

# Assessing Factors Influencing the Diffusion of Mobile Banking in South Africa

A case study on the company Wizzit

Carried out as a Minor Field Study with financial support from the Swedish International Development and Cooperation Agency, SIDA



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This study on mobile banking in South Africa has been very fascinating and inspiring and has given us the opportunity for both professional and personal growth. It has also given us a broader

understanding of the difficulties and complexities facing a developing country like South Africa

during its development process.

During our study we have had the opportunity to meet many interesting people, of whom many

have given us their opinions on mobile banking, while others have shared their picture of South

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during our stay in South Africa. That has made us want to come back to this beautiful country,

with its wonderful people, in a not too distant future.

Gothenburg, on the 27th of May

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# **Abstract**

There are about 6.5 billion people living on earth. Only about 1.5 billion have a bank account but as many as 4 billion people have access to a mobile phone. In South Africa research indicates that about 16 million of 48 million inhabitants do not have a bank account but as many as 90% of the population have access to a mobile phone. During 2005 an initiative to give access to bank services through mobile phones was launched by the company Wizzit. Wizzit has since then offered thousands of people better living standards through its mobile banking services but the adoption rate of their service has been relatively low and Wizzit has not yet reached breakeven.

A grant from the Swedish International Development and co-operation Agency (Sida) enabled a field study in South Africa. The questions the authors wanted answers to after this study was completed were:

"What are the main factors influencing the diffusion of Wizzit's banking service in South Africa and how do these factors influence the rate of diffusion?"

"What are the main obstacles that have to be overcome from Wizzit's side in order to speed up diffusion?"

21 semi-structured interviews and a number of observations were conducted in South Africa with different actors in order to collect the information that would enable the authors to answer these questions. These actors were either involved in Wizzit directly or in mobile banking in general. In addition to this, before and after the field study was conducted a number of interviews were conducted in Sweden with experts in the field. The findings from these different interviews lay the foundation for the authors' conclusions.

Our empirical findings correspond well to theory in that they indicate that the main factors influencing diffusion are innovation features, social factors, customer perception of the innovation and how well adjusted to a developing country environment the offer is. Further on, our conclusions indicate that the main obstacle to overcome in order to speed up diffusion is to build trust in the service among existing customers and among potential adopters.

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#### 1 Introduction

#### 1.1 Background

#### 1.1.1 Mobile banking - Why?

This bachelor thesis is written on the subject of Mobile Banking (m-banking) in South Africa. To begin with, a short quote will give the reader a first glimpse of m-banking and its benefits:

"Life is now easier for Andile Mbatha, who owns a hair salon in Soweto<sup>1</sup>. Gone are his days of trekking to his bank, which could take two hours by minibus, to send money to relatives. Nor does he keep piles of cash in his salon any more. Last year, he opened a bank account with Wizzit, an innovative provider of financial services. He now sends money to his sister in Cape Town whenever he wants, from wherever he wants, using a simple menu on his mobile phone. Half his customers no longer pay cash for their haircuts. They use their phones to move money from their accounts to his, in a few seconds. -This has taken out a lot of stress, says Mr. Mbatha" (The Economist, 2006). Three years later, the authors of this thesis interviews Mr. Mbatha again, and his enthusiasm for Wizzit's service has not decreased, rather the reverse: "Almost all customers pay with Wizzit, it's too risky carrying around cash these days. Now I even sell Wizzit accounts to my customers in my hair salon" (Mbatha, 2009).

#### 1.1.2 South Africa





#### Republic of South Africa

**Population:** 48 800 000

Capital: Cape Town (legislative), Bloemfontein (judicial), Pretoria (executive)

Largest city: Johannesburg

Ethnic groups: 79% Black, white 9,6%, colored 8,9%, Asian 2,5%

**Literacy:** 82,5 %

Language: 11 official; Afrikaans, English, Southern Ndebele, Northern Sotho, Southern

Sotho, Swazi, Tsonga, Tswana, Venda, Xhosa, Zulu

GDP per Capita: 6 170 US dollar (2008)

**Currency:** 1Rand (R), (R8~US \$1~0,95 SEK. 2009-05-27)

(The Swedish institute of international affairs)

1

<sup>&</sup>lt;sup>1</sup> A township outside Johannesburg.

South Africa is a middle income country. The infrastructure with roads, railroads and harbors keeps a high standard. The macroeconomic level is rather high and telecom networks and electricity grids are relatively well developed. South Africa holds big reserves of natural resources and prerequisites for further development of tourism are good (Sida).

Since South Africa represents a substantial part of the economy in Africa its development, both from a political and a financial perspective, plays a significant role for all of Africa. The last years the economical development has been around four percent and the predictions for the future are looking good (Sida).

Since the first democratic election 1994, great progress has been made and South Africa has been transformed into a democratic country and into a liberal, deregulated economy. It is the only African country represented in the G20, which is the group with twenty of the world's richest countries, plus the EU, measured in terms of absolute GDP (Sida).

However, apartheid, the racial segregation which enabled the white minority to rule and exploit the black population between 1948 and 1994 has left deep wounds in the whole society. Today, after 15 years with the African National Congress party (ANC) in power, and a policy promoting black empowerment, some improvements have taken place regarding inequalities in wealth and income distribution between whites and blacks and South Africa. Nevertheless, South Africa is still one of the most unequal countries in the world (Sida). Apart from at work, the interaction between the white and the black communities is still rather sporadic, and the authors' impression from South Africa is that South Africa is sadly still best seen as two different countries, sharing government, laws and land, but not culture, norms, wealth, values, or possibilities to improve individuals' lives. The whites enjoy living standards fully comparable to the richest countries in the Western world while many blacks still have to live on less than \$2 per day.

It is mainly in and around the big cities where the economy is developed and modern. Cape Town, Port Elizabeth, Durban, Pretoria and Johannesburg are the five most developed areas. Outside these areas the poverty is big and it is the consequence of this that makes South Africa to a developing country (Sida).

To fight poverty and all its belonging affects, e.g. unemployment, corruption, crime and violence is some of the biggest challenges South Africa is facing today. Approximately one third of the population is unemployed. Murder, rape and related crime are more common here than in most other countries. The growing HIV-AIDS epidemic is maybe the biggest threat against democracy, growth and development (Sida).

Today, the South African government promotes ambitious programs to give more people access to housing, electricity, water, sanitary environments, education etc. According to UN's development program, UNDP, South Africa will reach the year 2000-goals, which for example states that the poverty shall be halved before the end of 2015 (Sida).

#### 1.1.3 Background to the thesis

The authors were granted a Minor Field Study grant (MFS) from the Swedish International Development and Cooperation Agency (Sida). The purpose with the grant was to enable a field study during two months in a developing country to investigate economical, social, political or educational development (Minor Field Studies Guidelines, 2007). Additionally, a preparatory course to give insight and guidance on the road was mandatory for all MFS-students and was arranged in cooperation with the Center for Global Studies, University of Gothenburg. During this two day course, lessons were held on cultural meetings, ethics, how to conduct field research, safety, and precautions.

#### 1.1.4 Brief Introduction to M-banking

The mobile phone has already dramatically changed most people's lives, but still there seems to be much work left for it. The reason to this is that the SIM card can act as a debit and credit card parallel to its original purpose as an identification module when making calls. This fact enables people to not only use their handsets for making and receiving calls, but also for depositing, transferring and withdrawing cash. The phenomenon where mobile phones are involved in carrying out banking services is called Mobile Banking or m-banking as we will refer to it from now on. It is not a brand new phenomenon in neither developed nor developing countries. However, what makes this subject so interesting at this point in time is that not until recently has its services begun to rapidly diffuse to previously unbanked people in developing countries. Access to bank services is believed to have a positive, direct impact on users and on economies (Bångens & Söderbergh, 2008) and therefore m-banking is seen as something that could eventually bring banking to the previously unbanked and consequently alleviate poverty.

Porteous (2006) chooses to separate m-banking into two categories, additive and transformational. The additive m-banking model provides existing customers with an extra access channel and is commonly used among retail banks. For example, several Swedish banks have been offering mobile banking services to their existing customers since the beginning of this decade. The transformational model on the other hand is a business model which has the potential to attract unbanked previously segments using existing infrastructure (telecom and agent/representatives) and by offering pricing and coverage that matches these targeted customer segments. This model has so far been run by new or alternative banking actors. Transformational efforts have potential to formalize previously informal transactions, which eventually will bring people and their assets into the formal economy.

In the developed world, one of the barriers hindering the switch to mobile money has been the costly infrastructure developed by banks and credit-card companies. With ATMs and bank branches at every street corner there is less call for an alternative payment system. However, in some African developing countries, things look differently. In for example Kenya and South Africa, with few bank branches and far between them, m-banking services as the ones mentioned

above have been offered to the public for some time and the diffusion has sometimes been surprisingly rapid. Also, for banks with high infrastructure costs, it has always been hard to make money out of small payments. But new and interesting low-cost business models, some of them from developing countries, are opening up new opportunities in this business. The main reasons to this fast development is that m-banking services are easy to sign up for, less expensive to use and that the only geographical limits to these services are the reach of the mobile networks, which in many African countries show impressing coverage figures (Porteous, 2006).

#### 1.1.5 The Infrastructure for M-banking - Information and Communication Technologies

The big advantage with the mobile phone as a purse is that so many people have one; by the end of 2008 more than 4 billion people in the world were believed to have mobile phone access, translating into a penetration rate of more than 60% of the Earth's population. This should be compared to the about 1.7 billion people worldwide who are estimated to have access to internet (International Telecommunication Union, 2009). The UN has set a goal of 50% world-wide mobile network access by 2015 but a report from the World Bank notes that 77% of the world's population already lives within range of a mobile network (Kenny & Keremane, 2007).

Research indicates that a mobile phone penetration of 40% leads to 0,5% increase in GDP (Stork, 2009), and that an extra ten phones per 100 people in a typical developing country increases GDP growth by 0.6 percentage points. Another advantage with mobile phones is that there is no need for intervention or funding from the UN or other aid organizations. This since the economic benefits of the phones are so apparent that the world's poor already are rushing to adopt them (Economist, 2005). Taking this into account, it is clear why so much hope is put in mobile phones as being the technology that will eventually bridge the technology divide between the developing and the developed countries in the world.

In Sub-Saharan Africa the ICT evolution has moved notably forward for the past decade. In 2000 there were 15 million mobile subscribers in Africa, a number that thereafter has risen to 271 million in 2007 (Cellular News, 2008). South Africa alone is estimated to have 42 million mobile subscribers, resulting in more than 90% of the population having a mobile phone subscription.

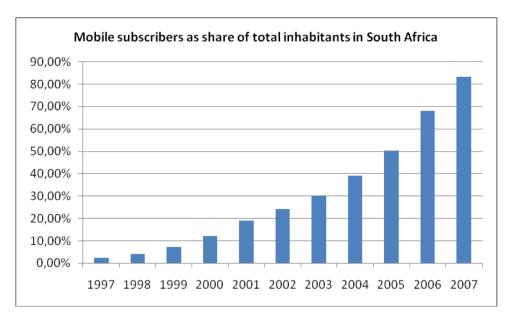


Figure 1 The development of mobile phone subscribers in South Africa (Esselaar & Gillwald, 2007)

#### 1.1.6 Introduction to M-banking in South Africa

The World Bank estimates that 5 billion of the 6,5 billion people living on this earth do not have bank accounts. These 5 billion people must rely mainly on cash in their everyday life, resulting in huge personal and societal costs in terms of money and time. In South Africa this problem was recognized by a number of politicians and business men who in 2002 started the company Wizzit. Their market research indicated that 16 million of the country's 48 million citizens were unbanked and had the potential of becoming customers of a service that offered affordable transactions (Richardson, 2008). This service would include storing and sending cash to family and friends, paying rent, and buying airtime for mobile phones and electricity. This market research also came up with the conclusion that South Africans keep approximately R12 billion (\$1,8 billion) in their mattresses.

