Mälardalens University
The academy of innovation, design and engineering

Cashews by SMS
An implementation in Mozambique

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Abstract

Title Cashews by SMS – an implementation in Mozambique

Problem Innovation is described by Tidd, Bessant and Pavitt (2005) as the core process within organisations associated with renewal and as generic activity associated with survival and growth. Yet many organisations fail to realise the benefits of adopting an innovation. Which the theory will show this is most likely due to a problem with one certain phase in the innovation process: the implementation.

Purpose The purpose with this academic paper is by a practical example illustrate the risks and problems one can come across in an implementation and the consequences of this. We also intend to give suggestion on how it is possible to restart an implementation process when the process once has failed.

Research questions Why has marketAlerts failed to be implemented in Mozambique? How should IPEX resume the implementation of marketAlerts?

Methodology Ethnographical approach.

Conclusion Our conclusion is that the Institute for Export Promotion (IPEX) has managed to adopt marketAlerts but has failed to implement it in their daily work mainly due to the fact that they only completed the acquiring phase. The failure is due to a combination of hierarchy, lack of interest and absents of routines for sending marketAlerts. In order for IPEX to make the best use of marketAlerts we believe that they have to go back and start from the executing phase and implement the service once again.

Keywords Implementation, innovation process, problems.
Preface

Ms Frida Karlsson and Ms Mona Mansour who are studying the Innovation programme at Mälardalens University in Sweden have conducted this exam project. In order to conduct the exam project in Mozambique a scholarship from the Swedish International Development Cooperation Agency (SIDA) has been received.

For many years SIDA has been giving scholarships called “Minor Field Study” to Swedish university students. The aim of these scholarships is to raise the level of knowledge and interest of Swedish students in international development and to give them the opportunity to learn about other countries, thus promoting international understanding and cooperation. The scholarship is used to carry out an in-depth study as part of a university programme and is intended to cover a study visit abroad of approximately two months. One of the objectives of the visit is to give the organisation in the host-country information in the form of a report by the findings of the study. Another objective is to promote contact between Sweden and the host-country. The Minor Field Study Programme is not a research commission and it is hoped that it will be of benefit to both countries.

Special thanks to

We wish to give special thanks to SIDA for granting us the scholarship called Minor Field Study. A special thanks also goes out to Mr Raphaël Dard at International Trade Centre (ITC) in Geneva, who has given us invaluable information about the ongoing project, putting us in contact with the organisation in Mozambique and supporting us throughout the process. Last but not least we also send out a special thanks to IPEX in Mozambique for letting us being a part of their daily work. This exam project could not have been carried out without any of these parties.
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1. Background

This chapter presents an overview of the entire project with a summary of the growth of mobile phones in Africa. The chapter also presents the two external parties which is International Trade Centre (ITC) who is the provider of the project Trade at Hand and the service marketAlerts and the local organisation in Mozambique, the Institute for Export Promotion (IPEX). At the end of the chapter a summary of the abbreviations is presented.

1.1 Mobile phones in Africa

The technological revolution that has entered the industrialised countries via the personal computer, and Internet encourages the entrepreneurial ethos, which has resulted in a few too many dotcom companies. In the developing countries one predicts that the technological revolution will develop via mobile phones. The use of mobile phones in sub-Saharan Africa has increased the most in comparison to fixed phones and use of Internet (see Figure 1.). Africa’s surge in mobile phones may unleash the same sort of business energy that Internet has made in the world, but tailored to more local needs. Because of this there are no plans of creating a pan-African marked based on mobile phones. Such initiative is about to begin.

TradeNet, a software company based in Accra, Ghana, will introduce a simple sort of E-bay focusing on agricultural products in a dozen of countries in West Africa. This will make it possible for buyers and sellers to indicate what they are after and communicate their contact information and this will be sent to all relevant subscribers as an SMS text message in one of four languages. Interested parties can then get in direct contact with each other for a possible deal. Both listing offers and receiving text messages is a free service (The Economist, 2005).

