank account”.

*Interview 4*

*Thulani: Ah ... more money. When you get a lotta money you gotta open a bank account. Because you can't keep all your money in your ... in your house, ya.*

This highlights that the quantum of the money is a further difference in the meaning of physical money and digital money to these research participants. Physical money is small amounts of money and digital money is large amounts of money.

Tsiko is an illegal immigrant from Zimbabwe. He lives and works within a different context, notwithstanding the fact that he is physically located in the same part of Alexandra as the other research participants. He understands the risk of keeping large amounts of physical cash on his person but he is unable to open a bank account in South Africa.

*Interview 4*

*Vusi: He says he'll save it on him, so he'll ... he'll always have it on ... in his possession.*

*GH: And is he not scared that somebody will steal it from him?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: Okay, um, he says he is scared that they could take it or steal it, but then he can't take it to the bank, because now he doesn't have, um, valid documentation to live in this country. So now it's hard for him to open up a bank account.*

*GH: Would he open a bank account if he could, if he had the documentation?*

*Vusi: [Speaks own language]*

*Tsiko: [Speaks own language]*

*Vusi: He says he would, um, open a bank account if he had the chance, and, uh, paperwork to do it.*

Tsiko would like to open a bank account but as an illegal immigrant he does not have the necessary documentation (SA ID, Residence Permit, etc.) to meet the requirements of the Financial Intelligence Centre Act (FICA) for opening a bank account. The political system, in the form of rules and regulations governing the movement of people across country borders and the requirements of FICA, is preventing Tsiko from being part of the digital money network. Tsiko would have to conform to the regulations or policy change would need to occur to enable him for digital banking in South Africa. Tsiko's situation demonstrates that "politics are central and even enabling" to socio-technical networks. His situation also demonstrates an important difference in the socio-technical networks of physical money and digital money. The physical money network is anonymous. Cash can pass from one person to another without any audit trail. It is impossible to determine ownership down to individual level for all the physical money in circulation. Digital money is quite the opposite. It is eminently possible to determine ownership of all the digital money in circulation at any point in time. This appears to be a key objective of government and regulators such as the Revenue Service in influencing and "enabling" the evolution of the digital money socio-technical network as a preference to the physical cash network. This objective may be in conflict with the objectives of some consumers who wish to remain anonymous within the total socio-technical network of money. Thulani explained this situation succinctly in 6.6.5 when describing people who do "illegal" things and would prefer to have cash hidden in a safe place rather than having digital money which could be frozen by the authorities. Physical money is anonymous and the person who has it has control over it and responsibility for it. Digital money is traceable and can be confiscated by the authorities if it is found to be the proceeds of crime.

Government is able to influence the socio-technical network of digital money by the policies and decisions they make. This provides a reason why low income people in Alexandra will use digital payments as a substitute for physical cash. They may be forced to by government. Clearly other components of the socio-technical system need to be in place (technical infrastructure, social access, etc.) but government can play a strong role in forcing low income people to use digital money as a substitute for physical cash.

There are numerous areas in which this could happen. Government could force the use of digital payment where they have a hand in delivering the service, including transport, electricity and water. Big business can similarly force (or strongly influence) the use of digital payment. A good example is pre-paid airtime where it makes sense for the cellular operators to cut out the middle men (remote distributors who sell airtime for cash) and sell the airtime directly to consumers using digital money for payment. Thembi is already buying airtime using cell phone banking.

One area where government is likely to turn to digital payment is in the distribution of water. It emerged from a deeper analysis of the data that water may not actually be for free in Alexandra. It is just that people do not pay and government does not collect, or perhaps government simply cannot collect.

*Interview 2*

*Vusi: It's not necessarily for free ...*

*GH: Ja?*

*Vusi: ... but there is people that monitor the meters ...*

*GH: Ja?*

*Vusi: ... but then the government doesn't check up on the balances that people owe. You know ...*

*GH: Yes.*

*Vusi: ... there's people that owe like R40,000.*

*GH: So they just write it off?*

*Vusi: But then they just write it off.*

*GH: Ja.*

*Vusi: Because they know people struggle in Alexandra, so it's ...*

One could speculate that this specific issue will become a significant issue in the near future<sup>23</sup>. It is not sustainable to provide water to Alexandra residents at no cost. The provision and use of electricity has transformed into a pre-paid model and, as with pre-paid airtime, this is increasingly becoming a digital payment. A similar model is required for water. However, the challenges are significantly greater. The community will resist and policing the theft of water from the supply infrastructure will be nearly impossible. Tapping into the electricity infrastructure is a mortal risk. Doing the same for water is less risky.

To emphasise the need for government and the water authorities to control the supply of water to Alexandra, recall the river flowing through Mpho's shop. Using the data provided by Mpho, the conclusion was drawn that "ground water is seeping from the back of her shop and out the front door". By ground water is meant rainwater and the natural water table. However, as stated, it is possible and more likely that the source of the river running through Mpho's shop is in fact a leak from a damaged water pipe. The excerpt below follows the earlier excerpt from the Mpho transcript.

*Interview 8*

*GH: So why, why has it been difficult for your business, the water?*

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<sup>23</sup> I returned to Alex on 24 March 2014 and discussed this matter with Vusi. He agreed that this scenario is likely and residents will protest.

*Mpho: I can't, when they come in, soon they're going to come and dig here, in order to put some pipe, in order to drain the water, because the water is coming down, down, down, down. Here we are.*

*GH: Ja.*

*Mpho: There was a river.*

*GH: Oh, so this is not water from a pipe, hey?*

*Mpho: No.*

*GH: This is water from the ground?*

*Mpho: Yes.*

*GH: And has it been here all through the winter, or is it only with the rain now?*

*Mpho: For ...*

*Vusi: Three months now.*

*Mpho: Hey? It's almost five months.*



Figure 15 – the river running out of Mpho's shop

Mpho believes it is ground water causing the water problem shown in figure 15. It appears she has spoken to someone in the municipality and has an understanding of the work to be done to capture and channel the ground water using a pipe. However, the flaw in this reasoning is precisely related to the question asked in the interview. Johannesburg is a summer rainfall area. It is very dry in the winter months from May to August. The interview with Mpho was conducted on 24 October 2013. The rains had just started. Even when the researcher returned on 20 November the summer rains were still a novelty and a surprise to the little children who were caught out playing in the rain.

*Interview 2*

*GH: So why, why has it been difficult for your business, the water? Ja, oh, look at the children, they're getting so wet!*

*Vusi: And this is [indiscernible] And they're going to get the 'flu.*

*GH: Four little kids, they can't be more than three or four all come to seek shelter, soaked as anything, absolutely soaked.*

Using Mpho and Vusi's estimates, the water has been running for between three and five months. That would mean that the problem started after 24 May 2013, well into the dry season. It is thus quite possible that the real problem is damaged and leaking water pipes<sup>24</sup>. Alexandra is more than 100 years old with aging infrastructure. It would not be surprising to find that there are many water leaks. What is surprising is that Alexandra residents continue to enjoy the "God-given" benefits of free water. This cannot last. Given Alexandra residents' adoption of pre-paid electricity and pre-paid airtime, it seems probable that water will also be sold on a pre-paid basis (a form of digital money in its own right) and that cell phone banking will be used to purchase pre-paid water much in the same way that Thembi purchases pre-paid airtime and pre-paid electricity.

### **6.3.4 Relationships within the digital money network are complex**

Thulani does not have a bank account. He has a matric certificate and he demonstrates an understanding of banking (his comment about EFT's refers) and mobile phones. He is also aware of the risk that criminals pose. Notwithstanding this, Thulani hides excess physical cash in his "secret place" rather than converting it into digital money and entrusting it to a bank. He is satisfied that it is safe.

*Interview 4*

*GH: Do you have a bank account?*

*Thulani: Ah I don't have a bank account. I don't need a bank account. Because, ah, don't earn that much, so I don't need a bank account.*

*GH: Mmm*

*GH: So if you've got money ... who looks after it for you?*

*Thulani: I look after it myself.*

*GH: You look after it yourself?*

*Thulani: Ya. Most of the time it's in my pocket.*

*Ya*

<sup>24</sup> I questioned Vusi on this when I met him on 24 March 2014. He confirmed that the problem was damaged water pipes which have now been fixed.



<i>GH:</i>	<i>Ya, it doesn't go out. Most of the time I just keep it in my pocket. Then use it where I use it.</i>
<i>Thulani:</i>	<i>Until it's finished.</i>
	<i>Mmm</i>
<i>GH:</i>	<i>If it's a lot, I hide it at home, I hide it in my secret place, ya. Take it out when I need this and ...</i>
<i>Thulani:</i>	<i>and this, ya.</i>

Thulani will be used as an example to demonstrate the attribute of socio-technical models that relationships are complex, negotiated and multivalent. They are not easily formed as conceptualised in the tool models.

The socio-technical network of physical money has complex relationships but they are well established and have been assumed away. One can think of the physical money socio-technical network within Latour's conception of a "black-box". Actor Network Theory (ANT) could be applied to consider and unpack how the socio-technical network of physical money "came to be" what it is for low income people in Alexandra. The monetary economy in Alexandra has come to be what it is over many years, going back to before Alexandra was founded in 1912, incorporating networks that extend beyond Alexandra and alternative networks such as barter and beads and other pre-colonial stores of value from which people have switched over time. The complexity of the network has been assumed away and is now taken for granted. When Thulani receives his occasional wage in cash, he is highly unlikely to have questions of trust in the Rand notes he receives. Furthermore he does not consider the vast network of technology and people that enables him to receive pieces of paper which he can exchange for the goods and services he requires to sustain his life-style. The socio-technical network of physical money has "come to be". It is a "black-boxed" technology. The same cannot be said for the evolving socio-technical network of digital money.

Thulani keeps the physical cash he earns from his labour on his person and if "it's a lot" hides it in a secret place in his home until it is required. He trusts himself to safeguard his money and it is generally all spent within a week. It is a simple arrangement. Should he desire (perhaps in response to increased earnings and excess physical cash) to join the socio-technical network of digital banking for the purposes of safe-guarding his money he would be required to enter into a contract with a bank. This may introduce complexity into his life. In principle, he could negotiate with various banks and select the best contract based on the interest rate, fees and other factors including his assessment of the trustworthiness of the respective banks. He may also have other values that are important to him that may influence his decision to join the socio-technical network and the participants within that network with whom he forms relationships.

During Interview 2 on 11 September 2013 the wailing of a fire engine was heard. Fire and crime are the main risks to physical cash savings and other possessions. Vusi, resident of Alexandra, is very aware of these risks, which act as incentives to move into the digital money network, yet as evidenced, there are numerous (including Nkulu and Thulani) who remain within the physical money network.

