

UNIVERSITY OF CAPE TOWN

Realising Partnership Needs

A Grounded Theory of mobile banking service
providers in Zimbabwe

Submitted in fulfilment of the dissertation module of the MCom Masters in Information Systems at
the University of Cape Town

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Acknowledgements

To my loving parents, my darling wife and first born son.

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Abstract

Mobile banking in Zimbabwe as a new phenomenon has been generally unexplored academically. The infant industry has seen various stakeholders step up to partake in the development of mobile banking services with various renditions of the phenomenon surfacing. The coming together of the stakeholders from different backgrounds has not been without complications. This study employs the Classic Grounded Theory methodology in an effort to discover the main concerns of the stakeholders involved in the development of mobile banking in Zimbabwe. The study finds that the main concern of these people is partnering. A grounded theory on how the need for partnering is realised and pursued through a three stage process named the Realisations Process is developed. The Realisations Process is how the stakeholders involved resolve their main concern by initially realising their need for partnering, reaching out to and engaging potential partners and eventually partnering with them on the condition they similarly realise the need to partner.

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CHAPTER 1: INTRODUCTION

1.1. Background

Despite a shaky inception in the early 2000's (Weber & Darbellay, 2010, p. 130), mobile banking (m-banking) has spread worldwide at a phenomenal pace. Where favourable environments have been found it has grown exceptionally as a useful application. With countries like Finland and Korea leading in adoption (Dewan, 2010, p. 367), m-banking is now widely considered the driving force for the next generation of e-commerce (Liang & Wei, 2004, p. 7). It has grown in Europe and more recently in Africa with success stories like M-PESA in Kenya and Ecocash (Econet Wireless Zimbabwe, 2012) in Zimbabwe. This study is particularly focused on the phenomenon that is m-banking in Zimbabwe, from the perspective of the developers of the service.

There are no set recognized definitions for what m-banking is, but it revolves around banking services being accessed through a mobile device. As a formal definition, this study will assume m-banking to be "the access to banking services and facilities offered by financial institutions such as account-based savings, payment transactions and other products by use of an electronic mobile device" (Njenga, 2009).

1.2. Problem statement and research question

The motivation for investigating the Zimbabwean context stems from the fact that the more evolved m-banking services have only recently been launched in Zimbabwe. The only mobile operators in Zimbabwe are Telecel, NetOne, and Econet and they have each embarked on m-banking services. Between the three MNOs, as many as fifteen mobile banking products have been launched in the country; some with more successes than others for different reasons. Given the country's history economically with hyperinflation and a formerly nearly collapsed banking sector the context of a new phenomenon revolving around banking solutions additionally provides for an attractive research area. Academically, the phenomenon in this context is relevant and persistent especially because the phenomenon of m-banking is highly context based and hardly transferrable between different contexts (Flores-Roux & Mariscal, 2010). This implies applying existing theory to the Zimbabwean context may be trumped by investigating and collecting empirical data from the context and building theory from that. The reasons behind these successes and failures of m-banking products, mostly difficult to determine, are evidence of this. For instance, the phenomenal successes of products like

Ecocash and M-PESA inadvertently have not occurred identically elsewhere despite the amount of literature on m-banking models and their applicability, and do not share identical conditions and causes of success. The m-banking phenomenon is relatively new in the Zimbabwean context and thus academically it is generally unexplored. The continual introduction of more innovations in the mobile money space in Zimbabwe despite past failures and stiff competition is indicative of how new the phenomenon is to the country and in turn, its unique context with m-banking to academia.

Research question

The importance of the contextual factor cannot be emphasised enough with m-banking services due to the observed lack of transferability and predictability from one country to the next of the phenomenon. The researcher is particularly geared to the investigation of the phenomenon from the service providers' perspectives in the Zimbabwean context in an effort to discover what they deem their biggest concern in the role of the m-banking service provider. The researcher seeks to discover this concern with specific attention to the context and more importantly how this concern is resolved by the people who hold it. The contextual emphasis, the focus on the provider perspective and their main concern and resolution combined, provide parameters for a relevant and persistent problem area and thus a relevant and persistent research question. Prior to the enquiry this concern specific to the context was not known and could not be accurately predicted nor could it have been conjectured due to the contextual factor. It then follows that an open research question that falls within the scope of the problem area will suffice if it seeks to discover the unknown that the researcher is after. The research question is posed by the researcher as "What is the main concern of the stakeholders involved in the development of m-banking services in Zimbabwe and how is it resolved?"

1.3. Outline

It should be noted that unlike the traditional structure of a dissertation, the following chapter is not the traditional literature review; instead a discussion of the methodology used is held and justification for its use is given. The researcher finds it necessary to proceed in this manner in order to eliminate potential misunderstanding and to illustrate and justify the correct use of the somewhat unorthodox methodology employed, that is Classic Grounded Theory (CGT) methodology.

Chapter 2 will explore the method employed for the enquiry of this study; it will serve to describe the theoretical aspects and background of the methodology. The Grounded Theory methodology is described, its use in the IS field discussed and its selection as the method of enquiry justified. Chapter 3 will go on to illustrate how this academic enquiry was executed using CGT.

Chapter 4 is the literature review in which the placement of the study in the broad agenda of m-banking is carried out. Frameworks on research on m-banking research are discussed there and a new comprehensive one proposed. Trends in m-banking research are also discussed. Chapter 5 paints a background picture of the phenomenon of m-banking in the context of Zimbabwe. There the current state of affairs with regards to the phenomenon is presented and discussed in an effort to give grounding to the ensuing chapters 6 and 7. Chapter 6 will discuss the approach through which the environment in which the study was viewed, that is the life world approach. Chapter 7 then discusses the results of the study. The theory discovered by the study is presented there and then contextualised amongst existing extant theory in the ensuing Chapter 8. Chapter 9 concludes this dissertation with a summary and some future consideration. Chapters 10 and 11 list the works cited by this study and the appendices respectively.

CHAPTER 2: GROUNDED THEORY

With the problem area identified and presented, this chapter moves forward; Grounded Theory as a methodology is explored and argued for as a suitable method of enquiry for this study. Sections 2.1. and 2.2. discuss the methodology itself and how it is used to develop theory. Section 2.3. discusses how it has been used in the IS field and the argument for why it is an appropriate methodology for this study is presented in Section 2.4. This chapter serves to create the platform for Chapter 3 to continue and describe the design of the research process in accordance to the methodology as it is described here. Chapter 3 will proceed to discuss the methodology's procedures as they were applied throughout the duration of this study.

2.1. The Grounded Theory Methodology

Grounded Theory (GT) was first defined in 1967 as the discovery of theory from data (Glaser & Strauss, 1967, p. 1). Glaser and Strauss essentially described a research methodology that aimed at systematically deriving theories of human behaviour from empirical data (Urquhart, Lehmann, & Myers, 2010). It is characterized by coding strategies (Charmaz, 2001), a contextualization focus (Brown & Matavire, 2008, p. 139), simultaneous data collection and analysis (Urquhart et al, 2010, p. 359), category saturation (Tan, 2010), memo making (Strauss & Corbin, 1990, p. 114) and the requirement of theoretical sensitivity on the researcher's part (Glaser, 1978). Although these traits may not be exhaustive, nor are they exclusive to the methodology, authors seem to identify three important principles. These are the principles of emergence, constant comparative analysis and theoretical sampling (Brown & Matavire, 2008, p. 139) as described by the originators of GT (Glaser & Strauss, 1967). Lehmann (2010) argues the two traits that distinguish Grounded Theory are the rigor with which analysis is carried out and the units of analysis being concepts instead of data.

Common misconceptions about the grounded theory methodology are evident in the academic debates on grounded theory. Authors argue over the consultation of literature prior to carrying out data collection and analysis (Urquhart et al, 2010; Tan, 2010; Urquhart & Fernandez, 2006; Urquhart, 2002), the flexibility of grounded theory, the value of the theory GT produces (Urquhart & Fernandez, 2006), the epistemological background of grounded theory (Lehmann, 2010; Urquhart et al, 2010; Brown & Matavire, 2008) and whether or not grounded theory may be accurately termed a methodology (Tan, 2010). The literature on grounded theory also identifies common mistakes made when employing grounded theory.

Some of which are: over-emphasizing the identification of codes without theoretical coding (coding in accordance with established concepts), confusing general inductive research with grounded theory, distorting the core tenets of grounded theory, premature conclusion of data collection and over-generalizing (Goulding, 1998).

Two strands of GT

About a decade after discovering GT, Strauss and a student of his, Juliet Corbin published 'Basics of Qualitative Research: Grounded Theory Procedures and Techniques' which they intended to be a straightforward instructional manual to using GT in different academic disciplines (Strauss & Corbin, 1990). This was to be the beginning of a public debate on how GT is supposed to be carried out with Glaser opposing the teachings of Strauss and Corbin (Glaser, 1992). Glaser contended mainly that the Strauss and Corbin's proposed GT did not adhere to the main point of GT, which was to let theory emerge from data. Instead, he claimed, their method forced theory onto the data. The debate divided GT into two versions (Lehmann, 2010), which became to be known as the Straussian approach to GT and the Glaserian or Classic Grounded Theory (CGT) approach due to different points of contention on how GT should be conducted. The originators have since published material (Glaser 2001; 1999; 1998; 1995; 1992; 1978; Strauss & Corbin, 2008; 1997; 1994; 1990; Strauss, 1987;) continuously developing their differing ideas on GT. GT has also evolved into various forms however these two strands of GT are the most recognized.

2.2. Theorizing with Grounded Theory

A grounded theory is built with concepts/categories as its building blocks. These concepts can be behaviours, or factors influencing behaviours, which help to explain how the basic problem the people involved face is resolved or processed (Adolph, Krutchen, & Hall, 2012). Essentially the idea is that concepts/categories as building blocks are integrated into a story that explains how participants of the study resolve their main concern; this story is the grounded theory.

Urquhart et al (2010) describe the process of theorizing using GT as one of increasing the level of abstraction, range and scope of theory. They identify three levels of theory and claim the increase in levels is from narrow concepts, to substantive theories and finally to formal theory. The narrow concepts build categories and their properties. The relationships between the categories are then used to build substantive theories, which are then in turn used to build formal theories. The difference between substantive theories and formal theories lies in the

level of generality (Glaser & Strauss, 1967). Formal theories are less specific than substantive theories, however there are no set boundaries between the two (Tan, 2010).

Fernandez (2004) describes a model that factors in the use and role of memos and extant literature in the process of theorizing using grounded theory. Figure 1 illustrates this:

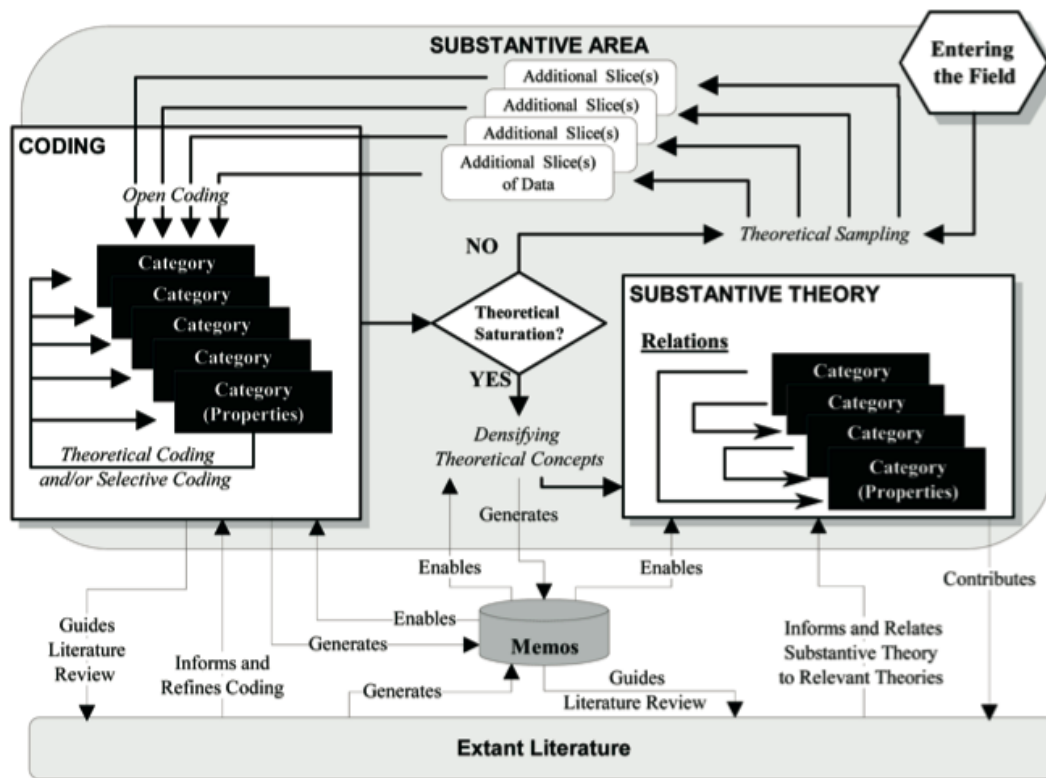


Figure 1: Theorizing with Grounded Theory (Fernandez, 2004)

Fernandez’s model is more characteristic of the Classic Grounded Theory (CGT) approach as described by Glaser and Strauss (1967) and Glaser (2004). This model captures the element of reflective as well as reflexive theorizing inherent in CGT as the end product is developed as opposed to a more vertical-oriented movement implied by abstraction.

A framework for theorizing in GT

Urquhart et al (2010) go on to propose a fitting framework for theorizing in GT studies in accordance to CGT. Their framework maintains consistency with their espoused process of theory generation as it identifies two key components for theorizing in GT namely the degree of conceptualization and theory scope. In essence, they argue for conceptualization beyond description and inclusive of categorical interrelationships and appropriate theory scope

(Urquhart, Lehmann, & Myers, 2010, p. 367). Figure 2 illustrates the summarized version of their framework:

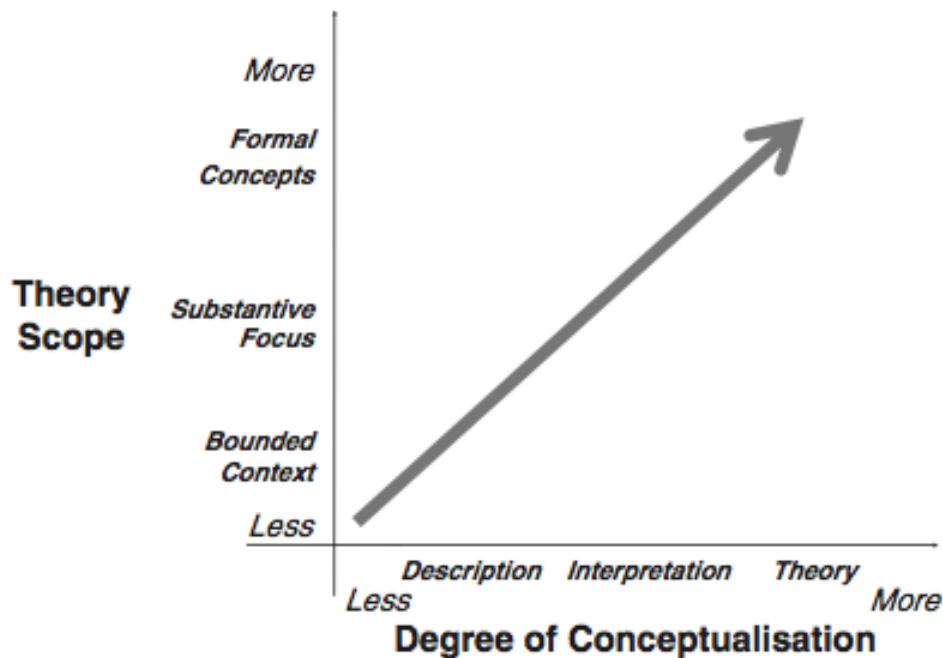


Figure 2: Framework for theorizing in GT (Urquhart, Lehmann, & Myers, 2010, p. 366)

The horizontal axis of the framework relates to the degree of analysis carried out while the vertical axis relates to the corresponding outcome of the building a grounded theory.

2.3. Grounded theory in IS

IS researchers have increasingly employed grounded theory as a method of enquiry in the field (Urquhart et al, 2010; Brown & Matavaire, 2008). It is widely believed the use of GT gained legitimacy in IS after Orlikowski's (1993) award winning paper on CASE tools (Lehmann, 2010; Urquhart & Fernandez, 2006; Urquhart et al, 2010) and has since caught many an IS researcher's interest. There have been concerns in the literature about the wrong use of GT (Urquhart et al, 2010; Lehmann, 2010) with various strands of GT being identified in IS. Urquhart and Fernandez (2006) identify the full use of GT, using GT to generate concepts, mixing GT with other methodologies and mislabelled GT. Similarly, Brown and Matavire (2008) identify the Glaserian or Classic Grounded Theory, Straussian grounded theory, the use of GT for analysis only, and mixed methods. Brown and Matavire (2008) further find that the most common trend in IS literature is using GT for analysis with the least

being CGT and the majority of the studies that employ grounded theory as a methodology are interpretive and include prior theorizing.

2.4. Grounded theory as an appropriate methodology

GT is argued for as the most fitting method of enquiry for this study. There have been calls for new theory development in the IS field (Weber, 2003) in an effort to relieve the dependence on theory from other fields (Truex & Holmstrom, 2006). GT provides a starting point for future theory building in IS via its production of substantive theory. The contextual factors involved in m-banking in general are highly influential on the findings of studies in this area. Studies on m-banking in different countries have been documented and show that the phenomenon is not replicable from one country to the next regardless of seemingly similar conditions (Flores-Roux & Mariscal, 2010). Therefore, the contextual nature of grounded theory (Brown & Matavire, 2008) makes it a good fit. The study will investigate the concerns of the people involved in building social constructs (such as money and banking) that result from human interaction on top of technology to create m-banking systems. The focus is thus a social one rather than a technological one. Grounded theory matches this focus owing to its roots being in sociology (Brown & Matavire, 2008). Duncombe and Boateng (2009) note gaps in m-banking research in the conceptual and methodological approaches used in the m-banking research agenda. Most relevant is that they note the prevalence of model-based approaches over formal recourse to theory and the preference of loosely positivist mixed method approaches over in-depth qualitative studies. GT would address this as it is a thorough methodology that seeks to build theory overlooking orientations of qualitative or quantitative data.

CGT as an appropriate rendition of GT for this study

The main versions of GT considered for this study were CGT and the Straussian rendition. There are various points of departure noted by authors between the two. Van Niekerk et al (2009) note important differences in initial considerations, analysis principles, coding techniques, memos and diagrams, writing phase and the criteria for judging theory. The three most compelling and relevant points of departure between the two renditions for the researcher were purpose (under initial considerations) (Van Niekerk et al, 2009, p. 98), research question (under initial consideration) and questioning (under analysis principles) (Van Niekerk et al, 2009, p. 99).

The purpose of the classic method is to generate concepts and relationships that explain, account for and interpret the variation in behaviour in an area of study. The behaviour is mostly related to some problem/concern experienced by the individuals in the area (Van Niekerk et al, 2009). The purpose of the Straussian rendition is more description-oriented with regards to the behaviour occurring in the area. This is “the reason why Glaser calls it conceptual description, rather than grounded theory” (Van Niekerk et al, 2009). The researcher, as mentioned in Chapter 1, seeks to discover the main concern of the stakeholders involved and how they resolve this concern. By comparison of the two renditions considered here the elected choice is CGT given its focus on concerns and concern resolution as opposed to mere description. By way of fitting the researcher’s intentions in this regard CGT is the better choice.

The second relevant point of departure specific to this study is around the asking of the research questions (Brown & Matavire, 2008). CGT requires no specific narrow research question (Glaser & Strauss, 1967) while the Straussian version suggests it be present (Strauss & Corbin, 1990). It is the researcher’s view that since the purpose of the study is to investigate the main concern of stakeholders involved in the development of m-banking services, which are unknown prior to investigation; a specific narrow research question might lead to preconception rather than discovery (Glaser & Strauss, 1967). With CGT, the researcher does not start with the traditional narrow research question but instead “investigates an area where the subjects have a main concern” (Van Niekerk et al, 2009). Again CGT is found to be the better and more fitting option by virtue of matching the researcher’s intentions.

The final point regards analysis and again finds the researcher favouring CGT. In CGT the researcher is required to be guided constantly by questions such as “What is going on in the data?”, “What is this study of?” (Glaser & Strauss, 1967). In the Straussian GT any question that could possibly relate to the data must be asked including aspects that might not be important to the concerns of the subjects, resulting in a description of the area under research (Van Niekerk et al, 2009). Again, this study seeks to discover the concerns of individuals in an area. Therefore the researcher finds it fitting to pursue what the data is saying in terms of what is going on in order to discover these concerns. Asking questions that might veer from this objective will only be fruitless and may hinder the data “speaking for itself”, let alone prevent true emergence of theory from the data. In addition to this CGT is the discovery of concepts (Glaser & Strauss, 1967; Lehmann, 2010); the focus on concepts over description

allows for better explanation of what is happening in the data with particular regards to how the concerns being expressed are resolved.

This study as a knowledge contribution

This study is intended to be a valuable knowledge contribution in five distinct ways. Firstly, the study will further the discourse on m-banking which has been noted by authors as necessary (Varshney & Vetter, 2002, p. 197; Dewan, 2010, p. 364; Ngai & Gunasekaran, 2007, p. 3). Secondly, the study will contribute to the ongoing debates around using grounded theory in the IS field. Thirdly, the study will discover knowledge on the m-banking phenomenon specifically in the Zimbabwean context. Fourthly, the study aims to build fresh valid IS theory and this will strengthen the field (Lyytinen & King, 2004). Lastly, the study will also provide knowledge to IS practitioners in m-banking.

This chapter has discussed grounded theory as a tool for academic enquiry. Most importantly, the two major strands of GT have been compared and contrasted in an effort to identify and argue for the better option for this study. The following chapter discusses the execution of the selected rendition, CGT, with regards to this study.