South Africa's financial landscape is dominated by four big financial institutions: First National Bank (FNB), Nedbank, Amalgamated Bank of South Africa (ABSA), and Standard Bank. They all launched mobile banking services back in 2000. However, their focus was on adding an extra channel to existing customers and thereby adding extra customer value to their existing offer. To profit on the poor customer segments in South Africa has never been a part of their business model, and even if things have started to slowly change, these four still mainly focus on their previous customer segments, consisting of middle- to high income earners (van Wyk, 2009). Apart from Wizzit and these four big banks there are still no serious mobile banking initiatives in South Africa. Similar initiatives, also targeting poor customers, have however been successfully launched in other parts of the world. Of these the Philippines and Kenya are particularly worth mentioning since diffusion of this kind of services has been extraordinarily rapid there (Vodafone, 2007).

Wizzit's M-Banking system was launched in November 2004 and it works across all cellular networks and on all GSM mobile phones. Other m-banking actors in other parts of the world are often telecom operators, which one might assume have the non-outspoken goal to eventually lock in customers with these services. In comparison to these initiatives, Wizzit's approach is a rather unusual and still a quite untested one.

Since Wizzit launched its service, the company has exhibited a slow but steady growth in terms of number of users. Exactly how many is rather unsure to estimate, and any exact figures are not disclosed. Numbers given from different actors indicate anything between 160 000 (Sanjay, 2009) and 300 000 (Richardson, 2008). In Kenya, with roughly the same number of citizens as South Africa, where a similar, if not exactly comparable, service has been launched (called M-PESA), the diffusion has been much more rapid. During the first ten months 1 million of the country's citizens signed up for the service (CGAP, 2008).

However, according to Richardson (2008), comparing these different initiatives is like comparing a Volvo with a motocross cycle. With this he means that so much differs between the different countries' cultures, regulations, and markets, so a comparison between them does hardly get relevant. Nevertheless, this comparison can give a picture of how adoption could develop if conditions are right and with this said, further comparisons between the offerings will be left for further research.

#### 1.1.7 M-Banking – How does Wizzit's service work?

Wizzit offers the market a service which enables customers to carry out less sophisticated financial services with their mobile phones. One of the simplest m-banking transactions is shown in the picture below (for a more detailed description see **Error! Reference source not found.**); money is transferred from one phone to another by using a platform similar to SMS (USSD which is available on all GSM phones).

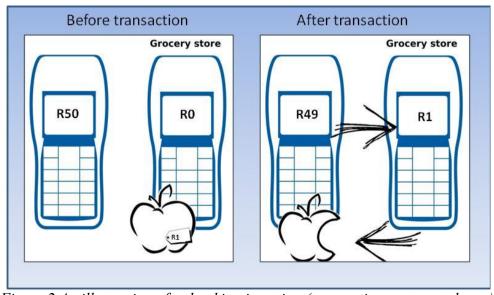


Figure 2 An illustration of m-banking in action (transaction costs not shown)

Except for being able to pay other accounts (Wizzit accounts or regular bank accounts), a Wizzit customer can buy prepaid airtime, for the own phone or for someone else's. A Wizzit customer can also buy prepaid electricity, which otherwise must be done at specific stores, only open at weekdays. Wizzit brands this service as "mobile banking", and so will we, but it is not the sole truth; added to the mobile banking service is also a debit card connected to Maestro. This card works as a normal debit card, meaning that users can use it to deposit cash at banks or post offices, pay at POS-terminals (point of sales) and to withdraw money from ATMs or from stores when paying with their debit cards. So what Wizzit offers is basically a traditional banking service, but with a focus on the mobile side of the service. To these services other services are to be added and it is probably not the technology that limits what kind of services it is possible to offer but rather regulative issues, financial issues or pure imagination.



Figure 3 An example of a Wizzit information brochure

Wizzkids are preferably previously unemployed people who after training in Wizzkids service get trained in the sales- and acquiring-new-customers-processes. These Wizzkids are supposed to live in and to know the community members where they will later work. The Wizzkids are meant to partly be selling the start packages, partly making PR for the product, and partly offering support to the users. These Wizzkids work on a provisional basis, meaning that they work without any fixed monthly salary. The income of these Wizzkids is based on two different revenue streams; provision for sold starter packs (R20 per pack) and a fixed percentage of their customers' air-time purchases. Therefore their incentives are to acquire new customers but also to get these customers to use Wizzit's services on a regular basis for their purchases.

#### 1.2 Presentation of the research problem

The number of users is not everything that matters to a company, and success cannot solely be measured in how many customers a company has. However, the number of customers can often act as a proxy for a company's success since it is easy to quantify. Also, reality is that a company's survival is often dependent on its ability to rapidly attract a large number of users that together will contribute to cover the company's costs. Also, in a developing country products must be offered to lower prices and with lower margins in order to be affordable for the population. This results in large volumes being critical for the success of the company (Rangan, Quelch, Herrero, & Barton, 2007). Most important however is to rapidly acquire a critical mass of users, i.e. a high user penetration in the market that will positively contribute to the company's marketing efforts. The most efficient marketing channel is satisfied customers who discuss or promote a product or service in their circle of acquaintances, and who happily do this for free. A company who learns to use this force for its own goals will be able to reallocate its resources from marketing to more value adding services, thereby increasing its positive cash flows (Silverman, 2001).

With a market that was initially estimated to include 16 million people, and with a value proposition that for an observer seems to target real perceived needs of this customer segment, it is quite astonishing that Wizzit has not been able to attract more than 160 000 - 300 000 customers during a period of five years. This corresponds to less than 2% of the users in the potential market.

### 1.3 Purpose and research questions

The purpose of this study is to assess key factors associated with technology diffusion in a developing country.

This will be done with a case study focused on the diffusion of an innovative banking service, Wizzit, in South Africa. The reason to the slow diffusion of Wizzit's services can stem from a

number of various underlying reasons and it is our task in this thesis to find out which they are and how they influence the rate of diffusion.

To fulfill this purpose the following questions need to be answered:

- -What are the main factors influencing the diffusion of Wizzit's new banking service in South Africa and how do these factors influence the diffusion rate?
- -What are the main obstacles that have to be overcome from Wizzit's side in order to speed up diffusion?

#### 1.4 Perspective

This study takes a managerial perspective on the diffusion of Wizzit's banking services, meaning that even though a broad spectra of studies have been read up on and different kinds of actors have been interviewed, our main focus has been on different stakeholders with managerial positions, stakeholders who were directly or indirectly involved in Wizzit. However, in order to un-bias our final conclusions we also interviewed users, non-users, and sales people.

The reason for choosing research on a managerial level, besides the fact that some research on users has already been conducted, is because of limited resources (time and money) which made us come to the conclusion that by interviewing managers and salespeople we could leverage our work input. Since these people already have heard many different users' and non-users' opinions we by interviewing them got their thoughts which were already based on a number of consumers. By comparing their findings to our own findings we could reach more objective conclusions, less dependent on these managers' interpretations, but still without starting from scratch conducting all interviews ourselves.

#### 1.5 Previous research

M-banking as an area of research is rather new. However, the subject is getting much attention and much hope is put on it which results in that much research, mainly from nongovernmental organizations (NGOs), is carried out on the subject at the moment.

Previous research has mainly taken a user viewpoint, with studies written for example on whether m-banking really is transformational (e.g. (Porteous D. , 2007) or (Vodafone, 2007)) or how it could be done more transformational (Stork, 2009). Another viewpoint used is the macroeconomic viewpoint, with a focus more on regulations, payment systems etc (e.g (Porteous D. , 2006)).

The authors to this thesis have chosen to study consumers' adoption behavior, i.e. attitudes and perceptions which decide buying decisions and using behavior. Moreover, these attitudes

and perceptions are possible for a firm to influence which makes consumer understanding crucial for a producer or a service provider. No indications have been found that any previous research with this viewpoint on this specific subject has been conducted.

# 2 Methodological considerations

#### 2.1 Research approach

For this study we decided on using a grounded hermeneutic research method. The purpose of a hermeneutic analysis is to bring a thing or situation from incomprehensibility to understanding and is used to illuminate social, cultural, historical, economic and other background aspects (Crabtree & Miller, 1992). In this report we try to understand the process of diffusion of a new banking system, m-banking, in South Africa.

A grounded hermeneutic research comprises several assumptions about the surrounding environment and the people in it. These assumptions could very briefly be explained by that participants are individuals that are easy to affect; different actions have different meanings and everything cannot be verbalized but rather expressed in action and practices. Sometimes immediate context, social structures, personal histories and languages makes understanding even harder. Meaning and significance are rarely fixed, clear or limited; it is a constantly ongoing process which has to be interpreted and evaluated (Crabtree & Miller, 1992). One has to bear in mind that the authors' background; culture, language, history etc. is very different to most of the people who were met during this study. This is why it is important to use an ethnographic method; to spend time locally, with users as well as managers in their context to be able to get insight from their perspective. Even though two months were spent in different places and cities in South Africa it is still hard to know whether the authors' experiences and impressions correspond with the persons' concerned in this study.

To be able to interpret gathered information, certain central practices of grounded hermeneutic research should be followed; it is important to immerse oneself into the participants' world and to look beyond individual actions, events and behaviors to be able to get to the big picture. A constantly questioning attitude and circular analyzing should be maintained in order to avoid misunderstandings. For this reason, the authors have tried to spend time in the informal settlements (i.e townships) where many of Wizzit's targeted customers live in order to get an understanding for everyday life of unbanked people as well as the atmosphere in these areas. The authors have visited several different townships throughout South Africa and met and come close to persons living in the townships. At a few occasions the authors were visiting these areas for the purpose of getting an understanding of the everyday life for people in a township in South Africa. Local friends gave the opportunity to stroll around, to see places, to meet interesting people, to have dinner and even to pay a visit to a service in the

local gospel church, all of which directly might not give understanding of m-banking but which indirectly gave us a sense of how the daily life goes on.

The authors have also been following the work of consultants and aid organizations, which in different ways have been working to promote the benefits of mobile banking. The insight on commitment from indirect and independent firms gave the opportunity to get unbiased information. Through these companies and organizations the authors met people and were to places where they would never have been to otherwise. All this indirect information is hard to write down because of its tacit nature, it will rather become explicit through the interpretations we make.

#### 2.2 Analytical model

In figure 4 a conceptualization of the process used for reaching the conclusions to the purpose can be found. The process will be described below.

First the purpose was established. This purpose was operationalized through research questions, which together could be seen as acceptable proxies to the purpose. Thereafter we had to identify the knowledge gaps, which in turn were used to analyze from where and from whom this needed information could be acquired. This information assisted us in developing the interview questions which were asked during the following interviews. The identification of knowledge gaps and the analysis from where and from whom we could find information to fill these gaps did also aid us in what to look for when observing people and phenomenon in the South African society. Parallel to the information gathering phase theory was studied and analyzed. This ended up in a theoretical framework, which we have called the "3D-framework" (the reason to the "3D" will be discussed in the theory chapter). In the interpretations process the 3D-framework, and our own reflections, were applied to the gathered information. This often gave us new insights which revealed new knowledge gaps, forcing us to start again in the information gathering phase but this time with more accumulated knowledge. Finally we reckoned that we had reached a satisfying level of knowledge, resulting in the final conclusions.

In our case knowledge gaps were identified at an early stage. We assumed from the beginning that questionnaires or standardized interviews with users would be inappropriate for capturing the complexity of the everyday use of m-banking, which would be necessary in order to fill these gaps. Instead we started to talk with people in the field of mobile banking to get a broad, first understanding. We continued to slowly narrow down to be able to reach answers to our research question. We met people in townships to be able to understand daily use of mobile banking and we met people on managerial levels to understand diffusion aspects and regulations. Also, in parallel we have been reading up on reports and studies on the subject,

many of which will not be directly used in this report but indirectly for us in order to get the right understanding of the subject and the research question. Additionally, several different sources of theory have been used to be able to develop a theory model, our own 3D-model, which we use to structure our interpretations.