1.2 Trade at Hand

Trade at Hand is another similar project which is financed by different governments and is run by ITC in Geneva. ITC is a technical organisational unite under United Nations Conference on Trade and Development (UNCTAD) and The World Trade Organization (WTO). The unite focuses on operational and business orientated aspects of commerce and its developing. The purpose of the project Trade at Hand is to make innovative use of mobile phones for exporters in the developing countries. It has recently been launched in Sub-Saharan Africa. The project started during the end of 2007 and involved providing information to exporters of agricultural products in Burkina Faso, Mali and Mozambique.
Trade at Hand’s aim is to launch the project in other countries as well and during 2007 the project was initiated in Senegal and in Libya.

**1.2.1 Trade at Hands modules**

Trade at Hands first module, “Market Prices” consist in sending via, SMS text messages, product prices on international markets in real time. The second module, “Market Alerts”, which is focused on in this report, aims to send out business opportunities, contacts and market news through Internet using local organisations to send this information via SMS text messages to exporters (for a quick information about the service see the information sheet in Appendix IPEX Report). This module relies on the unique network of local Trade Support Institutions which ITC has been building for more than 40 years. One of the main objectives of Trade at Hand is to become a self-sustainable service that integrates perfectly to local realities, in countries where the service is launched. Subsequently, the management of Trade at Hand is given to local organisations. In Mozambique ITC is working with a local organisation IPEX. The department responsible of the project Trade at Hand is called the Trade and Market Information Centre (TMIC).

**1.3 IPEX as an organisation**

Mr Raphaël Dard is the project leader for Trade at Hand and is situated at ITC in Geneva, Switzerland. It was Mr. Dard who introduced us to the Manager of TMIC at IPEX.

IPEX is a non-profit socio-economic unit created in 1990 to promote and coordinate the implementation of policy measures for the development of Mozambique’s exports. IPEX’s mission is to develop and promote the export of Mozambican products and services, harmonising its activities with all institutions that deal with foreign trade. Their vision is to assert themselves as a national focal point for the development and promotion of Mozambique’s exports.

**Structure**

In order to achieve the objectives for which it was created the IPEX structure comprises four services and two regional delegations, namely:

- Product and Market Development Service
- Trade Research and Information Service
- Planning and Statistics Service
- Administration and Finance Service
- Central Region Delegation
- Northern Region Delegation

**Main activities**

- Influencing foreign trade policies
- Promoting exports in coordination with the private sector
- Development of exports, promoting the production and diversification of products, services and markets
- Facilitating access to the country’s products overseas
- Collection, treatment and dissemination of trade information
Cooperation with various national and international institutions linked to foreign trade

**1.3.1 Services available**
IPEX provides their clients with promotion and development of products and markets, they can also offer their clients research and dissemination of trade information.

**Promotion and Development of Products and Markets**
There are services for a range of products and market development activities. IPEX provides a service for the preparation of studies, identifying products and/or sectors with export potential and export markets. In addition to identifying a product’s potential, the studies also identify quality requirements, plant and animal health measures, tariff and non-tariff barriers and the recommended type of packaging. IPEX promotes and organises meetings between buyers and sellers within the country and also overseas. The identification and selection of the invited participants are based in a specific group of products and the market of interest.

IPEX organises, coordinates and sponsors (supports) the official participation of Mozambican companies in carefully selected regional and international fairs and exhibitions. Sponsorships (support) covers the cost of hiring space and furniture, construction, decoration, maintenance and safe of the stand, the transport of materials and samples, electricity and water expenses, preparation of catalogues to publicise the product and services and promotion activities. In addition, through national and international fairs IPEX promotes the country’s image and national brand names.