CHAPTER 3: CLASSIC GROUNDED THEORY AND THIS STUDY

This chapter describes the research approach that was employed in accordance and strict adherence to CGT. The originators of the grounded theory methodology did not specify any epistemological inclination with grounded theory (Brown & Matavire, 2008, p. 142). Therefore, it is reasonable to assume it is open to use by researchers of any epistemological stance. As such it is worth noting firstly that the study was neither inductive nor deductive but instead followed abduction logic by the virtue of employing CGT (Fernandez, 2004). CGT involves both induction (during abstraction of concepts) and deduction (deriving from induced concepts) (Lehmann, 2010). Fernandez (2004) explains this logic as a cycle of induction and deduction as illustrated by Figure 3:

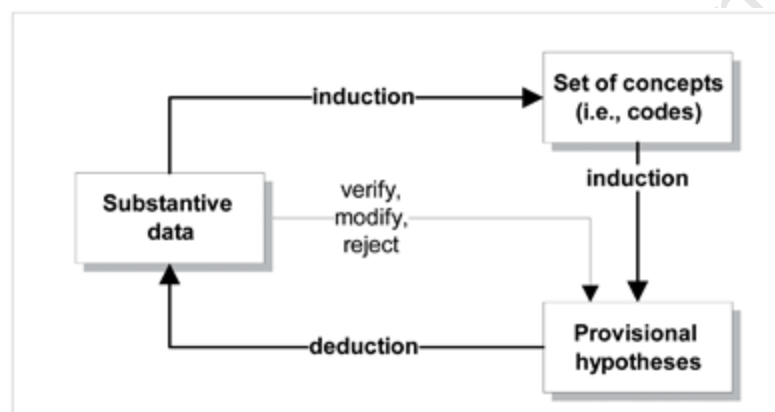


Figure 3: The inductive-deductive cycle of the grounded theory method (Fernandez, 2004)

Secondly, the study was neither qualitative nor quantitative. According to Glaser and Strauss (1967) “all is data” and this nullifies all claims to whether a grounded theory is intrinsically qualitative or quantitative.

The purpose of the study was to investigate the concerns of stakeholders involved in the development of m-banking services. The study attempted to capture the concerns of the stakeholders involved in the development of m-banking services only in the time in which the actual development occurs or occurred, whichever the case may be. As such, the timeframe was cross-sectional.

The following are the detailed methods techniques and procedures that were employed for this study inclusive of data collection, data analysis and the write up of findings. These techniques and procedures draw from Glaser’s (2004) recommended essential CGT procedures. The ethical considerations are then discussed in section 3.3.

3.1. Sample

The initial informant(s) were selected for convenience of getting access to data. This is to say the first informant was selected solely as a means to gaining access to the field for data collection. From then on the progressive selection of informants was solely driven by theoretical sampling as prescribed by Glaser and Strauss (1967) and Glaser (2004). It should be noted that this initial informant was employed and directly involved in the mobile banking services space as were the rest of the informants despite being employed by different organisations. The total list of informants totalled fourteen, all of which were top management or executives barring one; the inclusion of the non-executive informant was again due to theoretical sampling. The organisations included a regulator, three banks, one MNO and three application solution providers.

An additional six potential informants were approached and declined to participate; they were employed as follows: one by a bank, four by MNOs and the last by an applications solution provider.

3.2. Grounded theory procedures

Getting started

Glaser (2004) and Fernandez (2004) prescribe that for a grounded theory study, the researcher go straight into the field to collect data before reviewing any prior theory. Glaser claims a good GT analysis starts right off with data collection and is not blocked by a preconceived problem. The researcher followed this prescription.

Research question

When conducting a CGT study, the researcher is encouraged not to enter the field with a specific narrow research question (Glaser & Strauss, 1967). Instead, a broad problem definition in a very general form is utilised (Adolph et al, 2012) in order not to block the emergence of theory from data. The specific problem then emerged from data. This study, as discussed in Chapter 1, was guided by the general question “What is the main concern of the stakeholders involved in the development of mobile banking services in Zimbabwe and how is it resolved?” The openness of the question allowed for whatever the main concern was to emerge without preconception. At the same time, the problem area was identified. The question adhered to CGT in that it served more as an identifier of the problem area to be investigated as opposed to a traditional narrow research question. It sought to discover and

focus more on the concerns of people in the problem area as opposed to the traditionally specific and closed research question. The discovery of the need for partnering as a core variable then subsequently provided room for a more specific direction and titling of the study.

All is data

Glaser and Strauss (1967) emphasise that in grounded theory “all is data”. The data collected was not presumed to be structured, obvious nor subjective (Glaser, 2004). The primary means of data collection for this study was interviewing and this was conducted at the informants’ places of work in offices and board rooms. This is not to say no other data was collected by any other means. Because any form of data may be used, other means of data collection were employed when the needs arose such as observation, secondary data etc. The interviews were initially semi-structured, open-ended to allow the informants to raise concerns out of their own will and perspectives and to minimize any predetermined influence from the researcher (Glaser, 2004). A sample of the initial interview question sheet is found in Appendix 2. On average each interview was an hour long. As the study progressed, the best interview style emerged according to emerging patterns and concepts (Glaser, 2004). Field notes were used in interviews to immediately capture the respondents’ responses as prescribed by Glaser (2004). Other means of data collection were open ended questionnaires, follow-up emails, teleconferencing and face-to-face and telephonic conversations (formal and informal). Again field notes were taken down in a notebook at each instance of data collection. A total of ten separate one-on-one interviews were carried out, two separate two-on-one interviews (one researcher two informants) and two completed open-ended questionnaires were received. Follow up emails and phone calls and made with three informants. Table 1 profiles the informants for this study:

Table 1: Profiles of informants

Informant	Organization Type	Position Held	Relevant Experience (Years)

1	MNO	Head of Department	<5
2	Applications solution provider	CEO	>5
3	Applications solution provider	CEO	<5
4	Bank	Head of Department	>5
5	Bank	Head of department	<5
6	Bank	Supervisor	5>
7	Bank	Head of Department	<5
8	Bank	Head of Department	>5
9	Regulator	Head of Department	<5
10	Regulator	Head of Department	<5
11	Regulator	Supervisor	<5
12	Regulator	Supervisor	<5
13	Regulator	Supervisor	<5

Open coding

Open coding is defined as the process by which field notes are to be analysed line by line to identify concepts (Glaser, 2004). This was the first step of coding to identify substantive codes. The data was be coded in every way possible to “run it open”. The researcher was guided by a set of questions: “What is this data a study of?”, “What category does this incident indicate?”, “What is actually happening in the data?”, “What is the main concern being faced by the participants?”, and “What accounts for the continual resolving of this concern?” Glaser (2004, p. 13). These questions were asked of the data so as to keep the researcher theoretically sensitive and transcending when analyzing. They forced the researcher to focus on patterns among incidents that yielded codes and to rise conceptually above detailed description of these incidents. In this manner, new categories emerged and new incidents fit into existing categories. Through open coding, the researcher had the opportunity to see the direction in which to take the study by theoretical sampling before becoming selective and focusing on a particular problem. Coding line-by-line had the effect of forcing the researcher to verify and saturate established categories, minimizing missing important categories and ensuring the grounding of categories in the data (Glaser, 2004, p. 13). Open coding allowed the researcher to generate only those codes that would fit with the empirical data and would work in terms of providing relevant predictions, explanations, interpretations and applications as described by Glaser and Strauss (1967, p. 3). The researcher used field notes to capture key phrases and quotes; these provided the basis to perform open coding in order to discover as many concepts as the data provided.

Theoretical sensitivity

Theoretical sensitivity is described as the researcher's ability to generate concepts from data (Glaser & Strauss, 1967). As difficult as it may have been, it was required on the researcher's part. The essential requirement on the researcher's part was the ability to generate concepts from the data and to relate them according to normal models of theory (Glaser, 2004). This conceptualisation was never in a straight and narrow order of ideas, but instead it was a process that consumed a lot of effort in order to grasp the conceptualisation skills required.

Interchangeability of indicators

GT was carried out in this study based on a model that compares incidents to incidents up until a conceptual code is generated then incidents are compared to the emerging concept. These incidents are referred to as indicators and the model as the concept-indicator model (Glaser, 2004). With conceptual specification as the focus of GT, the interchangeability of indicators across concepts and their properties produced saturation of these concepts (Glaser, 2004) as well as potential transferability of theory to other substantive areas. This was characteristic of the incidents and concepts that emerged from this study. These indicators as per CGT were actual data (Adolphet al, 2012) – words, sentences or phrases from informants. For example, “unfamiliarity” as an indicator emerged from the informants' statements when they expressed how they viewed the business of developing m-banking services as new and foreign to them. Again unfamiliarity emerged as a reason for people casting doubt on one another's capabilities. The two incidents were compared and aided in saturating the concept of unfamiliarity while the interchangeability of the indicator unfamiliarity was evidenced by how it also aided in saturating the concepts of doubting and resisting change.

Constant comparative method

“Constant comparison is the major strategy used in discovering grounded theory” (Matavire & Brown, 2011). The collection and analysis of data was carried out simultaneously; this was done following grounded theory's principle of constant comparative analysis as described by Glaser and Strauss (1967). Data gathering and analysis was undertaken together repeatedly, with every incident of data being analyzed and compared to the rest to determine if it extended, completed or enhanced any concepts so far established. Soon after each interview or instance of collected data whatever incidents emerged from that data were compared to what had been collected on previous occasions of data collection. The notes taken from each

interview were reviewed and analysed and then compared to previous analyses. To help the researcher keep track of data collection, all incidents recorded were dated to enable easier comparison as the study progressed. The goal was theoretical elaboration, saturation and verification of concepts, densification of concepts by developing their properties and generation of further concepts (Glaser, 2004, p. 14; Lehmann, 2010, p. 4).

Selective coding

The researcher, upon discovering the core variable, ceased open coding and delimited coding to only those variables that related to the core variable in sufficient ways so as to produce a parsimonious theory (Glaser & Strauss, 1967). This is referred to as selective coding (Van Niekerk et al, 2009, p. 101). Upon finally discovering the core variable, all coding was directed towards it assuming it best explained how the main concern was resolved.

Theoretical coding

Theoretical coding dictated that the researcher focused on emerging patterns and continued to code in line with established concepts from the data in pursuit of integration of conceptualized codes into sound theory (Matavire & Brown, 2011). The incidents that were articulated in the data were analyzed and coded, using the constant comparative method, to generate initially substantive and later theoretical categories. Coding got the researcher off the empirical level by fracturing the data then conceptually grouping it into codes that then became the theory that explains what was happening in the data in accordance to Glaser's prescription (Glaser, 2004, p. 12). Theoretical codes conceptualized how the substantive categories may have related to each other as hypotheses to be integrated into theory (Adolph et al, 2012); they illuminated the underlying relationships between separate categories. An example of theoretical coding was with the category "Partnering need". Partnering appeared on all occasions of data collection as a core concern and by constant comparison the category was strengthened. "Skills shortage" also appeared often but not always. Initially, there was no clear link between the two but through the theoretical code "Low confidence in partnering" it then emerged organisations often lacked confidence in partnering based on a lack of confidence in each others' skills. In this way, although initially through open coding the categories were independent, it later emerged through pursuing what was happening in the data that the categories were related with "Partnering need" as the core variable. These theoretical codes gave integrative scope and helped the researcher maintain the conceptual level in writing about the emergent concepts and their interrelations (Glaser, 2004, p. 12).

Theoretical sampling

Sampling was on the basis of concepts derived from the data already found (Glaser & Strauss, 1967; Fernandez, 2004). Beyond the decision concerning initial collection of data, further collection was not planned in advance of emerging theory. Successive requirements to collect data arose as a result of discovering codes and attempting to saturate them. This is to say the already established concepts pointed to the units of enquiry (the theoretical sample) at each turn of data collection. These units then maximized further development of concepts in terms of their properties and dimensions, uncovered variations and identified relationships between concepts (Glaser & Strauss, 1967). By identifying gaps in the discovered theory, the researcher was guided as to the next sources of data. For instance, if a concern that was unique to banks emerged it only meant the next informant had to be employed by a bank. The basic question that guided the theoretical sampling was "to what groups or subgroups does one turn to next in data collection – and for what theoretical purpose?" Glaser (2004, p. 14).

Delimiting

Data collection and coding was delimited to that which is relevant to the emergent conceptual framework (Glaser, 2004, p.15). Delimiting occurred at the theoretical level where the theory was clarified and non-relevant properties were pruned; and at the categorical level where the list of categories was reduced in order to focus on one core category and related variables. Glaser argues this integration of theory around a core variable delimits the theory and thereby the research project (Glaser, 2004, p.15). Delimiting helped the researcher focus on only what was relevant to the emergent theory.

Core variable

There emerged a central theoretical code on which the researcher focused. This occurred via incidents being compared to other incidents of data until a core category began to emerge (Glaser, 2004). It related meaningfully to many other categories and their properties and accounted for the bulk of the variation in behaviour around the problem area (Glaser, 2004). The objective was to saturate categories as much as possible, especially those that contributed the most to the core variable. This core variable was of course an elusive variable due to the level of conceptual ability that was required. The eventual core variable, "realising the need for partnering", was discovered after many attempts. It should be noted that the numerous

attempts only helped in strengthening the end result in terms of the core variable – the end result was built on these attempts.

Use of literature

Extant literature in this study was used as a source for comparative analysis with emerging theory from the data (Glaser & Strauss, 1967). Comprehensive consultation of extant literature prior to entering the field was shunned as the researcher deemed it to be problematic as it would possibly divert from concerns of the people in the substantive area of interest. The risk of doing so is that the researcher may have focused on concerns irrelevant to what was to emerge from the data. In accordance with this, prior theory in the area of interest was only consulted under the direction of the concepts that emerged from the data. However, it should be noted that Glaser's recommendation on delaying the literature review is not absolute. Similar to Adolph et al (2012), the literature review process for this study was two-phased. The initial literature review (Chapter 4) was conducted not to consult existing theory but instead to situate the researcher's work in the broad agenda of m-banking. The ensuing literature review around the emergent theory from the data (Realisation of the need for partnership) was then consulted after collection was complete and the theory developed is placed in the context of existing theory (Fernandez, 2004) in Chapters 7 and 8.

Pacing

Glaser (2004) cautions researchers that the discovery process that is inherent in using GT takes time and hence patience must be exercised – the researcher took heed of this and tried by all means to pace himself. Rushing or forcing the process shut down the researcher's creativity and conceptual abilities resulting in thin and incomplete theory (Glaser, 2004, p. 16). This was a lesson the researcher learnt twice over before discovering the core variable. Rushing the process resulted in two false core variables. The researcher had to pace himself and rely solely on the emergence of theory from the data.

Memoing

Glaser (2004) defines memos as theoretical notes about the data and the conceptual connections between categories. Memoing is of paramount importance to GT (Charmaz, 2006) and was carried out parallel to the data analysis process in this study (Glaser, 2004, p. 17; Van Niekerk et al, 2009, p. 101). The writing of theoretical memos was the core stage in the process of generating theory and without this the researcher would not have been doing

GT Glaser (2004). The basic idea was to compile memos that could be sorted from which the write up of theory drew (Glaser, 2004; Van Niekerk et al, 2009). The researcher carried a notebook with him throughout the duration of the research project in which ideas and memos were recorded during data collection and even on random occasions. This notebook served as the researcher's memo bank from which the resultant theory drew. Memos were an instrumental tool in the building and coming together of the grounded theory discovered in this study. Some of the key memos as jotted down by the researcher are found in Appendix 3.

Sorting and writing up

Theoretical saturation was reached when data collection, interviews and follow-up communications driven by delimiting, did not provide any incidents that could develop, strengthen or discover new concepts. The core variable had been discovered and developed as far as it could. Upon achieving theoretical saturation of categories the researcher reviewed, sorted and integrated the numerous memos from the memo bank related to the core category. From these sorted memos, the theoretical outline or conceptual framework that guided the articulation of the GT through an integrated set of hypotheses (Glaser, 2004; Van Niekerk et al, 2009) was developed. The outline for writing was then simply an emergent product of the sorting of memos (Glaser, 2004, p. 18). A mind map was also drawn up by the researcher as recommended by Charmaz (2006) together with memo-writing to aid in the clarity of what the researcher was discovering as the study progressed. This mind map was dynamically constructed using hard board and sticky notes and was strictly guided by the memo bank.

Analytic rules developed during sorting

Glaser (2004) notes the importance of analytic rules in GT in guiding the construction of theory as it emerges. He points out sorting, the notion of a core variable, memoing, carrying forward concepts, integration and cutting off the analysis appropriately. These rules were the guiding rules that detailed operations, specified foci, delimited and selected use of the data and concepts, acted as reminders of what to do and keep track of and provided the necessary discipline for sticking to and keeping track of the central theme as the total theory was generated (Glaser, 2004, p. 19). These rules were developed and strictly adhered to for the duration of this study. Although not initially difficult, adherence to them proved to be the key to the success of building theory using CGT.

Expected results

By the principle of emergence (Glaser & Strauss, 1967) the results were solely determined by what the empirical data dictated and not by any preconceived theory in this study. Typically, the product of a classic grounded theory study is a set of carefully grounded concepts organized around a core category and integrated into hypotheses (Glaser, 2004, p. 10). This was the case with this study. The resultant theory explains what was happening with the behaviour in the area of interest with the prime mover of this behaviour prevailing as the main concern of the stakeholders involved in the building of mobile banking services in Zimbabwe. The details and specifics of the final theory were strictly dependent on the emergence of theory from the data. The researcher did not enter the field with any expected results.

3.3. Confidentiality and ethical considerations

Organisations tend to be wary of the information they share especially in the instance of product development. In this case the product development process that this study proposed to investigate was the development of m-banking services. Sensitive information concerning this product development was largely considered to be trade secrets especially amongst competing organisations such as banks. However, this study did not require a vast amount of sensitive information so all of the required information was acquired with little hindrances and fully consenting and cooperative informants.

The researcher was well aware of the ethical implications and responsibilities involved in carrying out a study of this nature. The department of Information Systems of the University of Cape Town (UCT) oversaw this study and was strict on not allowing any unethical practice in the duration of the study. To address the ethical issues surrounding the research project, access to all the information gathered for analysis was limited to the researcher and the researcher's supervisor when necessary. Under no circumstances could the information be revealed to any other party even after the project was completed. Unless the partaking organisations request otherwise, their participation in the project as informants will be kept anonymous and they are not to be named in any explicit or implicit way as an informant at the organisational or individual level. The only motivation/incentive for participation offered to the organisations/informants that were involved in the study is the knowledge that the study discovered. All individuals were approached formally with an information sheet that doubled as a consent form for participation in the study. This had to be signed by the informant prior to them giving the researcher information for use in this study. This sheet is shown in Appendix 1. Where permission had to be acquired from the informants' superiors,

the same sheet was presented to them and they would sign the sheet thereby allowing the informant to participate. Similarly, where more than one informant from the same organisation required permission from a superior, the appropriate superior would sign the sheet allowing the informants to participate.

It should be noted however that the Zimbabwe financial regulator was at liberty to allow their identity as an organisation to be mentioned in this study as the Reserve Bank of Zimbabwe (RBZ). Given the study is not meant to explicitly nor implicitly name organisations, terming them 'the regulator' may have been pointless and a violation of the ethical code for this study as they are the only financial regulator in Zimbabwe. However, the individual informants from RBZ are not named.

In conclusion, this chapter has laid out the method of inquiry in detail and covered all considerations that may have been challenges with regards to ethics and confidentiality. In an effort to situate this study in the current m-banking agenda in the IS field, the following chapter carries out a literature review.

CHAPTER 4: LITERATURE REVIEW

This chapter explores the literature on the broad agenda of m-banking in order to situate this study in this agenda; a review of the broad agenda of m-banking is carried out here. To undertake an extensive review of literature before the emergence of a core category violates the basic premise of the methodology elected. The theory must emerge from the data not from extant theory (Glaser, 2004; Glaser & Strauss, 1967). Given the context of the study is based in Zimbabwe it was deemed necessary that an abstraction to the context of an African country also be reviewed in this chapter. Section 4.1. reviews the research that has been carried out in IS on m-banking exploring the classifications under the agenda of m-banking that have arisen, difficulties identified in the field of practice the general trends in the research. Section 4.2. abstracts m-banking in the context of an African developing country and discusses it before Section 4.3. concludes by identifying the gaps in the literature.

4.1. Review of literature on the broad agenda of M-Banking

Research interest in the m-banking field has grown yet a comprehensive review of existing work is missing. This lack of published reviews impedes the field's progress as review articles are essential to strengthening m-banking as an area of study. Reviewing existing literature in a field of study serves to offer a clearer understanding of the state of the research and existing patterns in the field as well as to help eliminate redundancies and spot gaps in research (Dahlberg, Mallat, Ondrus, & Zmijewska, 2008). These reviews are encouraged to be structured in order provide meaning (Webster & Watson, 2002). As such, to better understand the state of literature with regards to m-banking, a set of reviews on the field and their findings are discussed here.

M-Banking as an interdisciplinary topic has been relevant to many disciplines such as management and marketing (Dewan, 2010) hence the discourses on it span far and wide. For the sake of this study, the scope of literature to be considered will be those articles covering matters that are pertinent to the IS field. The purpose of this review was to discover what nomenclatures have been suggested in the literature on m-banking research in the IS field, what the research trends have been and where research is predominantly headed on the phenomenon. The idea is to identify under which category, according to existing research, this study would fall. Section 4.1.1. will explore the frameworks on m-banking research that have been proposed and Section 4.1.2. will develop and propose a new comprehensive framework under which this study will be placed. Section 4.1.3 will briefly discuss the

difficulties that have been documented in the m-banking space and then Section 4.1.4. will explore the trends in m-banking research.

4.1.1. The frameworks on m-banking research

Four relevant frameworks were identified as the main ones in the literature on the broad agenda of m-banking. The identified frameworks suggested by authors for framing research on the phenomenon of m-banking are those by Ngai and Gunasekaran (2007), Dewan (2010) and Duncombe, Boateng (2009) and Dahlberg et al (2008).