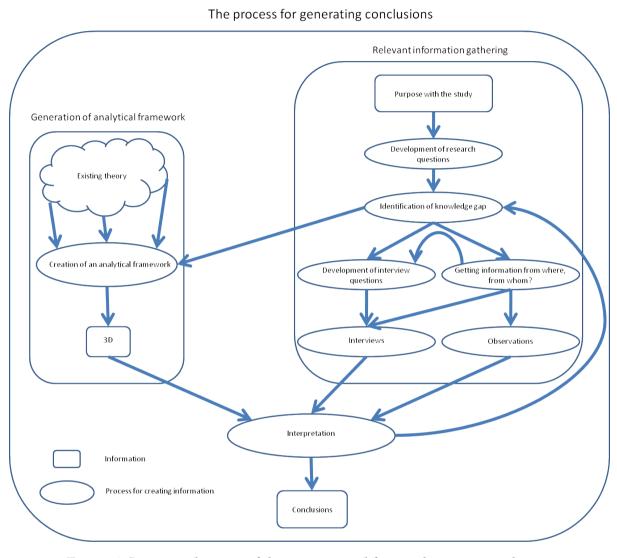


Figure 4 Conceptualization of the process used for reaching our conclusions

# 2.3 Primary and secondary data

This study includes both primary and secondary data. The principal sources for primary data are interviews and meetings conducted mainly in South Africa. All of the interviews on a managerial level where prescheduled and a set of tailor made questions where done for each case. Most user interviews though where not prescheduled and the information from these cases where seldom written down during the meeting, it was rather a situation for basic understanding of m-banking in practice.

The secondary data used in this report is mainly reports, market surveys and articles gathered before, during and after the field study in South Africa.

#### 2.4 Respondent selection

The authors' initial knowledge on the subject of mobile banking was rather limited, and therefore an initial phase of information gathering was needed. Most initial information was gathered from electronic resources and from PhD. Lennart Bångens, who has conducted a number of studies on marketing related issues in Africa.

Once in place in South Africa it was important to get a basic understanding of m-banking and its everyday use. Therefore we decided to start our study with an interview with someone very well-grounded and informed of m-banking. Therefore, one of our first interviews was at the Wizzit head quarters in Sandton, Johannesburg, with the CEO and founder of Wizzit, Brian Richardson. Mr. Richardson provided us with contact details for relevant persons to meet throughout the route we had planned to follow in South Africa. All the contacts along the road gave us more contact persons and after a couple of weeks we had a rather broad spectrum of interviewees from different correspondent levels.

In order to get more understanding about Wizzit and how its services are used we met users and non-users in a number of places in South Africa. Also, consultants, employees and other related persons were contacted in order to be able to understand the nature of m-banking.

To get an unbiased understanding of Wizzit and its industrial environment, we also contacted and interviewed other stakeholders offering similar products in the same market. In today's South Africa it is almost only other banks that offer similar services, whereof we chose to interview representatives from First National Bank (FNB) & Nedbank.

Finally, in order to get information of the whole m-banking market and to fill in knowledge gaps we contacted and interviewed researchers within the field.

#### 2.5 Research route

The illustration below shows the route we travelled during the two months long field study phase in South Africa and gives the reader an indication of how we spent our time. More specific dates can be found in the **Error! Reference source not found.** where exact dates for interviews and meetings are shown.

Since we had limited resources and a limited time at our disposal in the country we chose to focus mainly on the big cities in South Africa and to meet people and organizations in cities where a significant number of Wizzit accounts already had been adopted. 42% of South Africa's population lives in rural areas (NationMaster), and to mainly focus on the urban areas may give a skewed picture about the phenomenon of m-banking, especially since the market that would benefit the most from a service such as Wizzit's is the poorer part of the population living in areas with few bank branches. However, the focus on the big cities enabled us to

work more efficiently and to conduct more interviews than we would have done if we had focused on less densely populated rural areas, with poor infrastructure and with fewer companies. Also lingual barriers would have obstructed our work since English is less widely spoken in these rural areas.

As mentioned above, Johannesburg is where we started our field research and also where Wizzit has its head quarters and where most other big companies' head quarters are located. After a couple of days, interviews and visits in Johannesburg we headed towards Durban at the east coast. In Durban and along the coast we met a number of representatives from companies involved in m-banking in one way or another. By Christmas we reached Cape Town where we analyzed collected data, visited more companies and visited several townships before we continued back to Johannesburg. In Johannesburg we conducted some final interviews and research before we finally headed back home to Sweden where the analysis of the collected material continued. For more information on what happened during the study see <a href="http://www.hgu.gu.se/item.aspx?id=16952">http://wfssydafrika.bloggsida.se</a>.

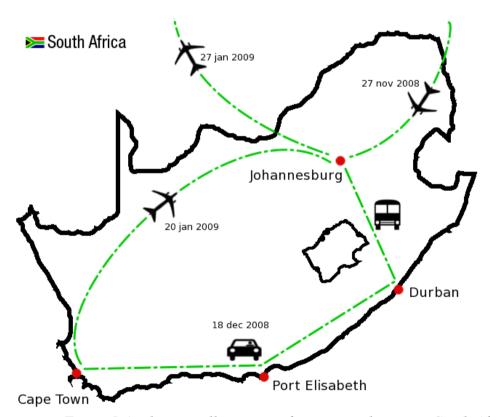


Figure 5 A schematic illustration of our research route in South Africa

#### 2.6 Validity & Reliability

Creativity and innovativeness is limited by rules and norms (Esaisasson, Gilljam, Oscarsson, & Wängnerud, 2005) and therefore we have decided to keep an open and social approach were most of our interviews have been qualitative. When we decided upon which area within

mobile banking to investigate we based it on what we found to be a knowledge gap. Several studies have been done on users with quantitative approaches and therefore we decided to take the opportunity to get an understanding for diffusion from mainly managers' and sales persons' views.

In order to avoid systematic errors and to be sure that we investigated what we claimed to investigate i.e. achieve validity (Esaisasson, Gilljam, Oscarsson, & Wängnerud, 2005) we decided upon using a previously used and well known research method (hermeneutic research method). Also we have created our own theory-model (the 3D-framework), consisting of several different known building blocks about diffusion. With this said, we do not claim that our model is flawless but the possibility that we investigate what we claim to investigate will be more likely the more perspectives and the more relevant theoretical frameworks we use.

A hermaneutic research approach is, as earlier mentioned, a circular procedure and which is why the reliability i.e. absence of random and careless errors (Esaisasson, Gilljam, Oscarsson, & Wängnerud, 2005) is taken care of. Further on, both authors have journalized during the visit in South Africa and constantly been analyzing and evaluating experiences and by so tried to unveil the everyday life of mobile banking.

Because of limited resources, language barriers and logistical considerations we decided upon performing this research only in urban areas which is why the external validity i.e. the ability to generalize the results of the research (Esaisasson, Gilljam, Oscarsson, & Wängnerud, 2005) to a larger extent is rather limited. What we conclude in this report can therefore not unconditionally be generalized outside urban areas or onto other countries, but with this in consideration we believe that the results nevertheless can give helpful insights for similar situations.

#### 3 Framework of references

This thesis will discuss how a new kind of offering, in this case a technical innovation, gets diffused into a market consisting of consumers with individual perceptions about the features of this offering. How these perceptions look like is a result of consumers' attitudes, value sets and mindsets. However, for an innovation to get adopted it is not enough that it possesses some certain features and that the consumers actually perceive these as beneficial for them. What is also necessary is that there is a capacity among the consumers to consume (both the purchase of the innovation as well as the use of it) and that finally a transaction of the offering and money is enabled.

In order to understand and analyze the diffusion process as described above we came to the conclusion that we needed three different theoretical frameworks. First we needed to know why some innovations are more likely to diffuse into a market than other. We called this framework the *diffusion framework*. Thereafter we needed to understand how different types of individuals have different needs and incentives to buy and to use products or services. This

framework was called the *demand framework*. Finally we needed to understand and analyze how the capacity to consume among poor people is created and what key requirements there are when innovating for developing countries. This last framework was called the *development framework*. The three frameworks (*diffusion, demand, and development*) were packed into one comprehensive framework, which was called the *3D-framework*. A conceptualization of the 3D-framework is found in figure 6.

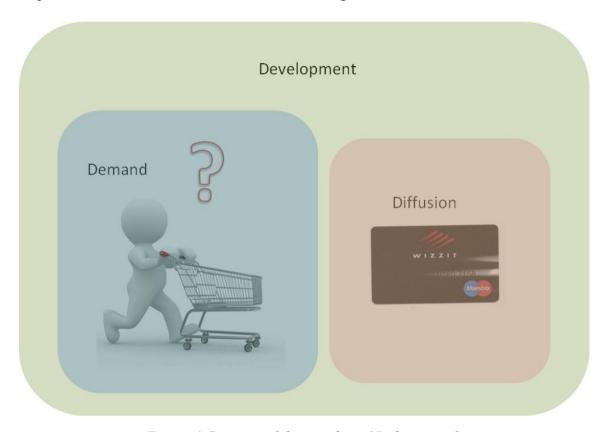


Figure 6 Conceptual figure of our 3D-framework

# 3.1 Diffusion

The process in which people adopt innovations is called diffusion of innovations. One of the pioneers in this area is Everett Rogers who developed a commonly used model for marketing and innovation studies (Dodgson, Gann, & Salter, 2008). The model describes the adoption process from the very first awareness of an innovation to implementation and use of it in five steps: knowledge, persuasion, decision, implementation and confirmation. In the first step, knowledge, an individual is first exposed to an innovation. In the persuasion phase the individual gets interested in the innovation and actively seeks information about it. In the decision phase the individual decides on buying or not, and if the innovation is bought, the implementation phase begins. In this phase a limited use of the innovation starts and evaluation of the innovation sets in, just to lead to the last phase, the confirmation phase, where the individual decides on whether continuing using the innovation or not (Jolly, 1997).

This innovation model focuses on two main factors: technical features and social factors that both influence decisions to buy a product or a service. Rogers emphasizes the importance of social factors and highlights how social networks, persuasion and word of mouth all strongly influence people's choices. Roger's model suggests that innovations should differ fundamentally from existing choices in order to shape potential for adoption. These differing aspects, which Rogers emphasizes as being important for adoption, are listed below (Dodgson, Gann, & Salter, 2008):

- Relevant advantages: The greater advantage compared to existing alternatives, the better and faster adoption. Rogers define these criteria with aspects on economic profitability, low initial cost, social prestige, time & effort savings and immediacy of reward.
- Complexity of innovation: If an innovation is difficult to understand or use it will have negative effects on diffusion.
- Trialability of innovation: The possibility to experiment with and to get experience from an innovation. At an early stage, when the diffusion has just started, this can only be done on a limited basis, something which influences what kind of consumer profiles the first to adopt an innovation must have. Late adopters can rely on experience and knowledge from early adopters.
- Observability: The degree to which the usability and results of an innovation can be observed. Innovations which do not have clear visible benefits and results will be adopted slower than those with obvious benefits.
- *Reinvention:* The degree to which an innovation can be changed or modified to the better by a user during the process of adoption or implementation.
- Appropriateness for existing systems: Innovations often need to fit into existing systems or infrastructure. If they do, the adoption process tends to be faster than otherwise.
- *Risk*: The higher uncertainty associated with an innovation, the higher the risk to adopt it. Consequently, lower or slower adoption rates will follow from high risk. This uncertainty could be both that the benefits of an innovation for a specific user is uncertain, but also that the risk associated with the company offering the service or product is estimated to be high.
- Appropriateness for tasks: Users have different needs and the better the innovation fits these needs, the more likely it is that it will get adopted.
- Support: Many innovations need support before and during usage in order to be implemented, the level of support will therefore affect the level of adoption.