*Interview 2*

*Vusi: Yah. Oh, there's a fire somewhere.*

*GH: What will that be, a fire where?*

*Vusi: Fire, shack.*

*GH: Shack?*

*Vusi: Yah. And then other people lose their IDs, then that's where we come in.*

*GH: They lose ... is that how they lose their IDs?*

*Vusi: Yah.*

*GH: In shack fire?*

*Vusi: Yah.*

*GH: And what else do they lose?*

*Mbongeni: Sjo, they lose it all, money saved.*

Nkulu occasionally earns a little extra and finds himself with money that he would like to keep for use in the future. He does not have a bank account. He has one trusted friend who looks after his extra cash for him until he needs it. It is usually a short term arrangement. There are no deposit fees and withdrawal fees or interest. R100.00 handed over one week and returned the following week. This is eminently less complex than joining the socio-technical network of digital money. There are factors, including perhaps the costs and complexity of opening a bank account and maintaining it, that appear to act as a disincentive to opening a bank account and joining the digital money network for people that do not have money in excess of their short terms needs.

Griffiths is a Zimbabwean. He has the correct paperwork but he does not have a bank account.

*Interview 9*

*Griffiths: But I have a problem, because I haven't got a bank account, so ...*

*GH: You haven't got a bank account?*

*Griffiths: So I must have a bank account.*

*GH: Has Vivienne said you must have a bank account?*

*Griffiths: [indiscernible].*

*GH: And why don't you have a bank account?*

*Griffiths: My money was very little because I was ... if I get money, I must send the money at home for*

*kids, so I can't save the money, because was very little.*

His reason for not having a bank account is similar to Thulani, Nkulu and Wandile in that his “money was very little”. He is now required to have a bank account because Vivienne (the researcher’s wife) wants to pay his monthly salary directly into a bank account rather than in physical cash. So, notwithstanding other impediments, Griffiths will join the digital money socio-technical network. This demonstrates that “contexts are complex” in terms of the “matrices of business, services, people, technology history, location, etc.” for socio-technical models. Griffiths’ personal circumstances and particularly his employment contract with the researcher’s wife (who is already part of the socio-technical network of digital money) bring him into the digital money network. He has a strong “incentive” to join the network.

Rodney is also Zimbabwean and he has a bank account, but he has stopped using it.

*Interview 12*

*Rodney: I said I got credit in Standard Bank, but while I was doing I was putting some money there, if I'm go on Monday, I want that the money, it's cut.*

*GH: It's cut? Where's it cut?*

*Rodney: They take [indiscernible] if I'm going now.*

*Vusi: He's talking about bank charges, so he doesn't get all of his money, he just gets some of it, because some goes to ...*

*GH: How much do they charge you to take your money out?*

*Rodney: I can't remember, but it's long time ago, and I got something [indiscernible], I'm not going [indiscernible]. Now I'm not banking.*

He has “about” R700.00 in his bank account. Much of what Rodney says is not very clear but it appears that he deposited small amounts “every day”, is tired of it being “cut”, and he has given up on banking and perhaps even his R700.00.

*Interview 12*

*GH: How much money is it? I'm go on Monday, I want that the money, it's cut.*

*Rodney: About seven hundred.*

*GH: Seven hundred bucks.*

*Rodney: [Indiscernible] put in money every day [indiscernible].*

In addition to the R700.00, Rodney is part of the socio-technical network of digital money via a different relationship and a network relationship that is rarely considered by policy makers and

business people. In the first instance, Rodney's earlier reference to "I got some brother who has a bank account" demonstrates that within the ensemble view of socio-technical models, relationships and contexts are complex. Rodney is using his brother as his banker. Excess funds are handed over to his brother, who deposits the physical money into his bank for safe-keeping. Irrespective of the informality of this agreement, it is valid and draws Rodney into the socio-technical network of digital money. Rodney's funds are not "hidden in some secret place" and subject to the risk of loss in a shack fire. Of course there are other risks (his brother may renege on the agreement) but it appears that Rodney's savings are held within the banking system where they are utilised to provide loans to other clients. Rodney's savings have been converted from physical money into digital money.

It appears that Rodney's preference for this mode of savings has been brought about by his poor experience with his R700.00. Rodney specifically uses the words "I got credit in Standard Bank" which demonstrates that he has knowledge of banks and the concept of a credit balance. However, the experience of going in on a Monday and finding that his money has been "cut" in the form of bank charges has affected his trust in the bank. He has discontinued using his bank account and appears to have given up on his R700.00. His complex relationship with the socio-technical network of digital money is deeply impacted by trust.

The final piece of data to be analysed in this section concerns Sindi and her bank account. It concerns a complex relationship that brought her into the digital money network.

*Interview 10*

*GH: Which bank?*

*Sindi: Standard Bank.*

*GH: And do you use it?*

*Sindi: I used to use it, I used to date a white guy long before like, for two years, I was living ...*

*Morena: From overseas.*

*Sindi: From overseas. I used to live in Sandton, by Sandown Hills, you know [indiscernible] street, there's Sandton Hills Townhouse, those ones. I used to be [indiscernible] and ...*

*GH: You used to be a glamour.*

*Sindi: I used to be ...*

*GH: Glamour girl.*

*Sindi: I used to be a glamour girl, hey.*

*GH: So that's when you had the bank account?*

*Sindi: No, like this guy, he's the one who showed me everything, that I should open the bank account, I should do what, what, what, what, and this and that, this and that. Ja.*

*GH: And now the bank account's ... you don't use it?*

*Sindi: I do, I don't now, because my bank ... my card, like I don't have money.*

*GH: There's no money in the bank now?*

*Sindi: Yes, because I spend it on drugs, you know.*

*GH: Ja.*

*Sindi: I spent it on drugs.*

*GH: And when you had a bank account did you do mobile banking?*

*Sindi: No I didn't do mobile banking.*

*GH:Sindi Just a bank account and a card?*

*GH: Just a bank account and a card.*

*Sindi: ATM?*

*GH: ATM.*

*Sindi: Did you use the card at the shops, or not?*

*Not in the shops, in the ATM [indiscernible]. This guy used to give me a lot of cash, like*

*Morena: R5,000, you know at a time.*

*Sindi: At same time [indiscernible] same time.*

*Ja, and it would be out, I'll buy more drugs and have party with Morena at home, having party like, you know [indiscernible] think for tomorrow, we don't even think for tomorrow.*

*Morena: The guy she was dating is a businessman, so half the time he just owns a big house, big cars, big everything, so he would just leave like R5,000 and he would just maybe go to Durban or Cape Town, or something, so I mean what would we do, we just buy, we just buy drugs and then we'd be there at the house, I mean it's a big house, there's everything, we didn't pay for anything.*

This is speculative but there are numerous indications in this excerpt that Sindi's bank account was being used by a drug dealer to launder the proceeds of drug sales. Although the account was opened in her name, it appears that Sindi opened it on behalf of the "white guy she was dating".

- The "white guy from overseas" guided her in opening the bank account.
- He gave Sindi a lot of cash, R5,000.00 cash at a time. She used this money to buy drugs.
- Sindi statement that "I earn my money through my boyfriend, I have a boyfriend take care of me, he gives me money and I spend the money on drugs, that's it".
- It is not clear but it does not appear that Sindi ever put money into the account or withdrew money.
- While he was travelling on business they stayed in his big house with the "big cars, big everything".

### 6.3.5 Potentially enormous repercussions of digital money

Patience is in her 70's and is a long-time Alexandra resident. Before (cell) phones and pre-paid airtime, she wrote letters to her friends to communicate.

#### *Interview 1*

*Patience: Without money, let's say the cheapest airtime is R5, and I feel I have to find out ... a friend of mine recently had an operation. I can't write a letter to her and say – hey, Sheila, how are you, blah, blah, blah, but I go and buy airtime for R5, and I phone her, and immediately I can talk to her and she feels nice, she feels okay, you know, that at least Patience phoned me to find out how the operation went, but if I had to write a letter, I don't even know if she'll get the letter.*

This example demonstrates the profound impact that the well-established socio-technical network of cell phones has had on Patience's life. There are examples within the socio-technical network of digital money which similarly demonstrate the impact and the potential that the migration from physical money to digital money has on the lives of people.

Vusi explains in the excerpt below how the Shoprite money transfer system works. This is a process within the socio-technical network of digital money for converting physical money into digital money and vice versa.

#### *Interview 2*

*Vusi: So the Shoprite transfer system, which is mainly used by the citizens of Alexandra, most of them use it because of its efficiency, people use it to send money to people that are far from them, maybe people that are in rural areas, or maybe send money amongst themselves, if ever in an emergency, or something, so the system's kind of efficient, because now many people use it, and they send money, or receive money for a fixed rate. Like if you send money, you send money for R10, and it doesn't change, it's always a fixed amount that you pay to send the money, and then when you receive, you receive it for free, which makes it even better, you know, so you can send money to far distant places for just R10, because if you use a bank, the rates of kind of high, and people are scared of that kind of stuff. They don't like paying a lot of money. Banks are really expensive to use, online transactions are expensive, so if you use Shoprite, Shoprite is kind of cool, you save money.*

It appears that the citizens of Alexandra like the system because it enables them to efficiently and cost effectively send money to people that are far from them. They particularly like the system because there is a fixed rate of R10.00 for money transfers regardless of the amount transferred and

for receipts there is no charge. The payer of the funds pays the R10.00. The cost of conventional bank transactions is perceived to be higher and as Vusi says “People are scared of that kind of stuff”.

As Vusi indicates the service is popular, but there are problems. The excerpt below highlights some of the constraints within that process.

*Interview 2*

*GH: So it works well. What do you think the problems are with it?*

*Vusi: The problems, the problems are the queues. It's always like ... time is your ... time is wasted in the queues, you have to wake up super early in the morning, just to secure your place in the queue, so if you go on like round about now, at eleven, joh, there's a lot of people, and then month end, even worse, there's a lot of people, much more than expected, the line is just exhausting, even give up, you know.*

The long queues highlight a key challenge with digital money and low income people. In most cases the Research Participants receive their income as physical cash and to convert it into digital money, it has to be “deposited” somewhere. However, if there were fewer queues and the cost was acceptable, then it is a fair assumption that many more people would convert their physical money into digital money and the repercussions of that are potentially enormous. The repercussions extend to the lives of individual people and society as a whole. Individuals would save money and time. Money saved could be used on the aspects where it has meaning, as explained in chapter 5. More time saved not standing in queues would enable more time for work and the opportunity to earn additional money. Society as a whole would benefit, because there would be more money in the digital money system available for loans to people who could use those funds to educate themselves and their children and perhaps start small businesses. This is a significantly more appealing prospect than people losing their physical money savings in shack fires.