**Research and dissemination of trade information**
IPEX hosts the Trade Point, a trade information system intended primarily to create opportunities for more companies, small and medium companies in particular, to participate in international trade by simplifying and harmonising world trade procedures, dissemination information about best practices in international trade and giving operators access to advanced technologies and information networks. IPEX also hosts a Private Sector Reference Centre containing information on multilateral issues. Its main function, among others is to provide and disseminate information on WTO agreements and those of other United Nations organisations dealing with trade and the business community.

**1.3.2 Trade and Market Information Centre (TMIC)**
TMIC has a wide range of up-to-the-minute information on Mozambique and the world. This information is provided in publications and also through conventional, on-line and electronic databases. TMIC is the focal point for people using the information services. It provides a substantial amount of information on trade and market as well as other relevant information. The kind of information available in the centre includes, among others, bilateral and multilateral trade agreements and commercial protocols as well as rules and regulations on access to markets. In addition, the TMIC researchers and publicise trade opportunities and the international prices of export products. The TMIC has information of commercial nature on companies, products, international trade statistics, tariffs, commercial agreements, among others. The information is obtained through research instruments such as the:

- Trade Map (statistical information on world trade)
- Mac Map (information on tariffs and access conditions by country, group of countries and economic regions)
To benefit the local and foreign business community IPEX regularly produces and publishes a number of publications such as Directory of Mozambican Exporters, Manual for the Foreign Trade Operator and an information bulletin, IPEX info, on topics related to export activity.

1.4 Abbreviations

- SIDA – Swedish International Development Cooperation Agency
- ITC – International Trade Centre
- IPEX – Institute for Export Promotion
- WTO – the World Trade Organization
- TMIC – Trade and Market Information Centre
- PACCIA/PACT – Programme for building African Capacity for Trade
- ETDU – E-Trade Development Unit
2. Introduction

This chapter presents our strategy to combine the use for Institute of Export Promotion (IPEX) and the use for the subject innovation science and management.

As part of the PACCIA/PACT\(^1\) programme, ITC’s E-Trade Development Unit (ETDU) was asked to provide a new trade information dissemination service to the Mozambican Institute of Export Promotion (IPEX) in Maputo. The service is called marketAlerts and is based on Web-to-SMS technology. Eight staff members at IPEX received training in Maputo from two representatives from ITC in the end of February 2007. During this period IPEX took the opportunity to organize a kick-off presentation of SMS marketAlerts along with another already planned presentation. Up until today there have been some technical problems with the system, which have complicated the usage of marketAlerts. These technical problems are now solved. The problem today is that marketAlerts is not a part of the division Trade and Market Information Centre’s daily work and therefore we were asked by ITC to with our knowledge in the field of innovation and with our objective perspective look into possible reasons why this is.

Our ambition with the field study is on one hand to contribute with knowledge for innovation technique as a subject and on the other hand with knowledge for IPEX. Two different reports will be conducted and in order to combine these ambitions we will use the same empiricism that is the different meetings interviews and observations from the field whereas different prior research material (theory). Different theories will be used because the two parties have different previous knowledge and interests. The outcome of one empiric and the two different approaches of theory will be two different reports, one business report and one academic paper with discussions to contribute new knowledge for both the subject innovation technique and IPEX (See Figure 2).

\[\text{Figure 2. Our strategy to combine the use for the project Trade at Hand and the use for the subject innovation technique.}\]

\(^1\) PACCIA/PACT - ‘Programme for building African Capacity for Trade’ – is a joint programme of the International Trade Centre UNCTAD/WTO (ITC), in Geneva, and Trade Facilitation Office Canada (TFOC) of Ottawa, Canada. The mandate of PACCIA/PACT is to “improve the capacity of African enterprises to do business internationally and promote their exports”. 
2.1 Use for IPEX

The report written for IPEX was conducted and presented out on the field (see Appendix A). This is to be seen as a business report and not an academic paper. The purpose with the report was to reflect on why IPEX does not use marketAlerts today and give suggestions on how they can start to implement the sending of marketAlerts in their daily work. We are well aware of the fact that financial aspects play a big role in both the development of the service as well as the usage, which only to some extent were taken under consideration in the business report. Since we do not have a technical background the focus was not to improve the technical aspects of the system, yet some suggestions were made. We know that IPEX does not have authorities to make technical changes in the system, but the intention of including our technical suggestions in the report was to show IPEX that we will bring these technical issues to ITC’s attention. These suggestions were made due to our assumption that the service marketAlerts will expand in the future, which we think will create a demand for easier administration in the system.