• Knowledge required for use: Some innovations require considerable formal or informal education and is seen to be a key determinant of diffusion.

These criteria together constitute the factors that lay a base for how attractive a product or service theoretically should appear to consumers. However, despite the fact that a product by its specifications is superior to another, it might fail to succeed. Consumers are human beings, and as such they do not have the capacity to fully investigate and assess the full scope of different benefits from a new innovation. This bounded rationality leads consumers to not find the optimum solution, but rather a satisfying one. Also, since consumers are not a homogenous group, but instead from many different backgrounds, with different preferences and mindsets, and with different ability and willingness to pay, consumers will interpret the criteria mentioned above in different ways and these interpretations will eventually lead to different actions.

#### 3.2 Demand

Despite the almost endless numbers of possible attribute combinations among consumers, they can be grouped after the actions that their interpretations result in. Roger explains in his model individuals of six different categories, and they are to be reached in different ways during the diffusion process. The six categories are the:

- •Innovators or the technology enthusiasts are seen as gatekeepers to innovations. They are often venturesome and prepared to be exposed to high risk and appreciate the technology for its own sake. Financial resources are often not a problem for this kind of personalities and they are looking for innovations that can fundamentally and radically improve their lives in disruptive ways, instead of small continuous improvements.
- Early adopters are often pacemakers and seen as ideals in their communities. Early adopters have visions that the emerging technology has a potential to match a strategic opportunity and they therefore see great value in being early in the adoption phase. Beyond the fact that early adopters are fueling the industry with money, they are also effective in alerting business communities to interesting technology advances. Early adopters are also often more than willing to serve as a visible reference and thereby drawing attention from media and additional customers. As a buying group they are easy to sell to but hard to please, this since they are visionaries who want to buy the "dream" and they seldom stay loyal to a product or a brand in their never-ending pursuit of even better solutions to their needs.
- Early majority or the pragmatists have willingness to adopt but wish to avoid being the first and are reluctant to risk. Pragmatists are often hard to win over, but once they are in they tend to be loyal. When pragmatists buy, they care about the company they are buying from, the quality of the product they are buying, the supporting structure of the product, how systems

and interfaces look and the reliability and the services they will get. In contrast to visionaries, this is a long term investment for them.

- •Late majority or the conservatives are often people who are reluctant to adopt but forced to by necessity. Safety and cautiousness is very important for this group of customers who are considered to be a bit frightened of high tech products. As a consequence, conservatives tend to invest at the end of the life cycle, when the product is matured and products can be treated as commodities. According to the model, the late majority represents approximately one third of the total available customers.
- Laggards or skeptics are often those who lack knowledge, skills and resources for adopting new practices. The cost of failure might be considered to be too high and therefore they will wait with adoption as long as possible i.e. until they are forced to adopt by market force or by regulators.

Each group mentioned above represents a combination of psychological and demographical profiles. Understanding them and their relation to the neighboring group is critical for development in the diffusion process. Together, these different types of adopters tend to make the diffusion a nonlinear process, characterized initially by slow penetration until a threshold is reached, followed by rapid adoption to finally come to a period of slower diffusion as saturation is reached.

If the adoption process is to run smoothly, the marketing process has to be adjusted in accordance to the different groups. Moving from one group to another is a critical process and the risk is to get stuck in between. The most critical step is the gap between an early market, dominated by a few visionary users, and a mainstream market, dominated by a large group of pragmatic users. This gap is often referred to as the "chasm" and bridging this is seen as a critical key success factor (Moore, 2006). The reason to this gap is that the two neighboring consumer segments strongly differ in their attitudes towards new innovations and you cannot please them both with the same marketing approach. It is also difficult for a firm to recognize which individuals belong to which group, even though the incentives for these individuals for a purchase are visible and radically different. Early adopters are looking for a product that gives them the opportunity to be the first to implement a product. They are also prepared to accept a certain level of flaws and bugs in the product while the early majority, in contrast, are looking for a product that gives productivity improvements i.e. evolution not revolution. The difficulty to overcome the chasm is the gap of perception between the two groups. Early adopters do not make a good reference group for the early majority for whom good references are essential before buying, so the company is stuck with a catch-22 problem (Moore, 2006). Lesson learned from this is that pragmatic buyers often communicate within associations they trust, technicians talk to technicians, doctors talk to doctors and so on. Marketing professionals concede on market segmentation because they claim that no sensible marketing

process can be implemented across a set of customers who do not reference each other. No company can afford or want to pay for every single marketing contact they make. All processes must rely on chain reactions, also called word-of-mouth (WOM) effects. Several studies have shown that WOM is the number one source of information to buyers in the high-tech buying process (Moore, 2006). Consequently, it is very important to find a market segment where the product can expect to get WOM leverage.

In order to be able to cross the chasm it is important to create a prominent position in a specific market segment and not try to reach the whole market at once. Within the chosen market segment it is important to attract the mainstream buyers in order to create long term relations and a reliable customer base. Upon entrance of the mainstream market, resistance will be met but on the other hand, if there is no competition there probably is no market (Moore, 2006). Many companies tend to fail as a result of trying to reach every opportunity they see instead of focusing their efforts to one segment, in analogy with the well known allied invasion in Normandy. The allied countries chose to focus their limited forces on a bounded stretch of coast where they knew they could win local dominance and from where they could gradually expand their dominance. Had they failed to win the initial bridge head the rest of the operation would have been deemed to fail as well. The same holds for the firm finding itself ready for bridging the chasm, if it cannot get a foothold on the other side of the chasm it will risk falling into it instead. To conclude, failures to reach the early majority can often be blamed on that the sales approach during a chasm period is not well suited for the early majority.

The goal for the company in this situation should be to keep the process smooth and running. It is important to maintain momentum in order to create an effect that makes it natural to move on to the next group. Too much delay would have the effect like hanging from a motionless liane – nowhere to go but down (Moore, 2006).

# Technology Adoption Curve

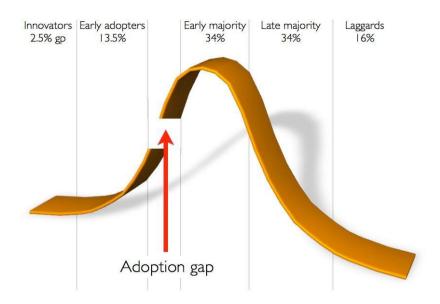


Figure 7 When a product reaches this point (the red arrow) in the market development, the adoption process must be made significantly easier for the early majority to adopt in order to over bridge the chasm (Kzero).

Finally it should be mentioned that the categories in Rogers' model are ideal, but it does not mean that all individuals have to fit into one of them. Also, individuals can fit into different categories at different times. Roger's model is a strong pro-innovation biased model which suggests that adoption is beneficial and does not focus on costs or how economical factors influence choices of adoption. An economical perspective would probably focus more on factors giving adopters choices and abilities. For example, given uncertain information regarding a technology, it might be advantageous to wait with adoption (Dodgson, Gann, & Salter, 2008).

#### 3.3 Development

#### 3.3.1 Creating capacity to consume

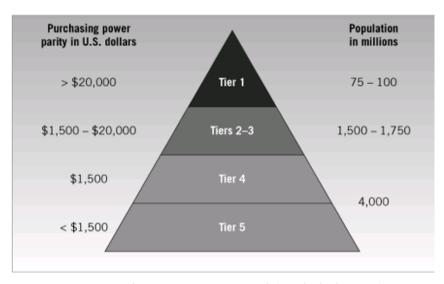


Figure 8 The economic pyramid (Prahalad, 2006)

Illustrated in figure 8 is the distribution of wealth in the world which can be captured in the form of an economic pyramid. At the top are the wealthy, which have the opportunities for generating high levels of income. At the bottom of the pyramid (BOP) there are the about 4 billion people living on less than \$2 per day. Even if every individual's wealth in this group is marginal, added together the total purchasing power of this market is estimated to be 5 trillion dollar (Richardson, 2008). However, for organizations to convert these 4 billion people into a consumer market, they have to create the capacity to consume. In comparison to the consumers at the top of the pyramid, the BOP-consumers are cash-poor and have a low level of income. The BOP-consumer therefore has to be approached differently. Traditionally, creating the capacity to consume among the poor has been approached by providing the service or the product free of charge. Such philanthropic approaches might feel good but they have very seldom solved the problems in a sustainable and scalable fashion.

Instead, creating the capacity to consume is based on three principles best described as the "three A:s":

-Affordability. Products or services must be affordable for the BOP consumer without sacrificing quality or efficacy.

-Accessibility. Distribution patterns for products or services to the poor must take into account where they live as well as when they work. Most BOP consumers must work long days before they can have enough cash to buy what they need for that day. Further, the BOP consumers cannot travel great distances. Therefore products and services that are offered them must be easy to reach, often within a short walk. This calls for a certain geographical intensity of distribution.

-Availability. The decision for BOP consumers to buy is often based on the cash they happen to have on hand at a given point in time. They cannot defer buying decisions and therefore availability of the product/service and distribution efficiency is crucial when serving the BOP consumer.

By focusing on the BOP consumers' capacity to consume, private-sector businesses can create new markets. What is critical is the ability to invent ways that take into account the variability in the cash flows of these consumers that makes it difficult for them to access the traditional market oriented toward the top of the pyramid (Prahalad, 2006).

#### 3.3.2 General aspects that influence diffusion of innovations on a macro level

The pace of technology diffusion within and between countries today is increasing. The product- and customer specific factors that influence this adoption from a developing country perspective will be discussed below. Here more general factors, which influence on a macro level and which must be in place for diffusion to emerge at all, will be discussed.

Many of the drivers for market growth and change are present in BOP markets. For instance, in BOP markets deregulation, involvement of the private sector, a high degree of connectivity, a young population, and an attendant change in the aspirations of people are all present and they interact. Together they contribute to that changes that played out during 15 years in the developed world are being shortened to often between 3-5 years in many BOP markets. This fact requires managers acting in these markets to be prepared for fast diffusion processes. Instead of the traditional "S-curve", which conceptualizes how technology diffuses in developed countries, they will have to cope with the "I-curve", as shown in Figure 9.

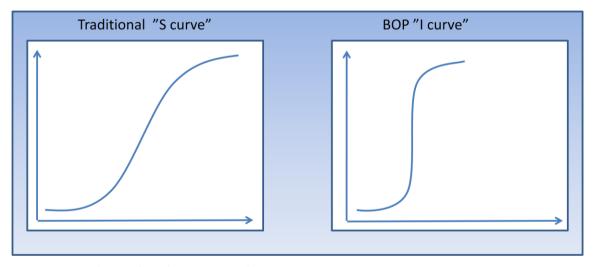


Figure 9 Traditional and BOP growth patterns

Not to be forgotten is the economic reality in developing countries; affordability can affect both technological inflows in a country as well as the absorptive capacity. Even profitable solutions that encourage adoption might be seen as unattractive to individuals and companies that are unwilling to adopt due to facts that new technology has a more risky and insecure future in comparison to already matured technology.

When the poor are converted into consumers for the first time they do not only get access to products and services. At the same time they acquire the dignity of attention and choices from the private sector that were previously reserved for the consumers further up in the pyramid. Another aspect to think about when trying to acquire the poor as customers is the mistrust that traditionally runs deep between them and the large firms. This mistrust stems from stereotypes from both sides; the poor tend to believe that the firms only want to exploit them as cheap labor without regarding them as worthy customers and firms see the poor as consumers likely to default on payments, which is not true compared to their richer consumers. So for firms approaching the BOP consumers, building trust is crucial for acquiring them as customers (Prahalad, 2006).