Ngai and Gunasekaran propose a framework in an effort to classify the various types of research on m-commerce that have been undertaken in the field of IS. They divide the research into 5 distinct categories as illustrated by Figure 4:

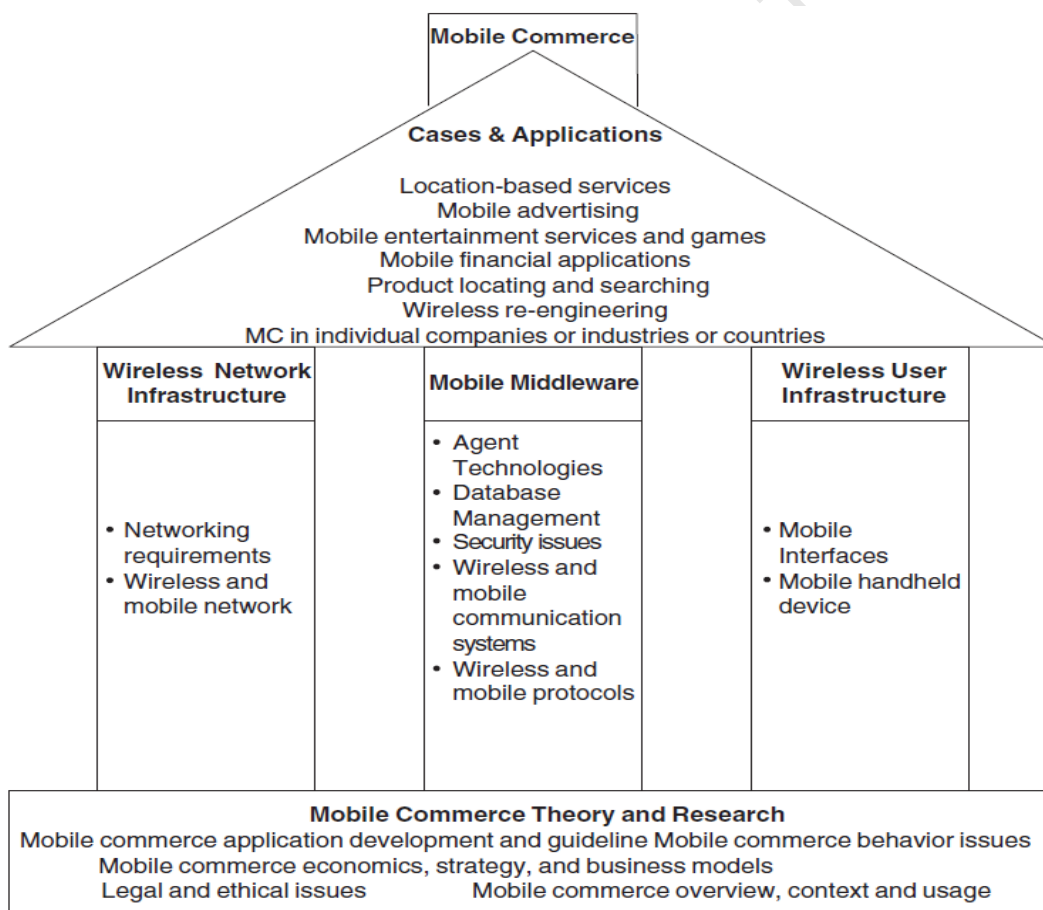


Figure 4: Classification of M-Commerce Research (Ngai & Gunasekaran, 2007)

Mobile Commerce Theory and Research is the foundation on which m-commerce research is developed. The research here included the development of m-commerce applications,

developmental guidelines, behavioural issues, economics, strategy and legal and ethical aspects of m-commerce. Conceptual research on m-commerce is also included in this classification. The three pillars for which this lowest level of research provides foundation are technology-oriented research classifications: Wireless Network Infrastructure, Mobile Middleware and Wireless User Infrastructure. The three pillars include research around different software and hardware issues in m-commerce including security, protocols, interfaces and database management. They support the development of m-commerce applications, which is the classification that sits above them. The three pillars, representing different technologies, combine to develop different applications of m-commerce. The research under the classification Cases and Applications is on the resultant cases and applications developed from elements from the three technological pillars; this includes mobile financial applications. Under this framework this study would fall under “Development of m-commerce applications”, under “Mobile Commerce Theory and Research”. One may argue that this study also belongs to the Cases and Applications classification as that is where m-banking itself would fall under mobile financial applications. It should be noted that this is a plausible argument given the study is a grounded theory one different aspects of the research may fall into more than one classification. However, the researcher argues that this study mainly focuses on the development of the m-banking services. This means although the research may fall under different classifications, the foundational classification under which Mobile Commerce Application Development falls is unmistakably relevant with the emphasis being on the perspective of the developers of the service and not the service itself.

Dewan (2010) similarly describes a nomenclature for m-banking research in the IS field loosely based on Ngai and Gunasekaran’s work (2007). Table 2 summarizes his framework:

Table 2: Framework of M-Banking Literature (Dewan, 2010)

Topic	Sub-categories	Brief description
Overview and conceptual issues	Overview, Market, Conceptual framework	General introduction and foundational concepts of m-banking
Applications and cases	Applications planning, financial applications	Range of applications under IS planning for application and mobile services for financial market
Behavior	Intention, Adoption, Decision, Resistance, Channel Comparison, Consumer Profiling, Trust and Satisfaction	Articles describing perceptions, decisions, acceptance and diffusion of m-banking applications
Infrastructures		Articles that discuss mobile software interfaces or mobile hardware interfaces. Security being the major issue
Strategic and legal issues	Strategy, Convergence, Legal and ethical issues	Articles on legal issues such as privacy, regulation, legal environment, m-banking economics, strategy and business models

The first category covers research on general introduction and foundational concepts of m-banking. Again this study would fall under “Applications and cases” using Dewan’s (2010) classification. The second category covers m-banking applications including mobile money transfer services. The third category covering research on behavioural issues with m-banking includes perceptions, decision, acceptance and diffusion of the m-banking applications. It is worth pointing out that this model explicitly states that studies from both users’ and service providers’ perspectives are included here (Dewan, 2010, p. 365). The fourth category covers research on the software and hardware issues involved in m-banking – the technological aspects particularly focused on security issues. The last category, strategic and legal and ethical issues, covers research on issues like privacy, regulations and legal environment. Similar to Ngai and Gunasekaran’s model (2007) economics, strategy and business models of m-banking are also included here.

Duncombe and Boateng’s (2009) rendition of the classification of m-banking (termed m-finance) research is somewhat synonymous with those of Ngai and Gunasekaran (2007) and Dewan (2010). The term m-finance is assumed to be interchangeable here with m-commerce

as defined by Ngai and Gunasekaran (2007) and Dewan (2010) due to the similar descriptions of the classifications of the research revolving around access to finance via mobile phone. Duncombe and Boateng (2009) prescribe requirements for how to classify the research. The first requirement is a coverage of issues that take into account the financial service preferences and behaviours on the one end (the human end), and the technological potential of mobile phones on the other. This spectrum, as another requirement, should incorporate social systems, socio-technical systems and technical systems. They also note the level of analysis at which the research is carried out as a requirement. The three identified levels of focus are: a) micro level – the owners or users of m-finance applications, b) meso level – intermediaries that deliver m-finance services, and c) macro level –institutions that deliver infrastructure, policy makers and regulators that govern m-finance. The final requirement is a temporal aspect which they address in their review by employing a four-phase model incorporating: assessment of financial needs, the design and development of applications, the analysis of processes of adoption and the assessment of m-finance.

For their review they use the temporal aspect and the level of analysis of articles found to classify m-finance research and include the numbers of papers they found in the different classes. Table 3 illustrates this:

Table 3: Mapping of articles reviewed according to at temporal lifecycle model and level of analysis (Duncombe & Boateng, 2009)

	Studies assessing needs or requirements	Studies concerned with design of systems and areas of application	Studies concerned with processes of adoption and adaptation	Studies concerned with assessing impact	
Studies conducted at the macro level (infrastructure, policy and regulation)		8 9 15 31 41	13 23 29	25 27 30 39 26	37
Studies conducted at the meso level (intermediaries, delivery mechanisms)		3 35 42	10 43	20 22 36	2
		19, 24			
Studies conducted at the micro level (individual owners/ shared users)	4	34	16, 38	40	1, 5
		33	11 14	7	21 17 32
					6, 12, 18, 28

According to Duncombe and Boateng’s (2009) framework, this study would fall under the intersection that includes (i) studies assessing needs or requirements, (ii) studies concerned with design of systems and areas of application, (iii) studies conducted at the macro level (infrastructure, policy and regulation) and (iv) studies conducted at the meso level (intermediaries, delivery mechanisms). Reasoning behind this is because this study (i) investigates concerns of stakeholders involved which brings rise to their needs as the people involved in developing the services, (ii) is concerned with the application area of m-banking including the various models of delivery of the service (iii) includes a regulator, and (iv) stakeholders who are the intermediaries of the services respectively.

Finally, Dahlberg et al (2008) propose a framework that is somewhat dissimilar to the first three. Theirs is more theory driven and it’s use is not solely to classify m-banking research. They develop a multi-faceted framework to classify research on m-payments based on Porter’s (1998) five forces and the Generic Contingency Theory (GCT) (Lawrence & Lorsch, 1967) as illustrated in Figure 5:

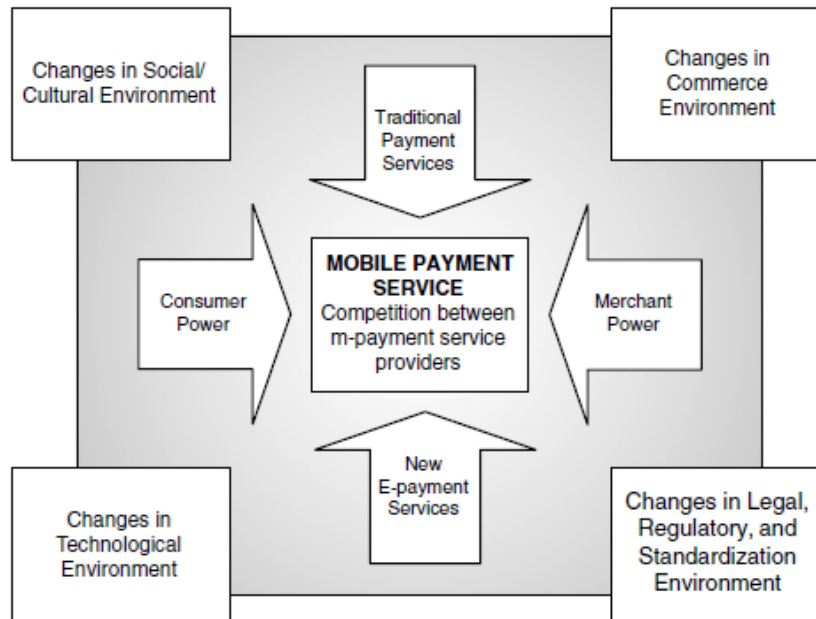


Figure 5: Framework of factors impacting the mobile payment services Market (Dahlberg et al, 2008), p. 167

It must be noted that although their focus was on mobile payments (m-payments), the relevance of their review stems from m-payments falling under m-banking given the working definition of m-banking for this paper. They define m-payments as payments for goods, services and bills with a mobile device taking advantage of wireless and other communication technologies (Dahlberg et al, 2008, p. 165). Furthermore, their confirmation of a shortage of reviews in the field qualifies their own review of literature as relevant for this study.

Their model is built on the premise that m-payments service providers, as part of the prime actors in the m-payments space, have factors that challenge their success in the market place. This premise then fits the choice of theory to build their framework on Porter's five forces (consumer power, merchant power, new entrants, traditional systems and existing competition). Moreover, assuming a mobile payment services market as the unit of analysis (organization), factors such as regulation and legislation, technology and standards, amongst others, which influence the performance of the unit but are beyond the influence and control of that unit, are taken as contingency factors as defined in the contingency theory. GCT therefore is claimed to also be well suited to classify mobile payments research and to capture the environmental factors which are characteristic to the mobile payment services markets (Dahlberg et al, 2008, p. 167). Their finished model may be used to classify m-payments

research and as a model to examine the different factors that affect the m-payments services market.

4.1.2. A proposed comprehensive model

Given the three models of framing m-banking research it is possible to combine different aspects about them to form a comprehensive model. Such a model is proposed here based on aspects drawn from Ngai and Gunasekaran (2007), Dewan (2010) and Duncombe and Boateng (2009).

The proposed model (see Table 4) is a two dimensional model. The first dimension consists of seven classifications of research numbered one through to seven (1-7). These are listed and explained as follows:

1. Conceptual studies: consists of those studies that focus on the theoretical and foundational basing of what constitutes m-banking (Dewan, 2010);
2. Studies assessing needs and requirements not exclusive to those of consumers;
3. Studies focusing on designs and areas of application of m-banking as described by Dewan's (2010), Ngai and Gunasekaran's (2007) and Duncombe and Boateng's (2009) models;
4. Studies on infrastructures as described by Dewan's (2010) model;
5. Studies on adoption and adaptation of m-banking not exclusive to consumer behaviours;
6. Studies on impacts of m-banking; and,
7. Studies on regulatory and legal issues as described by Dewan's (2010) model.

The second dimension allows for the different levels of analysis as described by Duncombe and Boateng (2009) and hence consists of micro (Mi), meso (Me) and macro (Ma) levels. Multiple stakeholders are involved in m-banking, all of which may fall under the different types of studies listed in the first dimension. The dissection of these different parties involved by Duncombe and Boateng (2009) via separating the levels of analysis allows for more specific classification of research in m-banking ultimately contributing to a more comprehensive overview of the literature covering m-banking.

It is worth noting that studies covering the interrelations between parties involved in the development of m-banking services which authors such as Porteous (2006) have noted to be

important would also fall under this model. The particular classification would be dependent on the actual focus of the study in question. For example, a study focusing on the technical competencies that arise when two organizations work together to develop m-banking services might fall under classification three at meso level while a study that assesses the readiness of two organizations to work together to develop m-banking services might fall under classification two at meso level. The same applies for studies on m-banking models whose importance is again noted by Porteous (2006).

The proposed framing of m-banking research seeks to comprehensively enlist and classify the different foci of research that have fallen under m-banking regardless of popularity. Hence the model observes the requirements prescribed by Duncombe and Boateng (2009) with specific regards to the spectrum of systems as they specified including social, socio-technical and technical systems. This is evident, for example, in the classifications of studies assessing needs and requirements, studies on designs and areas of application and studies on infrastructures respectively. The proposed model also acknowledges the relevance and importance of m-banking regulatory issues. Most importantly, all the model’s classifications would list articles that arguably are relevant to and fall within the boundaries of the IS discipline. This study would fundamentally fall under classification Two/Three at Meso/Macro level (2/3, Me/Ma) of the proposed comprehensive model. An illustration of the model and where this study would fall is shown in Table 4:

Table 4: A proposed comprehensive model of m-banking research classification

	Micro Level Analysis (Mi)	Meso Level Analysis (Mi)	Macro Level Analysis (Mi)
1. Conceptual studies			
2. Needs & Requirements		2/3, Me/Ma	
3. Design & Application			
4. Infrastructure			
5. Adoption & Adaptation			
6. Impacts			
7. Regulatory & Legal Issues			

4.1.3. Difficulties faced with m-banking

Some challenges pertinent to m-banking as a phenomenon are identified in the literature relevant to this study. For the sake of this study, these are narrowed down to those relevant to the m-banking service provider's perspective. These challenges are classified according to the model depicted in Table 4. It should be noted that the challenges identified here are not exhaustive. This is especially owing to the widely recognized fact that research on m-banking is mostly carried out with a focus on the behaviour of the consumer (Dewan, 2010).

Design and application issues

The challenges faced in this aspect revolve around IS managers deciding whether or not to add m-banking to their business for customers. Here, IS literature has taken an advisory role. Authors such as Peffers and Tuungnen (2005) acknowledge IS managerial concerns revolving around how much value mobile commerce, including m-banking, can bring to their businesses. "Senior executives are concerned that they do not have a clue about what m-commerce applications customers might be willing to pay for" (Peffers & Tuungnen, 2005, p. 484). They ultimately propose prescriptions on how managers can better understand and plan for development of applications that will bring value to their organizations such as m-banking. In a similar effort, Liang and Wei (2004) propose a predictive framework to assess the failure or success of m-commerce applications, under which m-banking falls.

M-Banking infrastructural issues

The bulk of the literature in this category focuses on security issues in the building of m-banking services (Dewan, 2010, p. 365). Authors point out the vitality of security in m-banking service provision (Herzberg, 2003). Due to the nature of the security issues encountered being mostly technical in nature, authors like Herzberg (2003), Ngo et al (2008), Ghotra, Mandhan, Wei, Song and Steketee (2007) and Claessens, Dem, Cock, Preneel and Vandewalle (2002) propose various architectures and frameworks to counter and manage the inherent security threats and risks involved in m-banking.

Interface design is also noted as a potential area of concern in the development of m-banking services with regards to the infrastructure required. The convenience of m-banking is said to be a major pulling factor (Weber & Darbellay, 2010) and is reliant on the interface design (Herzberg, 2003, p. 54) and user friendliness (Weber & Darbellay, 2010, p. 130).

M-Banking conceptualization issues

The m-banking phenomenon is relatively new and thus literature covering its conceptualization is largely present. Authors such as Chen, Lee and Cheung (2001) and Kemper and Wolf (2002) are involved in debates on the concept of m-commerce, the umbrella classification under which m-banking falls, with various proposals in the form of frameworks being given.

Regulatory and legal issues

M-Banking as a financial service has legal and ethical implications. The prevailing situation is that international regulatory frameworks seem to lag behind in terms of establishing a specific supervisory regime for mobile banking services (Alexandre, 2012; Porteous, 2006). Typically, the general rules and regulations that apply to credit institutions and banks also apply to mobile banking services providers. National regulators proceed on the assumption that the particularity of mobile banking merely implies that banking services can be delivered electronically through mobile devices.

Issues with interrelations between involved parties

Comminos, Esselar, Ndwalana and Stork (2008) find that an important challenge for making m-banking a success is the collaboration between all the involved parties in delivering the service. This is due to the fact that each party would have interests to protect ground they wish to gain.

4.1.4. Trends in research on m-banking

The findings of Dewan (2010) and Dahlberg et al (2008) on the trends on m-banking research generally indicate that the research area is fairly new, seems to follow a somewhat seasonal pattern of interest, is skewed in terms of topics researched, and the Asian countries seem to be of more interest to researchers. Relevant meta-data on the two authors' findings is presented in Table 5:

Table 5: Meta data on literature reviews

Parameters	Dewan (2010)	Dahlberg et al (2008)
Number of articles	65	73
Academic disciplines	IS, Technology Innovation, Management, Marketing	Unspecified, various
Years	2000-2010	Unspecified
Journal (J) vs Conference (C) publications	34J, 31C	16J, 57C
Databases searched	ABI/INFORMdatabase, ACM Digital Library, AIS eLibrary, Google Scholar, IEEE Xplore, ScienceDirect, Web of Science, Wiley Inter-Science	ProQuest Direct, EBSCO Business Source Premier, ScienceDirect, IEEE Xplore, ACM Digital Library, AIS eLibrary, M-Lit online database dedicated to mobile business literature, Google Scholar for academic conference papers

These two papers combined find the following distributions of the literature on m-banking:

Distribution of m-banking articles by topic

Table 6: Distribution of articles by topic (Dewan, 2010, p. 366)

Topic	Percentage of articles
Overview and conceptual issues	20%
Applications and cases	11%
Behavior	58%
Infrastructures	5%
Strategic and legal issues	6%

The fact that articles concerning behaviour and conceptual issues associated with m-banking are the bulk of the studies is said to be indicative of the research area being a relatively new one as more researchers seek to understand user acceptance and conceptual issues of the technology in its early stages of adoption (Dewan, 2010, p. 366). In concurrence, Dahlberg et al find that the bulk of research carried out focuses on the technology and consumer sides of m-banking with these topics having 29 and 20 articles each respectively. The topics that include providers of the m-banking services are neglected, with only 2 out of 73 articles (Dahlberg et al, 2008).

Distribution of m-banking articles by year of publication

The distribution of articles in the period between 2000 and 2010 is illustrated in Figure 6:

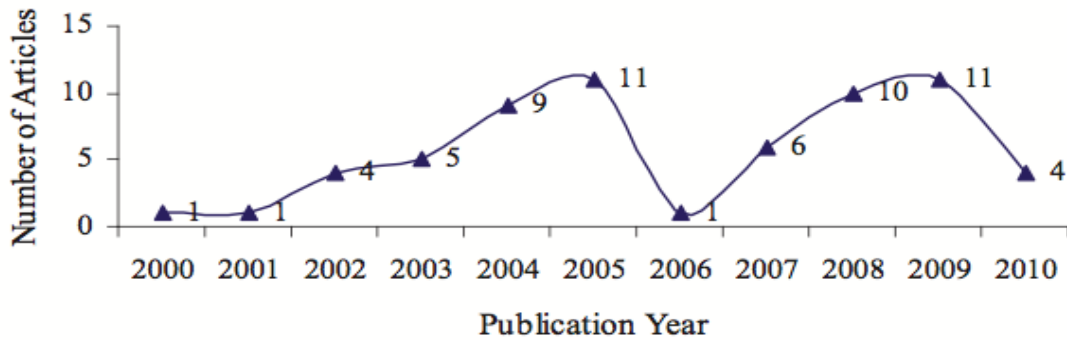


Figure 6: Distribution of m-banking articles by year of publication (Dewan, 2010, p. 367)

Dewan claims the increases and decreases in articles published seem to be driven by m-banking hypes as were the cases in 2000 and 2010 (Dewan, 2010, p. 367). Dahlberg et al (2008, p. 166) also note the influence of such hypes on research trends

Distribution of m-banking articles by country of data collection

Table 7 summarizes Dewan’s (2010) findings with regard to the worldwide distribution of m-banking articles:

Table 7: Distribution of articles by country of data collection (Dewan, 2010, p. 367)

Continent	Country	Number of articles
Asia	Korea	6
	Taiwan	4
	China	3
	Hong Kong	1
	Indonesia	1
	Japan	1
	Malaysia	2
	Australia	
Europe	Germany	4
	Finland	11
Africa	South Africa	3
	Ghana	1
	Kenya	1

It is noteworthy that the most interest in m-banking research is found in Europe and Asia, with Finland and Korea leading with 11 and 6 articles respectively. In Africa, outside South Africa with 3 articles, only Ghana and Kenya have one published m-banking study each.

Distribution of m-banking articles by journal and conference

Dewan claims that journals held in high regard in the IS field are increasingly publishing m-banking articles (Dewan, 2010, p. 367), m-banking is becoming more relevant in the IS field as a research area. His study's findings in this aspect are summarized as follows: "Decision Support Systems (3 articles), Information Systems Journal (2 articles), Communications of the ACM (2 articles), Information and Management (1 article) and Information Systems Frontiers (1 article). The majority of these articles were published since 2009. In terms of conferences, Americas Conference on Information Systems (AMCIS), Hawaii International Conference on Systems Sciences (HICSS), International Conference on Information Systems (ICIS), Pacific Asia Conference on Information Systems (PACIS), International Conference on Mobile Business (ICMB), Australasian Conference on Information Systems (ACIS) and European Conference on Information Systems (ECIS) published 8, 5, 5, 5, 4, 3 and 1 article(s) respectively." (Dewan, 2010, p. 367). Dahlberg et al (2008) find that more articles are found in conference publications but anticipate that they will evolve into journal publications.

Distribution of m-banking articles by research method

Dahlberg et al (2008) find that 30 publications were carried out using empirical methods while 43 were conceptual. A deeper analysis of methods used revealed that of the publications based on empirical methods, 70% were consumer focused; 9 used interviews, 4 used focus groups, 2 used open-ended web surveys, 9 used quantitative surveys, 1 used simulation and 5 used design research.