2.2 Use for the subject innovation

Innovation is described by Tidd, et al. (2005) as the core process within organisations associated with renewal and as generic activity associated with survival and growth. Yet many organisations fail to realise the benefits of adopting an innovation. Which the theory will show this is most likely due to a problem with one certain phase in the innovation process: the implementation. It is crucial to not only guide how to adopt an innovation but also how the innovation should be implemented and sustained. Based on Tidd, et al. (2005) implementation process a study of a specific implementation will be conducted.

2.2.1 Purpose and research question

The purpose with this academic paper is by a practical example illustrate the risks and problems one can come across in an implementation and the consequences of this. We also intend to give suggestion on how it is possible to resume an implementation process when the process once has failed. Therefore the research questions for this academic paper are:

- Why has marketAlerts failed to be implemented in Mozambique?
- How should IPEX resume the implementation of marketAlerts?
3. Theory

This chapter presents different theories regarding the innovation process according to Tidd, et al. (2005). The difference between adoption and implementation is defined. The chapter also presents reasons for complications in implementation and ends with a project management plan.

3.1 Innovation process

In changing work environments innovation is crucial (Klein & Knight, 2005). Innovation is described by Tidd, et al. (2005) as the core process within organisations associated with renewal and as generic activity associated with survival and growth. In order to be successful in managing innovation the authors (Tidd et al., 2005) states that the innovating organisation needs to go through the process shown below (see Figure 3).

- **Searching** – this initial phase in innovation involves scanning the internal and external environment to pick up and process signals about potential innovation. This could be both threats and opportunities for the organisation and the organisation needs to respond to these different kinds of stimuli.

- **Selecting** – deciding on a strategy on how the company can be best developed. No matter how much resources an organisation has it cannot do everything, so the challenge lies in selecting those things which offer the best chance of developing a competitive edge.

- **Implementing** – growing the innovation from an innovation through different stages of development to final launch – as a new product or service in the external marketplace or a new process or method within the organisation.

![Figure 3. The innovation process (own revision Tidd et al., 2005)](image-url)
Innovation is a very complex undertaking, but it is manageable and in order to be a winner one needs to get every part of the innovation game right, not only doing one part perfectly (Jagersma, 2003). But still many organisations fail to realise the benefits of the adopted innovation and this is most likely due to a problem with one certain phase in the innovation process: the implementation. Observers estimate that approximately 50% or more attempts to implement technological and administrative changes fail to succeed (Aiman-Smith & Green, 2002; Baer & Frese, 2003; Repenning & Sterman, 2002). In most cases this is not due to a failure in the innovation itself, it is more often a result of a failure in implementing the innovation. The organisation simple fail to make consisted and committed use of the innovation (Klein & Knight, 2005). The financial giant Morgan Stanley presented a report in 2002 which showed that of the $2.7 trillion that the companies pour into technology each year. More than $500 billion is wasted and mostly because of failure in the implementation phase (Klein & Knight, 2005).