The reason the BOP market challenges the logic of the larger firms is that the basic economics of the BOP market dramatically differ from what these firms are used to. Instead of high margins, small volumes and reasonable return on capital employed the approach towards the poor must be based on low margins per unit, high volumes, and high return on capital employed. Also, larger firms often assume required infrastructure to exist or that Western infrastructure can be made economically viable and to function properly in these markets. This is often not the case and therefore advanced technology solutions must be able to coexist with poor infrastructure, such as badly working electrical networks or water supply of bad quality.

#### 3.3.3 Key Requirements when Innovating for BOP markets

During the last decade, large firms have tried to approach the BOP consumers with their existing portfolios of products or services, with some minor modifications to them. But these are developed and priced for Western markets, and they are therefore often out of reach for these consumers. During the same time, aid organizations have tried to apply Western technical solutions to the BOP markets to help them solve their problems, but reasons such as that the local communities cannot afford to buy electricity for these, that they do not have any spare parts, they do not have a steady electricity supply etc result in that these solutions eventually are let to corrode and disintegrate. Therefore involvement in BOP markets will challenge assumptions that managers in large multinational firms have developed during a long time; a new philosophy of product development and innovation that really reflects the realities of BOP markets is needed. In his book, Prahalad (2006) discusses twelve principles that together constitute building blocks for such a philosophy. These are:

1) A firm innovating for the BOP market *must focus on price and performance* for products and services. However, it is not just about lowering prices, but more about to think

- radically new on how to offer the consumers their required amount of value for less money. To satisfy this market, quantum leaps in price-performance must be achieved.
- 2) Innovations for the poor *must be hybrid solutions*. Old technology is often not appropriate for solving the problems BOP consumers tend to have. Scalable and price-performance enhancing solutions need advanced technologies that are creatively implemented and blended with existing and evolving infrastructures.
- 3) For an innovation to be suitable for BOP markets, which often are large markets, it has to be *scalable and transportable* across countries, languages, and cultures. Solutions have to be designed for easy adoption in similar BOP markets. Without this it is difficult to gain scale, which as mentioned above is a prerequisite for being profitable in the BOP markets. Most of the individual BOP markets, such as many African nations, are small. Innovations for these markets must therefore be supported by organizations that have significant geographical ambitions and reach. Typical examples of such organizations can be the MNCs.
- 4) The developed world has accepted an attitude that resource wastage is unavoidable. If the BOP consumers would adapt to this standard, the earth would not be able to sustain it for long. Therefore products offered should be *resource efficient*, and this is especially important in the BOP market due to its large size.
- 5) When developing products and services for the BOP markets, the starting point must be an understanding of *functionality before form*. To slightly change products and services offered rich customers in the Western world is not enough for the BOP markets. The reason to this is that the infrastructures with which the BOP consumers live demand a total rethinking of the functionality.
- 6) In developing countries, *process innovations are as important as product innovations*. Process innovation is a critical step in making services and products affordable for the poor. Other examples of processes that must be well thought of are how to educate customers or how to getting paid from them.
- 7) Since the skill levels in the population in the BOP markets in general are lower than in their Western counterparts, new innovations must take this into account, enabling *work to be deskilled*.
- 8) Innovation for the BOP markets *requires education of customers* on the appropriate use and the benefits of a product or service. Innovations on how to do this with a semi-literate customer base often living in media-dark areas (meaning no TV, newspapers or radio reaching them) can however pose a real challenge to the firm and will demand a fair share of creativity.

- 9) Products offered the BOP markets must *work well in hostile environments*. This does include noise, abuse and dust but also bad infrastructure, such as bad roads, fluctuations in electricity supply or low water quality.
- 10) The BOP market is very heterogenic in terms of language, culture, skill level, and prior familiarity with the function of feature. Many users are first-time users of products or services and the learning curve cannot be long or difficult. The use of the product or the service must therefore be as self-instructive as possible. This challenges developers and forces them to conduct *thorough research on product and service interfaces*.
- 11) New innovations must reach the consumers in order to get diffused. Therefore *innovations in distribution*, i.e. designing methods on how to access the poor at a low cost, *are crucial*. In developed countries distribution channels set up for reaching new customers are well developed and only slight changes have to be made for specific products. On the contrary, in developing countries no logistics systems can be assumed to exist and therefore it becomes just as crucial to come up with how to reach the customers as with what to reach the customers with
- 12) Contrary to common belief, feature and function evolution in BOP markets can be very rapid. Because of this, developers must not lock-in themselves in rigid product structures that do not allow for fast changes or modifications. Instead they should *focus on the platforms of the system* so that new features can be easily incorporated when demanded.

These 12 criteria combine usability, scale, technology, price, and sustainability in a quite new way and it might seem as innovation for developing countries requires too many changes compared to innovation for developed countries. It does require significant adaptation, but all these elements do not necessarily apply to all business and managers have to pick and choose and prioritize. However, since it requires managers to start with an un-biased, zero-based view on innovation this adaptation to BOP markets can become a source of innovations for the developed countries as well, therefore the pain of change will in many cases be worth the reward.

# 4 Empirical findings

This chapter is based on the information and experiences which the authors gathered during their field research in South Africa. To evaluate this information in a structured way the empirical findings will be linked with the theory chapter in order to finally make conclusions about how well suited Wizzit's m-banking solution is for a market such as South Africa and how this has affected the diffusion up until now. It will also be assessed how this will affect the diffusion of the service in the future and what Wizzit should do about this.

# 4.1 General product oriented factors influencing diffusion of innovations

In this chapter we will discuss our findings on a general level regarding the innovation oriented factors that influence the diffusion of new innovations and thereafter assess how well Wizzit's offer complies with these.

#### • Relevant advantages as compared to the alternatives.

As of today, only a fraction of the population in South Africa has bank accounts and carrying around money is a direct risk. With the possibility to pay with the phone or to have "my bank in my pocket", as Wizzit states it, the advantages are huge, especially in places where risks for robbery are substantial. In addition to risk reduction, the time- and cost reduction with mobile banking is substantial. Instead of sending money with a delivery car or by traveling on your own, money can be sent with a few presses of a button on a mobile phone. Last but not least, social prestige of owning a bank account for someone with rather limited financial resources is indescribable. Brian Richardson, CEO Wizzit, told us about his domestic who got her first bank account (a Wizzit account of course) when she was 54. "To get a bank account and a card is a sense of belonging, you can't really be an economic citizen without it" (Richardson, 2008).

To conclude, Wizzit's mobile banking service in comparison to cash or an ordinary bank account is very time- and cost saving. The service is always available, not just only because it is integrated in a mobile phone but also because Wizzit have support offered in all eleven official languages to be sure to be available for everyone. Last but not least, the ease of opening a Wizzit account should be mentioned. In contrast to an ordinary bank, where the customer has to go to a branch and fulfill several requirements Wizzit will come to the customer and the only thing needed to open an account is an ID, a mobile phone and R40.

#### • *Complexity* of innovation

During one of our interviews with Wizzit customers, conducted outside Durban in a township where our new-found friend and WizzKid Jonah Sithole helped us to find customers to interview, we met a satisfied customer named Welcome. He let us know that one of the main reasons for him and many others to open a mobile banking account at Wizzit was because it was very easy. "It is easy, no requirements and a flexible account with no hassle in the documentations. The truth is that even if Wizzit did not offer mobile services, people would adopt it just because the ease of opening it" Welcome told us. On the other hand, Jonah told us about customers, especially

elderly people, who got frustrated when the technology did not work the way they wanted and therefore just stopped using it. At the end of the interview it came clear to us that Welcome was not currently using his Wizzit account. His debit card was retained by an ATM a couple of months ago and his status today is that he is planning to get a new one.

Our personal experience though is that safety precautions, such as pin codes made the service time- and money-consuming. And even though we consider ourselves to be advanced mobile phone users we actually experienced the menus and overall logic to be quite complicated.

After all, Wizzit's service is very easy to open and almost all mobile phone users understand how to use it even though it could have been easier. The overall judgment is that the diffusion process will not be slowed down because of the complexity.

#### • *Trialability* of innovation

Wizzit's service is rather easy to try before a purchase. The possibilities are limited to if a WizzKid or a friend will allow testing. In comparison to ordinary banking services it is both more available and affordable. Fees associated with different service will, to some extent also limit the trialability of the product but otherwise the service has to be valued to be relatively easy to explore before the actual purchase.

#### Observability

It takes only a few seconds of explanation to understand the benefits of mobile banking: "a few presses on the buttons on the mobile phone and money is instantly transferred from your account to someone else's". If the transfer is successful, both receiver and transferor get an indication on the display. At all occasions when we were present, the WizzKid showed and taught the potential customers how to use Wizzit's services which gave them the last bit of conviction to get an account. On a visit to the township Kathlehong, outside Johannesburg, with a local WizzKid team leader named Siphiwe, we could observe him gather a group of ten women within seconds at the local restaurant. He then demonstrated the service for the enthusiastic group, all within the time it took us to get our South African sandwiches and our Coke. This demonstrates that the interest in Wizzit's service is big.

To conclude, it is very easy to show and understand the direct benefits of Wizzit's services and is something that without substantial efforts creates curiosity and admiration from customers.

#### Reinvention

There are no possibilities to directly change or modify Wizzit's services for a customer. On the other hand, sales persons are very close to the customers and with feedback to the head office it should be a rather simple action to implement or change certain functions if there is a need for it.

#### • Appropriateness for existing systems

Wizzit's platform works on any GSM-phone and independently of which operator the customer is connected to. Also, no application is needed for the phone. Anyone with a Wizzit account can send money from their mobile phone to any other bank account, no matter if it is an ordinary bank account or another Wizzit account. The fact that Wizzit's service fits well into existing systems has definitely enabled diffusion of it.

#### • Risk

The risks associated with the service as such are rather low. As long as you have money on your account you are able to use Wizzit's services and you are not dependent on whether or not other people use Wizzit since money can be sent to ordinary bank accounts as well. The highest risk would probably be the risk associated with the company and its business model. If the service provided is not adopted and profitable, Wizzit will go bankrupt and existing customers will probably lose some of their money. Wizzit is a relatively new company and the barriers to becoming another party offering banking services in South Africa is probably rather hard. There are four big banks in South Africa which dominate the market. According to Brian Richardson, these banks closely observe Wizzit and "no one of these are going to sit around, see someone eating their lunch". He also said that these banks "could shut Wizzit down anytime if they want to" but he still thinks Wizzit will succeed since "regulation will always follow innovation". People need Wizzit's services and therefore policies and regulations will eventually change for the better for the benefits of Wizzit.

Stefanus Karolus Tieties, whom we met outside Cape Town, has used Wizzit for a while and he likes the service. Now he tries to sell accounts by himself. The selling has not started to well, and he thinks the reason to this is that he does not yet know how to convince people to buy. He is firmly resolved to learn how to do this but he thinks he must learn how to overcome the general mistrust to banks, "people believe that banks come and go" as he stated it.

Further on, previously unbanked people are used to handling their cash on their own and there is a risk that they will not be comfortable with someone else to handle their cash from now on. Another obvious risk if a customer loses its cell phone. PIN codes

do exist to prevent unauthorized use, but exactly as with ordinary debit cards, it is not a 100% secure system.

To sum up, Wizzit do have some risks associated to its services but in comparison to cash, which otherwise generally is the alternative for unbanked, the risk is substantially lower.

#### • Appropriateness for tasks

Wizzit is an initiative to give previously unbanked an opportunity to save money in a bank account. This task is fulfilled and in addition to that customers are being offered several other services which facilitate everyday businesses. The ease of opening an account is often explained by customers as one of the main advantages, as well as the time- and money saving aspects associated with Wizzit's m-banking.

During our last visit in Johannesburg, just before we went home, we met Dr. Christoph Stork, a researcher at the Edge Institute who is quite skeptical to Wizzit's way of approaching the unbanked. Dr. Stork claims that Wizzit is just another bank, but with a somewhat new distribution system, and that banking in South Africa is too expensive for BOP consumers. Stork says that a solution from a bank will never have transformational effects; just another channel of access will not make any change for the poor. In his idealistic opinion, for m-banking to be beneficial to poor people it must be able to substitute real cash, and first when m-banking services are free of charge this will be possible. Further on Stork believes that a change in financial and mobile regulations is needed in order to make transformational mobile banking possible.