### **6.3.6 Contexts are complex**

There are numerous examples in the data where the complexity of the context within the socio-technical network is evident. Patience has a bank account and also receives a social grant.

*Interview 1*

*Patience: Ja, my son and my daughter give me, but I also get the social grant, I also get the social grant, but the social grant doesn't give me the same amount as the other old people, because they know that ... they are aware that I get my Old Mutual Grant,*

Patience's Old Mutual pension is paid into her Nedbank account every month. She has a SASSA (South Africa Social Security Agency) Card for the purpose of receiving her social grant. She could use the SASSA Card to make digital payments for purchases at retailers but instead she withdraws the full amount in physical cash.

*Interview 1*

*Patience: No, initially I used to give the money in the SASSA card, and use the SASSA card over the counter, but then, ai, I decided that, uh-uh, it's not good, it's not right, it takes me out of my planning. What I do now i fetch the whole lump from the SASSA station down here.*

Patience receives digital money from two sources. The SASSA Card has digitally enabled millions of social grant recipients in South Africa who receive their monthly grant into an account that can be accessed using a card at any bank ATM and at retailers (in Patience's words "over the counter") for purchases. In addition, recipients can withdraw funds "from the SASSA station" which has an ATM-like machine for use only by SASSA cardholders. For the reason that the "over the counter" takes Patience "out of her planning", she has reverted to drawing the "whole lump sum" from the SASSA station. Patience has established a method of planning her expenditure which involves allocating physical cash to specific expense items. Perhaps she keeps the physical notes in different envelopes or different drawers within her home.

Patience's social grant is allocated to specific items (perhaps church donations, pocket money for her grandchildren, or payment to the man who helps her occasionally in her garden) which can only be made in cash. Patience operates partly in the socio-technical network of physical money and partly in the network of digital money. The reason she does this is because the people that she transacts with are part of both networks. Patience has the necessary "social access" and "incentive" to operate within the digital money network but because some of the people she transacts with do not have the social access and incentive to operate within the digital money network she remains part of the physical money network.

Mbongeni receives his monthly allowance from his mother directly into his bank account. As explained by Griffiths previously and evidenced by Patience, one of the major reasons for having a bank account is for receiving digital money from payers who prefer / demand this method of disbursement. It does not appear to make much difference to the beneficiary. If cash is required then it is a reasonably simple matter of going to an ATM.



Mbongeni draws cash at an ATM. The only time he uses the Card to make digital payments “over the counter” at a retailer is when the balance is less than the minimum amount he can draw from an ATM.

*Interview 2*

*Mbongeni: Yes, I use the card in an ATM, the card.*

*GH: Do you ever use it at the shop, to buy the ...?*

*Mbongeni: I use it when there's little money left, because then you know, the bank, when you try to take our money from an ATM, some of the money wouldn't come up, so I'll either go to a Pick n Pay store, buy me a chocolate, or something, and just swipe it out.*

Given that he has the knowledge and skill to use the Card at Pick n Pay but only uses it for accessing the remaining small balance in his account, this suggests that he does not do regular shopping at Pick n Pay and similar retailers. Mbongeni is at school and is dependent on his mother for food. His allowance is for entertainment and food at school which he pays for in cash withdrawn from an ATM. It is possible, however, that should his digital receipts increase (increased allowance or work) and he starts buying his own (or his mother's) groceries then he will increase the usage of his Card at retailers, thereby increasing his use of digital money. Mbongeni's situation and likely further migration to digital money illustrates the complexity of the context of the socio-technical network as well as the ongoing process of ICT implementations.

Mpho will be used as further example of the complexity of the context and the extent and impact of participants in the socio-technical network. The research participants are impacted by the actions of a varied group of participants in the socio-technical network.

Mpho has a bank account but her shop is cash sales only. Many of her expenses are paid for in small amounts of cash from the shop takings. In the excerpt below, Mpho is referring to the physical money she had just given her son to enable him to pay for transport to school.

*Interview 8*

*Mpho: There goes my money.*

*GH: Where's your money going to?*

*Mpho: To school.*

*GH: What does he need the money for?*

*Mpho: For transport now, he doesn't stay with me.*

Mpho thinks that there are “too many charges” for having a bank account.

*Interview 8*

*GH: And how much do they charge you to have a bank account?*

*Mpho: There are many charges there, oh, there are too many charges.*

*GH: How much do you think you pay in bank charges every month?*

*Mpho: I think it's R30.*

Mpho is more definite on the cost to draw money at the ATM.

*Interview 8*

*GH: How much does it cost when you draw money at the ATM?*

*Mpho: It is R8.*

One can understand Mpho’s reaction to bank charges if one considers her expenses and the fact that she is very clear on where every Rand of income comes from.

*Interview 8*

*GH:*

*Mpho: So what do you sell in your shop?*

*Beer. In that crate, my commission is R12.*

I did not specifically discuss this matter with Mpho, but based on what I know about her, I can speculate that the main reason for having a bank account is to pay for her beer stock purchases and to fund her children at university. It is probable that the excess cash from her business after paying out daily expenses is deposited at her bank on an ad hoc basis. The bank account is then used to make beer purchases and fee payments to the university.

Mpho operates comfortably within both the socio-technical networks of physical and digital money. Bank charges clearly act as a disincentive to moving more of her transactions to the digital network but she does have incentive to deposit some money into her bank account. Excess cash not required for daily purchases is deposited into her bank account. This cash is deposited into her bank for payments to suppliers that demand digital payments rather than physical cash payments. In this instance, physical money means small daily payments and digital money means payments for large payments.

Mpho is prepared to accept the bank charges associated with this (R30.00) but, as for Wandile, she does not deposit money in the bank that is required for daily payments such as the transports costs

of her school-going child as this would result in additional deposit and withdrawal fees and no doubt inconvenience.

Mpho earns commission of twelve Rand for twelve beers in a crate or one Rand for every beer that she sells. She would need to sell eight beers simply to pay for the cost of an ATM transaction. It is unlikely that the Pricing Committee within a bank (part of the socio-technical networks of physical money and digital money) consider how many beers are required to be sold by an Alexandra shebeen owner in order to cover the cost of withdrawing cash at their ATM's. From the researcher's own experience, the Pricing Committee considers the pricing of ATM transactions relative to other cash withdrawal channels (retailer / branch) and the pricing of competitors. The Pricing Committee also considers the costs incurred in enabling and processing an ATM transaction. Furthermore, for interbank transactions, the committee consider the interbank fees determined by the South African Reserve Bank (SARB). The socio-technical network of physical money and digital money comprises all of the aforementioned parties. The centrality of politics, the role of incentives, and complexity of contexts in the socio-technical network of digital money are evident. The price of ATM transactions is a part of that network and Mpho has determined the extent of her participation in the network on the basis of that pricing.

### **6.3.7 Knowledge and skill in socio-technical networks**

Two final attributes of socio-technical models being the "implicit nature of knowledge and expertise within a socio-technical network", and the "additional skills and work required to be part of the socio-technical network" are discussed together with the concept of social access. The concept of social access (knowledge, resources and skill to use advanced technologies) is also considered in relation to the degree of social access that the research participants have to the socio-technical network of digital money.

In addition to not owning a cell phone, Nkulu is unique within the research group in a further respect. Although Nkulu battles every day to earn enough money for food, he operates comfortably within the socio-technical network of physical money. He has the necessary social access to be part of the physical money network. He understands the attributes of physical money. He is able to differentiate between the various denominations of notes and coins and he can count it. It is likely that he is able to differentiate between a crude counterfeit note and an authentic Rand note. He has an understanding of the value of physical money. The same cannot be said for his social access to the digital money network. All of the other research participants displayed at least some knowledge and expertise of the digital money network, including those who had never been part of the network. All

the unbanked research participants, apart from Nkulu, gave the impression that with some additional skill and work they could become part of the socio-technical network of digital money. The tool models of ICT implementations assume that the necessary knowledge and expertise are easily made explicit and the ICT infrastructures are fully supportive. This is clearly not the case for Nkulu and even the rest of the unbanked group will require more knowledge, expertise and support to become banked (i.e. part of the digital money socio-technical network) than is assumed in the tool models.

Thembi is a highly proficient user of digital money. He has overcome the additional skill and work requirements to be part of the network and the knowledge and expertise are for him now inherently implicit. He has the requisite social access to be part of the network. The excerpt below is lengthy but packed with interesting data. Thembi uses mobile banking (or cell phone banking as he terms it) for sending money to his girlfriend, buying pre-paid electricity and airtime, and checking his transactions. He also uses a (debit) card to make purchases at retailers. He accepts the various bank charges applied. He believes he is receiving value for what he receives as part of the socio-technical network of digital money. The value he receives is the ability to save “smartly” and transact securely. His phone makes his life easier and better. It should be remembered that Thembi does not have a matric, washes cars for a living and earns about R3,000.00 a month.

*Interview 6*

*GH: Do you ... do you have mobile banking?*

*Thembi: Yes, I definitely do mobile banking, if I want to send money, I send it to my ... to my wife here, to my girlfriend, you know, via cell phone banking.*

*GH: Ja?*

*Thembi: I can send money via cell phone banking.*

*GH: So, do you use ...*

*Thembi: Buy electricity, buy airtime, you can do ... you can do everything, buy your traffic fine, pay, you can do everything with your cell phone banking.*

*GH: So you use that, hey?*

*Thembi: I u ... and I love it, and it helps me, and the smart saving you can check your transaction, each and everything, it will clock on your phone.*

*GH: Ja, ja*

*Thembi: You can buy everything, swipe, even cigarettes, I can even swipe them, if I don't even have cash, or if I don't want to take cash out there, I use my credit card, it's much better.*

*GH: Have you got a credit card?*

*Thembi: No, it's a ... it's a ... it's a credit card, a [indiscernible] savings account, it's a card.*

*GH: It's a card?*

*Thembi: Ja, a card, bank account.*

*GH: Ja.*

*Thembi: Hm, it's much better.*

*GH: So you swipe that card, hey?*

*Interview 6*

*GH: Ja.*

*Thembi: Ja, even if your card is lost, you just do a stop order, phone them at Standard,... ABSA, they're going to stop it, and then tomorrow you go to your branch there at ABSA, and then they'll make another card with R50, if you lost your card.*

*GH: Is that what they charge you, fifty bucks?*

*Thembi: Fifty bucks, ja, but if you have money in that account, they'll charge you fifty bucks, but they will take it in your account there, so it's much better ...*

*GH: That's a lot of money, hey, for a new card?*

*Thembi: You lost it, so you have to pay, nothing is for free, you know.*

*GH: Ja.*

*Thembi: Mm, nothing is for free in this world.*

*GH: And bank charges, how much do they charge you, if you're having your bank account?*

*Thembi: Let's say if I go and withdraw at Standard Bank, and I'm using ABSA, I think they're going to roughly charge me R9.59, because it's not the .. the ... the real branch that I'm using, but if I go to ... to ABSA, roughly R1, R2, ja, sometimes I think they don't charge me, the way I see it.*

*GH: And you're happy with that?*

*Thembi: Ah, I'm more than happy, I'm happy.*

*GH: So how much do you think you pay in a month on bank charges?*

*Thembi: Ah, not more than ... not more than R20, the way I see it.*

*GH: Ja.*

*Thembi: Ah, not more than R20, even not more even than R10, the way I see it, because I keep track of my things, because I can also do a statement over my phone, and see what money do I have available, you know. That's why I like this phone ... phones, they make your life easier and better.*

The research participants demonstrated knowledge and technical skill in the use of mobile phones. Tsiko has a Samsung that he bought for R450.00 at the Mall. His family have developed an interesting method to communicate and ensure that Tsiko pays for the call.