### 3.2 The implementation phase

Researcher says that implementation is the critical gateway that involves all the activities that take place between making an adoption commitment and the time that an innovation either becomes part of the organisational routine, ceases to be new, or is abandoned (Linton, 2002). Therefore it is important to place implementation in the context of the entire innovation process for one to understand. To manage the implementation process is often more difficult than deciding the strategy in the first place but then again if ideas cannot be translated into action they do not serve any purpose. To be able to manage the implementation it is important to refine visions and strategies. Implementation only works when every party understand who does what, when, at what cost. It has to be a clear and shared understanding. Of course it is not enough to only refine the strategy; it also has to be translated into actions so that everyone understands. The best way of doing so is to keep it simple. Implementations are very complex processes and therefore the project gains by keeping the strategies as simple as possible so that everyone can get the chance to understand. (Allio, 2005)

As shown in Figure 3. Tidd et al (2005) describe four activities that is included in the implementation phase: acquiring, executing, launching and sustaining. Acquiring is the activity to obtain necessary knowledge in order to enable the innovation. The second activity is executing the project under conditions of uncertainty, which create a need for trial and error. Furthermore is the activity involving the launch of the innovation and administrating the process of initial adoption. Last but not least is the activity of sustaining the adoption and use in the long term or modifying the original idea. In other words implementation begins when an idea has been adopted and ends when the innovation becomes routine or is abandoned (Linton, 2002).

It is only when implementations have a positive outcome that innovation benefits are gained. Since routinizations is the next step after implementation of an innovation it is not until the implementation is complete that routinizations has occurred. (Linton, 2002)
3.3 Adopting and implementing

In order to survive and flourish in a changing environment both individuals and organisations must adopt and implement innovations (Klein & Knight, 2005). The authors (2005) stress the fact that there is a fundamental difference between adopting and implementing an innovation. Adopting an innovation is the decision to use an innovation. Implementing an innovation is “the transition period during which [individuals] ideally become increasingly skilful, consistent, and committed in their use of an innovation. Implementation is the critical gateway between the decision to adopt the innovation and the routine use of the innovation” (Klein & Sorra, 1996, p. 1057). In order to illustrate what they mean by that quote the authors use the following example. Let’s say that you bought an exercise machine of some kind. When you bought it you adopted it. If you hardly ever use it you have managed to adopt an innovation but you have failed to implement it. If you on the other hand use the machine regularly in a skilled, consistent and committed manner, you’ve managed to implement an innovation. In general an adoption is considered as much easier but also more expensive than the implementation (Klein & Knight, 2005).

Linton (2002) also finds it important to stating the difference between implementation of technical process innovation and change management. His view of this is that since innovation is something new to the members of the organisation it is not the same thing as changing something that already exists.

3.4 Reasons for complications in implementation

The organisation’s climate for innovation implementation can be one reason that creates complications in implementation processes. In this case the authors (Klein & Knight, 2005) refer to the employees’ shared view of the importance of innovation implementation within the organisation. It goes without saying that if an organisation has a positive attitude to innovation, employees usually regard innovation more as a top priority than a distraction from their “real work” (Klein & Knight 2005). The innovation climate is thereby a predictor of innovation use (Holahan, Aronson, Jurkat & Schoorman, 2004; Klein, Conn, & Sorra, 2001).

Further more in order to successfully implement an innovation it is often necessary to invest a lot of time and money. No matter how successful an innovation might be in the future it is most likely that it in the initial phase will result in a drag on performance for the organisation even though it will increase the performance in the long run. There is however a risk that the people involved in the implementation may feel greater pressure to maintain the existing level of performance than to invest in the uncertain and long-term potential of the innovation (Klein & Knight, 2005). When it comes to money the accessibility of financial resources is crucial since everything costs and an innovation implementation is no exception. The money is necessary in order to provide training, user support, to launch and to ease up on the performance standard during the time that the employees learn to use the innovation (Klein & Knight 2005).

Another reason that can complicate the implementation is that organisations are stabilizing forces and through their routines and norms they enhance the individuals’ status quo (Klein & Knight, 2005). Which results in that even though the individuals know that a change would benefit them and the organisation, they often fall in the in what Pfeffer and Sutton (2000) call the knowing – doing gap. That means that the individuals are stuck in the comfortable past.
and fail to do things that they know would improve the performance or the morale of the organisation. This can go so far that the individuals hold on so strongly to the past that they are scared of punishment for making suggestions of bold changes. This results in failure to adopt and of course to implement potentially beneficial innovations.