It must be noted that the findings in the two reviews, although helpfully informative, may have had their limitations. Although the two reviews searched for publications in different ways, thus spreading the net wider so to speak, preference seemed to fall to top-tier publication avenues which may have overlooked publications elsewhere. For example, journals that focus solely on the developing world (such as IT for Development, IT and International Development), to which m-banking is of prime interest, may have had articles deserving of being included in such reviews. Another limitation is the discretionary decisions

made upon the inclusion or exclusion of articles. Dahlberg et al (2008) for example, explicitly state how they went about including articles in their review; where there was uncertainty another researcher was to give an opinion and ultimately inclusion of an article hung on the agreement of researchers. This uncertainty implies that interpretation of the articles was prone to unintentional and reasonably acceptable fault; an article that may have been intended by an author to cover a certain topic, for example, may have been interpreted as not achieving that and thus excluded. In these ways the findings are inherently prone to inaccuracy but may be taken as sufficiently reflective of the current state of literature on m-banking.

4.2. M-Banking in the context of an African developing country

Africa, a predominantly developing continent, “is struggling with access to formal financial services for its citizens and the informal sector” – this is termed ‘the access gap’ (Comninou et al, 2008, p. 1). There is a lack of penetration of regular banking services (Jack, Suri, & Townsend, 2010, p. 90). Comninou et al (2008) find that this is mainly due to poor economic standing, lack of regular income and lack of education on the citizens’ part. The same study finds that generally in Africa “there are more people with mobile phones than there are with bank accounts” (Comninou et al, 2008, p. 1). Beshouri and Gravråk (2010) echo similar findings and claim that in emerging markets, formal banking reaches about thirty-seven percent of the population, compared with a fifty percent penetration rate for mobile phones. For every ten thousand people, these countries have one bank branch and one ATM but five thousand and one hundred mobile phones. Here emerging markets are likened to developing countries on the basis of an important trait they share – low income levels (Lins & Servaes, 2002). Given these statistical circumstances it follows that m-banking in the context of developing countries in Africa thrives on the fact that there is a service gap in the formal banking sectors and a high mobile penetration. The motivation is to provide financial services to the otherwise unbanked populations (Jack et al, 2010, p. 83) via cell phones. In this way it is intended to use mobile phones as a main tool of development (Weber & Darbellay, 2010, p. 130) and m-banking is employed as a solution to the service gap problem (Comninou et al, 2008, p. 1). The appeal of m-banking services is more about accessibility and affordability in developing countries (Dube, Njanike, Manomano & Chiseri, 2011; Beshouri & Gravråk, 2010; Donner & Tellez, 2008; Jenkins, 2008, p. 5) as the mobile phone is utilized as a service delivery channel for the poor (Duncombe & Boateng, 2009). Authors such as Duncombe and Boateng (2009, p.1242) argue for m-banking’s transformative power in the developing countries’ context. Examples of m-banking being applied in the African context are M-PESA

in Kenya, Uganda, South Africa, Nigeria and Tanzania; and Zimbabwe's OneWallet (NetOne, 2011), CellCard (Kingdom Bank (Ltd), 2012), Skwama (Telecel Zimbabwe, 2012) and Ecocash (Econet Wireless Zimbabwe, 2012).

This need for financial inclusion has been recognised in industry, independent policy makers and researchers, governments and by academia. This is indicated by the research initiatives by organisations such as the International Finance Corporation (IFC), GSM Association (GSMA) and the Consulting Group to Assist the Poor (CGAP) (Jenkins, 2008), governmental objectives such as those espoused by the RBZ, which aim to promote financial inclusion as an economic growth strategy (Reserve Bank of Zimbabwe, 2012), and the various academic research surrounding the topic such as works by Flores-Roux and Mariscal (2010). The financial market is an essential part of the development process and inclusion in this market is accompanied by economic growth (Flores & Mariscal, 2010). The poor are said to face high economic and social consequences, absent financial inclusion, (Beshouri & Gravråk, 2010) as it curbs otherwise inevitable vulnerabilities in emergencies, illness or theft (Flores & Mariscal, 2010, p.42). The potential ability to aid in financial inclusion is key in how m-banking may be used as a development tool (Jenkins, 2008).

4.3. Gaps in literature on M-Banking and the research question

The identified gaps in literature that this study proposes to fill are based on the following: there is need for more research on m-banking (Dewan, 2010, p.34; Duncombe & Boateng, 2009, p.1238; Varshney & Vetter, 2002, p. 197), there is no known relevant literature covering m-banking specifically in the Zimbabwean context apart from Dube et al (2011) and the literature on m-banking predominantly focuses on the consumers' behavioural issues. M-Commerce as a research area in IS is still in its early stages and hence is broadly unexplored (Duncombe & Boateng, 2009). M-Banking, which falls under M-Commerce, "so far seems fragmented and lacks a roadmap or an agenda" (Dewan, 2010, p. 364) in terms of research. Implicit in these claims is that there exists great need for more research on this area as it is still growing (Ngai & Gunasekaran, 2007, p. 3). Practice has taken strides in m-banking with the service being available and growing rapidly in Zimbabwe and IS literature is yet to catch up to the phenomenon in this particular context. Similar studies to this one have been carried out elsewhere. Regardless of this fact, the contextual element poses potential influence on the results for the Zimbabwean context to be generalized without enquiry. The majority of the research that has been done on m-banking has focused on user behavioural issues. This has seen the rest of the areas of enquiry to do with m-banking being somewhat neglected. The

focus seems to be on the customer, thereby creating a gap in that there is little focus on the development of the m-banking services from the providers' perspectives.

Aligned to these gaps, the general research question and objectives are developed in accordance with the selected methodology for this study, CGT. The research question is posed in a non-specific manner (Glaser, 1992). It allows for open exploration of the area of concern and simultaneously stipulates a suitable scope. The most fitting initial research question is posed as "What is the main concern of the stakeholders involved in the development of m-banking services in Zimbabwe and how is it resolved?" To further refine the goals of this study the following were the specific main objectives:

- To identify the stakeholders involved in the development of m-banking services in Zimbabwe,
- To get a rich understanding of the life-world that is m-banking services in Zimbabwe according to the stakeholders involved,
- To get a rich understanding of what the stakeholders involved perceive as their roles in this environment,
- To get a rich understanding of the main concern of the stakeholders in these roles in the development of these services, and
- To understand how the main concern is resolved

The study has been situated in literature in this chapter. The next logical step is to discuss the results. Before that however, the researcher found it useful to paint a background picture of the context in which the results were found; a picture of who is involved in this life-world of m-banking and what they perceive as their roles in the life-world. The importance placed on the context is in accordance with the use of CGT as it is a context oriented methodology. It is worth noting however that despite the contextual focus, the methodology aims to develop theory to explain concepts abstracted from context (Glaser & Strauss, 1967). The following chapter does this by describing the context of this study extensively as a precursor to the theoretical discussions of the results of this study as well as in an effort to meet the first three objectives of this study.

CHAPTER 5: M-BANKING IN ZIMBABWE

After a consideration of the gaps in literature exposed in Chapter 4, this chapter proceeds to lay out the background picture required to attempt to address the discovered gaps. Here, m-banking as it is observed in Zimbabwe is described including the products available in Zimbabwe, how they are structured and regulated. Section 5.1. briefly discusses the reception of m-banking in Zimbabwe using a specific case and 5.2. discusses the regulatory structures that oversee m-banking in Zimbabwe and concludes this chapter.

M-banking in Zimbabwe has grown tremendously over the years, appearing in different forms for different purposes and customers across the industrial players that have developed the services. The various products on offer in Zimbabwe on the mobile money space are offered on different platforms; in some cases different products share platforms. Much like the prevailing models for the creation and delivery of m-banking services described by Mallat et al (2004, p. 45), observation informs that the key stakeholders involved from a provider's perspective are banks, mobile application service providers and mobile network operators (MNOs). Historically, the most common rendition of m-banking was the additive model used by banks in the form of short message service banking (SMS-banking) services. The term additive in this instance refers to when the services are a mere addition to those that were already available to existing bank account (Porteous, 2006). Whereas the transformative model is that which incorporates non-banked people who would then own virtual accounts. The additive model consists of simple push and pull transactions (Dube et al, 2011). More recently, more innovative and transformative versions of m-banking models and applications have surfaced. To date, the prevalent models that have appeared in Zimbabwe according to Porteous' (2006) definitions of m-banking models are the bank-driven, joint venture, non-bank led and non-bank driven models. In addition to these, some variations of these models have also been observed.

Typically the bank-driven models were and still are availed only to customers of those particular banks which provide these services. An example of such an instance is Standard Chartered Zimbabwe (2012), and Central African Building Society (CABS) (2012).The services offered by these banks to their customers normally fall under the additive model of m-banking. However, there are instances of bank-driven models in use such as Kingdom Bank's CellCard (2012) which includes both transformative and additive m-banking services. An example of a joint venture model in use is NetOne (MNO) and FBC (bank), the product

being OneWallet (2011), which was launched in January 2011. More joint ventures include those by FBC and ZimSwitch's Mobile Moola. Skwama by Telecel (MNO) and ZimSwitch (a third party electronic transaction service) falls under the non-bank led model. Innovations in technology have seen the advent of the most recent and popular m-banking product, Econet's Ecocash (Econet Wireless Zimbabwe, 2012), operating on the non-bank driven model as of the 30th of September 2011. Table 8 shows Zimbabwe's fifteen m-banking products as officially documented by the Reserve Bank of Zimbabwe (RBZ) as at 31 January 2012:

Table 8: Zimbabwe's documented m-banking products (Reserve Bank of Zimbabwe, 2012, p. 43)

Institution	Mobile Network Operator	Mobile Banking Platform/Brand Name
FBC Bank	Net One/ Telecel	ZIPIT*/One Wallet
Kingdom	Telecel	Kineto Mobile/Kingdom Cellcard
POSB	Net One/Telecel	ZIPIT
CABS	Net One/Telecel	ZIPIT/Textacash
Metropolitan	Net One/Telecel	ZIPIT, Metbank Mobile
FBC Building Society	Net One/Telecel	ZIPIT
Interfin	Net One/Telecel	ZIPIT
Barclays		Inbuilt Platform
TN Bank	Econet	Ecocash
Tedrad	Telecel	e-Mali
CBZ	Net One/Telecel	E-Tranzact/CBZ mobile/ZIPIT
Stanchart	All	ZIPIT
Trust		E-Tranzact/Bank at Ease
ZB		E-Solutions
ZABG		E-Solutions

*ZIPIT – ZIMSWITCH based platform. Currently eight banks are on the platform with a target of including all banks which are members of Zimswitch.

There also exist unique scenarios where one organization may work with multiple organizations to provide different mobile banking products on different mobile banking

models. Examples of such are ZimSwitch and Telecel who are involved with FBC, the People's Own Savings Bank (POSB) all with different m-banking products. Other stakeholders that exert noteworthy influence on the m-banking in Zimbabwe are regulatory authorities which are discussed further in Section 5.2.

5.1. Reception of m-banking – the case of Ecocash

It must be noted that an in-depth discussion on the reception of m-banking in Zimbabwe would require a separate study on its own. However, again observation adequately informs that uptake of mobile money services in Zimbabwe has been fairly successful thanks to aggressive marketing campaigns. Econet's Ecocash product, which centred marketing on sending mobile money to rural homes, recorded an active user count of a million subscribers as at March 11, 2012 in record time surpassing uptake rates of similar products elsewhere in Africa such as M-PESA (Econet Wireless Zimbabwe, 2012). As at July 2012 the service was reported to have more than 1.7 million users (Econet Wireless Zimbabwe, 2012).

Ecocash is a mobile money service that requires its users to not have a traditional bank account but instead register a virtual account with the MNO which the user may use to store, send and make payments using virtual money. The conversion to cash from virtual money in the virtual account may be done at any one of Econet's plentiful and scattered agents. In the case of sending money, should the receiver not be registered to Ecocash, they simply need to take a PIN code received via SMS to any of these agents to receive the cash. The product is also interoperable in the sense that money may be sent across all mobile networks. The product initially was pricy, but soon the MNO adjusted their rates and continue to enjoy growth. In a bid to further promote the success of the Ecocash product, Econet bought TN Bank which had always been the bank that Econet had partnered with. This strategic purchase of the bank was likely to further improve, fine tune and seamlessly align the back office processes and functions behind the product Ecocash.

More recent developments of the Ecocash product are indicative of the evolution of m-banking in Zimbabwe. The product added functionalities that link Ecocash accounts to traditional bank accounts essentially increasing the interoperability available with the product. Soon after, the product was successfully migrated from a platform developed by Pattern Matched Technologies in South Africa to an internationally more acclaimed platform developed by Comviva (Econet Wireless Zimbabwe, 2012). Mobile payments fall broadly into two categories: daily purchases (where m-payments mobile payments complement or

compete with cash, cheques, credit cards, and debit cards) and payments of bills (where m-payments mobile payments typically provide access to account-based payment instruments such as money transfers, internet banking payments, direct debit assignments, or electronic invoice acceptance) (Dahlberg et al, 2008). Both have been covered extensively by Ecocash as it has surface as a means of payment in various facets of Zimbabwean life; payments for stock exchange transactions, public transport, hospital fees, insurance, supermarket goods, fast food products, utility bills and more may be done via Ecocash. However, the pervasive nature of the product has not been without challenges. Recently, the government warded off calls from the banking community for the product to face the same inhibiting costs of operation via regulation as they do. Continuing with breaking new ground in the m-banking industry in Zimbabwe, Econet announced a mobile phone to POS solution on the 26th of March, 2013; this product, under Ecocash, was called Eccocash Debit Card. With 10 000 POS units as the initial batch, this solution replaces the merchant mobile phone and sits at the till like the regular POS unit except it communicates with the customers mobile phone via USSD. In addition, these units accept Visa, Mastercard and cards from partner banks, have Near Field Communication (NFC) capabilities and are the first implementation of such a technology in the world.

Use of the Ecocash product has not been limited to urban-rural money transfers. The product has also been taken up by urban people in Zimbabwe partially due to the traditional banks' rates which are commonly perceived by the people as too high. In addition to this, Zimbabwe's banking sector has reportedly been through near-collapse operating conditions prior to the country's adoption of the multi-currency system specifically in the 2003/4 period (Reserve Bank of Zimbabwe, 2012, p. 33). Resultantly, the people have an inherent distrust in the banking system and opt for mostly cash based transacting regardless of the liquidity problems the country faces (Reserve Bank of Zimbabwe, 2012). Informant 4 of this study, a head of department in a bank, even calls for a paradigm shift in the peoples' trust in banks. The trust situation, which is difficult to ascertain, can work in different ways for m-banking products' adoption depending on their models. For example, Ecocash could benefit from this distrust in that it enables rural people to be in easy reach of their cash should they need it. Then again, the distrust could curb growth in that the people may simply not trust the involvement of banks or the notion of an unfamiliar pseudo-banking system. The long term growth of m-banking in Zimbabwe cannot be accurately predicted at this infancy stage. Regardless, developers of these services have been increasingly venturing into mobile

banking (RBZ, p. 42). This is possibly because the banking sector has actually improved since. The Zimbabwean Monetary Policy Statement (Reserve Bank of Zimbabwe, 2012) reports that the sector was safe over the year 2011 and the “weak and troubled banks in the sector are few, small and of low systemic importance” with a combined market share of under 5% amongst them. With specific regards to the recent short term growth of mobile banking in Zimbabwe, the RBZ reports recorded phenomenal increases: the value of mobile payment transactions increased by 575% to US\$8.1 million in 2011 from US\$1.2 million the in 2010. Similarly, the volume of mobile payment transaction surged by 446% to 2.3 million in 2011 from 0.4 million in 2010 (Reserve Bank of Zimbabwe, 2012). Cashless transacting through the mobile device has become more popular, as evidenced by the growth trends in the banking sector and with products such as Ecocash, despite the country’s history in the banking sector and could prove its potential in aiding with liquidity issues that have risen due to the adoption of a multi-currency system in the country amongst other economic vices. However, challenges such as infrastructure and lack of technological and capital investment continue to exist and limit the rate of growth of m-banking in Zimbabwe.

5.2. Financial Regulation and M-Banking in Zimbabwe

RBZ is mandated by law to be the supervisor of the country’s financial system, including the banking sector. The instruments that render them the financial regulators include the Zimbabwe Banking Act (Reserve Bank of Zimbabwe, 2012), from which other acts stem and are used in specific areas with specific purposes. Examples of such acts in terms of relevance to this study are the National Payment Systems Act [Chapter 24:23] and the Bank Use Promotion and Suppression of Money Laundering Act [Chapter 24:24].

As the financial regulator, the RBZ has elected a focus on financial stability as the theme in the Monetary Policy of 2012 with formal supervisory and stability assessment frameworks underpinned by risk-based supervision methodologies in use (Reserve Bank of Zimbabwe, 2012). This stems from the fact that the regulator has targeted financial stability as a high priority economic policy objective. As at 31st December 2011, there were twenty-six operational banking institutions, sixteen asset management companies and one hundred and fifty-seven microfinance institutions under the supervision of the Reserve Bank. The reserve bank seeks to enhance the stability of the banking sector through risk based supervision, effective supervision of banking groups, stress testing, enterprise-wide risk management, enhancement of corporate governance, disclosure requirements and prudential liquidity ratios. Organisations in the banking sector are also availed with the opportunity for

engagement and training from RBZ in order to comply with their requirements to facilitate risk-based supervision.

5.2.1. RBZ as the regulator of M-Banking

Financial inclusion is recognized by the Reserve Bank as critical for economic growth and development hence initiatives such as m-banking are welcomed (Reserve Bank of Zimbabwe, 2012, p. 42) in this regard as well as in its bid to encourage cashless transacting. It is useful to understand the structure of the regulatory authorities in order to comprehend how regulation on m-banking is effected in Zimbabwe.

The four masters of the financial system

The reserve bank consists of four divisions namely the Financial Intelligence Unit (FIU), the Banking Supervision unit (BS), the National Payments unit (NPS) and the Exchange Control unit (EC). These divisions work together as what Informant 9 described as the masters of the financial system with different roles. The lead arm of regulatory authorities with regards to m-banking is the NPS unit which works with the FIU and the BS unit.

The BS unit's role is to supervise the already established m-banking products according to the country's Banking Act [Chapter 24:20] via supervising the banks involved with the products. The FIU is mandated by the Bank Use Promotion and Suppression of Money Laundering Act to firstly promote financial inclusion through bank use, m-banking in this case; and secondly to address the security concerns that arise with bank use in an effort to weed out and protect the financial system from criminal activity, the harbouring of proceeds of crime and money laundering. The internationally recognised standards such as the "Know Your Customer" (KYC) Act (Mulligan, 1998) and Financial Action Task Force (FATF) recommendations are where the FIU department derives some of the laws they enforce. The unit also shares intelligence with other countries regarding money laundering under international requirements. FIU's concern with m-banking is that it may be used as a channel for moving around proceeds of crime and money laundering. As such, it is within their power for instance to order suspicious transactions reports from MNOs involved in m-banking.

5.2.2. The Zimbabwe NPS and M-Banking in Zimbabwe

The NPS unit is mandated by the National Payment Systems Act [Chapter 24:23] to effect a robust payment system as described by informants of this study. The act is guided by international standards, principles, guidelines and recommendations specifically from the

Bank of International Settlements (BIS). Informants of this study from the RBZ stress that the act addresses three important aspects of their mandate namely (i) Recognition: the legal recognition of payment systems, (ii) Oversight: the ensuring of oversight of recognised payment systems, and (iii) the settlement of payments made in the payment systems. A payment system is defined as a system that consists of a set of instruments, banking procedures and, typically, interbank funds transfer systems that ensure the circulation of money (Bank for International Settlements, 2012) and they consist of large value transactions and low value transactions. In Zimbabwe, retail payment streams are recognised and they are considered to be characterised by low value transactions. M-banking falls under the retail payment streams (Reserve Bank of Zimbabwe, 2012, p. 47). The NPS Act essentially makes the NPS department the custodian of the m-banking system in Zimbabwe with a mandate to keep the system safe, reliable, cost efficient, secure and fair. As with the FIU, the NPS unit is empowered to demand information from MNOs as they see fit.

Innovators of m-banking services require prior approval by the reserve bank of Zimbabwe and this approval is granted only after measures are in place that match the reserve bank's supervision requirements (Reserve Bank of Zimbabwe, 2012, p. 43). The FIU, BS and NPS units are involved with granting this approval directly as they work together analysing the innovation put forth according to their different concerns.

This chapter has described the m-banking industry as it is observed in Zimbabwe as a means to lay a foundation to discuss m-banking in Zimbabwe as a lifeworld. Its inner workings including a prominent example of an m-banking product as well regulation have been discussed and therefore present the opportunity for a closer look that may allow for abstractions that build into theory to be carried out.

CHAPTER 6: THE LIFEWORLD OF M-BANKING

Chapter 5 gave a description of m-banking in Zimbabwe, that is how it generally operates and who is involved. In continuance, this chapter explores how the various parties are involved according to their own perspectives. This chapter serves to paint a vivid picture of the environment in which the people involved in the development of m-banking in Zimbabwe work according to their own perspectives – to draw the lifeworld of m-banking in which the involved people exist. Section 6.1 will explore the consideration of the notion of lifeworld and Section 6.2 will discuss the use of metaphors. These two sections serve to equip the

reader with information that will aid in understanding the lifeworld to be described and discussed in Sections 6.3. and 6.4. They provide pre-emptive explanations to what a lifeworld is and how the one under consideration in this study is described.

6.1. The notion of lifeworld

Basden (2009) proposes a lifeworld attitude in doing IS research citing the potential richness of the results this attitude may offer. He sets out to evaluate the notion of lifeworld as applied to Information Systems research and subsequently proposes Lifeworld Oriented Information Systems Research (LOISR) after scrutinizing two IS articles for evidence of a lifeworld approach. The notion of lifeworld, with its grassroots in philosophy (Husserl, 1954), is defined as the knowledge employed by people in everyday life and is said to be characterised by diversity, background knowledge, meaning, normativity and a social aspect (Basden, 2009). Meaning comprises the bulk of a lifeworld (Dooyeweerd, 1984) with the social aspect being important in that whatever holds meaning in a lifeworld is shared amongst people involved in it (Basden, 2009) and at any one time one person may exist in two or more lifeworlds (Gadamer, 1977). In this instance, the focus would be in terms of what it means to be one of the professionals who are involved in the development of m-banking in Zimbabwe and the lifeworld of concern would that in which this work is done.

The notion of lifeworld is not one that has been thoroughly addressed in IS research prior to Basden's (2009) suggestion to pursue a lifeworld oriented attitude in research. This study resonated with the notion of lifeworld in IS research as it fits with the study's purpose in terms of the social environment in which m-banking development occurs in Zimbabwe as well as because of the method of inquiry, CGT. A lifeworld's two important characteristics, meaning and the social aspect, are in accordance with the purpose of this study and its specific objectives in that the study seeks to get a rich understanding of the meaning of work perceived by the people involved in the development of m-banking services and their various roles. The social aspect is seen in the fact that they have different roles; this means they have some sort of shared understanding of what happens in their work; what is meaningful to one is the same to others (Basden, 2009; Husserl, 1954) in a way that they may communicate amongst each other about it.