Obviously, Wizzit offers eagerly awaited services but if it is done in an optimal way is to be a disputed question.

#### • Support

During our visits in Johannesburg we spent some days with Wizzit team leader Siphiwe, who is a very enthusiastic and motivated sales person. When Siphiwe taught his WizzKids marketing strategies he always repeated Wizzit's mantra: "Know your customer". According to Siphiwe the customer care and follow up is vital in order to keep customers using the services. The backside of this is of course the limited possibilities for the WizzKids to keep track of all its customers and to gain economies of scale in sales. The future vision is that users should learn and benefit from each others' experiences, something that would decrease the required amount of support, per user, given by Wizzit. But to get there, a threshold in marked penetration must be reached, first then will this kind of WOM effects emerge.

Wizzit does not have any physical branches (like eBay or to some extent Skandiabanken). What they do have is collaborations with a well known clothing store, Dunn's, where Wizzit customer can get assistance and information through educated employees. The idea with this collaboration is that it shall be some kind of base to get in contact with WizzKids as well as a place where customers can go to get indirect contact with the Wizzit head office in case of problems.

Wizzit supporting structure is designed to keep costs low. A potential backside of this is when or if problems occur and customers need help.

#### • Knowledge required for use

Ordinary skills to use a mobile phone should be enough to be able to handle Wizzit's services. Richard, a consultant we met outside Port Elisabeth, works with a project that should encourage Coca-Cola dealers to start using Wizzit's services. The benefits of this are manifold, but the main reason is that the Coca-Cola Company wants cash to be removed from their distribution system. Richard however thinks that it will be hard to make people start using "digtal numbers on a display" instead of handling with tangible cash. The general trust and knowledge about this kind of technology is rather low, a fact that Wizzit is aware about and therefore they spend a relatively vast amount of resources on customer education prior to purchase.

Our friend Siphiwe sees another problem; poor people are not used to saving money. Siphiwe thinks that education in private economics is needed to understand the benefits of saving money in the bank instead of keeping it in the mattress, and to eventually change this habit.

To sum up, the problem does not lie within problems using mobile phones but rather in lack of basic knowledge about everyday economics and saving.

Finally, from an innovation technological perspective, the adoption process will probably not be limited by the features and aspects mentioned above. Everything can always be better but in this case Wizzit should probably put focus elsewhere to optimize resources.

# 4.2 General consumer oriented aspects influencing diffusion of innovations

When it comes to the marketing process and which level of adopters Wizzit has reached it depends on which level that is being analyzed. If we are looking one the whole market, all of the targeted customers, it is quite clear that Wizzit have not yet reached the early majority; the technology is so far, far away from being commonly adopted. Today's estimated market potential is 11 million people and the highest estimated number of existing customers is

around 300.000, which is less than 3% of the potential market. According to Roger's model, this indicates that Wizzit should be about to move somewhere from the innovators over to the early adopters, i.e. in a transition process where companies generally have most problems.

To give a fairer picture of Wizzit's customer and their marketing efforts it would probably be more appropriate to divide the market into different geographical areas. In Johannesburg, where the head quarters are located, and where probably most efforts have and will be focused initially the diffusion have reached other levels than most other areas we visited. The number of customers in this area was not revealed for us but as we experienced it after a couple of weeks, Johannesburg was an area where many people knew about the service even though it was still not commonly adopted. The diffusion process was probably about to meet the most difficult part in the adoption process, the chasm.

We did not visit any other place where Wizzit's services were as well-adopted as in Johannesburg, even though awareness seems to rapidly increase in Cape Town, Durban, and Port Elizabeth as well. Our experience of adoption outside big cities is that the service was sometimes known but still in a phase to convince innovators.

Wizzit's approach has been to almost fully rely on direct marketing where the WizzKids get one day education. Also, much of the marketing has been very sell-oriented. There has not been much promotion for the service, whether that is because of limited financial resources or because of a strategic standpoint is hard to say. Wouter Swart, a sales representative for Beehive Financial Services, a micro finance institution in the Western Cape Province says that conventional promotion campaigns would not work in the targeted customer segment, "if it was done more commercially, then the bulk of people would be more antagonistic towards Wizzit (Swart, 2009). So a good quality product must be diffused slowly". Further on, Mr. Richardson, does not like to measure success by counting the number of active accounts. However, without doing so it is rather hard to find an easy way to tell how Wizzit is doing. With 300.000 customers since 2004, it is hard to claim that things have been running smoothly and the risk is that they have lost, or never had, momentum in the diffusion process.

The initiated collaboration with Coca-Cola, which is one of the world's most available products and one of the world's most well-known brands, will enable Wizzit to reach out to more customers but also to get a good reputation and to facilitate the marketing process radically. This effort goes in line with Roger's adoption model since this is a good way to reach both the early adopters and the early majority. The early adopters are often willing to invest to get a strategic advantage and willing to serve as a visible reference. The early majority will recognize the Coca-Cola brand in the same time as they get reference users. The idea behind the collaboration is that Coca-Cola truck drivers should use Wizzit to get paid by the distant shops they are delivering to and by so radically decrease risk for robbery by easily sending money to another account and to get rid of the handling costs of cash.

In the theory chapter an analogy to the beachhead in Normandy was made which tries to illustrate that companies should be more focused in their segmentation processes. Wizzit has certainly done some segmentation, but we could not observe any actions that indicated that their marketing efforts took this segmentation into account. The geographical limitation is so far set to be the South African borders and the demographical limitations are focused on previously unbanked people. At several occasions when we visited townships the WizzKids showed us long wriggling waiting lines outside the bank offices where people stood to withdraw or to deposit money. We were told that many of these people were interested in mbanking solutions which of course is good for Wizzit, but these consumers fall outside the main focus of their main target, the unbanked. To give another example, when we were in Cape Town, Wouter Swart told us that parents, who he met in shopping malls, had realized the benefits with Wizzit's services. They could now send money instantly to their children when they were on their own on school journeys (Swart, 2009). This was only one of many cases when we heard of customers who were outside Wizzit's targeted customer group enjoying the benefits with Wizzit's service.

Yolande van Wyk at FNB Johannesburg believes that the underlying reason that m-banking for poor is not being especially successful in South Africa depends on the banking system and it regulations and policies. Banking in South Africa is rather expensive, the offered advantages are not valuable enough for previously unbanked (van Wyk, 2009). During an interview at Bank of Athens we got almost the same reflections, banking in South Africa is expensive. Withdrawing, depositing, paying with cards are all services connected with fees in South Africa in contrast to Europe, were these banking services most often do not have this kind of fees.

To conclude this chapter, Wizzit has set its targeted customer to previously unbanked people. They have done some segmentation and Johannesburg is probably their so called beach head where most efforts have been done. Obviously, it seems like Wizzit have had some problem to attract previously unbaked directly. Instead sales persons at Wizzit have realized that other individuals such as dissatisfied bank customers, parents to traveling kids, companies and organizations are easier to attract. Because of this, previously unbanked people have become a secondary target even though they, at least outspokenly, are the intended main customer segment to be reached.

#### 4.3 Creating capacity for BOP consumers to consume

#### 4.3.1 The three A:s

As mentioned in the theory part of this thesis, if a company initially does not create the capacity to consume, they will not get any of their products or services sold, no matter how superior to other products or services this product is. This of course holds for all kind of consumers, but it is less of an outspoken problem in developed countries where purchasing

power is high and existing infrastructure is well developed. However, in developing countries, the initial focus must be on creating this capacity to consume. The theoretical framework behind this was summarized in the theory part as the "three A:s", which in short means that a service or product offered the poor must be affordable, the purchase and use must be enabled and the goods or service must be available to buy or use at the point of time when the buyer wants to purchase or use it.

Our findings in South Africa enable us to assess Wizzit's efforts in these areas as the following:

#### -Affordability.

Wizzit's offer requires an upfront payment of R40 (\$5) and this sum is legitimated as being the cost for producing the "starter pack", including bank account details, a Maestro card, terms and agreements, users' manuals etc, everything packed in a sealed CD-shaped cover. In this sum is also included the R20 that is provision to the WizzKid for selling the starter pack. This amount of R40 should not be underrated; even we reflected over this sum when opening our bank accounts. However, we did not meet anyone who explicitly told us that he or she had refrained from opening an account because of this sum. Nevertheless, it should probably discourage some potential customers from opening one, especially if they are not totally convinced of the value of the benefits with the service. Consumers who see a value in using new technology will however probably not have this problem, but risk adverse consumers, such as late adopters described in the theory chapter, will probably use this as an argument for not opening an account. However, as Mr. Richardson, CEO Wizzit, stated it, "a product in South Africa must be charged for, otherwise it will indicate low quality and won't be adopted" (Richardson, 2008). This is probably a rather relevant reflection and can be seen in other markets as well, where price to a certain extent indicates quality and sometimes even increases willingness to pay. However, taken together, R40 should be an affordable sum for most consumers also in the targeted group, even if a lowered price would definitely attract even more consumers from the targeted customer segment.

Once an account has been opened, there are charges on all services (see figure 10). These are lower, or at the same level as other banks', but they surprised us as Swedish consumers used to bank services free of charge. The banks in South Africa do however have the advantage of, what some people we met called, a non-efficient market and the fact that alternatives to their services are so much more expensive. For instance, to send money between family members is a very common phenomenon in South Africa. Younger family members from rural areas often move to the bigger cities with a hope for more opportunities and a better life. They thereafter send a share of their income to family members who are left back home. This sending of money can be done in a

number of ways; one way is to physically transport the money to the receiver, either through paying a bus or taxi driver for bringing the money or by travelling yourself. Another alternative is to use money transfer companies, such as Western Union or Moneygram, who charge very high fees for this kind of services (Moneygram charges \$12 for sending \$20 within South Africa, (Moneygram)). In comparison to these services, paying R3-5 (~\$0,5) for sending money with Wizzit is a very attractive alternative.



Figure 10 Wizzit's price list

#### -Accessibility.

The distribution system used by Wizzit, with a network with WizzKids, is an intelligent way to access the targeted customers. Our impression is that WizzKids do not work as WizzKids, they actually *are* WizzKids, at least indentified so by themselves and by other community members. When we spent time with WizzKids, also in private, they always had their Wizzit branded clothes on and most conversations that we overheard between the WizzKids and their acquaintances and people they just met eventually slipped into the advantages with Wizzit's services. So even if that is not an outspoken requirement from upper management, a WizzKid is always accessible; he or she is never off duty. And since it is their task to live in and to

circulate around in their communities, they reach out to targeted consumers in a way which would be very hard to do with traditional marketing approaches. The authors of this thesis believe that this high degree of accessibility is one of Wizzit's major advantages in their marketing approach.

Wizzit has a co-operation with a store chain, called Dunn's, which sells clothes and targets almost the same customer groups as Wizzit do. These stores also sell Wizzit accounts, which means that consumers can buy a Wizzit account in a more traditional way as well, offering Wizzit an extra distribution channel for accessing customers living in areas missing WizzKids. However, we visited and talked to Dunn's managers in a number of places (Cape Town, Kathlehong, Port St. John's, Soweto) and no one could convince us that people preferred to buy accounts from traditional stores instead of buying from WizzKids. These Dunn's stores should probably be seen more as service centrals, places which customers visit when they lose their SIM-cards, PIN-codes or their debit cards and want replacements. During an interview with the store manager in Port St. John's, she told us that they had sold 13 [Sic!] accounts during the last four years. The manager had an account herself, but had lost her PIN-code so she did not use it anymore. But she stayed in touch with Wizzit, with which she communicated every 3 months when problems for the existing customers emerged.