The managers that are involved in the implementation process and their support of the innovation can also affect the implementation. Without a committed manager the employees are likely to draw the conclusion that the innovation implementation simply is a managerial fancy and if they ignore it, it will go away. (Klein & Knight 2005). As Repenning (2002) warn about, “Managers may be understandably suspicious of the recommendation that, once they choose to adopt an innovation, they support it wholeheartedly irrespective of any reservations concerning lack of appropriateness. To do otherwise, however, insures that the implementation effort will fail” (pp. 124–125). It is also important that the managers has patience. They need to see the innovation implementation as a long-term process and that in order to achieve long-term benefit it needs to take its time (Klein & Knight 2005).

Many innovations are in their initial phase unreliable and not perfectly designed, in particular the technological ones (Klein and Knight, 2005). The success of implementation might therefore also depend on the complexity of the technical innovation, which is not very surprising (Leifer, Mc Dermott, O’Connor, Peters, Rice, Veryzer, 2000). The fact is that the newer the technology, the more likely it is to have bugs and break downs, which often results in frustration (Klein & Knight, 2005). In another study, conducted by Klein and Ralls (1995), which concentrated on reviewing literature on computerized-technology implementation it was acknowledge that 61% of the studies they reviewed documented the negative effect of low technology quality and availability on employee satisfaction and use of the innovation. Gaining the knowledge of the new technology can also be a stress factor for the people who are trying to implement the innovation (Klein & Knight, 2005). In a study done by Aiman-Smith and Green (2002) it was found that innovation complexity, which means to what extent the new technology was more complicated than the one it replaced, was highly negatively correlated to the employees satisfaction and the speed required to become competent users of the innovation. But if the technology is related to already existing competencies it should make the implementation easier (Prahalad & Hamel, 1990).

Who makes the decision to adopt and implement an innovation? This is also something that could influence the implementation. Some think that decision-making should be local and unstructured because implementers have more knowledge then their superiors others think the opposite because local decision-making is counterproductive. (Linton, 2002) Yet, the decision to adopt and implement an innovation is rarely made by the ones who are going to actually use the innovation, so called targeted users, instead the decision is most often made by upper management. Unfortunately targeted users are often comfortable with their present situation and are sceptical to the innovation. Even so they are usually instructed by people in higher places in the hierarchy to use the innovation against their wishes. It is also common among managers that their strategy when it comes to implementing innovation is persuasion and edict, which leave little or no room for users to give their input when adopting and implementing an innovation. (Klein & Knight 2005)

Another reason for an implementation to fail is the organisations implementation policies and practices. This could concern the training it is important that its quality and quantity is satisfactory so the users can be taught properly how to use the innovation. It could also
concern the stipulation of technical assistance to the users and the accessibility, quality and user-friendliness of the technology itself. Yet Klein and Knight claims that no single implementation policy or practice is completely critical to the effectiveness of the implementation, but overall the quality of the policy or practice is usually predictive of the implementations effectiveness (Klein & Knight 2005).

An organisation’s learning orientation can also complicate the implementation process. A positive learning orientation means that the organisation needs to have necessary means and support to improve their skill development, learning and growth. In organisations with a strong learning orientation the employees do not hesitate to participate in experimentation and are willing to take risks since they lack constraint of fear or failure. This is necessary for an organisation that is in an implementation process, since this process rarely is a smooth or a success right away. Bugs, errors and missteps are most likely to occur, but these obstacles can be overcome by a strong learning orientation which enables the employees use the innovation in a way of trial and error (Klein & Knight 2005). To create a shared team learning orientation Edmondson, Bohmer and Pisano (2001) suggests that managers should explain in an enthusiastic and inspiring way why the organisation needs the innovation, they should also encourage the employees to give input and least but not least the managers should emphasize the employees’ importance in the process and that their opinions are vital. This should result in the employees seeing the innovation implementation as an exciting learning opportunity and not as a burden.