The notion of lifeworld and CGT

The notion of lifeworld and the lifeworld attitude in conducting IS research as described by Basden (2009) resonates with CGT, a careful consideration and analysis of the two reveals this.

Discovery of theory and the nature of data

“The background nature of the lifeworld challenges LOISR to find ways to explicate the tacit and avoid giving undue priority to the easily-explicit” by carefully considering “anything mediated by language” regardless of how it is mediated (Basden, 2009, p. 9) . This is in line with Glaser and Strauss’ (1967) method that requires the researcher to be theoretically sensitive and seek to uncover a main concern that may not explicitly be articulated; and according to CGT “all is data” (Glaser & Strauss, 1967).

The research question and required responsiveness to and seeking out of data

The diversity of the lifeworld being studied “extends beyond what the researcher may be looking for and the stated purpose of the research” and thus must be designed in a manner that allows for responsiveness when unexpected data are found. This is comparable to CGT’s main motivation as Basden admits (Basden, 2009, p. 9); it also highlights the idea that the research question itself should not be narrow and specific – a recommended practice in CGT (Glaser & Strauss, 1967). It follows that where and how data is sought out is not straightforward and predictable. Again, this resonates with the procedure of theoretical sampling as described by Glaser and Strauss (1967) and Glaser (1998).

Epistemic neutrality

Basden’s (2009) analysis of two examples of IS research, one positivistic and one critical, reveals that both exhibit lifeworld characteristics. The presence of these characteristics independent of epistemology implies that the notion of lifeworld applied to IS research is comparable to CGT in terms of epistemic neutrality as GT itself, regardless of rendition, has been proved to be independent of the researcher’s epistemological inclination (Brown & Matavire, 2008).

Claim on findings

Basden (2009) claims lifeworld oriented research and interpretation yields richer findings which are more reflective of the researched area a similar claim to that of Glaser and Strauss (1967) on CGT. CGT findings are grounded in data and thus reflect only what emerges from the data.

6.2. Use of metaphors

It is worth noting that the descriptive and the theoretical discussions that are to come in this and ensuing chapters employ metaphors as a communicative tool. Metaphors have been used in IS research to better explain or put forward particular ideas by authors like Adolph et al (2012) and Arnold (2003). For instance, Arnold uses a metaphor and describes mobile telephony as “Janus-Faced”. In this way, he highlights the notions he discusses on the paradoxical and ironic nature of mobile telephony basing them on the idea that Janus, a Roman deity, was cursed and blessed with two faces that always faced opposite directions. The researcher employs the use of metaphors for the ease of description and explaining theoretical concepts in Chapter 7 as he understood them also as a result of some of the concepts being inspired by the language used in the data.

6.3. The m-banking lifeworld

The near full lot of informants were either management or executive employees. Theoretical sampling led to these individuals as it emerged that partnering was the core concern. The people in positions to make decisions around partnering are people in management and executive positions as it turned out. The life-world of m-banking as it related to partnering is documented they perceived it.

The business of m-banking is situated at the intersection of banking and mobile telecommunications (Beshouri & Gravråk, 2010); two industries that formerly had no interaction prior to the advent of m-banking. As such, the resultant lifeworld visible to those who work in the area is inevitably a complicated and unfamiliar one. The two worlds must collide and both desire a positive result. The researcher depicts the notion of a collision as the data indicates that the coming together of the two industries is not a harmonious one especially during its infancy stage. Testimonies from informants 1 and 3 indicate this. Informant 1 acknowledged the infancy of the industry and how its first step naturally should be to grasp the conceptual aspects of m-banking services:

“The industry is fairly new in our country and at this stage the fundamentals haven’t settled”

The complexity of the infancy stage of m-banking as a lifeworld is likened to chaos by Informant 3 who said:

“The dust hasn’t settled in our industry.”

In some cases the complexity of the industry is plainly underestimated. This could be owing to the fact that having seen m-banking success stories elsewhere in the world one may think it replicable in their own lifeworld and find that is not the case. Informant 3 stated that prior to entering the m-banking industry he:

“thought it easier than it actually was.”

Organizations who independently have their own ways of working now find themselves in positions where they have to work with another organisation. The different organisational cultures, structures, efficiencies and expectations of their employees and one another as organisations all create an environment of social structures and processes, whether intended or not, and these are again unfamiliar to the people they are involved with. The mismatches in these factors often cause delays and frustrations in which the people involved easily start blaming each other. Informant 2 shows this by saying:

“The product could’ve easily done better, but those guys were too bureaucratic for nothing. They couldn’t market the thing aggressively and here we are now. We lost out!”

He went on to say:

“there has been urgency and speed problems as all organisations had their own ways and methods to do the work and their own timescales”

Race to market

The bureaucracies pointed out by Informant 2 being the cause of ‘losing out’ indicates that the life world is a race to market of some sorts and various factors can be hypothesized to have caused delays. In some cases an organisation in itself is structured in a way that slows it down in the race to the market with an m-banking product. Prior to m-banking, the separate industries of banking and mobile telecommunications could afford to take their time when doing their regular business depending on their individual market share. The point is they knew their place in the market and could pace themselves accordingly. However, with m-

banking being a new space no one was certain of where they stood and the situation that prevails is a race to market as shown by Informant 2's testimony. Organisations whose structures will not permit agile responses will tend to join this race later than those that can. Informant 1 stated that:

“the product could have been launched sooner but the size of our company and the bureaucratic structure may have played a part in the delay.”

Other organisations simply joined the race as fast as they could confidently and willing to bear the pros and cons of leading the way. The potential risks in the pioneers' perspective are heavily outweighed by whatever it is they believe they stand to gain by developing m-banking services. On the other hand some organisations are cautious about joining the race and prefer to sit back and observe other organisations then join in depending on how the first entrants fair. Informant 5 boasted that:

“we have always been pioneers in industry; it should be no different with m-banking.”

They went on to say:

“the other banks have been cautious about m-banking, I guess they are waiting to see how we will do.”

Informant 7:

“I have always been one for new ideas, always. But pioneering does have its disadvantages. The time cost, mistakes, waiting for people to catch up internally; that sort of thing is what you deal with as a pioneer. But pioneering is what we do here.”

However, the industry according to Informant 3 is:

“tough and contested”

The entry points in time in the business of developing m-banking services will for one reason or the other vary from organisation to organisation.

Motivations

The motivation of offering mobile money services has been espoused as to extend the convenience of banking with certain banks (additive models) and to reach out to the population that normally cannot access the traditional brick and mortar banks

(transformative). Such is evidenced by the numerous amounts of products and their models respectively. For instance, OneWallet and Ecocash do not rely on the traditional bank to avail cash to their customers. Profit-making is another motive. Some products are launched and do not offer much interoperability for example between MNOs. The deliberate exclusion of each other with rival networks is indicative of them wanting to lock in clientele to their financial gain. Given the services are still new to Zimbabwean people, the more customers one organisation can get the more likely their mobile money services are likely to generate revenue for them. However, some form of interoperability has recently started to appear in the mobile money space in Zimbabwe. An example of this is the recently launched MNO neutral Mobile Moola product. This product however is available to only FBC's customers thus also making it an additive product.

Stakeholders display behaviour that indicates a strong acknowledgement of the potential profitability of offering m-banking services. This motivates them to join the industry. With the vast amount of mobile penetration versus dwindling figures of bank account holders it is reasonable to expect vast amounts of revenue from a successful m-banking product. Flores-Roux and Mariscal (2010) acknowledge that "mobile banking is beginning to be recognized as a profitable market for companies, and development agencies are promoting its expansion as it provides a means for economic and social inclusion." Some organisations decide to join the industry in the hopes of profit maximisation while some only realise the potential the industry has to generate a healthy revenue stream. Such organisations often then behave in a manner that seeks nothing else but profit. Informant 1 stated that m-banking was a:

"good business that gave us a new revenue stream to cover [for] the ones we have that are no longer doing so well. But sometimes the board expects too much from it"

In as much as the profit is realisable when offering m-banking services, it does have limits to it. Informant 1's statement indicates that what may be termed good profit is relative from one organisation to the next depending on the organisation's financial position and expectations. Big organisations will expect sizeable financial gain from m-banking especially if they invest heavily in it. Other organisations may not be driven by profit as much as others, again depending on the organisations. The numerous amounts of m-banking products launched indicate there is certainly something to gain from it, even with repeated attempts, but it is not absolute to limit the provision of m-banking services to profit. Informant 5 stated that:

“the first model failed, it was never going to get us anywhere”

Informant 5’s statement is in line with the financial gain they were to not enjoy. However, they then emphasized that:

“our company’s drive, our company’s strategy is e-commerce. That’s how we got into mobile money to start with.”

Here the motivation to offer m-banking is somewhat independent of profit in the sense that it is a directive dictated by the company’s strategy to pursue e-commerce. Although the e-commerce strategy may be inspired by profit, m-banking as part of the e-commerce portfolio is pursued simply for being in that portfolio of e-commerce services. There is no direct link between profit seeking and providing m-banking services in this instance. It did also emerge however that because of some organizations line of work strategy and profit may be closely tied in the main motivation for offering m-banking services. For Informant 3’s organisation, the development of m-banking services was the result of:

“a natural progression given the line of our work.”

Profit is not explicitly the motive here, neither is strategy. But the line of work the organisation is involved in might be oriented in such a way that when a new technology is developed they must familiarise themselves with the technology if technology is what the organisation relies on to make money. This is to say their strategy is to stay abreast with technology. In this way profit and strategy combined may be an independent motive for getting involved in the development of m-banking services. This is common with, but not exclusive to, application solution providers.

Developing m-banking services also may be motivated by expansion ambitions. In the case where mobile banking may be used to reach the unbanked as discussed in Chapter 4, an organisation may take it as an opportunity to grow. For banks, tapping into the market of the unbanked may create a mini-bank in itself for an organisation or grow the organisation into a bigger institution. Informant 5 stated that:

“to us m-banking has opened up a new channel of service delivery and in that channel we have the opportunity to segment our target markets”

Informant 7:

“with m-banking we have the opportunity to tap into the unbanked market and create a bigger institution, a new bank. We cannot afford brick and mortar expansion”

Expansion may be an ambition an organisation holds prior to m-banking, but m-banking itself may turn out to be a useful tool for expansion. This alone, as alluded to by Informant 7, is legitimate motivation for an organisation to be involved in the development of m-banking services. Here the organisation is motivated by an intrinsic goal which stands with or without m-banking; the relevance of the technology is determined by how it relates to this goal. Table 9 summarises the motivations behind the involvement in the development of m-banking specific to banks, MNOs, technology providers and those that are general and common to the different parties involved.

Table 9: Summary of motivations

Banks	Extension of banking convenience, financial inclusion, expansion, strategy (e-commerce)
MNOs	New revenue stream
Technology providers	Natural progression due to line of work
General	Profit maximization

The learning curve

With the m-banking technology being a new one, because of unfamiliarity a learning phase is inherent in developing m-banking as a service. The entities developing the services, comprising of one or more organisations, would have a learning curve through which they would go in developing m-banking services. The existence of such a curve is emergent in the data and is sometimes tagged as a delaying factor in the race to market. Informant 1 stated that the infant industry is:

“a learn as you go sort of thing. There’s a learning curve involved.”

Regardless of the skill levels present in the industry, the fact that the industry is new means whosoever is involved in the development of m-banking services will have their own unique learning curve to follow. Different attitudes to taking this learning curve on were bound to emerge given no one organisation is identical to the other in how they react to the prospect of facing a challenge. These attitudes, whether positive or negative, it emerged, are affected mostly by the individual’s disposition to challenges, prior knowledge about m-banking and their perception of the potential of m-banking on a grand scale. Informant 7 stated:

“given my experience with technologies I’ve always had a nag for mobile money.”

Informant 5:

“I have always had a distant interest for m-banking and always wanted to get into it.”

They went on to term taking up the challenges of the learning curve inherent in developing m-banking services as:

“the right thing.”

Informant 2:

“it looked so sophisticated and complex at first but the challenges then became exciting.”

They went on and stated that:

“it’s new, it’s a diversion from the norm and known concepts, it’s easy, it’s likely to change banking rules and regulations, norms and standards.”

Informant 3:

“I thought mobile banking referred to the software development of mobile apps.”

The perceptions people have of the development of m-banking services taking into account the prospect of the learning curve involved have miniscule impacts on their decision to actually be involved in it. The assumption here is that the employees find themselves in the industry owing to a superior’s decision which they cannot refute or change. The employees mostly find themselves with no choice. Informant 4 stated that their perceptions of m-banking were irrelevant to their involvement in developing it because it was:

“in line with my job.”

Their perception of the development of m-banking services however often changes upon starting on the learning. The actual experience of being involved in the development of m-banking services has an impact on their attitudes towards the learning curve.

Management employees across organisations involved in the development of m-banking services typically are ahead of their subordinates on the learning curve mostly because the introduction of m-banking as a new technology into the organisation is by their hand. Should

it not be by their own doing it would be a directive from superiors. In either case they have a head start in learning about it. They then provide guidance and mentorship to the people they manage. This guidance and mentorship responsibility, it emerged, evoked either a positive, neutral, or negative feeling about the responsibility. One will feel a sense of pride, self worth and embrace the responsibility. Another will not necessarily enjoy or resent the responsibility but just take it on. The last will resent the responsibility of helping others. Informant 3 expressed his comfort in the role and stated:

“I’m a director here. I’ve been a developer, an architect, a project manager and now I’m more of a mentor. I enjoy being a mentor. It’s a good feeling to mentor someone fresh out of college into what most of my guys are today.”

Informant 1 was rather neutral in his perspective:

“you just have to be there and do what you must because sometimes the young guys get carried away by the technology.”

Informant 7 stated:

“it gets frustrating at times having to wait for other guys to catch up.”

Kolekofski and Heminger (2003) describe a model on employees’ intentions to share information in an organisational setting. They conclude that a set of beliefs and attitudes that the employee has influence the employee’s intention towards sharing. The particular set of attitudes they include pertain to ownership versus stewardship of information: whether the employee has a tendency to share the information basing on it being beneficial to the organisation, instrumentality of sharing information and value for feelings: how the requester of information treated the information holder in the past.

6.4. Roles and emergent models

It became clear as the study progressed that the types of stakeholders that were involved in one way or another in the development of mobile banking services varied. The researcher notes for the sake of clarity that the stakeholders referred to are those parties that had an impact on how the m-banking services were developed. The complete list of involved stakeholders as per data consisted of banks, MNOs, m-banking solution providers/integrators, software vendors, agents, cash merchants, regulators, community bankers, SIM card providers, utility providers and marketers.

6.4.1. Key functions amongst organisations

The key players, it emerged, were the banks, MNOs, m-banking application providers and the regulatory authorities. This was not owing to the general title of their type of organisation but to the functions they each held in the development of m-banking services. Informants 3 and 7 point this out:

Informant 3: “these are the key guys involved because of the roles needed to make the whole thing work. And of course the regulator regulates it”

Informant 7: “the nature of m-banking requires these key roles and they are all needed.”

The implication here is that the key function or capability to perform the key function rather than the specific organisation is what is important to m-banking. Alexandre (2012) advocates for a similar notion suggesting that “regulators should not have to decide which type of provider is best placed to offer a service, as long as that provider can meet their requirements.” A shift from an emphasis on institutions (banks) to a focus on services (credit or payment), which would reflect the vision of an unbundled value chain for financial services where different entities compete at different levels is encouraged. This notion emerges from the data; the key functions needed for the successful development of an m-banking system are the banking function, the mobile network function, the technology provision function and the regulation function. However, there exists a division of roles based on this notion because of core competencies amongst the first three functions; the regulation function is unique in that it serves to supervise the system. The banks brought in the banking function as that was their core competency. Informant 5, an employee of a bank, stated:

Informant 5: “no us, no banking aspect”

The m-banking services are a pseudo-banking system as is and that banking function being present is what is most important in the m-banking product. Banking itself is a unique business that is heavily regulated and that function is not easy to replicate for the organisation that formerly was not acquainted with the way the banking/financial sector works (Alexandre, 2012). Typically, the banking function will be the centre of the system as it is the banks that are normally allowed by law to provide the banking function even outside m-banking.

Informant 6: “without our [banking] role there would be no industry”

The MNOs provide the mobile network function through the mobile telecommunications services and infrastructure they already specialise in and have respectively. They are the means by which the customer is reached on the mobile device via their network. Informant 1 termed the MNO the:

“channel provider”

The technology provision function is performed by mobile banking solution providers mostly although technology and software vendors or integrators as they are referred to in the data can be involved for varying durations. In some instances their involvement is contractual; after a certain milestone is achieved they are no longer needed. And in some cases they play a supporting role to the technology being used whether they provide it or not. Their function comprises of providing the technology needed for the m-banking product to work. This usually is in the form of work on and around a mobile banking platform. The idea is that this function is there to provide the technological interface through which the information systems that already exist in the banks and MNOS may communicate as needed. As a result, they are often in the middle of two organisations offering the banking and mobile network functions. It emerged that this middle role is problematic in that the quality or efficiency of their work can easily be affected by either of the organisations they are in the middle of. The expectations and competencies from the two organisations may differ which again proves problematic. Informant 3 stated that:

“being the middle man is difficult; navigating the relationships on both ends is hard.”

He further stated that:

“these guys are easier to work with because they know what they are doing, not so much on the other side”

In some instances the technology provision function may be the source of innovation for an m-banking product. However given their position, m-banking application providers often find it difficult to persuade other key function providers since it is the norm that other key function providers call on the technology provision function providers. Informant 3 stated that:

“as a solution provider it’s hard to convince the guys in the banks there that you actually have a business case.”

There exist other instances where the division of roles is not purely based on required functions but instead jostling for preferred position occurs. In as much as core competencies may have some sort of influence, in this instance the drive behind the rapid divisions of roles is as a result of organisations trying to place themselves somewhere in the m-banking industry to get as much benefit they can from it while the industry is still new. Informant 5 stated that:

"everyone wants a piece of the cake.”

6.4.2. Key roles at employee level

The sample for this study included mostly managerial level employees and executives; the bulk of whom have experience in m-banking services exceeding five years. These are decision makers or close support to decision makers in the organisations they work for regarding m-banking. Typically, their concerns revolve around ensuring the m-banking projects succeed in terms of time and budget. They deeply appreciate the context in which they carry the managerial responsibilities. Given the technology is new they are fully conscious of the responsibility bestowed upon them and the inherent consequences of failure as well as the rewards of success in terms of their career progression. Informant 5 stated:

“I’m the entire project management team, I’m answerable for the whole thing.”

The unfamiliarity of m-banking as a new technology and industry in Zimbabwe presents new challenges to the management employees. Being in the middle between their subordinates looking up to them for direction and the executives/directors expecting results is no easy task. Often they have to go beyond regular efforts for the sake of ensuring success. Informant 1 stated:

“it’s a very demanding job. Sometimes I get home and my little girl is already sleeping.”

In the managerial position in the m-banking industry one works with many people, be they internal or external to the organisation. It emerged that the comprehensive list of functions the managerial role needed around it were support, reconciliation and recovery, retail, marketing, key decision makers (CEOs, directors, CIOs), developers, business analysts,

production managers, encouragement and motivational function, mobile network liaison, technology liaison, banking liaison and regulator liaison. The combinations would differ from one manager or another depending on their needs and the organisation they worked for.

Self evaluation of roles

It emerged that the manager in the m-banking industry perceives they do a good job in that role. This self evaluation was positive in all instances from data

Informant 5:

“I’m comfortable, I’ve done well.”

Informant 1:

“I’ve impressed myself so far.”

The managers typically feel positively about the performances of the roles of the people that work around them. The manager acknowledges where there is room for improvement but overall believes internally the people executing the functions required by the manager do so well enough. Where subordinates undertake some kind of training for their roles around the manager, the manager does not highly rate the training programs; instead they rate them at most as merely relevant and opt for certifications as validation of their employees’ capabilities instead. Informant 3 stated that:

“none of my guys will work on a project they don’t have recognised certification for.”

Regardless, the workforce directly under the manager carries the manager’s confidence in executing the development of m-banking services successfully. As for the executives above them, the manager complains only about their expectations being too high. Where shortfalls surface amongst subordinates, the cause is cited as change management issues - a heavily researched topic in the field of organisational psychology. The organisation is required to accommodate the new line of work they are involved in by changing themselves. Informant 5 stated that:

“They’ve done alright I guess. [There is] room for improvement on integration of product processes. It’s more of a change management thing I would say.”

Internally, it happens that employees may be resistant to this change for various reasons. Key decision makers might not be technologically inclined and/or may be sceptical about investing in m-banking. This could be cautionary behaviour, ignorance and/or resistance to changing old ways of working. The researcher metaphorically likens this behaviour to that of an old dog that refuses to learn new tricks. This also occurs at subordinate levels in the employee hierarchy. The onus normally falls on the manager to convince the relevant people in the organisation to believe in m-banking. Informant 7 stated:

“Internal buy in is something I have to battle with because people here believe something when they see it. So, there’s a lot of convincing going on.”

Evaluation of external roles

Managers are normally less than impressed by the performances of people from other organisations when they must work together. This is usually the case of the mismatches in organisational cultures. The manager in m-banking has what the researcher has labelled “distrusting” as a tendency upon evaluating the skills and capabilities of an external workforce. The prevailing situation is rather ironic in that one manager will rate themselves and their workforce highly while the other does the same but they both behave “distrustingly” towards each other should they have to work together. The concept of “distrust” is further elaborated in Section 7.1.2. Other concepts such as “compromising” with others emerged from the resultant behaviour from this situation and these are discussed in Section 7.1.4.

Problems in roles

The problems the managerial employees face are common and not necessarily unique to the type organisation they work for in the m-banking industry. When the organisations have to work together they essentially become one entity that consists of interdependent units that inherently must face the biggest obstacles together. The more notable differentiation of problems, as common as they may be amongst the units, such as skills retention, utility provider failures, costs and infrastructure is in that they affect all the necessary functions differently. Here the managers simply try to adapt where they can, as much as they can and depend mostly on risk management. There are instances where the manager may be concerned for his own well being owing to the amounts of money that would be involved in an m-banking product. Informant 1 stated that:

“in a sense it’s scary [being in this position] because should there be a fraud case I will be the first suspect.”