*Interview 5*

- GH: And how often does he phone his family in Zimbabwe?*
- Vusi: [Speaks own language]*
- Tsiko: [Speaks own language]*
- Vusi: Okay, so he says, when they, um, buzz his phone, then he calls them back, and then um, the last time he spoke to them was yesterday.*
- GH: What do you mean by 'buzz his phone'?*
- Vusi: Okay um, they just ring him once, and then ...*

Griffiths uses his phone to advise his family to go to Bulawayo to collect cash he has sent them.

*Interview 9*

- Griffiths: I phone at home, they take a taxi from home, rural area, and then they go to town, Bulawayo, then they go to the taxi offices, and then they get the money.*
- GH: And do you pay the two hundred Rand fee this side?*
- Griffiths: Yes.*

Tsiko and Griffiths use their phones for verbal communication. Some of the other young men in the research group are advanced smart phone users.

*Interview 6*

- Thembi: I have WhatsApp, I have Facebook, I have Mxit, I have all those social activities, networks there. It helps me, and it's more fun, you know, mm. I like those kind of phones, because you can do a lot of things with those phones, unlike those cheap phones, because those cheap phones you can't do a lot of things, you know.*

The excerpt below highlights more of the advanced applications of mobile phones used by the research participants and introduces the concept of an "anti-social phone".

*Interview 4*

- GH: Have you got a cell phone?*
- Thulani: Ya*
- GH: Can I see it?*
- Thulani: Ah, I don't have it. I left it at home. But it's not these Blackberry's, ah ... It's a Nokia. The ones with the ... ah ... FM radio.*
- GH: ah!*
- Thulani: No camera, no nothing, no ... internet. Nothing like that.*
- Vusi: No Facebook.*

*Thulani: Ya, no Facebook, no tig ... ah ... no bbm!*  
*Vusi: It's a anti-social phone.*  
*Thulani: Ya (laughter)*

Thulani's rationale for having an anti-social phone is simply his own personal security. The subject of discussion is the fact that he can buy the blackberry the researcher owns on the street for R100.00

*Interview 4*

*Thulani: Ya, it's yours, but I ... I ... you, you bought it for like, ya, maybe like ... five thousand. I buy for a hundred Rand right here in the street. So, and then when I buy it like that, at night, I might be, like, walking late night, they come and take it, you know, ya. They come, ya, you know, I get robbed. Get mugged, and I get mugged, ah, it's gone! Ya, so, when I think of buying a phone like that ... from the shop. When I think that ... I'm gonna ... one day I am gonna be out late, and I might get mugged. And that phone is gonna go away. All that money ... gone.*

A very interesting finding in the data analysis concerns terminology. The term "mobile banking" was used in the interview introductions and in the interview questions.

*Interview 10*

*GH: And when you had a bank account did you do mobile banking?*  
*Sindi: No I didn't do mobile banking.*

Sindi's response was quite normal. However, in general conversation, none of the research participants used the term "mobile banking" other than when responding to a question in which the researcher had used the term. In an analysis of the interview transcripts, none of the research participants ever referred to a "mobile phone". Thembi initially used the term "mobile banking" which I used in the question but then he immediately switches to "cell phone banking".

*Interview 6*

*GH: Do you ... do you have mobile banking?*  
*Thembi: Yes, I definitely do mobile banking, if I want to send money, I send it to my ... to my wife here, to my girlfriend, you know, via cell phone banking.*

In fact, the term "cell phone" was used very infrequently by the research participants and usually only when I used the term in a question. The excerpt below shows Griffiths initially using the term "cell phone" and then switching to the more natural "phone".

*Interview 9*

*GH: And Griffiths, do you have a cell phone?*

*Griffiths: Yes, I have it, but it's ... there's a problem with my cell phone these days.*

*GH: What's the problem?*

*Griffiths: I don't know, it's just sometimes, if I talk with somebody, he can hear me, but myself, I don't hear, so I don't know, it's the speaker, I think so.*

*GH: Ah. Speaker is broken.*

*Griffiths: I think so. So I must ... I must buy ... next week I must buy another phone.*

This is speculative and based only on the data collected from the eighteen research participants, but it appears to me that banks and other suppliers to this community would be well advised to forego the term “mobile banking” in favour of “cell phone banking” or “phone banking”. Interestingly the term “phone banking” would have no difference in meaning to “cell phone banking” for the low income Alexandra community. There would be no confusion with what was known as “Telephone Banking” in the early 90’s. The terms “mobile phone”, “cell phone”, and even “cellular telephone” are first-world terms used to differentiate from fixed-line telephone infrastructure. The low income Alexandra community has no need to differentiate. Fixed-line telephones were, and still are, rarities in Alexandra. Vusi and his friends divide the world up into people that have “social phones” and those that have cheap, “anti-social phones” and all the research participants who owned phones were very comfortable using them. Some used their phones for a variety of advanced functions, including social media and cell phone banking.

In the final analysis, it appears that all of the research participants, except Nkulu and Tsiko, have the social access to be part of the digital money network. They have the requisite knowledge, resources and skill to use advanced technologies, such as mobile phones, debit cards and ATM’s. Tsiko lacks a vital resource in that he does not have the requisite paper work to open a bank account. There may also be an argument that some of them have insufficient financial resources and on this basis, do not have social access to the digital money network. Wandile and Thulani claim to have insufficient income to warrant having a bank account. However, this is not the only reason for them not having a bank account. Thulani is specifically conscious of the costs associated with having a bank account. The issue of the cost of having a bank account was prevalent throughout the interview texts and is likely the most significant reason for the research participants not having a bank account or not migrating more physical money to digital money. Physical money is considered free so any cost associated with digital money is incremental and must be absorbed in other areas of the expense budget. Mpho is a case in point. The profit she makes from selling one beer is one Rand. She must sell eight beers to cover the cost of an ATM withdrawal. This is money that Mpho needs to feed



herself and her children and to pay for transport and the education of her children. The cost of banking must come at the expense of something that has meaning for the research participants.

## **6.4 Conclusion**

In this chapter, the reasons for not being part of the digital money network (or increasing usage within the network) and the reasons for being part of the network were summarised. The different meanings and attributes of physical money and digital money were also presented. The themes of digital money and physical money were tied back to the theory of socio-technical models and, specifically, the attributes in Kling and Lamb's conceptions of socio-technical models. An understanding of how digital money may come to be used by low income people as a substitute of physical money started to emerge and conclusions to this research question are provided in the next chapter.

## **Chapter 7      Conclusions in response to the research questions**

### **7.1 Introduction**

This chapter provides the conclusions drawn from the analysis of the data in response to the research questions. The first two research questions have been answered in chapters 5 and 6 and this chapter merely summarises and clarifies the answers to those questions as a precursor to the third question and the two sub-components of that question.

- What does “money” mean for low income people?
- How does the digitisation of physical money impact the meaning of money for low income people?
- How may digital money come to be used by low income people as a substitute of physical money?
  - Why would low income people use digital money as a substitute for physical cash?
  - Under what conditions will low income people not use digital money as a substitute for physical cash?

The chapter concludes by detailing how this research has made a contribution to knowledge and providing recommendations for government and civil society, and banks and broader business.

### **7.2 What does “money” mean for low income people?**

The five themes for the meaning of money that emerged were; Money as Hedonism, Money as Love, Money as Food, Money as Development of Self and Children, and Money as Support Structures. The first priority of money is food. Money as food was explored and the concept of Money = Food = Energy = Work = Life emerged from an analysis of the data. As Mbongeni said, “Money is your life basically”.

### **7.3 How does the digitisation of physical money impact the meaning of money for low income people?**

The attributes of physical money and digital money were explored in chapter 6 and summarised in section 6.2. Physical money and digital money do have different meanings to the research participants. This is influenced by whether a research participant is banked or unbanked but there are also areas where the meanings are shared by the group as a whole. Physical money is generally for receiving payment from customers and making daily purchases. These are typically small amounts of money and much of it is conducted within the informal sector. Physical money is free

and anonymous while digital money has a cost associated with it and it is traceable. Both physical and digital money can be saved and this is largely determined by whether a person has a bank account or not. Digital money is typically receipts, savings and payments of larger amounts of money within the formal sector.

## **7.4 How may digital money come to be used by low income people as a substitute for physical money?**

This section answers the final research question. It answers the question in two parts and draws upon the analysis of the data and the conclusions in chapter 5 and 6.

- Why would low income people use digital money as a substitute for physical cash?
- Under what conditions will low income people not use digital money as a substitute for physical cash?

### **7.4.1 Why would low income people use digital money as a substitute for physical money?**

In most cases, the research participants have the necessary social access to use digital money as a substitute for physical money. Three reasons why they would do so are provided.

- Digital for Meaning – low income people will more readily use digital money where the transaction involves goods or services that have “meaning,” as defined and explained in the previous chapter.
- Digital by Decree – low income people will use digital money if a decree is made to use digital money. The decree can come from government and to a lesser extent, big business.
- Digital for Utility – For example, low income people have a significant need to transfer money over distance.