Team work and social interaction is also a key issue in successful implementations and therefore it is important to delineate roles and responsibilities (Allio, 2005). This can also disrupt the hierarchy within the organisation, requiring individuals from different levels to work as equals. It may also require that individuals who are used to working single-handedly have to coordinate their work and share information with other colleagues (Klein & Sorra, 1996). In a study concerning an empowerment project between doctors and nurses the authors Adolfsson, Smide, Gregeby, Fernström, and Wikblad (2004) found that even though both parties believed that the project was of benefit for the patients they struggled to step out of their previous roles.

3.5 Project management
Since the project management includes different activities such as determining needs and objectives, manpower needed and budgeting this planning in the initial phase is crucial for the implementation success. As a risk reduction strategy an idea is to divide the implementation into smaller segments. This way of working is positive because small-scale implementation minimizes the adverse effects of implementation failure. (Linton, 2000) The implementation could be divided into three smaller segments or phases as Lindstedt and Burenius (1998) chooses to describe them.

- The first conceptual phase is called “Where are we going?” the red light. This phase symbolises the need to stop and define the project.

- The second conceptual phase is called “How do we get there?” the yellow light. This phase symbolises that one wants to go forward and one has to get ready.
The third conceptual phase is called “Make the trip safe” the green phase. This phase symbolises a safe journey forward and the aim is to through good management reach the projects goal.
4. Methodology

This chapter presents our way to the applied methodology and the procedure.

4.1 Applied methodology

We have felt puzzled about what methodology approach we should use for this exam project. First we were leaning towards using action research, but we later changed our minds since we were not sure if IPEX would be comfortable with us interfering in their work to the extent that is required in this type of research. When we had ruled out action research we started to look into the opportunity to conduct a case study. But we dismissed using a case study as well, since we did not think that we would in four weeks time reach the depth that is required in a case study.

Since we were going to conduct our exam project in a country with a different culture than ours we were not sure of what to expect and felt that we needed a methodology with a free approach and a high level of flexibility. We found this in what Alvesson and Sköldberg (1994) calls ethnography, which is a methodology that instead of focusing on a systematic procedure, encourages the researcher to a free way of conducting research. Ethnography is not considered as a close-knit and in great detail mandatory methodology, it is more of a direction of research that can be shaped in many different ways. Still ethnography has to have three criteria. The first criteria, ethnographical research has to be based on the researcher’s open mind to what is being studied (1994). We feel that an open mind is essential when research is conducted over all and especially when it is conducted in a country with a different culture. The second criteria, it is vital for successful ethnological research that there is an extensive amount of data (1994). Regarding this matter we think that this criteria is fulfilled due to the fact that we were a part of IPEX daily work for four whole weeks collecting data. This also means that we have fulfilled the third criteria, which require personal involvement, flexibility and the opportunity to come close to what is being studied (1994).

4.1.1 Procedure

Before we left for Mozambique a Memorandum of Understanding (MoU) between us and the organisation on the field was conducted and signed by the two parties. In this MoU it was clearly stated that we would report our findings in a business report to IPEX, to Mr Dard at ITC and to Mr Nygren at Mälardalens Högskola. It was also stated that the findings would be included in our academic paper which is a part of our Bachelor degree presentation.

The process of gathering material from the field took place during an intensive period of four weeks. To be able to be a part of IPEX daily work we were situated at their headquarters in Maputo, Mozambique in October and November 2007. In accordance with HSFR:s ethnical rules (1999) all participants were at the first meeting on the field informed about the purpose of the study, that it was voluntarily to participate and that they had the right to interrupt whenever they wanted to. The participants were also informed of the MoU and we were explicit about how they would report their findings and that we despite this would try to keep the level of confidentiality as high as possible.