6.4.3. The regulator function

The regulator function in the m-banking systems, it emerged, was what the researcher metaphorically refers to as to “the mother of the system”. This is to say the function is there to oversee the entire system, set the regulation and boundaries in which it operates and monitor it as it progresses. This function is taken up by a collaboration of regulators; the financial regulator and the telecommunications regulator. Porteous (2006) concurs with the idea of collaborative regulation for m-banking with his claim that m-banking sits at the intersection of a number of important policy issues such as consumer protection, stability of the national payment system, money laundering issues and more. Each issue is often associated with a different regulatory domain. This is to say each function in the m-banking system could very well have its own unique regulation to obey. “As many as five regulators (bank supervisor, payment regulator, telco regulator, competition regulator, anti-money laundering authority) may be involved in crafting policy and regulations which affect this sector” (Porteous, 2006, p. 30). Although typically the financial regulation takes lead, other regulatory bodies such as the telecommunications regulators cannot be overlooked as they would impose regulation that affects the mobile telecommunications function. Informant 10 stated that:

“we have been working with the telecom [regulations] guys to jointly come up with an official regulation strategy. Nothing is official yet but we have already been working with them successfully.”

In mothering the system the regulator function enforces the law and ensures protection of the financial system, the customers of m-banking and the stakeholders involved in developing it from each other when necessary. Interfaces between banking and MNO systems are constantly monitored, spot checks are done, and reports are ordered. RBZ, for example, dictated that each mobile banking product had to have a registered bank handling the banking function. This is an instance of the regulator function exercising the power to dictate certain things that deliberately set the system in a particular direction. Where deemed necessary, the regulator function holds the power to alter the m-banking system. Informant 10 stated that they are:

“[we are] driving these guys out of competing. Instead we are looking for interoperability, [and the] sharing of infrastructure.”

However, the function’s presence is not solely autocratic. The m-banking system is a tool for financial inclusion, which is one of the objectives of the RBZ in Zimbabwe (Reserve Bank of Zimbabwe, 2012). It emerges from data that especially where the regulator function’s objectives prior to m-banking are matched by m-banking, the function is also there to help with the development of m-banking services. Informant 11 stated:

“in as much as we police the system we are also there to help it develop because we are in full support of m-banking.”

Regulatory philosophy

The concept of a regulatory philosophy is of importance to the regulatory function. More so, is the importance of the awareness of having one. It emerged in data that this philosophy ideally would be an evolving one. Here the regulator maintains supervision of the system but not full control of it. Instead innovation leads the way and regulation follows closely behind with a watchful eye and may mother the system if the need arises. Informant 10 alluded to this and described their regulatory philosophy in an analogy:

“imagine a goat tied to a tree. The goat is m-banking and the rope is us the regulators. The goat can graze freely as it pleases but if it goes too far the rope will hold it back. That’s how we regulate. We want to know what we are regulating before we are quick to regulate.”

Informant 11:

“we don’t want to micro-manage [the m-banking system].”

It is difficult to determine a universally ideal philosophy given the highly contextual nature of m-banking (Alexandre, 2012). Three philosophies are described by Alexandre (2012), these are: (i) Regulation follows innovation: no regulation exists when innovation is brought to regulators, (ii) Regulation precedes innovation: regulation develops closely with innovation but approval for official launch is required, and (iii) Regulation prescribes innovation: specific regulatory framework in place and regulator dictates what the innovation should be like. This study discovered a compounded regulatory philosophy consisting of the first and second regulatory philosophies. With the m-banking being new in the country, no set

regulation designed specifically for m-banking existed hence regulation followed innovation. However, regulation is built in an evolutionary manner with the development of m-banking innovations using international guidelines with approval to launch required; regulation also precedes innovation. The development of this regulation is often inclusive of the financial regulator deriving regulation adopted from peer regulator communities. When the innovations are brought to them they then make adjustments accordingly (Alexandre 2012).

Regulator-Regulated gap

The regulator function often finds itself distanced from the rest of the functions present in the m-banking system, only engaging when there are new innovations seeking approval from the regulator or when the regulator mother's the system. These meeting points normally spur opinions between the regulator and the regulated; neither will necessarily be constructive nor positive. They create an atmosphere where one party says something about the other but the words from one end never reach the other. Informant 1 stated:

“The regulation is heavy, but it hasn't been all that bad. The secret is never to fight them.”

Informant 5:

“The regulation doesn't seem very clear on what to do with this new technology yet”

While informant 10 stated:

“The [usual] problem is these guys when they come with their innovations they seem to have little knowledge about how the NPS and how it works. So we have had to send many of them back to the drawing board.”

However it emerged that both ends are keen on actually engaging as partners and working together as they both stand to gain from m-banking being a success. Informant 10 then stated that:

“We are keen to work with these guys though, we have awareness programs we are planning and we are ready to work with them.”

The regulator and regulated gap may at this stage be closed or reduced as the two ends seem keen to have a meaningful relationship.

6.4.4. Prevailing models and causes

Referring back to Table 8, the official documented list of m-banking products as at 31 January 2012 (Reserve Bank of Zimbabwe, 2012), all but one mobile banking product have an external technology provision function and all have registered commercial banks providing the banking function and at least one MNO providing the mobile network function. From this, the two models that have been observed are: Bank-MNO-Mobile applications provider and Bank-MNO. The latter model is where the most popular m-banking product Ecocash exists which saw the MNO Econet going as far as purchasing the bank it initially partnered with. It emerged from data that the product ownership, that is the brand that leads the product, was a common cause of conflict amongst organisations. The bank would argue that they are the centre of the product and should hence lead the product's brand and the MNO would argue that they bring the larger customer base and the customers would identify with their brand more. Informant 1 stated that:

“If I bring an odd couple of million people and they bring the few thousand they have it doesn't make sense for them to lead the branding of the product.”

It emerged that both the additive (relies on owning a bank account) and transformative (does not rely on owning a bank account) renditions of m-banking are present. However, the majority of the m-banking products were mainly the former. They served as an extension to the services already offered to the banks existing customers hence the bulk of them were bank-led m-banking products. The two main causes of the models including the leading brands observed are regulation and the notion of reaching the unbanked population. Less common but still documented reasons revolve around organisations having to settle for a partnering arrangement out of circumstances beyond their control; usually by law or out of a lack of choice.

With the lifeworld of m-banking now laid out, theory on what occurs in it may be successfully built from here; the following chapter achieves this.

CHAPTER 7: RESULTS

As per CGT, the write up of the emergent theory developed from the empirical data collected must be a result of combined and sorted memos that are accumulated throughout the entire research project. The theory is built on constant reflective theorising; these theoretical reflections are captured in the memos to be sorted. As such, the theory that will be developed

in this chapter is exactly that – an integration of the memos the researcher accumulated based solely on the data that was collected and concepts that emerged from it. Throughout the discussion, the theory developed here is intertwined with existing literature found from the second phase of literature review. Further and more elaborate contextualisation amongst other theory is carried out in Chapter 8.

While other research on m-banking commonly revolves around conceptual issues and consumer adoption of m-banking as a technology (Dewan, 2010), the perspective of the providers of the services is all too neglected. As any new technology, comprising of software development processes there are various theories that may be useful on the actual software development process. The researcher however sought to investigate the social aspects involved in the development of m-banking services instead of the technological artefacts produced. It should be noted for the sake of clarity that the term ‘m-banking services’ here refers to, and is interchangeably used with the term ‘m-banking products’ – the set(s) of m-banking functions availed to the customers. This study revealed the numerous social concepts that are embedded in the development of m-banking services. As per methodology employed, the researcher sought to find the theoretical centre of these social concepts – the core variable. Before long the researcher found that “partnering” was the centre of what was going on in the data – the core concern. It became clear to the researcher that this study was about individuals in organisations involved in the development of mobile banking services realising the need they inherently have to successfully partner with individuals from other organisations in order to successfully build and deliver m-banking services and how they would then act on this realisation to achieve the partnerships they needed.

In the pursuit of partnering to build a successful m-banking product, various social processes were by-products, some deliberate and some unanticipated, and in some cases affecting each other and each other’s courses. These followed no particularly linear order but instead were unique depending on observed behaviour; concepts explaining these behaviours developed toward a core variable. This theoretical discussion shall be on realising the need for partnership as the core variable and seeking partnership in the life-world of m-banking as found in the data taking into account the individuals’ perceptions. As discussed in Chapter 6, the concept of a lifeworld here is utilised with the notion’s philosophical background. The lifeworld is defined as background knowledge that is employed in everyday life (Basden, 2009) where “the meaning/understanding of something emerges as a nexus of necessary relationships that constitute something as that which it is” (Mingers & Willcocks, 2004, p.

64) – objects and events exist in a referential whole in which things refer to each other in such a manner as to constitute a meaningful whole. Meaning is created by relationships between things and events that are observable. In this case, one such lifeworld is observable in the data - the lifeworld of m-banking. It is a shared one by people involved in developing m-banking services, where ‘everyday life’ refers to the work in developing the services. The lifeworld is built on what the people involved perceive based on meaning they create using reference and prior knowledge they gain through experiences in the development of m-banking services.

The theory developed here is grounded in the empirical data and context described in Chapters 5 and 6. It is conceptually built here in a theoretical discussion involving the core concern, concepts that emerged and how they related to each other and to the core variable. The basic social process, the “Realizations Process”, is then identified and laid out as how the informants attempt to resolve their core concern. Section 7.1. presents the building blocks of the Realisations Process which is presented in Section 7.2.

7.1. Partnership

It emerged that this study was a study of people in different organisations involved in the development of m-banking services realising their needs for forming partnerships and subsequently actively seeking partnerships. The participants’ main concern was partnering. Metaphorically speaking, informant 5 alluded to this:

“This thing is supposed to work. But we all just need to come together and be one big happy family.”

From this statement, the researcher coined the concept “partnership”. An important conceptual indicator of “partnership” was also named, in vivo, “The Big Happy Family”. The indicator itself, by the researcher’s, conjecture can be broken down for further meaningfulness beyond a simple metaphorical phrase by virtue of its properties: stakeholder numbers, state of affairs between stakeholders and the idea/sense of unity. The word ‘big’ denotes that the m-banking system consists of a number of stakeholders directly involved in its development as a service. The word big also speaks toward the point that the involvement of the big number of stakeholders implies the reason behind such a gathering is perceived as a big one, in this case it is the m-banking product. The word ‘happy’ indicates the state of affairs and the behaviours that should be observed in terms of partnering for the development of the services. The more strain there is on the partnership the less likely the development of

the services will go as the stakeholders involved may prefer; the ideal situation is where all the stakeholders involved are happy with the partnering arrangements. And finally, the term 'family' denotes the requirement for organisations involved to be conscious of the fact that upon partnering they have essentially become one entity working towards the same goal. Here the assumed norm is that families share last names, households and generally, in one way or another, the family members depend on each other. Similarly, the entire host of stakeholders involved should have a keen sense of awareness of a new abstract entity, what the researcher metaphorically refers to the "m-banking family", that will begin to exist upon them coming together and their interdependence amongst each other as individual parts of that entity. From this, another conceptual indicator of "partnership", "cohesion", emerged; this was citing the required sense of unity amongst the stakeholders involved to successfully develop m-banking services in partnership.

As one might expect, achieving "partnership", the desired status of "the big happy family", is no easy task. It emerged that partnering was the stakeholders' main concern largely owing to the hindrances to achieving it. Major categories, with sub-categories under them, emerged that represent hindrances to cohesion: "rivalry", "distrust", "compromising" and "resisting change". These categories were the building blocks to the grounded theory on how the participants involved sought to resolve their main concern. Each will be discussed here in turn:

7.1.1. Rivalry

It emerged that organisations motivations influence their conduct in pursuing partnerships. They sometimes can behave somewhat maliciously amongst each other. The category "rivalry" was named so in relation to the big happy family, where the organisations that are supposed to be in the big happy family are likened to siblings in sibling rivalries with the regulatory authority playing the parental role. This unsavoury behaviour appeared in different forms, that is, the different incidents spawned different concepts which strengthened the category of sibling rivalry. An organisation may simply opt not to partner in the hopes of developing m-banking services alone or with the least partnering possible or appear to want to partner with other organisations but deliberately stall the process while developing or further marketing an existing product. This utilisation of position in attempts to dominate would normally be observed in a key organisation in the big happy family such as an MNO. The concept of abuse of position under rivalry was labelled the "bullying sibling". Informant 5 alluded to the former and stated that:

“they initially tried to do the cowboy thing and went at it alone, but now they’ve come around”

Evidence of the bullying sibling emerged in data. Informant 5 further stated that:

“they’d rather cater to their existing product first before working with us.”

In this way an organisation knowing that they are needed by others uses the situation to their advantage by deliberately delaying or not working with other siblings. The concept “race to market” also bolsters rivalry. This concept is observed in an organisation's behaviours being motivated by wanting to have their product arrive sooner than others at the market (see Chapter 6). Another concept emerged that represented conflicts amongst the organisations; this was labelled “infighting”. Infighting, it emerged, was largely owing to quarrels over brand leadership as Informant 1’s testimony revealed (see Section 6.4.4). Typically MNOs would want to lead the brand given their larger customer bases. On the other hand banks may believe their function in the services warrants more recognition of their organisation in the branding. Conflicts are potentially observed here.

Rivalry, often motivated by profiteering, can be a threat to the industry in that the competitive behaviour mostly inconveniences the end user. The siblings themselves often overlook the fact that they are likely to gain more from being a big happy family. Resultantly, the m-banking industry where sibling rivalry is abound, often sees failed m-banking products or services with very low levels of interoperability. Corrective measures may be executed by the regulatory function intervening through “steering” – a concept that represents the intervention of regulatory authorities with the intention of directing the development of m-banking services in a certain direction. Regulatory intervention however can only produce limited results. Much like a mother with good intentions for her children, at some point they make decisions on their own which she may have little authority over. Where the organisations are not required by law to partner it is their prerogative, be their actions detrimental or not to the development of the industry.

Rivalry as a category built inclusive of and strengthened by different concepts is illustrated in Figure 7:

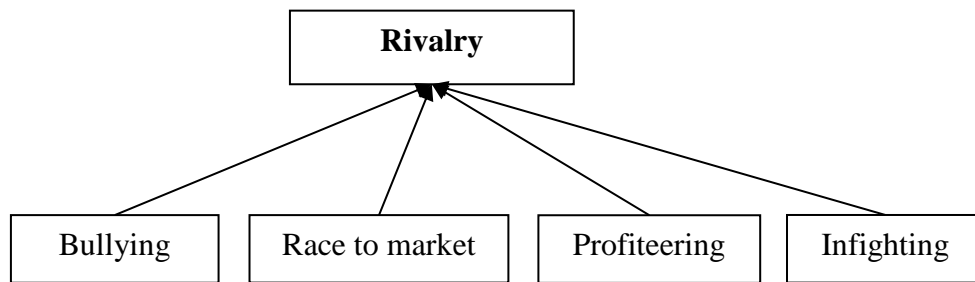


Figure 7: Sibling Rivalry as a major category

7.1.2. Distrust

The skill set of the employees in the m-banking industry is perceived differently by managers as discussed earlier. It emerged that a manager can hold reservations and have genuine concerns about the capabilities of employees (see Chapter 6); this is mostly about another organisation’s employees that he must work with including the regulators of the m-banking system. Informant 5 alluded to this by stating that:

“the regulation doesn’t seem very clear on what to do with this new technology yet”

The researcher labelled this concept “distrust”. Distrust may result from compromising (see Section 7.1.4.) – where the organisation has little choice but to settle for a partner. The fact that they have to settle for a partner non-autonomously means they are prone to doubting and subsequently distrusting their unintended counterparts. Another cause of distrust that emerged was unfamiliarity (see Section 7.1.3.)

7.1.3. Unfamiliarity

Distrust mostly stemmed from the concept of “unfamiliarity”. Unfamiliarity as a concept emerged in different incidents. The industry being new and comprising of two formerly unrelated industries, as described in Chapter 6, meant the people were bound to be unfamiliar with the work they had to do hence the presence of learning curves (see Chapter 6) and management harbouring reservations about employees’ capabilities. Again, unfamiliarity in tandem with distrust was observed in management. Working with foreign employees combined with the prospect of working in an unfamiliar field can spawn condescending or at least cautious perspectives in managers. Because the manager has experiences with his employees he presumably can almost accurately project or predict how they will go about their work when required to do so even with unfamiliar work. How the work will be done in

his organisation is in his control, how it will be done in another is not. The sense of not having control may result in distrusting the capabilities of the other organisation's employees and/or the organisation itself. In the case where distrust is not caused by compromising it may well be the demise of a potential partnership. Compromising would have implications of there being not much of a choice in an organisation's partnering options. Where choice exists, distrust threatens the potential partnership. The organisation may decide not to expose themselves to the potential risks they identify when distrusting. However, distrust may also be observed with the manager and their own employees. It follows that the process as a whole is not solely an inter-organisational one but includes intra-organisational occurrences of distrust, unfamiliarity and resisting change (see Section 7.1.5.).

Unfamiliarity was also observable in the attitudes and expectations informants had of m-banking. In some cases informants assumed that because the technology required for m-banking was in place it automatically meant the product had to be a success. This technological determinism is indicative of how unfamiliar m-banking was to the providers.

7.1.4. Compromising

The data reveals that often people find themselves in involuntary and/or unfavourable partnering situations. Informant 2 stated that:

“by law we have to work with them, nothing can be done about that.”

Partnership when compromising involuntarily occurs is as a result of the organisation involved not having a choice but to partner with another organisation as with the case of directives from the law on the involvement of banks in m-banking services. This often presented a case of strategic partnering versus regulatory requirements considerations. The strategic partnering, which was often desired, was driven by the organisations motives mostly but often compromised by regulation and other circumstances out of their control. One such form of compromising also occurs as a result of the bullying sibling. In this instance an organisation may be coerced into accepting terms of partnership they would otherwise have not preferred. They would then give in because the organisation they are partnering with is at an advantage somehow and offers no choice but to accept the terms. This is closely related to profiteering in that the bullying sibling may resort to bullying while profiteering. This is often in the situations where one partner needs the other more and the partner more sought after has a choice of partners to choose from while the suitor has a limited choice. Informant 5 stated that:

“well, they are the only ones who do this sort of thing so we have no choice in the matter.”

A more subtle form of compromising occurs in the wake of distrusting. This is when the manager goes ahead with a partnership while distrusting. The concept of compromising revolves around going ahead with a partnership under unfavourable conditions assuming the people involved always prefer favourable conditions in partnerships. Figure 8 illustrates distrust, compromising and unfamiliarity:

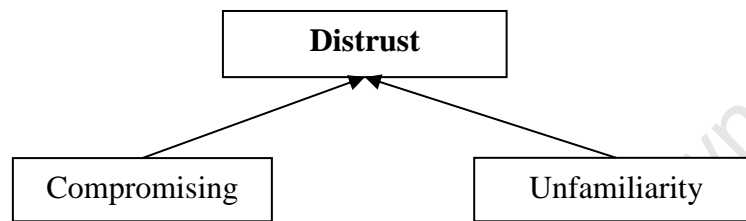


Figure 8: The category “Doubting”

7.1.5. Resisting change

Some organisations, it emerged in the discussions on the race to market (see Chapter 6), exercise extreme caution despite their desire to join in the development of m-banking services. In some cases people harboured a resistance to adapt to the new ways of working that developing m-banking services required. Metaphorically, this describes the behaviour of an old dog that would not learn new tricks – people were in some instances sceptical about being involved in the development of m-banking services for reasons revolving around a reluctance to undergo change and adapt to an unfamiliar working environment. The category representing this behaviour was labelled “resisting change”; it was strengthened by incidents and concepts that alluded to its occurrence stemming from the concept of distrust. Here people would resist the necessary change due to distrust. It emerged further that the inability to adapt sooner than later also occurred due to skills shortages and via the concept of unfamiliarity. Although the factors are out of the people’s control in this case, they would then spawn distrust in the managers and in turn they would be likely to resist necessary change. The category is illustrated in Figure 9:

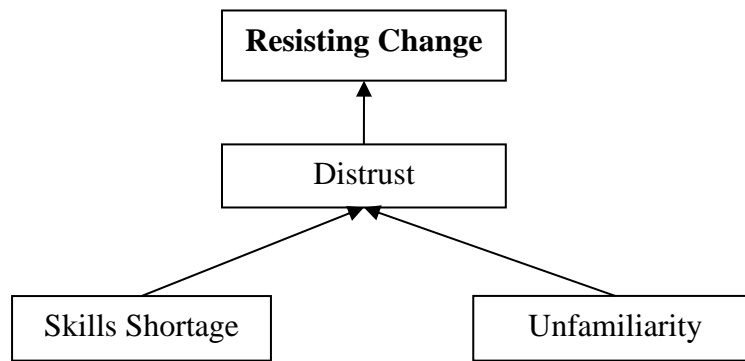


Figure 9: The category "Resisting Change"

7.1.6. Value of partnering

The variable “perceived value” of partnering by the parties involved – what they see as what they stand to gain from partnering is an important concept linked to the entire partnering process. Although the parties involved may have an interest in partnering, they may not necessarily rate the attempt at partnering as a top priority for different reasons. Despite realising the need to partner, should any hindrances prove to be too time consuming, too expensive or imply more change than an organisation is willing to undergo then achieving the partnership may prove to be too short of adequate “value” to an organisation to pursue. An organisation may simply view a partnership as not worth all the effort involved at this stage. Hence, the value placed on realising the partnering outcome by the parties involved has direct influence on how the people involved behave in the engaging process (see Section 7.2.2).

7.2. Realisations process

Identification of the basic social process (BSP) is central to CGT (Glaser & Strauss, 1967); this explains the phenomenon under investigation. It emerged that the core concern from the data was partnering, the core variable was the realisation of the need for partnering as it then explained the behaviour caused by this core concern. The basic social process (BSP) of how people sought to become “the big happy family” is presented here – how they sought to resolve their core concern. The basic social process, which the researcher has labelled as the “Realisations Process”, explains how the individuals go about their pursuit of the state of being the “big happy family” – how they decide to partner and how the process plays out until successful partnering is achieved. Through the CGT analysis procedures, constant comparative analysis, it emerged that the discovered processes combined to explain the lower

level concepts that emerged from data (Parry, 1998). The Realisations Process, with the desired end state becoming “the big happy family” (realising partnership), consists of three distinct states namely: Realisation, Engaging and finally the desired state the big happy family where partnership is achieved. This section theoretically discusses the Realisations Process.

7.2.1. Realisation

The process begins with, for the sake of argument Organisation_i and Organisation_{ii} with the two independent of each other (no partnership), Stage 1. Organisation_i undergoes a realisation for the partnering need and decides the fitting candidate partner is Organisation_{ii}. Organisation_i then seeks out Organisation_{ii} by whatever means. Only by this action of seeking out does the process move onto Stage 2, Engaging. This concept of realisation is linked to cohesion in that the people involved realise the need for cohesion in the partnerships they seek to forge.