### **7.4.2 Digital for Meaning**

In the section “Money as Hedonism” and in considering Vusi’s “sneaker fetish” the conclusion was reached that the meaning of money is to “acquire things (physical or experiential) that give one pleasure”. Mbongeni’s quote, “and that’s the point of money” indicates the powerful connection between money and something that gives pleasure. This can be extended to the powerful connection between money and something that gives “meaning”.

If a ruling were made to the effect that fashionable sneakers could only be purchased using digital money, it is reasonable to suggest that Vusi would go to extreme measures to use digital money as a substitute for physical money to satisfy his hedonistic pleasure and desire for sneakers. Similarly, extreme measures would be taken by the research participants to use digital money if they are thereby able to satisfy their desire for pleasure, food, love, and development for themselves and their children.

The statement, "If a ruling were made ..." is used as a thought experiment. Kling (2000), in discussing the highly inter-twined socio-technical model, points out that separation of the technology in use and the social world can only be done for analytical convenience. If one assumes that the social world and the technology world are split, the technology removed and replaced with another technology, it is possible to consider how the social world will react with the new technology in place. Furthermore, the possible reactions under the ruling are indicative of how people will react over time if the socio-technical model is left to evolve over time without arbitrary rulings.

So, returning to the assumed world where Vusi is faced with the prospect of a life without sneakers or adopting digital money to purchase them, the theory is that he will expend high effort to use digital money as a substitute for physical money because sneakers have strong meaning for Vusi.

Conversely, where money has no meaning, there will be no effort expended to use digital money as a substitute for physical money. To use an example from the analysis, it would have little or no impact on Vusi (and his use of digital money) if a ruling were made to the effect that the church collection plate only accepted digital money. If we use an example relevant to all the research participants there may be violent street protests if a ruling were made that water (previously free) could now only be obtained by making payment using digital money.

This is called the Digital for Meaning (D4M) Index. The D4M index has been self-developed by the researcher as a tool to consider the relative strength of the meaning of money (Money as Hedonism, Money as Love, Money as Food, Money as Development of Self and Children, and Money as Support Structures) for a given purchase of goods and services, and the consequent likelihood that a physical payment may become a digital payment. The index is not an objective, quantitative measure. It is a subjective measure informed by the analysis of the data in chapter 5. This is consistent with the interpretive philosophical assumptions that underpin this research and the research approach, qualitative methods and design adopted. The index has a simple 0-5 scoring system where 0 = "Under no circumstances" and 5 is "sign me up now". A score of 3 is a grudge (or occasional) use of digital money as a substitute for physical money. Patience provides a story about her trip to the mall and back which can be used to demonstrate the D4M Index.

*Interview 1*

*Patience: For me money is a necessity, it's essential, because if I don't have money, let's say, for example, the taxi fare from my nearest taxi stop to the mall is R6, somebody will say it's R6 ah, that's nothing, but to me, if don't have that R6 in my pocket, it means I have to walk all the way up to the mall. Time spent walking up there, the **energy** spent walking up. For example, I'm in my seventies, I can no longer walk uphill all the way to the mall. **Sometimes** coming back, because even going to church, it's just next to the mall, sometimes even coming back I don't spend my R6, I actually say to myself, I'm going to save this R6 for tomorrow. Now going home, it's a downhill, so I walk home to exercise, for saving, for meeting other people, but the main purpose why I sometimes do not take the taxi to come back home, it's because I'm saving that R6 for tomorrow, in case tomorrow I have to go up again, but the down is okay, because it doesn't need to be so much effort and energy.*

Clearly Patience is talking about physical money. However, if a ruling were made (there have been attempts) to force people to use a form of digital money (e.g. a card or a mobile phone) for taxi fare payments then we could use the D4M Index to consider whether Patience would use digital money, and provide reasons why Patience may use digital money as a substitute for physical cash or why she may not. It is important to note that although the researcher specified "if a ruling were made", this is not to say Patience has to use digital money. She may elect not to take the taxi. She may also participate in protest action against the ruling.

Patience gets a D4M score of 5 for the Up journey and a 3 for the Down journey. Patience has no choice for the Up journey. Getting up the hill to the mall and church is very meaningful for Patience. Patience is thrifty and likes to save R6 (on the Down journey) but frankly the taxi driver could treble the fee and she would gladly comply to get up the hill and preserve time and energy in doing so. This is why Patience will do whatever necessary to enable herself for digital taxi fare payments for the Up journey. If it were necessary to stand in a long queue then Patience would likely stand in the queue all day and enjoy the experience. She would explain to others the importance of being digitally enabled so that she can get up the hill to Church.

The Down journey is a different story for Patience. She enjoys the walk down the hill. It is a time to relish that she is still fit and strong enough to walk down the hill. It is an opportunity for exercise, to save money and to meet other people. However, she does not walk down the hill every time. In the excerpt above she specifically says that "Sometimes coming back ... I don't spend my R6 ..." It is likely that Patience walks home when it is a pleasant afternoon and she has time to enjoy being with her friends. When the weather is inclement or a child is sick at home then Patience will make the R6.00

digital payment. This is why Patience will enable herself for digital taxi fare payments for the Down journey.

For the purposes of this exercise, assume that Patience is required to stand in a different queue to become digitally enabled for the Down journey. The researcher acknowledges this is speculative but it is probable and plausible that in this scenario Patience will do what is required to digitally enable herself, but she will do it reluctantly. She will complain that she enjoys the walk down the hill and the change from physical to digital cash is unwelcome and unnecessary.

The D4M index is further developed and explained by applying it to Money as Food. Data, analysis and argument was presented that food was the first priority for the research participants and the reason an Ace Cook is so important is that Money = Food = Energy = Work = Life. Therefore, using the logic previously presented, if a ruling were made to the effect that food could only be purchased using digital money, then all the research participants will go to extreme measures to use digital money as a substitute for physical money to satisfy their desire for food. The theory is they will expend high effort to use digital money as a substitute for physical money because food has strong meaning for them. In fact, given that Food = Life then the research participants will expend the most extreme effort to use digital money if using physical money is not possible.

The application of the theory to food could work in practice in a communist state or food rationed economy (WWII) where the supply of food is controlled by the state. However, as presented in the data, the food distribution network in Alexandra includes the big retailers (Pick n Pay, Shoprite, etc.) as well as countless informal traders who “cut the whole cabbage into half or into quarters” and sell portions for R3.00. People like Mpho are using the “smallest change they get to buy food” from these traders. So while the D4M score may initially be 5 (in the assumed, analytically convenient, cashless world) when one returns to reality and considers the sheer number of disaggregated food suppliers, the regularity of food purchases (often daily), the small amounts involved, and the fact that the buyers are using the physical cash they receive today to buy food for today, then one is inclined to reduce the D4M score to 1 or perhaps 2. This acknowledges that food purchases using digital money at formal retailers will (increasingly) occur<sup>25</sup> but the vast majority (by volume) will continue in physical money at the almost countless informal retailers throughout Alexandra.

Finally, the D4M index is used to consider whether low income people will use digital money as a substitute for physical money in the development of themselves and their children. Again, for analytical convenience, the social and technology worlds will be split and it is assumed that

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<sup>25</sup> Mbongeni explained that when the balance on his account went below the minimum amount available at an ATM then he would “go to a Pick n Pay store, buy me a chocolate, or something, and just swipe it out.”

education can only be paid using digital money. Again, the initial assessment is a score of 5. Obtaining a matric and a tertiary education has strong meaning for the research participants, whether it is for themselves or their children. They will expend high effort to use digital money as a substitute for physical money because education has strong meaning for them.

It seems that the socio-technical model of payments may have already reached this stage for education payments. It appears that most education institutions do not accept cash payment for fees and students (or their parents / sponsors) have enabled themselves to make digital payments. Mpho is again the reference point. It was speculated that the main reason she had a bank account was to make fee payments to the university for her children. The D4M score thus remains 5. Mpho's response to "the ruling" is "sign me up".

### **7.4.3 Digital by Decree**

Government policy provides a reason why low income people in Alexandra will use digital payments as a substitute for physical cash. Clearly other components of the socio-technical system need to be in place (technical infrastructure, social access, etc.) but government can play a strong role in forcing low income people to use digital money as a substitute for physical cash.

There are numerous areas in which this could happen. Government could force the use of digital payment where they have a hand in delivering the service including transport, electricity and water. Big business can similarly force (or strongly influence) the use of digital payment. A good example is pre-paid airtime where it makes sense for the cellular operators to cut out the middle men (remote distributors who sell airtime for cash) and sell the airtime directly to consumers using digital money for payment. Thembi (Car washer) is already buying airtime using cell phone banking.

One area where Government is likely to turn to digital payment is in the distribution of water as discussed in section 6.6. The provision and use of electricity has transformed into a pre-paid model and as with pre-paid airtime this is increasingly becoming a digital payment. A similar model is required for water.

### **7.4.4 Digital for Utility**

There were a number of very practical uses for digital money in the data that cannot be excluded from an answer to the question, "why would low income people use digital money as a substitute for physical money?"

The most obvious is the transfer of money over distance. Just as cell phones and voice communications solved communication difficulties for families and friends separated by distance, so too will cell phones and data communications solve the transfer of money to dependents separated by distance. It is nonsensical that people in the 21<sup>st</sup> century should put physical money into “a little purse” to be taken home by a trusted friend. The concern is the apparent difficulty experienced by regulators and banks to achieve the level of social access and trust relations within the socio-technical system necessary to substantially displace physical money with digital money for these transactions.

The next item is payment for digital content. This is not strictly speaking substitution as the digital content is new. However, the youth in Alexandra are fixated with cell phones as the youth all over the world appear to be and digital content will become increasingly desirable. Payment for digital content requires digital payment.

Finally, digital money has utility for the receipt of income or payment of expenses which the other party to the transaction demands in digital money. This is a significant reason for adopting digital money.

## **7.5 Under what conditions will low income people not use digital money as a substitute for physical money?**

Illegal activity, low value transactions, and a shortage of digital money are situations where the research participants do not have the necessary “social access” to use digital money and specifically cell phone banking as a substitute for physical money. These conditions are the impediments to the evolution of the digital money socio-technical system in Alexandra.

### **7.5.1 Illegal activity**

Three categories of illegal activity will be discussed namely illegal immigrants, smoking kush, and other crime, including dealing in hard drugs.

Illegal immigrants do not have the requisite social access to use digital money as a substitute for physical cash. Tsiko would like to have a bank account and use digital money but he does not have the required documentation to be in South Africa.