Accessibility is also important when it comes to the use of the service. Today customers can deposit money into their accounts at a number of defined banks. Withdrawals can be done either through ATMs or when buying goods in a store. To find new ways to make these services more accessible might be a point which has to be improved in order for Wizzit to gain increased sales.

#### -Availability.

Since potential customers' cash flows vary significantly, a WizzKid can never be sure about when a potential consumer will eventually decide on buying an account. The WizzKids solved this by always carrying with them a couple of Wizzit starter packs, in case a prospect would eventually decide upon opening an account. On the few occasions when we observed an interested customer meeting a WizzKid who was out of starter packs this was solved rapidly by the WizzKid who in these cases always happened to know anyone from whom he could borrow a starter pack. Moreover, problem solving skills among the WizzKids really impressed us. Was there a need for a table for promotion, loud speakers, or anything else that could be used in promotional purposes, this was fixed within minutes. When we asked how this was solved the answer was always that some friend lived nearby. This once again shows the advantages working with a local sales force.

Once an account is opened, the mobile phone based services are always available; the only requirement is that the customer has access to a mobile phone when he or she wants to carry out a transaction and that this phone is within reach of a mobile network

In most regions of South Africa, one of Wizzit's main sales arguments is that the customers can use the service to buy electricity, which is always made on a pay-in-advance basis. Welcome, a Wizzit customer we interviewed in Durban, said that "I am sure that 75% of the people sitting in taxis around South Africa do it to buy electricity at a dealer". Welcome also mentioned the problem with pre-paid electricity abruptly turned off when the balance reached zero. If this happened in the night there was nothing to do but to wait until the next morning when the dealer opened again, if it did not happen during a weekend when you had to wait until Monday morning for the dealer to open again. This was easily solved by Wizzit's services, with which you within minutes could purchase more electricity, regardless of which time or day it was. The same holds for buying airtime to the mobile phone, with the introducing of Wizzit's services this can be done instantly, instead of physically transporting yourself to the airtime vendor during opening hours.

The conclusion is that Wizzit has been successful in creating the capacity to consume for BOP consumers. With the system with WizzKids the get access to many of the consumers which they would not reach with other means, and they also build trust with their customers. The drawback with this system is that it is a very resource demanding way of selling, and that the dependence of WizzKids in a region effectively hampers growth of sales in regions which they do not cover with WizzKids yet. We also noticed that the knowledge levels of the WizzKids differed strongly when it came to what Wizzit's service was capable of and what it was not. This is a risk with such a system, that communication ways get too long and winding, so that the information that eventually reaches the consumer is unwittingly falsified. We seldom met any WizzKids that could not offer customers an immediate purchase of a starter pack. A reason to this is probably the risk of losing a customer and thus the provision of R20 plus future revenue streams from this account, something that motivated the WizzKids to keep a well dimensioned stock of starter packs. The most discussable factor of the "three A:s" is affordability. After all, R40 is a considerable amount of money for BOP consumers. The reason to this price model is probably to as fast as possible reach breakeven, targeting richer, but still un-banked, customer segments in richer regions in South Africa, such as Gauteng, where income is higher and a price of R40 is considered lower than in many poorer South African regions. Once more stable and positive cash flows are reached, a lower price will probably be charged which will enable more of the targeted customers to buy.

#### 4.3.2 Trust

The system with WizzKids who are well known in their communities is also a good way to counter the mistrust previously found between the BOP-consumers and larger corporations. However, through our observations we learned that there are two sides of this coin. The people we spoke to almost all told us that the BOP-consumers in South Africa did not trust the big four banks ("blacks are still afraid of banks and any white establishments" as Wouter Swart stated it) when they offered these consumers anything new. The feeling we got was that there was a disappointment that the big banks had not cared more for these people earlier and when they eventually approached the BOP consumers with alternatives that would suit their needs they were met with skepticism and suspicion. The suspicion consisted of a mistrust that they still did not care about the real needs of these people but just wanted to squeeze some money out of this market segment, lacking further profitable segments to exploit.

On the other hand, there is a major trust in the trademarks of these big four banks. These banks have been around for a long time and with their logotypes visible almost everywhere, these banks enjoy massive brand awareness from all consumer segments. The consumers also have a feeling that their money is safe in these banks, with visible buildings, iron bars and walls protecting their money, something which Wizzit cannot offer.

Wizzit's advantage when it comes to trust is that consumers identify the company with the WizzKids, whom they know or at least know about. The result is that the company gets very tangible in the community, after all the "kid next door" can happen to be a WizzKid. We also felt a sentiment from these consumers that Wizzit actually approached the poor on their level, and with solutions to their real needs. Nevertheless, being an up-comer, and with no visible branches, it is much harder to convince the customers that their system works reliably and that their money is just as safe as in the big banks, even if this money is only represented by digits on a mobile phone display. A majority of our interviewees told us that the trust-issue is one of the most important issues for Wizzit to deal with, to actually build trust to their banking solution. In this process it is of outmost importance to avoid all kind of errors who might lead people to think "Yeah, that was what I thought all the time, after all, Wizzit is trying to cheat us". To include a Maestro debit card in the offer is another way to reduce mistrust. With this Wizzit both gets a well known brand into their offer, but also brings some kind of tangibility to their services.

The earlier described newly initiated co-operation with Coca-Cola is another good measure to counteract such mistrust. With this co-operation, people will see a well-known and well-trusted brand in co-operation with Wizzit and will transfer some of this trust and brand awareness to Wizzit. Another trust building method is Wizzit's way to work with the campaign "Proudly South African", a campaign that promotes South African companies, products and services. This is a well-known trademark in South Africa and by showing

consumers that they co-operate with this campaign; they will trust Wizzit's brand more than they would otherwise.

Recently a co-operation with one of South Africa's biggest telecom operators, Vodacom, was announced. Vodacom agents will hereafter also sell Wizzit accounts. This co-operation was announced after we left South Africa, and it is hard to assess whether this is a move with the goal to gain a better network of vendors, becoming less dependent on the resource heavy direct selling, or if the main expectation is to get a share of this brand's credibility. However, one alternative does not have to exclude the other, and whatever the goal is we believe this is a correct and important step toward increased trust and brand awareness. A risk that Wizzit should be aware of is if sales gets too impersonal, and that trust and support therefore is lost that way.

#### 4.4 Innovating for the BOP markets

When assessing Wizzit's chances for success in a BOP market, we will use the twelve principles that were discussed in the theory chapter and which together constitute building blocks for a philosophy on innovation for BOP markets. Some will be discussed more thoroughly, they are the ones that we consider really apply to Wizzit's offer. Others will be discussed very briefly since they are less relevant to Wizzit's kind of offer, or for the diffusion of Wizzit's services.

#### • Price and performance

In some aspects, Wizzit's banking service can be seen as a quantum leap in price-performance. It is cheaper than ordinary bank services, and other mbanking services as well (estimated on a certain user profile), but the price difference is not enough to get anyone to talk about a quantum leap in price-performance. However, if compared to other services, such as sending money to relatives of friends far away, then Wizzit is much cheaper. The alternative is often to travel far distances for delivering money, which includes lost income, travel expenses and risks of robbery. With Wizzit this can be done within seconds for the cost of R3 to R5, dependent on whether the receiver has a Wizzit account or not.

#### • *Hybrid solutions*

Wizzit is based on new and rather advanced technology but is developed to work on all kind of mobile phones. The service does in an interesting way use all kind of existing infrastructures for its purposes. For instance, depositing money to a Wizzit account can be done through a number of banks in South Africa, withdrawals can be done from all ATM:s or when buying food, clothes

etc in any shop in the country which has a point of sale (POS) terminal connected to Maestro.

The distribution system with WizzKids does effectively overcome problems with existing infrastructure, such as bad communication, consumers living in areas with bad media coverage hampering conventional marketing etc.

#### • Scalable and transportable

Wizzit's technical solution is almost independent on the number of users, the technology is almost the same and the only things that must be scaled up at an increased customer base are server capacity and probably customer care.

The marketing solution is however more difficult to scale up. Being dependent on direct marketing, a very resource heavy approach, sales will never be able to grow rapidly if this sales method is the dominant sales approach also in the future.

#### • Resource efficient

This is not really relevant to Wizzit, since it at large is not a physical product. However, one might argue that the effects of resource usage are positive with Wizzit since many car travels will be made unnecessary when money can be transferred electronically.

#### • Functionality before form

Wizzit has chosen to make their services as available as possible; therefore basing them upon existing infrastructure as far as it was possible. The requirement of owning specific technology should not be a factor that could discourage consumers from adopting their services. Therefore services had to be possible to use on all cell phones and no application for the phone would have to be downloaded. Therefore functionality had to come before form.

#### • Process innovations are as important as product innovations

In order to make the services affordable to the poor, Wizzit had to come up with innovations in their own processes. To offer the poor bank services that are not dependent on branches is a typical example of a process innovation that reduces costs and thereby enables Wizzit to charge a lower price than would have been possible otherwise.

To almost solely rely on a direct selling force, such as the WizzKids, who get paid on a provisional basis, is another way of process innovation which do not drive costs if sales is not increased at the same time.

#### • Work must be deskilled.

Using Wizzit's service is supposed to be quite easy and straight forward, even if some training is required initially. The authors of this thesis however found instructions quite contradicting, but with the assistance of a WizzKid the problems were possible to overcome. This once again emphasizes the importance of working with WizzKids with a product such as this one.

#### • Requires education of customers

Many of our interviewees mentioned lack of customer education as one of the major impediments for further diffusion of Wizzit's services. The kind of education they thought was lacking was above all education in private economy. In South Africa today there are a number of active "loan sharks", i.e private persons or corporations offering loans to double digit interest rates with some days maturity, resulting in interest rates reaching 1000% on a yearly basis. However, without proper education and with these alternatives often being the only alternative for the poor, customers do not possess the ability to compare different alternatives and they do not possess the power to put pressure on these sharks to lower their interest rates. Wizzit has plans to offer a number of extra services, loans and funeral policies to mention some of them. But before they will do that, education in private economy is a must to get people to understand how to compare different offerings and how to evaluate these.

In South Africa, with relatively high illiteracy and low formal education, education of customers on Wizzit's specific service is important. The system with WizzKids is a very powerful tool in doing this and is another reason to why this distribution system is so advantageous in this environment; you would not be able to sell a service like this in South Africa without proper education and then expect people to use the service properly.

The WizzKids are free to arrange much of their work after their own ideas, and some WizzKids we met mentioned ideas about arranging educational meetings with not-yet-customers as well as with existing customers. As a WizzKid there are incentives to both get consumers to buy an account but also to use it once they have bought it, and such meetings could be beneficial for both consumers and WizzKids

#### • Work well in hostile environments.

The infrastructure that Wizzit's services rely on is mainly a well-working mobile network. In South Africa, and more and more in Africa as a whole, this is no longer a big problem, considering the advances in network coverage. Into the term hostile environment can also be included users not used to using cell phones. We did not find menus and commandos especially fool-proof or self instructive, and once again we believe the solution to be the WizzKids who can educate the users in this.

#### • Thorough research on product and service interfaces.

As mentioned earlier, Wizzit provides customer support in all of the eleven official languages. They also provide customer education through their network with WizzKids. The product interface is what the customers see on their mobile phone displays, and even if this interface is rather simply made in order to avoid errors and confusion we believe menus (i.e interface) could be further improved.

#### • *Innovations in distribution*

The network with WizzKids, acting as sales agents, is an old and well-tried way of selling products and services. Normally this is used in business-to-business selling, but could also be used for consumer products. However, what is new with Wizzit's approach is that they really focus on local sales persons, building their whole business on personal trust. Experience shows that the less regulated a market is, and the less accepted non-outspoken norms in business are, the more dependent the emergence of market transactions are on personal trust. By using this local sales force, Wizzit overcomes much of these problems.