7.2.2. Engaging

Throughout the duration of the entire lobbying process as a whole, the most time is spent engaging. Here is where all or some of the hindrances to the big happy family are observed independently, simultaneously, jointly or linearly – these are “rivalry”, “distrust”, “compromising” and “resisting change”. The mix and pattern of behaviours is not entirely predictable and depends on the nature of the organisations involved. The resolutions to these hindrances again are not predictable. They may be well drafted solutions headed for a successful partnership or may be a result of compromising. This will all depend on the observed behaviours between the two organisations. For instance, if Organisation_i is resisting change and Organisation_{ii} somehow convinces them of the potential value of m-banking services, a more peaceful partnership may prevail. Whereas if Organisation_i is bullying Organisation_{ii} then Organisation_{ii} might find themselves compromising, a less than ideal partnership may prevail. Conceptually, the main building blocks for this stage are rivalry, resisting change and distrust. Regulatory involvement may be observed if and when necessary. The regulatory function may exert its influence to steer the process in a certain direction.

Engaging may occur recursively between Organisation_i and Organisation_{ii}. This is owing to that fact some of the behaviours that may be observed are inherent in others. For instance, if

Organisation_i is profiteering (taking unfair advantage with profit as their motivation), infighting with Organisation_{ii} may be a linear result; this would be a cause-effect occurrence. However if Organisation_i is profiteering, in trying to resolve this more hindrances may be inherent such as bullying. Because the latter often exists within profiteering, the occurrence is observed in a recursive form - behaviour not resultant from but embedded in another. It should be noted that despite Organisation_i being the initiator of the whole process, the progress and passing of this stage is not entirely up to either of the organisations. Instead a combination of the organisations' conduct towards each other is more indicative of the end result. A typical by-product, often a requirement by law, is Service Level Agreements (SLAs) and other such agreements between the partnering organisations.

An important concept in the process of engaging is the perceived value of partnering by the parties involved. The perceived value of partnering is vital to the engaging stage; as a variable it is prone to fluctuation, be it deliberate or not. The hindrances encountered in this stage are typically countered by attempting to deliberately alter the perceived value of partnering in other people be it internally or between different organisations. Apart from highlighting the importance of this concept, this implies that the perceived value of partnering is highly indicative of the outcome of the engaging stage. The higher the variable is the more likely the Realisations Process will move on to the next stage. This is not to imply that passage of this stage is a direct result of the perceived value of partnering being high, neither is it solely owing to this variable alone. There is no particular threshold for this variable that guarantees successful passage of the stage; for instance, through compromising, a partnership may be forged with a less than ideal level of value placed on partnering. The researcher simply wishes to highlight the importance of the variable as an indicative tool and as an aid in explaining observable behaviours in this stage.

7.2.3. Induced realisation

Engaging will last as long as Organisation_{ii} has not reached their own realisation of the partnering need. Once the realisations of the partnering need of Organisation_i and Organisation_{ii} are matched engaging ends. Organisation_{ii}, as a result of the engaging stage, now experiences what the researcher termed "induced realisation". The notion of induction stems from the fact that their realisation is a result of an external action – one that is not of their own initiative. With the matching realisations the organisations reach the "big happy family" state - a partnership aimed at developing m-banking services is forged.

7.2.4. Graphic illustration

Glaser and Strauss (1967) recommend the researcher avoids the use of diagrams so as not to lose the richness of the data. However, the Realisations Process has been thoroughly explained and a depiction was developed which does not lose any richness from the discussion. Figure 10 depicts the Realisations Process graphically:

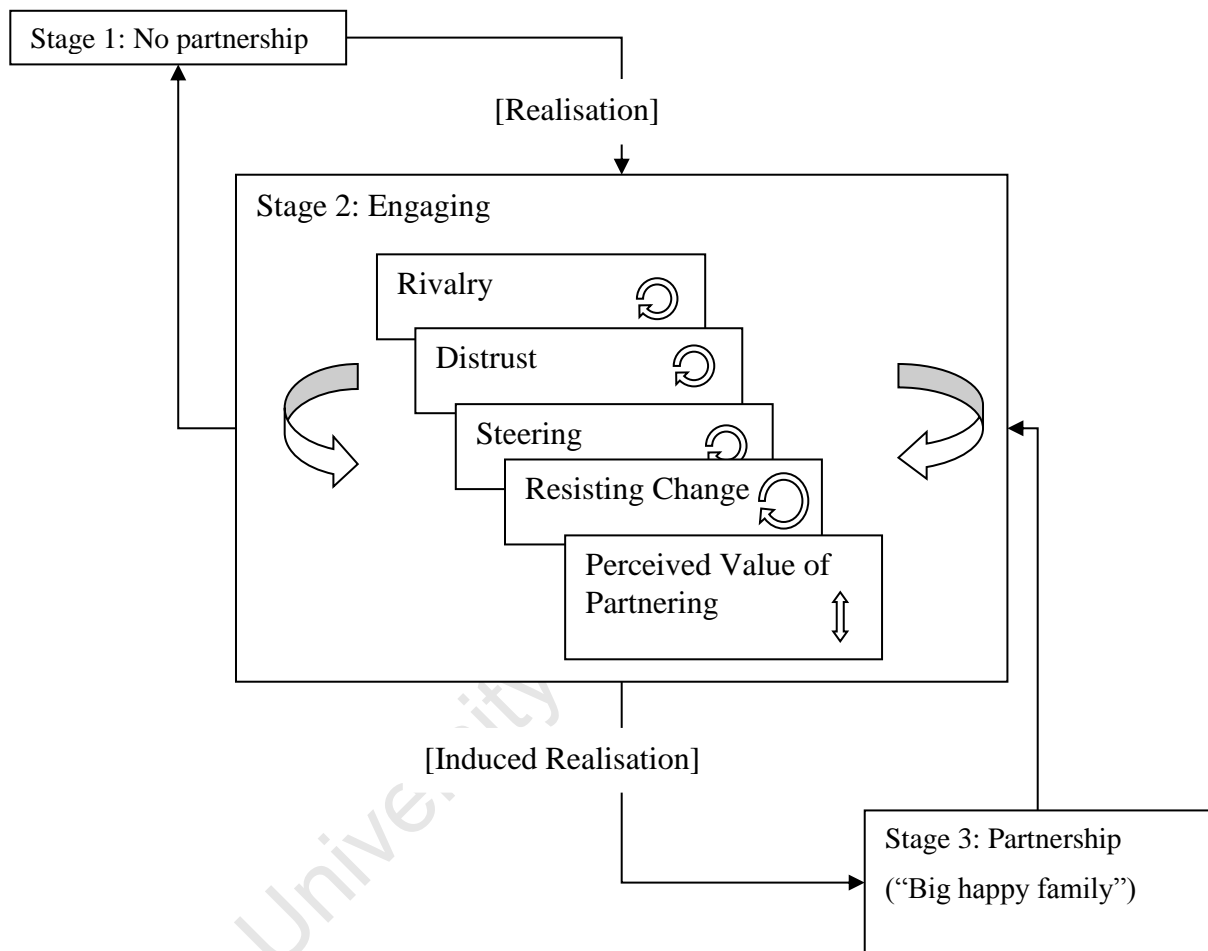


Figure 10: Realizations Process

It should be noted that at Stages 2 and 3 it may happen that the process back-tracks. The engaging process may fail and the organisations return to Stage 1. Similarly, decisions may be made by either organisation after completion that will take the organisations either back to either Stages 2 or 1. Informant 5 stated:

“we had to scrap the first product because it didn’t work out. We’re going to work with someone else this time around.”

Chapter 8 will proceed to discuss the result found here.

CHAPTER 8: DISCUSSION OF RESULTS

This chapter discusses the discovered theory developed in this study in lieu of existing theory. M-banking research in the IS field has been carried out as analysed in Chapter 4. The discussion in this chapter is an effort to analyse and evaluate the contribution of this study as per CGT. The Realisations process is discussed further and identified theories from the second phase literature review in relation to the emergent grounded theory from this study. Essentially, the theory developed in this study is compared and, where applicable, woven into existing literature. Section 8.1. discusses the Realisations Process with regards to its occurrence and generalisation. Section 8.2. holds a discussion on partnership and cohesion with regards to the emergent theory and existing theory on cohesion and 8.3. explores the findings of this study in relation to existing theory on m-banking as a system. Sections 8.4. and 8.5. discuss Diffusion of innovation theory and Actor Network theory respectively in relation to the emergent theory found in this study. 8.6. discusses the discovered models of m-banking and finally 8.7. concludes the chapter by evaluating the contribution of this study as a GT study. In these discussions to ensue, existing theory is discussed and compared to the discovered theory in this study and the researcher argues for how their findings are better positioned to explain what is happening in the data.

8.1. The Realisations Process

The nature of m-banking services, it emerged, is that a variety of stakeholders are involved in the development. The realisations process explains what would happen with two organisations on both intra-organisation and inter-organisation levels. This therefore means the occurrence of this process may be in a circular/chain, one-to-many or many-to-many.

Circular/chain occurrence

In the circular/chain instance it would happen that the process would occur between Organisation_i and Organisation_{ii}, Organisation_{ii} and Organisation_{iii}, Organisation_{iii} and Organisation_{iv} and so forth. The implication here is that an organisation in the chain would need not have any constant and heavy contact with an organisation further down or behind in the chain; just the organisation directly behind and ahead of itself in the chain. An example of this may be seen where a partnership involves an MNO, an m-banking application solution provider and a bank. It could happen that the MNO need only be in contact mostly with the technology provider and minimally with the bank. The technology provider is in contact with both, and only the bank is mostly in contact with the financial regulatory authorities while

only the MNO is in contact with the telecommunications regulatory authorities. This scenario would likely, although not exclusively, be observed where the solutions provider is responsible for most of the work required for the innovation; the bank and MNO would simply require each others' functions and not necessarily commit to a fully fledged partnership.

One-to-many/many-to-many occurrences

This occurs when many organisations have a partnership with one central organisation and not necessarily amongst themselves. Typically this occurs with a central function required for the m-banking services or a function offered by few organisations. For instance, one MNO may be sought after by a number banks or one bank by a number of MNOs. Should the “big happy family” state be realised here, there are opportunities for the interoperability between banks/MNOs that are availed here. More so with the many-to-many occurrence. Here the most number of m-banking products are developed normally specific to different banks. In whichever type of occurrence, Realisations Process_i may or not be dependent or resultant of Realisation Process_{ii} occurring. The dependencies of the Realisation Processes occurring on each other are entirely dependent on the circumstances of each instance. For example, assuming a technology provider would be needed solely for the technology provision function, when an MNO has an m-banking services innovation they may trigger a Realisation Process with a bank. Should the process fail, neither would have the need to trigger a Realisations Process with the technology provider.

Generalising the Realisations Process

The realizations process being a simplistic one raises the question of its applicability in other substantive areas where partnership of organisations for the development of a technology artefact is a requirement. An abstraction may be made to a higher more general level where realisation is required to initiate engaging, the hindrance processes may differ and the process ends with induced realisation and the formation of a partnership. This may be possible but as per CGT, the theory developed here is deeply rooted in the data and this inherent contextual factor must be heeded should an attempt to generalize to other substantial areas be made (Glaser & Strauss, 1967).

8.2. Partnership and cohesion

The indicator “the big happy family” is based on the need for organisations to partner and become one abstract entity consisting of them as co-dependent units. Although it is in a general Information and Communications Technology for Development (ICT4D) context, Klein and Unwin (2009) suggest seven principles for partnerships with technology: (i) they should be based upon clearly identified and relevant development needs of specific user groups. In this case, the users of the m-banking products; (ii) they require charismatic leaders and champions who are able to bring together the many different stakeholders involved. Here, the brand leadership would have to be given to such leaders; (iii) they require the establishment of trust between the different stakeholders. Ideally distrust should be minimised; (iv) they need to focus from the start on the sustainability of the initiative beyond any initial input of resources; (v) they should be founded on a transparent ethical framework that openly acknowledges the contributions and expectations of the various partners involved; (vi) significant effort should be put into sustaining the partnership and its constituent networks; and (vii) they should have mechanisms in place whereby the needs of users can effectively be matched by the contributions that the different partners can offer. That is, the functions present in the partnership must effectively match the users’ needs.

Equally important with partnering is the need for “cohesion” in these partnerships. Taking the definition of cohesion as the “the tendency of a group to stick together and remain united in the pursuit of its goals and objectives” (Wang, Ying, Jiang, & Klein, 2006). This notion of unity in the definition emerged from the data (“the big happy family”) as discussed in Chapter 7; specifically the need for it. The new abstract entity (the m-banking family) consisting of different units that begins to exist upon formation of partnerships is laden with the need for cohesion as a social system. The different organisations involved, although from different industries, are united in a common space with common goals. The common interest they share here is to develop a working m-banking service. The Realisations process is the means by which they then do so. The element of cohesion here is present in that they unite in the pursuit of the same result. However, there are distinctions amongst the individual units given their independence as different organisations. These are based on the motives behind seeking to develop m-banking services. Identified motives include strategy, profit and enrichment of services already available to customers. Despite the differing motives, cohesion is still present as a necessity in achieving what each stakeholder involved desires.

It must be noted however that although the discovered theory may be comparable to existing theory on partnerships (Kleine & Unwin, 2009) and cohesion (Wang et al, 2006), it presents a more valuable and in-depth contribution in both considerations on partnerships and cohesion. Where existing theory prescribes what is needed for successful m-banking application in a somewhat cause-effect manner, the Realisations Process presents theory that thoroughly explores and explains how these needs come about based on emergent empirical data. The need for partnership and cohesion is merely an end result of a series of deeply analysed social processes; the theory is founded and driven by sound and valid premise in the form of empirical data from which it emerges. The realisations process allows for an in-depth analysis and understanding of what is entailed in a partnership and what it means to be involved in one. In turn it allows for a more informed understanding of the need for a partnership. The theory enhances the understanding of cohesion by exploring the different ways in which it may come to be in situations where partnerships may result and flourish.

8.3. The mobile money ecosystem

Authors agree on the need for partnering successfully for the development of m-banking services (Mas & Almazan, 2010; Jenkins, 2008; Hughes & Lonie, 2007). This need arises from the fact that different capabilities are needed for the system to work and these are found in different organisations. Limited partnerships and solo efforts will experience inevitable inhibitors in the development of m-banking services (Goswami & Raghavendran, 2009). Much like the big happy family, Jenkins (2008) denounces the point solutions approach to m-banking systems and instead proposes the notion of m-banking as an ecosystem. This roots from the idea of a business ecosystem and she thus defines the mobile money ecosystem as “a network of organisations and people who must be in place for mobile money services to take root, proliferate and go to scale” (Jenkins, 2008, p. 7). The ecosystem as defined by Jenkins consists of different players. The composition of the involved stakeholders according to Jenkins is almost identical to the m-banking family that begins to exist with the advent of partnerships in the m-banking development space as identified in the development of theory in this study. A graphical depiction of the mobile money system is shown in Figure 11:

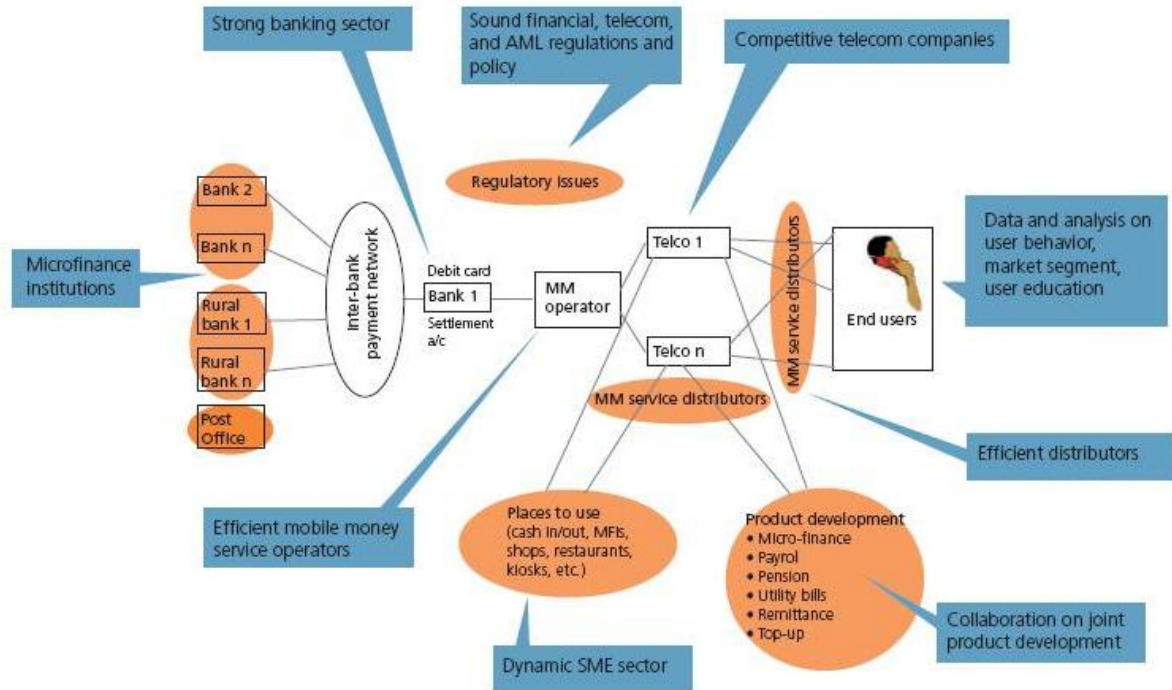


Figure 11: The m-banking ecosystem as defined by Jenkins (2008, p.10)

The leadership role in the ecosystem is said to be taken up by the MNO typically owing to the network of potential users they already have. The outlets and retail agents form the backbone of this ecosystem as they are the point of contact with the customer. They know and can observe the customer's habits and can thus inform further development of the ecosystem (Jenkins, 2008). Flores-Roux and Mariscal (2010, p. 42) also speak about an almost identical ecosystem and the need for its existence. They claim the mobile phones being used in m-banking need a complete ecosystem that supports their application to a functioning mobile banking service. A mobile banking platform is needed and it has to be supported by a cash conversion platform that in turn requires a full collaborative system of different players namely mobile networks operators, banks, airtime sales agents, retailers, and regulators.

This study has reaffirmed that there is a need for partnering for the successful development of m-banking services (Roux & Mariscal, 2010; Beshouri & Gravråk, 2010; Kleine & Unwin, 2009; Jenkins 2008; Porteous 2006). This study goes past the reaffirmations and reveals the embedded social processes in the concept of partnering and how people go about achieving it in the development of m-banking services. Again, this study not only reaffirms why partnering is needed but reveals and analyses the behaviours observed in the wake of the pursuit of partnering. The notion of an ecosystem is emergent from the data further

strengthening the arguments of authors like Jenkins (2008) and Roux and Mariscal (2010). This study delves deeper and reveals theory on the behaviours and perceptions of people in this ecosystem thus offering a better understanding of the ecosystem as a whole using a bottom-up or top-down approach. The notion of co-dependence in the ecosystem (Jenkins 2008) is emphasized. It is therefore useful that the units in the ecosystem that are ideally supposed to be co-dependent on each other be analysed as individuals and the relationships amongst them, including their co-dependencies, be analysed the same way. This study discovered and explained behaviour amongst individuals in the ecosystem of m-banking; how they perceive each other, themselves, their roles and how they perceive the importance of their roles. It is the belief of the researcher that exposing these concepts and behaviours can help better understand the m-banking ecosystem. This study has revealed that the units in the ecosystem generally do have the will to work together but struggle with actually getting down to successfully doing so. The analysis of the behaviours emergent between the units, which are explored in this study, can aid in finding solutions.

Furthermore, the theory developed here suggests a slight difference, one that sets it apart as the superior theory, between the ecosystem as described by Jenkins (2008) and the m-banking family described in Chapter 7. The theory developed indicates that various parties are required for this entity to be a success; but where Jenkins (2008) prescribes the specific organisations (banks, MNOs, applications providers etc.) the theory developed here assumes the notion of the necessary functions being present (banking function, mobile network function, technology provision function) rather than the specific type of organisation. This theory is more accurate as evidenced by the data which indicated that in some cases, for example, MNOs had independent technological capabilities. In this scenario, the functions of mobile network operation and technology provision are present in one organisation which then might contradict prescriptions of specific organisations being present for hard-wired purposes.

8.4. Diffusion of innovation theory

It emerged that organisations took to m-banking service development at different rates. Some went straight into it; some were cautious and instead waited to see how the former would fair. This phenomenon of differing rates, as it emerged through the concept race to market, of being involved in a technology can be explained by existing theory in the diffusion of innovations model.

Rogers (1983) highlights the main components of the process of diffusion of innovations when he describes the process as an innovation, which is communicated through certain channels, over time amongst the members of a social system. The adoption process of this innovation he defines as “the process through which an individual or other decision-maker units passes from first knowledge of an innovation, to implementation of the new idea, and to confirmation of this decision” (Rogers, 1983, p. 163). The rate of adoption of the innovation is dependent on the attributes of the innovation namely: relative advantage, compatibility, complexity, trialability and observability. The main relatable attributes of that emerged from data were relative advantage, compatibility and complexity. For the sake of clarity, the innovation in this case is the provision of m-banking services by the developers of these services.

Relative advantage

Relative advantage is defined as the degree to which an innovation is perceived better than the idea it supersedes (Rogers, 1995). As discussed in Chapter 6, different stakeholders involved in developing m-banking services are motivated by various reasons to develop m-banking services. These motivations are linked to some benefit(s) they anticipate to realise directly or indirectly, for themselves and/or the people they intend to offer m-banking services to. Realising benefit in this way is how the potential adopter perceives relative advantage of developing m-banking services.

Compatibility

Technical compatibility refers to an innovation’s compatibility with existing systems including hardware and software (Bradford & Florin, 2003). However it emerged that the consideration of compatibility of m-banking as an innovation with a potential adopter occurs in respect to intrinsic values or goals held by organisations and individuals alike. This is in line with Rogers’ (1995) definition. He defines compatibility as the degree to which an innovation is perceived consistent with the existing values, past experiences and the needs of potential adopters. The perceived potential offered by m-banking is evaluated against goals and values that exist in the organisation/individual prior to the decision to be involved in the development of m-banking services. The extents to which these match directly imply to the organisation/individual the level of compatibility.