Smoking Kush (marijuana) is widespread in Alexandra and used by the research participants. The product is illegal and thus transactions involving the product will largely remain in physical money. Illegal immigrants and users of kush are plentiful in Alexandra. All transactions involving illegal



immigrant or kush will thus remain in physical money for as long as the prevailing laws remain in place and people continue to break (or disregard) these laws. The interesting aspect of this class of “criminals” is that they move about freely within Alexandra. The illegal immigrants earn money and spend money and move it to neighbouring countries. Most of this is physical money. The users of kush sit peacefully on street corners with the occasional furtive search for policemen. They require physical money to purchase kush. The dealers use the physical money to buy food and other goods and services in Alexandra. The cycle of physical money continues until someone elects to digitise it.

Other criminals also perpetuate the circulation of physical money. An element of digitisation may take place when organised criminals are successful as laundering the proceeds of crime as appears to have been the case with Sindi. However, FICA is designed to prevent the proceeds of crime entering the banking system and these measures will remain in place. If anything, the FICA controls will become stricter and more rigidly applied. In addition, Thulani described how people doing “illegal things” will elect not to digitise physical money because when they are convicted, they require access to that money which would not be possible because “that money is gonna be frozen”.

## **7.5.2 Low value transactions**

Low value transactions at the many semi-formal and informal shops in Alexandra are analysed with a focus on the transaction today and the factors to consider in assessing whether digital money could substitute physical money in the transaction.

In the section “Digital for Meaning”, low value physical money transactions were considered from the perspective of a person making (food) purchases at an informal trader. Here the transaction is considered from the perspective of the seller or merchant. A number of the research participants are such merchants.

Mpho sells beer in her shop and receives physical money from her customers. Customers typically buy one or two bottles of beer at a time for R12.00 each. Mpho receives no digital money from her customers. The same is true for Rodney, Paulina, Wandile, Tsiko and Thembi.

Why does Mpho (or any of the others) not receive (any) payments in digital money?

Consider the following:

- Who ultimately determines whether a transaction is effected in physical money or digital money? Is it Mpho or her customer?

- If a customer demanded to effect the transaction in digital money (EFT<sup>26</sup>, Debit Card, etc.) would Mpho be able to oblige?
- If Mpho demanded digital money rather than physical money would she have any customers?
- If Mpho made it clear that she could accept digital money would any customers make digital payments?

Both parties to a digital payment must be digitally enabled to complete the transaction. However, the simple answer is that Mpho does not receive any digital payments because she does not make digital payment options available to her customers. Mpho has many customers and at least some of them are enabled to make digital payments<sup>27</sup>. If she offered digital payment options at least some of them would use it. The fact that Mpho does not offer digital payment options nullifies the potential for digital payments even if every customer is digitally enabled.

Why then, does Mpho not offer digital payment options in her shop?

In answering this question, the researcher first considered the research participants' general attitude to physical money. The reasoning being that their propensity to want digital money (as a substitute) will be related to their general attitude to physical money. Tsiko and Thulani express the threat of criminals in Alex and Thembi indicates a preference for his card, but the general sense of comfort with physical money is evident in all the data. The research participants are certainly not agitating to have physical money replaced with digital money. On the contrary, the research participants have a strong and positive relationship with physical money. Perhaps low income people are grateful for the money they do receive and they have little reason to talk ill of it. It may also be true that income of R3,000.00 a month received in cash on a daily or weekly basis does not present the same requirement for digitisation as higher income people who are paid on a monthly basis.

In answering the question why Mpho does not offer digital payment options in her shop, the first part of the answer is quite simply that she has no reason to. She is happy receiving physical money and her customers are happy handing it over in return for their beers.

The question was then considered assuming Mpho had an awareness of various digital payment options and was interested in making them available in her shop. There are two plausible answers<sup>28</sup> why she would then not offer digital payment options:

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<sup>26</sup> Including money transfer offerings such as FNB e-Wallet and ABSA Cash send.

<sup>27</sup> South Africa has in excess of 25 million debit cards including more than 10 million SASSA debit cards.

<sup>28</sup> The positivist determinants of mobile adoption by consumers include perceived risk, cost, complication, relative advantage and social influence. From a merchant's perspective all of these (and any others) can be placed in the categories of cost and convenience.

- Costs – to Mpho and / or her customers.
- Convenience (speed of transaction etc.) – to Mpho and / or her customers.

The convenience answer is flawed because there are thousands of merchants in South Africa who accept digital payments in the form of debit cards. Other forms of digital payment (EFT's and e-Money) are not broadly used at merchants and convenience may be a contributing factor. However, cost appears to be a significant reason why low income people do not use digital money as a substitute for physical money for low value transactions at semi-formal and informal merchants.

The costs for Nedbank's recently released PocketPOS card acceptance solution include a once-off device cost of R2,000.00 and fees of 3.5% of the transaction value. This would be paid by Mpho as the merchant. Transaction fees for debit cardholders vary but the "pay as you go" option from Nedbank and ABSA is R1.00 per transaction. Assuming Mpho sells 5,000 beers per month and the device cost is amortised over 2 years that means for every beer sold for R12.00, the banks would receive R1.44 or 12% of the transaction value. Interestingly, Mpho only earns R1.00 "commission" or gross profit on each beer sold. Accepting card payments would eat up 44c of that gross profit. The customer would pay R13.00 a beer instead of R12.00 for the pleasure of paying with digital money.

The table below shows the details of the calculation as well as a comparative for Wandile's hair salon. Wandile's business model is different in that she has lower turnover but higher gross profit. This results in significantly lower transaction fees to the bank yet they are still 7.7% of the total value of haircuts.

	Mpho Beer	Wandile Haircuts
Number of units sold per month	5,000	76
Price per unit	R 12	R 50
Monthly turnover	R 60,000	R 3,800
Transaction fee to bank	3.5%	3.5%
Transaction fee amount	R 2,100	R 133
Device cost amortised over 24 months	R 83	R 83
Amount paid to bank by merchant	R 2,183	R 216
Transaction fees (R1) paid by customers	R 5,000	R 76
Total amount paid to banks	R 7,183	R 292
Total amount to banks as % of monthly turnover	12.0%	7.7%
Paid to bank by merchant per unit of sale	R 0.44	R 2.85
Received by banks per unit sold	R 1.44	R 3.85

Table 2 – Analysis of transaction fees paid to banks for low value transactions

The other digital payment option would be e-money products such as FNB's e-Wallet and Absa cash send. These products are really designed for money remittances and their pricing reflects this. FNB e-

Wallet costs R8.50 for amounts less than R1,000.00. Clearly this is not going to appeal to Mpho's customers paying R12.00 a beer.

Physical money will prevail within the environment of low value transactions at semi-formal / informal shops until the costs of digital payments are dramatically reduced. This may entail better, sexier and more convenient digital payment options becoming available but they will have to be very appealing to the merchant and customer in terms of cost. This is particularly the case given it appears that low income residents in Alexandra are satisfied with physical money and have no urgent need to find a substitute.

To argue the point from a different angle, if a bank (or other party) agreed to enable Mpho for digital payments at zero cost (to her or customers) then it is reasonable to suggest that Mpho would receive (some) payments for beer in digital money. However, given the positive general attitude towards physical cash, and the sheer volume of cash in circulation within Alexandra, it is not evident that digital money would significantly displace physical money for low value transactions at semi-formal and informal shops.

### **7.5.3 A shortage of digital money**

A shortage of digital money creates a condition under which low income people are unable to use digital money as a substitute for physical money.

One way of creating digital money is through a process of converting physical money into digital money. This process is known as a bank deposit. The reverse process is known as a cash withdrawal and this reduces the pool of digital money. The pool of digital money can thus be enlarged by encouraging bank deposits and discouraging cash withdrawals. A consideration, however, is that if cash withdrawals are overly discouraged (through pricing or limited distribution) then low income people are discouraged from depositing their physical money as they are mindful of the implications of converting it back into physical money. Similarly, digital payments should be encouraged and cash payments discouraged. Every payment is an opportunity to increase or decrease the digital pool so the desired behaviour should be encouraged. This assumes of course that enlarging the pool of digital money is desired.

Practical examples in the data where enlarging the pool of digital money was not encouraged include:

- Distribution - long queues at Shoprite and other retailers for money transfers. In general, there are insufficient locations to deposit physical money and convert it into digital money. Ideally there should be "thousands" of points where physical money can be converted into

digital money regardless of the institution that provides that digital money. As with any product (e.g. Coca Cola, pre-paid airtime), pervasive use or penetration can only be achieved by creating a distribution network that is accessible by consumers. Importantly, the distribution network does not have to be a network of bank branches. The locations need to comply with FICA legislation that is primarily designed to prevent money laundering.

- Cost - banks are perceived to be more expensive and the pricing is less well understood. With the exception of Thembi, the research participants are very conscious of the cost of transactions. If the costs of converting physical to digital (i.e. a deposit) are too high, it is a serious disincentive to the creation of digital money. Money transfers at Shoprite are perceived to be low cost and the charges easier to understand.
- Cash wages – physical money payments to casual labour and employees such as Thulani. He does not believe he earns enough to warrant having a bank account. In any event his employer does not offer payment in digital money. Both parties appear satisfied with this state of affairs. How can this be changed?

## **7.6 Contribution to knowledge**

The socio-technical model was useful as the foundation of the conceptual framework informing the research. The interpretive perspective adopted confirms and provides new knowledge about the adoption of digital money in response to calls from Donner and Tellez (2008), Pickens and Ivatury (2006), and the earlier calls from calls from Orlikowski and Iacono (2001) and Kling (2000) for social informatics researchers to adopt interpretivist perspectives. The research specifically addresses a knowledge gap identified by Dahlberg et al (2007) being the impacts of social and cultural factors on the adoption of digital money and comparisons between mobile and traditional payments. This chapter provides details how the research findings confirm, contradict and add knowledge of the determinants for the usage of digital money and mobile banking.

### **7.6.1 Confirmation of existing knowledge**

This research confirms there are personal networks that serve as transactional networks that satisfy the banking services needs of low income people and that cost (and the perception of cost) is a barrier to adoption and an impediment to usage. The research also confirms that the research participants adopt digital money because of the relative advantages in terms of availability.

Donner (2007) highlights personal networks that serve as transactional networks that satisfy the banking services needs of low income people. There were a number of instances where these

networks were evidenced in the data of this research. In section 6.7, Nkulu demonstrates such a network in that he has a trusted friend who looks after his extra cash for him until he needs it. Similarly in section 5.3, Rodney gives his extra money to his brother to look after for him rather than use his own bank account which has fallen into disuse. In section 5.7.1, Wandile acknowledges that if she needed money she would rely on her mother. Wandile has no bank account savings or ability to get a bank loan. She demonstrates that personal networks and reliance on family and friends, in particular, satisfy the banking services needs of many of the research participants. In section 5.7.2 her friend, Paulina, was able to buy her home using an interest free loan from their friend, Aunt Peggy. In section 6.5, Griffiths and Tsiko use a taxi service to send physical money back to Zimbabwe and in 6.6.7 it is clear that for Tsiko it is a personal network built on a relationship of trust that enables him to give the transporter a bag of clothes and a “little purse” containing R4,000.00.