#### • Focus on the platforms of the system

Wizzit's service is basically based upon a technology whose task it is to enable money to flow, directed by commands by users or service providers. This means that what Wizzit actually does is to provide a platform, upon which they have added some services, such as depositing and sending money. But as a platform, their possibilities to develop their offering are almost endless. So far Wizzit have focused on developing this platform, but once their customers are ready, in terms of education and perceived needs, more sophisticated banking services can, and surely will be added.

The conclusion when assessing Wizzit's potential as an innovation in a BOP market is that it is a service which seems to be well suited for this specific market. The main product specific advantage, when seen from a BOP market perspective, is that it is based upon a direct selling force whose task it is to know their customers. The possibility to offer the customers drastically reduced costs for their banking related services, as well as the possibility to further develop the service, adding new offerings to the existing platform, should also vouch for a bright future. Once regulative issues in new markets are sorted out, these markets should not be too hard to exploit with the existing system, which should enable for gaining economies of scale once the first threshold has been overcome. The major disadvantage with Wizzit's service, when focusing on the service in a BOP-market, is that it is quite demanding to learn how to use

#### 5 Discussion

South Africa has been the main focus in this report and the reason why we have not compared further with other countries is because of different banking systems, regulations and the unique historical background of South Africa. To fully include a comparison with other initiatives, e.g. Kenya and the Philippines, would almost be to conduct an additional study and this is why the authors has left this for a potential area of further research.

Further on the choice of the theoretical model can be discussed. We have chosen to look at diffusion from several different viewpoints but if the models are compatible or even possible to use together (our 3D-model) is not investigated further. The reason for us to use several different perspectives in the theory was to be able to cover as many angles as possible and try not to miss anything of great importance.

A hermeneutic research approach has been used in this report and many conclusions in this report are based on the authors experience during a limited time in South Africa. A disadvantage with approaches like this is that they are dependent on the interpretations the researcher does, and that they therefore are subjective. It is therefore possible that if someone else would perform a similar investigation they would reach different conclusions.

The initial, main respondents in this report were given to us by the CEO of Wizzit, Brian Richardson, with whom they were somehow affiliated. Therefore they could possibly be suspected to give us a subjective viewpoint. On the other hand, the information from these respondents has been validated and confirmed by several other respondents which should minimize the risk of getting a biased picture of the reality.

We have not investigated further whether or not the different adoption individuals are applicable on the I-curve. The I-curve is more compact in comparison to the S-curve because the BOP-consumers react differently. The steep I-curve can be interpreted as the early majority in the BOP market is harder to reach, but if/once they are reached the adoption

process is considerably faster. It should not be seen as "the chasm" disappears but rather getting shorter and substantially higher.

#### 6 Conclusions

After analyzing the results from our field research we have reached a number of conclusions. These will presented below, under each research question respectively.

# "What are the main factors influencing the diffusion of Wizzit's banking service in South Africa and how do these factors influence the rate of diffusion?"

We found that Wizzit has been successful in creating the capacity to consume for its targeted customers. Wizzit's approach to the BOP consumers, which involves working with a network of WizzKids is an appropriate solution for this market. In doing this, Wizzit overcomes many of the problems that otherwise would occur in this market and which we have found affects sales negatively, such as lack of trust, lack of personal relations, lack of education, lack of customer understanding, reaching new customers etc. Nevertheless, we believe that the price is one big issue when it comes to capacity to consume.

Further on, our findings indicate that criteria determining how attractive a technical innovation is, assessed with Roger's and Prahalad's frameworks for new technological innovations (i.e. technical features and social factors) cannot be blamed for the slow diffusion process. Our findings made us believe that there indeed is a need for a less sophisticated, cheap banking service in South Africa, and Wizzit's solution seems to match this need well. However, even if findings based on interviews and observations indicate that there is a need for a convenient, cheap and safe banking service, there is always a risk that the targeted consumers value human relations more than an efficient banking service. The impact of this factor is difficult to assess, why we leave this for further research.

Probably the most important factor determining if consumers will adapt Wizzit's service or not is not the features of the offer, but how consumers perceive these features to fit their needs and if they can trust the service. Innovators' and early adopters' perceptions of an innovation are not dependent on trust or references, their perceptions are more based on a desire being first with a new technology or gaining strategic advantages. In accordance to theory, our findings indicate that for the early majority, which is the consumer group most crucial for Wizzit to acquire because of its big number, perception of a product or service is important. Therefore trust and brand recognition are two very important influencing factors determining diffusion of Wizzit's service.

# "What are the main obstacles that have to be overcome from Wizzit's side in order to speed up diffusion?"

Since we believe that the lack of trust from consumers is the single most important factor to why Wizzit's services have not been more rapidly diffused, countermeasures from Wizzit's side must focus of gaining trust from these consumers i.e. change from a sell oriented approach to a more customer oriented approach. However, being a new, unknown player in a market dominated by four well established, big and well known players, this is a long-drawn process, especially since it comes down to handling people's dearest belongings, their money.

Wizzit partly understood this from the beginning which made them working with a locally known sales force, made them locate their head quarters in a "fancy but credible and well-renowned" suburb to Johannesburg, offer support in all 11 official languages etc. Now, some years later, due to the fact that they in some geographical areas are facing a risk adverse, trust dependent early majority, the trust issue has probably become even clearer to them and some countermeasures from Wizzit's side can be seen. Examples of these are newly initiated collaborations with credible and well known brands (Coca-Cola, Proudly South African, Vodacom, etc) and some education of consumers. Nevertheless, it seems as if more has to be done.

A lasting impression from talking to Wizzit's existing customers, as well as with non-customers, was that a Wizzit account indeed was "nice to have", but nothing they could not be without which is often the case with new, disruptive products. Education of customers could be beneficial here as well as word of mouth effects and customer segmentation-focus.

Even if Wizzit's services are cheap relative to financial services offered by other actors, they are still rather expensive considering the income levels of their targeted customers groups. This has resulted in the fact that the customers who have signed up until now are less price sensitive, and this has resulted in the fact that the targeted customers, previously unbanked, do not really have the same characteristics as the customers that they after all have acquired.

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### 8 Appendix - Appendix 1

### Pictures demonstrating Wizzit's service



Figure 11 How Wizzit's service works



Figure 12 Cell phone commandos used when using Wizzit's service

### Appendix 2

### **Interviews (in chronological order)**

Only interviews where we used a half structured format are listed below. The authors conducted a number of interviews with people that they met more randomly or who they were presented to through their "main" interviewees but these are not listed here. These insights often gave ideas for further investigation.

#### In Sweden

**Lennart Bångens**, former assistant professor in industrial marketing at Chalmers University of Technology, now working as a consultant specialized on supply chain questions in developing countries. A number of interviews have been conducted with him throughout the whole project.

#### In South Africa

**Dominik Takacs**, Senior Channel Manager, Nedbank, Johannesburg. Interview conducted on the 1<sup>st</sup> of December 2008 during 1 hour.

**Brian Richardson**, CEO and founder of Wizzit, Johannesburg. Interview conducted on the 1<sup>st</sup> of December, 2008 during 2 hours at Wizzit's head quarters, Sandton, Johannesburg.

**Siphiwe,** teamleader for a group of WizzKids, mainly based in Kathlehong. Interviews conducted on a number of occasions between the 2<sup>nd</sup> of December 2008 and the 28<sup>th</sup> of January 2009. Some full days in different townships (Katlehong and Soweto) were spent with him as well.

**Jonah Sithole**, WizzKid and entrepreneur in Durban. 2 interviews conducted between 11<sup>th</sup> and 12<sup>th</sup> of December 2008, every interview lasting for about 2 hours.

**Linda**, Loan Officer SMA Finance, a microfinance institute using Wizzit in their lending process, Athlone Park, Durban. Interview conducted on the 11<sup>th</sup> of December 2008 during half an hour.

**Buse**, Loan Officer SMA Finance, Athlone Park, Durban. Interview conducted on the 11<sup>th</sup> of December 2008 during half an hour.

**Elisabeth**, Wizzit user outside Durban. Interview conducted on the 12<sup>th</sup> of December 2008 during half an hour.

**Welcome**, Wizzit user and self-employed outside Durban. Interview conducted on the 12<sup>th</sup> of December 2008 during half an hour.

**Loan officer** – Nedbank, Durban. Interview conducted on the 12<sup>th</sup> of December 2008 during one hour.

**Store Manager**, Dunn's, Port St John's. Interview conducted on the 15<sup>th</sup> of December 2008 during less than half an hour.

**Richard Marinus**, Regional Consultant for Wizzit, Port Elisabeth. Interview conducted on the 18<sup>th</sup> of December 2009 during two hours.

**Wouter Swart**, Officer, Beehive Financial Services, Cape Town. A number of interviews conducted between the 8<sup>th</sup> and the 13<sup>th</sup> of January 2000. The authors also spent time with him travelling around to different townships (Khayelitsha and De Noon) when he carried out his everyday work.

**Stefanus**, WizzKid Cape Town. Interview conducted on the 13<sup>th</sup> of January 2009 during 20 minutes.

**Unathi,** WizzKid and entrepreneur, De Noon, Cape Town. Interviews conducted between the 8<sup>th</sup> and the 13<sup>th</sup> of January 2009 during one hour each.

**Solly,** WizzKid and entrepreneur, De Noon, Cape Town. A number of interviews between the 8<sup>th</sup> and the 21<sup>th</sup> of January 2009, lasting between one and two hours.

**Sanjay Persad,** Bank manager, The South African Bank of Athens Limited, Johannesburg. Interview conducted the 26<sup>th</sup> of January 2009 during two hours.

**Ingrid** *Ravenscroft*, Head of Internal Audit, The South African Bank of Athens Limited, Johannesburg. Interview conducted the 26<sup>th</sup> of January 2009 during half an hour.

**Debrah Lee Bekker,** Anti Money Laundering Control Officer, The South African Bank of Athens Limited, Johannesburg. Interview conducted the 26<sup>th</sup> of January 2009 during about 45 minutes.

**Dr Christoph Stork**, ICT researcher, Edge Institute, Braamfontein, Johannesburg. Interview conducted the 27<sup>th</sup> of January 2009 during two hours .

**Yolande Van Wyk**, Head of Expansions, Mobile and Transaction Solutions, First National Bank, Johannesburg. Interview conducted the 27<sup>th</sup> of January 2009 during one hour.

**Andile Mbatha,** hair salon owner and Wizzit user, Soweto. Known from the article "Phoney Finance" in the Economist (2006). Interview conducted over telephone 28<sup>th</sup> of January 2009.

# Appendix 3

# **Miscellaneous pictures**



Figure 13 The Wizzit branded Maestro card offered all users

# **Appendix 4**

# Photos from the study

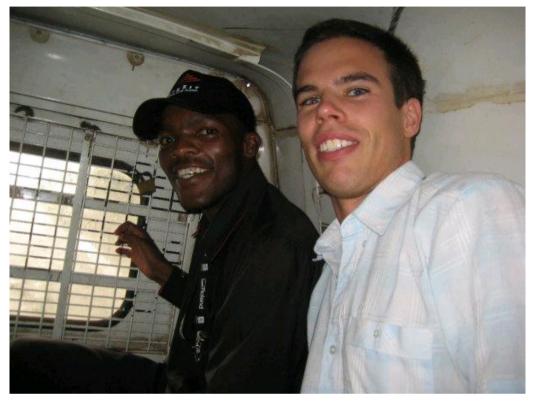


Figure 14 On a sales mission with WizzKid Siphiwe in Kathlehong



Figure 15 The township Khayelitscha outside Cape Town



Figure 16 Promotion stand consisting of our rental car and a borrowed table,

De Noon township outside Cape Town



Figure 17 Wouter Swart, Officer Beehive Financial Services



Figure 18 De Noon township outside Cape Town



Figure 19 The authors outside FNB's head quarters in Johannesburg



Figure 20 Fredrik in Soweto hanging around with WizzKid Siphiwe and his family