On the organisational level, strategy dictates how compatible developing m-banking services is considered to be with the organisation. An organisation's formulated strategy that exists prior to potential involvement with m-banking would typically cover m-banking in a generic manner as a technology that falls under a broader suite targeted by the strategy. For instance, an organisation's strategy may be e-commerce oriented. Given m-banking falls under the e-commerce suite of technologies (Liang & Wei, 2004) the organisation's strategy would therefore dictate that the development of m-banking is compatible with the organisation. This was the case with informant 5' organisation who stated:

“our strategy as an organisation focuses on e-commerce, m-banking is a part of that”

On the individual level, compatibility is considered through the individual's perceptions of m-banking and their own capabilities. Typically the individual employee maintains no autonomy in getting involvement in the development of m-banking services. This is assuming they intend to stay in the organisation. The implication here is that the individual's compatibility or perceived compatibility is independent of their adoption as the decision does not lie with them. The consideration of how compatible the prospect is with them is based on how they perceive m-banking and how it fits with how they rate their own performance. For instance, the data dictates that given the unfamiliarity of m-banking, misconceptions about what its development entails are abound. However, individuals tend to rate their ability to overcome this unfamiliarity highly through and in full acknowledgement of a learning phase. In some instances the fact that the technology is unfamiliar matches the individual's modus operandi that leans towards a pioneering mentality – the individual feels comfortable and favours breaking new technological grounds and thus feels they are compatible with m-banking.

Complexity

Complexity is the degree to which a certain innovation is difficult to understand and use (Rogers, 1983). The perceived complexity of the development of m-banking is indicated by the acknowledgement of the presence of a learning curve for each individual. The fact that managers may doubt their own or each others' employees implies they may anticipate or at least make mental provision for the failure of employees to comprehend and/or competently develop m-banking services. This again is indicative of the perceived complex nature of developing m-banking services.

Diffusion of the innovation, m-banking in this case, is the process by which potential stakeholders (the social system) get involved in the development of m-banking services. Over time more stakeholders get involved until all of the potential stakeholders are involved. The rate of adoption can be linked with the organisation's learning curve (see Chapter 6) and the concept of resisting change; the organisation undergoes the necessary steps and changes internally in order to be involved in the development of m-banking services. It emerged that this occurred at different rates, evidence of these differing rates were found in the durations that organisations took from deliberating upon getting involved in the development of m-banking services to actually doing it. Informant 5:

“it took us about a year”

Informant 7:

“we sat down, thought about it and decided on a course of action over about four months. From there the partner search was on.”

The differing rates of adoption according to Rogers (1983) divides the potential adopters into five categories based on how early individuals adopt the technology relative to others over time. These are innovators, early adopters, early majority, late majority and laggards.

Given the technology is new in Zimbabwe, it is possible the time t is currently early in the period where the late majority are getting involved in the development of m-banking services. This is because the innovators and early adopters have already been identified and soon after a flurry of m-banking products surfaced. The more cautious stakeholders are now starting to decide on joining the m-banking ecosystem.

8.5. Actor Network Theory

The Actor Network Theory (ANT) has been deemed to be very helpful in IS research. For the sake of clarity and argument, it is assumed in this study that IS research “examines more than just the technological system, or just the social system, or even the two systems side by side; in addition, it investigates the phenomena that emerge when the two interact” (Lee, 2001). This socio-technical implication confirms that this study indeed falls within the field of IS as it focused on the phenomena that emerged when humans interacted with a technological system in the pursuit of building m-banking systems. It has been argued however that the border between the technological and the social systems is one that is regularly neglected (Hanseth, Aanestad, & Berg, 2004), and one that ANT has the potential to aid in

understanding. This is especially made more important a finding after Orlikowski and Iacono's (2001) revelation that the theoretical understanding of the key object in the IS field is absent.

ANT can be viewed as a social theory of technology (Hanseth et al, 2004) with its most basic and important concept is the existence of what is called an actor network. This actor network is defined as "a network where elements of any kind may be included: humans, technological artefacts, organizations, institutions, etc." (Hanseth et al, 2004, p. 118). Each element is viewed as equal and none are pre-defined. In addition, with a focus on diversity and socio-technical world, ANT assumes that all networks are heterogeneous or socio-technical; there are no exclusively human or technological networks. ANT does not say anything about the makeup of entities in the network nor their actions, but only "what the recording device should be that would allow entities to be described in all their details" (Latour, 1996, p. 374). This is to say that it does not focus on action in the network, but rather qualifies what the researcher should suppose in order for action to be observed through its tenets of infinite pliability and absolute freedom in the network amongst its elements (Latour, 1996). Its use in IS, although favoured, is not without flaws. Identified misuses of ANT include limiting its use to mere description (Hanseth et al, 2004) and misinterpretation of the words 'actor' and 'network' and their meanings in relation to the theory itself (Latour, 1996).

It may be argued within reason that such a theory may be applied to this study and its findings. Indeed by definition, under ANT, a network emerged consisting of humans and technology. This network was heterogeneous and existed in a socio-technical world with its elements free to interact. Application of ANT would focus on the establishment of a 'recording device' (Latour, 1996) and suppositions in order to qualify whatever may be observed – the burden of theory would be on recording (Latour, 1996). This would increase the already noted risk of the findings being limited to shallow description (Hanseth et al, 2004). Furthermore, in as much as establishing a recording device as theory might safeguard from irrelevant observations, should this recording device be flawed then this has the potential to distort what is perceived in the actor network itself. With the Realisations Process, similarly to the ANT approach, there is no pre-defined course of actions amongst the stakeholders (elements of the network) as they embark on the process; the shape of actions is not pre-determined although the available actions themselves are known. The Realisations Process sets itself apart as a superior alternative in that it is free of the need to establish a recording device which potentially could spawn the wrong understanding of the course of

actions that the stakeholders take. In contrast to this, ANT would claim the availability of any actions in any course amongst its elements given they can be qualified. The Realisations Process, with its foundation in CGT, instead, has a known set of possible actions that are identified as they emerged in data though its predictive power is limited in that the course of these actions cannot be pre-determined. It does not have any reliance on a flaw-prone, pre-determined qualifying mechanism for the processes that occur within it; its strength is in that the processes/actions that may occur are backed by data and thus evidenced and irrevocably presumed to be correctly available actions unless fresh data suggests otherwise.

8.6. Models of m-banking

Porteous (2006) discusses models of m-banking in Africa and develops a classification of m-banking models. Based on four considerations, Porteous (2006) identifies four models. These considerations are (i) Who has the legal responsibility for the deposit, (ii) the leading brand of the m-banking product, (iii) where cash can be accessed, and (iv) who carries the payment instruction: whether the services are tied to one MNO or not. Table 10 is a recreation of his findings with some Zimbabwean examples:

Table 10: Classification of emerging m-banking models (Porteous, 2006)

Model name	'Pure' Bank driven	Joint Venture	Non-bank led	Non-bank driven
(i) Who holds the account/deposit	Bank	Bank	Bank	MNO/Non-bank
(ii) Whose brand is dominant	Bank	Joint, non-bank or MNO	Usually non-bank or MNO dominant	MNO/Non-bank
(iii) Where can cash be accessed	Bank	Bank	Bank + alternative agent network	MNO + other
(iv) Who carries the payment instruction	Any MNO (sometimes with 3 rd party payment gateway)	Usually specific to one MNO	May be one or any	Specific to offering MNO
Current examples	Barclays	Textacash (CABS, Telecel)	Ecocash (TN Bank, Econet)	None

From left to right the bank becomes less important. The first three models from left to right have been observed in Zimbabwe with the 'pure bank driven' model being the most common. The last model is by law illegal.

At a higher level of classification, Porteous (2006) defines two versions of m-banking, additive and transformative. The data reveals that both additive and transformative versions of m-banking are present in Zimbabwe.

Goswami and Raghavendran (2009) describe a similar classification consisting of five models based on how banks may partner up with MNOs: (i) MNOs going solo, (ii) banks going solo, (iii) exclusive bank and MNO partnership, (iv) bank-MNO open partnership, and (v) open federation model. According to this classification, all models have been observed with the last being the most recent to surface in Zimbabwe. In the open federation model, numerous banks and MNOs partner to provide a shared platform for mobile-banking services. “By developing a common platform and infrastructure, open federation models reduce the cost that banks and carriers would incur from investing in proprietary software and infrastructures.” (Goswami & Raghavendran, 2009, p. 18). It is argued that this model maximises the likelihood of amassing partnerships and end-users and generating network effects which would then see new mobile-banking users moving to the federation that hosts the dominant platform for mobile banking. The effect is to create an industry standard. The idea is to have the federation stimulate innovation and third-party development of applications and services for the platform thus making the platform more valuable than solutions inherent in the other models of m-banking (Goswami & Raghavendran, 2009).

8.7. Evaluation of contribution

Given the study was carried out using CGT it should be evaluated in that light. The criteria for evaluating the theory should be limited to (i) fit: matches reality from the informants’ perspectives, (ii) work: explains variations in behaviour with respect to informants’ major concerns, (iii) relevance: if it fits and works it has relevance, and (iv) modifiability (Van Niekerk et al, 2009).

The researcher’s prior knowledge and biases were suppressed as much as possible during the duration of the study; had this not been so the findings would have not revealed “the big happy family” as the core category. The CGT procedures were closely followed at all times, with particular rigor on the constant comparative method. The final write up was a theoretical discussion built from the researchers sorted memos as per CGT (Glaser, 2004). A few important memos are found in Appendix 3.

The researcher laid out the concepts generated from the data, in many instances using direct quotes to illustrate how the concepts were related to the data and how they were labelled. The

interplay between the concepts themselves was thoroughly explained using examples where necessary. The core category was related to the concepts that built it and the theoretical discussion on how this happened, the process that explains how the big happy family is achieved, was presented as the emergent theory- the Realisations Process.

The credibility of this study is affirmed in that the findings, although fully emergent from the data, are in sync with existing literature. Adolph et al (2012) lists credibility as one of the four criteria for trustworthiness in research and claims that the findings must be credible to the people being studied and the readers. For the sake of authenticity the findings should be related to significant elements in the research context. Existing theories partnership and cohesion, regulation, m-banking ecosystems, technology adoption, socio-technical systems and models of m-banking are all relatable to the findings of this study. However, CGT being inherently focused on the unknown discovered the Realisations Process, which is commonly loosely referred to as lobbying in literature and in the data, as well as other intricacies around partnering and co-dependence, and the m-banking ecosystem as discussed in Chapter 7. The researcher contends that the concepts presented are easy to comprehend and may be used to better understand m-banking ecosystems and the development of m-banking services. The study also highlights the importance of other areas of study such as change management and how they affect the development of m-banking services.

CHAPTER 9: CONCLUSION

Partnering emerged as the core concern amongst the stakeholders involved in the development of m-banking services. The researcher acquired information from the perspective of mostly the management employees in the m-banking industry who worked for different stakeholders in the industry. The processes that these people went through in order to achieve partnership were discovered from data collected using interviews, questionnaires, follow-up conversations, emails and telephone calls. Theory subsequently emerged on the perceptions of the stakeholders about their work, each other and how they go about resolving their core concern.

9.1. Summary of findings

The process by which the big happy family (achieving partnership) was sought after was named the Realisations Process by the researcher and it occurred in Stages 1, 2 and 3. At Stage 1 there exists no partnership. The process is initiated by the concept the researcher labelled “Realisation”. Here Organisation_i realises the need to form a partnership with another organisation, Organisation_{ii}. Organisation_i then reaches out to Organisation_{ii} and the process moves onto Stage 2, the condition being Organisation_i is in realisation.

In Stage 2, Engaging occurs. This concept represents the organisations facing hindrances to partnering between the two of them. These hindrances are represented by the concepts the researcher labelled rivalry, distrust, unfamiliarity, compromising and resisting change. Rivalry represents when an organisation behaves more in a competitive manner rather than cooperatively. Distrust represents when managers/organisations hold reservations about their own or external employees from partner/potential partner organisations. Unfamiliarity as a concept represents the literal sense of unfamiliarity with new work or external individuals and is often a cause for distrust and resistance to change when it may be necessary. The Engaging stage lasts for as long the two organisations’ realisations do not match. The condition to moving to Stage 3 is that Organisation_{ii} reaches a realisation that matches that of Organisation_i, this concept was labelled “induced realisation”.

At Stage 3 the organisations have matching realisations and “the big happy family” is formed. It is at this stage that a partnership may be formed. Back tracking from Stages 3 and 2 may occur. A variable, perceived value of partnering, exists and has certain but not absolute influence on the outcome of the entire process.

9.2. Limitations and future considerations

This study, like any other, was bound by limitations the researcher could not help. Firstly, the sample was very MNO deficient. In as much as theoretical sampling led the direction of where to next look for data, where the theory pointed towards MNO related concepts the choice was limited due to lack of access. It is not entirely predictable what difference the presence of more informants from MNOs would have made but the limited access did impact the study. In some instances where a questionnaire was received by the researcher, some issues were not clear and clarification often proved difficult to obtain in these situations. The researcher then relied on conjecture and other incidents of data.

This study provides a grounded starting point for further research on the development of m-banking services. CGT developed theory such as the findings from this study cannot be disproved but rather improved or built on (Glaser & Strauss, 1967). Because the area is a neglected one in IS research more research can be done around it and more theory discovered. The researcher believes this study reveals a clearer picture of what questions to ask around the development of m-banking should further research be pursued. Which indeed it should, be it qualitative or quantitative. Hence further research using the findings of this study as a launch pad on the development of m-banking services would further refine the concepts that emerged from this one with those that might emerge from other data. The idea is to move towards formal theory.

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CHAPTER 11: APPENDICES

APPENDIX 1: COVER LETTER

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RE: RESEARCH FOR MASTERS DISSERTATION, PARTICIPATION CONSENT FORM

Dear Sir/Madam,

As an Information Systems Masters student at the University of Cape Town (UCT), I am undertaking a short study on mobile-banking (m-banking) in Zimbabwe. The particular focus of my study is to investigate the concerns of stakeholders involved in the development of m-banking services. As part of the research process I will be conducting one-on-one interviews (roughly an hour long each) to gain relevant insight from the stakeholders involved in the earlier mentioned area.

Participation is entirely voluntary and as an informant it will be your prerogative to withdraw at any time, should you wish to do so, with no repercussions. All data collected is intended only for academic use and will be available for that purpose only to myself and my supervisor. Your participation in this study will be greatly appreciated.

The interview procedure and questions have been approved by the department of Information Systems at UCT and the Ethics in Research Committee. Data collected will be stored electronically and kept strictly confidential. The research project and the dissemination of its results will not implicitly nor explicitly name your organisation as a participant of the study. A copy of the results will be made available to you on request.

For any further queries feel free to contact the student researcher or the supervisor of the study. Contact details are provided below.

Your time and cooperation is greatly appreciated

Sincerely,

Takunda Mujuru (UCT Masters Student), takumj@gmail.com

Prof. Irwin Brown (Supervisor), Irwin.brown@uct.ac.za

Department of Information Systems

University of Cape Town

PARTICIPANT CONSENT FORM

By signing this participant consent form, you are agreeing to participate in the research project entitled “M-Banking in Zimbabwe: The concerns of stakeholders involved in the development of m-banking services”

Signature: _____

Date: _____

APPENDIX 2: QUESTION SHEET

Stakeholders involved

1. Who are the key players in the m-banking services industry in terms of the stakeholders involved in building the services?
2. Why would you say this is so in this industry in general?
3. What is the model of stakeholders specific to your organization?
4. Why is this so? [Why did your organization opt for this model? (If they did)?]

M-Banking services

1. What comes to mind when you think m-banking in Zimbabwe?
2. What does the business of m-banking development entail in general?
3. How long has this organization been providing m-banking services?
4. What influenced the organization to get involved?
5. How long did it take the organization from considering it to actually providing m-banking services?
6. What influenced this duration? [Why was it as long as it was that they took?]
7. What were your personal perceptions of the development of m-banking services before you were involved?
8. How did your perceptions then influence you getting involved? [If applicable]
9. What are your perceptions now about the business of developing m-banking services?
10. What would you say have been your highlights and or low points in working in the space?
11. How would you describe your general confidence in the workforce dedicated to building the service in your organization?
12. Are these people formally trained, educated or specialized in any way to work in this area?
13. What are your feelings about the training programs? [If applicable]
14. How would you describe your general confidence in your organization's capabilities when it comes to providing m-banking services? [Finance, Technology, Innovation etc]
15. How would you describe your general confidence in the workforce dedicated to building the service in the other organization(s) that you work with? [If applicable]
16. How would you describe your general confidence in the capabilities of the other organization(s) you work with? [If applicable]

Roles

1. What do you perceive as the key role(s) of your organization in providing the services?
2. Why is/are your organizations role important? [How would the development of the service be different without the org?]
3. What are your feelings and/or concerns about your organization's role and how the organization plays it?
4. What do you perceive as the role(s) of the organization(s) you have worked with in this space? [If applicable]
5. Why is/are the other organization(s) role(s) important? [If applicable]
6. How would you describe working with the other organization(s) that you have worked with in this space? [What is it like working with them as a partner or whatever the case may be? Has this been a major concern and how so?]
7. How would you describe your day-to-day personal involvement in the development of m-banking services in your organization?
8. How long have you been working in the space?[M-Banking services]
9. How do you feel about working in this space?
10. How did you get to work in the space? [Did you decide autonomously or you were assigned to working in the space?]
11. Why is your role important? [What would be different without you/your role?]
12. What are your feelings about your role and how you play it?
13. What are the key roles of the people that work around you?[Permanent or not, your organization or otherwise]
14. What are your feelings about their role(s) and how they play it?
15. Do the roles ever change internally in your organization amongst you and the people you work with?
16. What would influence these changes?
17. What are your feelings and/or concerns about how these changes occur or how they are implemented? [If applicable]

Concerns

1. What would you say are the main concerns in the business of developing m-banking services in Zimbabwe?

2. What would you say are the main concerns in the business of developing m-banking unique to the role your organization plays?
3. How does the organization at the strategic level deal with these concerns (if at all)?
4. What would you say are your personal day-to-day worries/concerns in the business of developing m-banking services? [Worries/concerns particular to your job/role in the organization?]
5. Are any of your organization's operations in the development of m-banking services influenced directly or indirectly by external forces out of your control?
6. How does the organization at the strategic level deal with these influences (if at all)? [If applicable]

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APPENDIX 3: MEMOS

NB: the memos presented here are not exhaustive but rather some of the key memos. Due to the sheer number of memos accumulated during the duration of the study including some which ended up being useless, the researcher opted to present a few of the major memos.

MEMO 1, Abuse of position

Category/Concept/Idea: Organisations taking advantage of positioning in the industry and behaving abusively – abuse of position
Quote/Idea expressed: “MNOs know not much can be done without them so they take advantage. I personally know of one such company that stole an idea that was pitched to them. How then can you work with guys like that?”
Conceptualisation/conjecture/what is happening?: No trust or a serious lack of it between them. Or at least doubting that working with them might achieve what he’s going for with his company. He’s worried/concerned that partnering up with these guys might put him through misfortune.
Next target/more on concept/category/idea: Trust/doubting each other, Partnering

MEMO 2, Competing

Category/Concept/Idea: Competitive behaviour as opposed to pursuit of successful partnership
Quote/Idea expressed: “We’d love to work with them but they did the cowboy thing and went it alone. But now they are coming around” “we lobby our way through to them”
Conceptualisation/conjecture/what is happening?: They’d rather take everything for themselves if they can and block everyone else out yet they can potentially build better services with external expertise – competitiveness. The notion of “now coming around”, do former cowboys then realise they stand to gain more from partnering than riding solo? How does this realisation occur – need/necessity (necessity being regulation). After they realise then they “lobby” their way through.
Next target/more on concept/category/idea: Do they consciously have some realisation phase, lobbying, need for partnering,

MEMO 3: Partnering

Category/Concept/Idea: Partnership as the way forward
Quote/Idea expressed: Lots of the informants I meet seem to advocate heavily for, and recognise that they need to partner to make this thing work but actually going about it is rough – so much has to happen before.

“we need to come together and be one big happy family”
“the dust hasn’t settled”

Conceptualisation/conjecture/what is happening?:

People realise that they need partnerships - realisation of the partnering need. They’re concern and what they are trying to achieve at the end of the day is successful partnerships. And a lot of the things they bring up speak towards partnership as the big concern; infrastructure, product ownership. “lobbying” is what they seem to allude to as the bridge they have to cross, lobbying is how they resolve their concern. But what is lobbying? What social processes can I identify as resolves or part of a resolution in what they loosely term “lobbying”? One thing for sure is they don’t trust each other(see) memo 1’s trust/doubt code. They seem not to trust each other’s workforces neither – another property of the trust/doubt category. By law in some cases they have forced partnerships – they have to settle. Is settling one of the processes involved?

Next target/more on concept/category/idea:

Settling, lobbying, mistrust/doubting

MEMO 4: Lobbying

Category/Concept/Idea:

When they mention “lobbying” – what goes on in “lobbying”

Quote/Idea expressed:

Conflicts, competitive behaviours – lots of hindrances to partnership

“we sit down and talk it out and see what we can reach”

“I have to lobby on a personal level with them”

“I have long time relationships with these guys so we talk”

Conceptualisation/conjecture/what is happening?:

Lobbying is used on this context to refer to the social processes that occur soon after realisation for the partnering need – when they engage each other. Another property of engaging is revealed by them also pointing out more than often that they have to seek approval from the regulators. Lobbying including to the regulators seems to be an intermediary social process consisting of other social processes within it (infighting, profiteering etc) between the guys realising they need partnership to achieving partnership. The idea that they have to settle due to regulation makes sense that the notion of their own strategy vs regulation strengthens the category settling as a property.

The one guy explicitly mentions he has personal relationships with external people, they all seem to know each other anyway from what I’ve figured. Given they all know each other these processes are probably on a more interpersonal platform rather than an organisational one – makes sense he said “lobby on a personal level”.

Next target/more on concept/category/idea:

Regulators, hindrance processes (infighting, settling, doubting etc)

MEMO 5: The big happy family

Category/Concept/Idea:

The whole m-banking industry as one unit

Quote/Idea expressed:

“we are the custodians of the system”

“big happy family” (see memo 3)

Conceptualisation/conjecture/what is happening?:

What do I know so far:

1. they all want to be in partnering somehow, and that’s their main concern, them achieving this
2. they all try to do so through lobbying/engaging who they want to partner with and go through hindering social processes before success can be realised
3. prior to this lobbying/engaging, the people undergo a realisation for the partnering need

The regulatory guys perceive themselves as the custodians of the whole thing they intervene when necessary (mothering the system) to set things straight, and they partner between themselves and jointly supervise the whole thing as a single unit; much like a mother does with her children (See figure below) The quote “big happy family” makes sense metaphorically in that the whole thing can be viewed as a family of siblings trying to get along and the mother helping and/or scolding when she can/should – all in the unanimous pursuit of being one happy family. The idea here is people realise they need to be one unit (partnering as main concern) in developing these services, sort out their differences (engaging as resolution), and go for it.

Next target/more on concept/category/idea:

Clarification on how the ‘siblings’ perceive the role of the regulator/ do they also see the mothering aspect the regulators see themselves?