Ivatury and Pickens (2006) identified the perception of cost associated with mobile banking as an impediment to usage. The perceptions of high cost were evidenced throughout the research (Thembi in section 6.4, Mpho in section 6.9, Thulani in 6.6, and section 7.5.2 in general) and are clearly an impediment to increased usage.

Mallat (2007) found that consumers would adopt mobile payments because of the relative advantages in terms of availability. Evidence of this was found where the research participants were required to have a bank account in order to receive digital money or make digital payments. This has been termed “utility” in section 7.4.4. In these cases the research participants faced the choice to use digital money or forego the income or purchasing opportunity. The physical money option was not available. Refer section 6.2 for Patience, Vusi, and Portia who receive digital money and Mpho and Thembi who make digital payments.

### **7.6.2 Contradiction of existing knowledge**

The perceived risk of digital money and the value placed on human interaction were not found to be barriers to adoption impediments to usage. There was no evidence found that opening a bank account or using digital money is regarded as complicated or that the avoidance of queues is a reason to migrate to digital money.

Donner (2007) found high levels of perceived risk to be a barrier to adoption. The only perceived risk of digital money that appeared in the data was Thulani’s reference in section 5.6.5 to the risk that money in a bank account could be frozen by the authorities if a criminal was arrested. This is likely not the kind of risk that Donner had in mind and aside from this there was no evidence that the research participants perceived there to be any risks to the adoption of digital money. On the

contrary, there was evidence of the risks of using physical money such as it being stolen (section 6.6) or burnt in a shack fire (section 6.2).

Mwangia and Brown (2014) found that mobile banking systems exposed customers to the risk of crime at money agents. No evidence of this emerged in this research. The finding is perhaps peculiar to Kenya where M-Pesa is reliant on a vast network of informal money agents for the conversion of physical money to digital money and vice versa. In South Africa this activity takes place predominantly at banks and large retailers so is not relevant to the environment. It does, however, isolate an issue that emerged in the data and that is the requirement for significantly greater distribution of money agents. Greater distribution into informal markets may introduce the risk of crime at money agents as an impediment to adoption of digital money.

Ivatury and Pickens (2006) identified the value placed on human interaction as an impediment to usage. Although there is a strong sense of community evidenced throughout the research report, there was no evidence that the research participants curtailed their usage of digital money because of the value they place on human interaction. Ivatury and Pickens (2006) also identified the perception of complication associated with mobile banking as an impediment to usage. There was no evidence in the data that opening a bank account or using digital money including mobile banking was regarded as complicated. It is not possible to conclude that the research participants find it simple and uncomplicated. Clear statements to this effect did not emerge from the data. It must be noted, however, that the interview questions did not directly address this potential impediment to usage. Nevertheless, it is significant that none of the research participants provided any data to support the notion that a perception of complication associated with digital money is an impediment to usage.

Mallat (2007) found that consumers would adopt mobile payments because of the relative advantages in terms of availability and avoidance of queues but the barriers included premium pricing and a lack of critical mass. This research supports the notion that premium pricing is a barrier to the adoption of mobile payments and any digital money. No conclusions can be drawn on the advantage of availability of digital money relative to physical money other than to state that physical money is widely used and does not appear to have a disadvantage due to availability. Physical money is readily available. In terms of the avoidance of queues, again there is no evidence to support this as a reason for the research participants to adopt digital money. The only mention of queues is in section 6.8 where, ironically, Vusi references this as an impediment to digital money adoption as the residents of Alexandra are required to “wake up super early in the morning, just to secure your place in the queue.” The lack of critical mass may be an impediment but no evidence was obtained to support or contradict this notion. The researcher is, however, able to make the general observation

that physical money has significant critical mass and digital money does not. In section 7.5.2, the critical mass of digital money was discussed from the perspective of the informal retailer who does not appear to be under any pressure from customers to accept digital money. This is indicative that there is no critical mass of digital money for this type of transaction in the community.

### **7.6.3 New knowledge**

This research report makes a contribution to knowledge about the social, economic and cultural context within which digital money systems are being implemented in low income communities in South Africa and Alexandra in particular.

The five themes for the meaning of money that emerged (Money as Hedonism, Money as Love, Money as Food, Money as Development of Self and Children, and Money as Support Structures) is a contribution to knowledge.

The answer to the research question, “How does the digitisation of physical money impact the meaning of money for low income people?” provides new knowledge. Physical money and digital money have different meanings to the research participants. Physical money is generally small amounts of money in the informal market for receiving payment from customers and making daily purchases. Physical money is free and anonymous while digital money has a cost associated with it and it is traceable. Both physical and digital money can be saved and this is largely determined by whether a person has a bank account or not. Digital money is typically receipts, savings and payments of larger amounts of money within the formal sector.

Schierz et al (2010) found that deliverers of mobile banking solutions (a form of digital money) should target them where consumers have a strong need to pay for goods and services in their everyday life. They noted that early adopters play an important role in influencing others to adopt mobile payment services in the move towards critical mass. This research is consistent with that notion and provides the areas of everyday life that deliverers of digital money solutions could target. This research found that low income people will more readily use digital money where the transaction involves goods or services that have “meaning” and the early adopters play an important role in bringing other people into the socio-technical network of digital money.

Furthermore, low income people will use digital money if a decree is made to use digital money. The decree can come from government and to a lesser extent, big business. They will use digital money if it provides utility such as receiving money, transferring money over distance or buying pre-paid airtime.



Finally, in answering the research question, “Under what conditions will low income people not use digital money as a substitute for physical money?” there were three findings which contribute new knowledge. Illegal activity, low value transactions, and a shortage of digital money are situations where the research participants will not use digital money as a substitute for physical money. These conditions are the impediments to the evolution of the digital money socio-technical system in Alexandra.

## **7.7 Limitations of the research**

The research, as clearly indicated in the report, was conducted in a very specific area in Alexandra and was restricted to the collection of data from eighteen research participants and observations of the community. The results may not be replicable across South Africa and other developing countries.

The research participants were mainly unemployed or under-employed people living and working in Alexandra. The research field work was conducted during the working week and as such formally employed people were not included in the group of research participants. They may have provided other views and perspectives.

A further limitation, and this is a feature of all interpretive research, is my personal attributes. I am a white, professionally employed, English language speaker with almost no grasp of African languages. I may have been viewed as an authoritative figure which would influence the information provided to me. The fact that I speak no African language also means that I may have missed important information particularly given that Vusi translated most of one interview and parts of another.

## **7.8 Recommendations for practice**

The following recommendations are provided in summary form. The detail is available in the body of the research report.

### **7.8.1 Recommendations for government and civil society**

Any form of criminal activity will perpetuate the circulation of physical money in the payments system. A reduction in crime would reduce the need for physical money as would the decriminalisation of certain activities.

Assuming a policy objective is the substitution of physical money with digital money, measures are required to increase the digital money pool. Bank deposits of physical money should be encouraged

and cash withdrawals discouraged through appropriate (lower) pricing, incentives and penalties. Similarly, digital payments should be encouraged and cash payments discouraged.

Any attempts to implement a (digital) payment system for water in Alexandria will be met with fierce resistance. Implement with caution.

## **7.8.2 Recommendations for banks and broader business**

It is recommended that the term “mobile banking” be discontinued within any business aimed at the low income market in Alexandria. Low income people (like any other people) will not use something that they do not understand. “Cell phone banking” is the preferred term and “phone banking” would suffice. The term “phone” can be used in preference to telephone, cell phone and mobile phone.

Low income people in Alexandria have a strong and positive relationship with physical money. Many of them receive their money on a daily basis which does not present the same requirement for banking services as higher income people who are paid on a monthly basis. The management of cash as a product will thus continue to be critically important.

Cost effective solutions to the challenge of converting physical money into digital money and vice versa are required. A suggestion is to enable physical money deposits to accounts of all banks at deposit hubs. As example, all bank branches and retailers should accept deposits for multiple different bank accounts (including money transfer systems) and similarly pay out physical money to multiple different bank account and money transfer systems. This is called the interoperability of bank deposits and money transfers.

Banks and other deliverers of digital money solutions are advised to educate potential clients about the advantages of having a bank account and the value they are receiving by adopting digital money rather than physical money. Cost is a significant factor so digital banking services need to be appropriately priced for the low income market. The current costs are an inhibitor to adoption.

## **7.9 Recommendations for further research**

### **7.9.1 The benefits of financial inclusion to low income people**

An ongoing debate the researcher had with himself during the research process concerned whether low income people in Alexandria really want or need digital money and whether they will benefit from it. Research into the real benefits to low income people (rather than benefits to government, business and banks) would be most useful. It seems that the benefits of financial inclusion are just

assumed. The biggest drum beaters for financial inclusion are big business and banks who have significantly more powerful stakeholders than low income people.

### **7.9.2 Replicate the research in another community**

The study conducted could be replicated in another community within Alexandra, or another city in South Africa or other developing country. The degree to which the data collected and findings differ in relation to the relative poverty of the community, industrialisation of the setting and proportion of foreigners (including illegal immigrants) would be interesting research.

### **7.10 Conclusion**

This final chapter provided the conclusions drawn from the analysis of the data in response to the research questions and detailed how this research has made a contribution to knowledge. It concluded by providing recommendations for practice and two ideas for further research.

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## Appendix 2 Participant information sheet

As approved by the Human Research Ethics Committee (non-medical). Protocol number H13/03/02.

# Wits Business School

## PARTICIPANT INFORMATION SHEET

**Graeme Holmes** is a Nedbank employee and Wits University researcher. He is conducting research for a Master's degree.

The purpose of the research is to gain a greater understanding of how people in Alexandra earn, receive, save and spend money in the tough economic environment.

The research will be conducted by formal and informal interviews and observing people in the community. The research report will be available to anyone (academic, government, business, etc.) interested in the community and its challenges.

No person's name will be linked to the published report. The identity of participants will be protected. Research participants have the right to withdraw from the research project at any time.

An ethics clearance certificate to conduct this research has been obtained from the University.

Graeme Holmes (083 271 0279 / [graemeh@nedbank.co.za](mailto:graemeh@nedbank.co.za))

31 March 2013

Supervisor:

Professor Louise Whittaker (011 717 3684 / [Louise.Whittaker@wits.ac.za](mailto:Louise.Whittaker@wits.ac.za))



### Appendix 3 Data collection consent form

As approved by the Human Research Ethics Committee (non-medical). Protocol number H13/03/02.

## Wits Business School

### DATA COLLECTION CONSENT FORM

I hereby consent and acknowledge the collection of data, for the purposes of academic master's research, by **Graeme Holmes**.

The data collection could be through formal and informal interviews and observations including photographs.

I understand and agree that the contents of this data will be recorded and analysed as part of this research project.

I understand that no person's name will be linked to the published transcript or in any publication related to this research. The identity of participants will be protected.

Name:	
Address:	
Date:	
Signature:	

## Appendix 4 Interview template

This template provides an idea of the questions asked in each interview. Although each interview included most of the questions, every interview was different and questions were asked in response to the flow of the conversation. For example, I did not ask every participant their age and in some of the group interviews it was not possible to ask all of the research participants all the questions. I used the template as a framework but allowed each research participant to tell me their story. I was interested in what money meant to them and how they participated (or not) in the socio-technical network of digital money.

We're talking about money. Where you get it, how you spend it, what it means to you. We're also talking about banks, we're talking about cell phones, we're talking about mobile money, electronic money, all those sorts of things. What I would you to do is just tell me a story about what money means to you.
What is your name?
How old are you?
Where were you born?
What level of schooling did you complete?
Where do you live?
Do you own or rent your home?
What work do you do?
What other ways do you earn money?
What do you spend your money on?
What food do you buy?
What else do you spend your money on?
What do you do for fun?
Do you have a bank account?
Do you use mobile banking?
How much do you pay in bank charges?
Do you have any savings?

What phone have you got?

If you urgently needed R500 how would you get it?

If I gave you R500 right now, what would you do with that money?

## Appendix 5 List of all codes and codes grouped in themes

### Code-Filter: All

HU: The meaning of money to low income people and how mobile banking will be come to be used by them  
 File: [...]The meaning of money to low income people and how mobile banking will be come to ...]  
 Edited by: Super  
 Date/Time: 2014-03-16 21:48:35

A movie date	Food - eating suckers	Peaks and troughs
Ace Cook	Food as first priority	Peer pressure
Alcohol	Food to fill the tummy	Pension
Alcohol abstinence	Food to survive	Personal safe-keeping of savings
Alexandra setting	Friendship	Phone and crime
anti-social phone	Friendship and job-sharing	photograph
bank account	Full-time employment	Physical cash
bank overdraft	Fun	Place to live
Banking - value for money	Furthering education	Plasma Screen Gang
Bargain hunting	Getting drunk	Policeman in Alex
Basic survival	Girlfriend	Political connections
borrowings	Girlfriend - the marrying type	Pre-Paid electricity
Boyfriend	Goedkoop is duurkoop	Pride
Budgeting	Gold diggers	Providing for children
Business Assets	Government support as in poor support	Public Health Care
Buying home for cash	Happiness	Quality beer
Car and status	Hard work	Quality home
Career	Healthy eating	Quality Shoes
Caring for baby	Healthy eating on a budget	Real Estate Ownership
Caring for Granny	hedonism	Replacing the barter system
Cash in wallet	Home - rent or buy?	Risk exposure
Cell phone ownership	Home furnishings and appliances	Risk mitigationSaving to send home
Charity	Home improvements	Saving up for a mobile phone
Child orphan	Home ownership	Savings - inability to
Church collection	Hunger	Savings in a bank account
Clothes	Hustle - working hard to survive	Scarcity of employment opportunities
Clothes shopping	Hustle for drugs	School attendance
Clothes shopping at a Mall	Illegal immigrants	School clothes
Clothes to send home to Zim	Inequitable wages	School education bursary
Clubbing	Informal home loan	School registration
Clubbing and drugging	Informal liquor retailing	School Uniform
Community Banking	Informal retailing	Sharing what is available
Competition	Inheritance	Single parenting
Constraints on business growth	Insufficient to sustain lifestyle	Skills, experience and qualifications
Crime	Integrity	Small business
Cross border Money remittance	Interest and fees on loans from family and friends	Social Grant
Cross Border remittance transaction costs	Internet usage	social phone
Daily toil for little	job	Special treat
Digital money	Job hunting	Special treat - Fast Food
Digital Money	Leaving Alex	Stuff for free
Digital payments	Life	Support of Grandmother
Digital Store of money - banking	Loans from family and friends	Survival money
Distrust of loan sharks	Loans to fund business growth	Teenage pregnancy
Driving a car and living in the suburbs	Long distance taxi transport	Telephone communication with friends.
Drugs	Love	The Mall and clothes shopping
Drugs and neglect of self	Makes my world go around	The occasional party
Drugs, cigarettes and alcohol	Marriage	Theft of personal assets like Phone
Eating mud cakes	Matric Dance	Time
Eating on the cheap	Mental well-being	Transport
Eating with money in your pocket	Micro-enterprise / small business	Transport to school
Economic refugee	Money laundering	Treat for the children
Educating children	Money Transfer	Trust Fund
Education level <sup>29</sup>	Money Transfer - standing in queues	TV and newspapers
Electricity	Monthly and weekly wages	Unfulfilling work
electronic money on phone	Monthly income	Vusi
Energy	More money, more problems	Walk rather than taxi or bus

<sup>29</sup> Incorporates Matric and Tertiary

Entrepreneurship ethics Fair trade or fair pricing Family business Family communications	Multiple sources of income Necessary clothes No money no love Outsourcing heavy jobs Partying	War wound White guys are policemen Work hard, play hard and don't get bored. Drink Beer. Young women careers
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## Code Families

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HU: The meaning of money to low income people and how mobile banking will be come to be used by them  
 File: [...]\The meaning of money to low income people and how mobile banking will be come to ...]  
 Edited by: Super  
 Date/Time: 2014-03-16 21:35:33

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### Code Family: Development of Self, Development of Children

Created: 2014-02-04 21:52:17 (Super)

Codes (36): [Business Assets] [Career] [Constraints on business growth] [Crime] [Economic refugee] [Educating children] [Education level] [Entrepreneurship] [ethics] [Fair trade or fair pricing] [Family business] [farming] [Feeding children] [Friendship and job-sharing] [Full-time employment] [Furthering education] [Hard work] [Hustle - working hard to survive] [Illegal imigrants] [Informal liquor retailing] [Informal retailing] [Integrity] [Loans from family and friends] [Loans to fund business growth] [Providing for children] [Real Estate Ownership] [Scarcity of employment opportunities] [School attendance] [School clothes] [School education bursary] [School registration] [School Uniform] [Skills, experience and qualifications] [Transport to school] [Unfulfilling work] [Young women careers]

Quotation(s): 114

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### Code Family: Digital or physical money

Created: 2014-01-16 21:10:25 (Super)

Codes (21): [bank account] [bank overdraft] [Banking - value for money] [borrowings] [Buying home for cash] [Cash in wallet] [Church collection] [Community Banking] [Digital Money] [Digital money] [Digital payments] [Digital Store of money - banking] [Distrust of loan sharks] [Family loans] [Loans from family and friends] [Money Transfer] [Money Transfer - standing in queues] [Monthly income] [More money, more problems] [Pre-Paid electricity] [Saving to send home]

Quotation(s): 45

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### Code Family: Food

Created: 2014-01-28 04:37:08 (Super)

Codes (22): [Ace Cook] [Bargain hunting] [Basic survival] [Eating mud cakes] [Eating on the cheap] [Eating with money in your pocket] [Energy] [farming] [Feeding children] [Food] [Food - cheap but tasty] [Food - eating suckers] [Food as first priority] [Food to fill the tummy] [Food to survive] [Healthy eating] [Healthy eating on a budget] [Hunger] [Sharing what is available] [Special treat] [Special treat - Fast Food] [Treat for the children]

Quotation(s): 62

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### Code Family: Hedonism

Created: 2014-01-16 14:23:44 (Super)

Codes (24): [Alcohol] [Car and status] [Clubbing] [Clubbing and drugging] [Drugs] [Drugs and neglect of self] [Drugs, cigarettes and alcohol] [Eating with money in your pocket] [Fashionable clothes] [Fast money] [Friendship] [Fun] [Getting drunk] [Hustle for drugs] [Informal liquor retailing] [Insufficient to sustain lifestyle] [Makes my world go arround] [Matric Dance] [Money laundering] [Partying] [Quality beer] [Quality Shoes] [The occasional party] [Work hard, play hard and don't get bored. Drink Beer.]

Quotation(s): 45

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### Code Family: Mobile phones and cell phones

Created: 2014-02-16 21:13:54 (Super)

Codes (10): [anti-social phone] [Cell phone ownership] [Digital money] [Digital Store of money - banking] [electronic money on phone] [Phone and crime] [Saving up for a mobilephone] [social phone] [Telephone communication with friends.] [Theft of personal assets like Phone]

Quotation(s): 18

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Code Family: No Money No Love

Created: 2014-01-26 13:50:05 (Super)

Codes (35): [A movie date] [Boyfriend] [Car and status] [Career] [Clothes] [Clothes shopping] [Clothes shopping at a Mall] [Clothes to send home to Zim] [Clubbing] [Driving a car and living in the suburbs] [Family planning] [farming] [Fashionable clothes] [Fun] [Girlfriend] [Girlfriend - the marrying type] [Gold diggers] [Happiness] [Insufficient to sustain lifestyle] [Love] [Marriage] [Money laundering] [More money, more problems] [Multiple sources of income] [Necessary clothes] [No money no love] [Quality home] [Quality Shoes] [Real Estate Ownership] [Saving up for a mobilephone] [Scarcity of employment opportunities] [Single parenting] [Skills, experience and qualifications] [Teenage pregnancy] [Young women careers]

Quotation(s): 74

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Code Family: Support Structures

Created: 2014-02-04 16:29:08 (Super)

Codes (31): [Caring for Granny] [Charity] [Child orphan] [Church collection] [Clothes to send home to Zim] [Community Banking] [Family business] [Family communications] [Family reliance] [Family support structures] [Feeding children] [Friendship] [Friendship and job-sharing] [Government support as in poor support] [Informal home loan] [Inheritance] [Interest and fees on loans from family and friends] [Job hunting] [Loans from family and friends] [Money Transfer] [Pension] [Place to live] [Providing for children] [Public Health Care] [Saving to send home] [School education bursary] [Sharing what is available] [Social Grant] [Stuff for free] [Support of Grandmother] [Trust Fund]

Quotation(s): 73