We have not done a traditional data collection, the process of gathering data can instead be described as commuting between nearness and distance of the organisation studied. The
nearness was accomplished by being a part of their daily work, taking part in different meetings, interviews, conversations etcetera. The distance was conducted by taking a step back and on a regular basis write our observations and reflections in flash reports (see Appendix Flash Reports). These flash reports have also been our foundation for our data collection. Clifford Geertz (1973) claims that the characteristics of an ethnographical study is that the research has been on the field. To emphasize and create a stronger feeling of the fact that we were on the field we have chosen to include personal thoughts and reflections in the data collection.

With consideration to the participants’ confidentiality there will not be a more detailed description of the participants than that they were all working at IPEX in the department TMIC.
5. Data collection

This chapter presents a summary of the background and the situation up until our arrival. The chapter also describes the present situation with some of our spontaneous reflections made on the field.

5.1 Background

As part of the PACCIA/PACT programme, ETDU was asked to provide a new trade information dissemination service to IPEX in Maputo. The service is called marketAlerts and is based on Web-to-SMS technology.

5.2 The implementation up until our arrival

In February 2007 a total of eight staff members at IPEX received training in Maputo from two representatives from ITC. Six staff members are situated at the regional office in Maputo and two at the regional offices in Beira and Nampula. They all had a good experience of the training. During this period IPEX also took the opportunity to organise a kick-off presentation of SMS marketAlerts along with another already planned presentation. The target group at this kick-off presentation was other trade institutions and ministries within Mozambique. In April 2007 they invited potential recipients to the launch of the service, unfortunately not so many from the target group of market alerts attended and most of the attending people were situated in the capital Maputo. Up until the time we arrived the system has had some technical problems, which have complicated the usage of the service. We were told that by the time we would arrive the system would be up and running.

5.3 Present situation

The process of gathering material from the field took place during four weeks. To be able to be a part of IPEX daily work we were situated at their headquarters in Maputo, Mozambique in October and November 2007.

The department responsible for marketAlerts within IPEX is TMIC. TMIC researchers and publicise trade information and business opportunities which they today mediate through newsletter (bulletins) on their website. There is one manager and four staff members working at TMIC in Maputo even though only the manager and two of the staff members are involved in sending the marketAlerts;

- **Manager** – The head of the department
- **Staff member (A)** – Search for trade information and business opportunities using different tools on the Internet
- **Staff member (B)** – IT support

The manager told us that he thinks the service is a good idea but to get an overview of the whole team’s attitude towards the service we started with a meeting. During this meeting they
explained that they understood that the objective of the service is to send information quickly and in real time and to reach more people than for example with e-mail. At this stage we felt that the team only repeated what their manager said and our concern was that the team does not really understand the objective.

5.3.1 Trade Information

Now the process of sending marketAlerts is:

1. The manager instructs A to search for trade information that is “appropriate” to send in a SMS.
2. A finds trade information and then hand it over to the manager to get his approval.
3. B receives the trade information from the manager.
4. B physically send the marketAlerts.

5.3.2 Financial issue

One concern IPEX has is the credit. They said that the credit was not in 2007 years budget and they did not want to run out of the credit they got from Trade at Hand. We were informed that this will be in the budget for 2008 but probably not enough to send SMS to a lot of people every week depending on how many contacts they have and so on. Because of the credit issue it is important for IPEX to be attentive to what type of information the recipients want. We therefore felt that it was important for the division at IPEX to get the potential receivers view of marketAlerts.

5.3.3 Meeting with potential receivers

Our suggestion was to meet some of the potential receivers to ask the some questions about the service. Our impression is that they are not sure where to start, we understand that they on the one hand would like to meet the exporters and “ask” them what kind of information they would like to receive in the SMS before they start using the service. On the other hand the exporters do not know what the service is before they have received a SMS. We told them that we do not really think this is a big problem because when they meet the exporters they can actually inform them about the service. So IPEX scheduled meetings with five potential receivers and because of lack of time the five companies we met were situated in Maputo. Our purpose with the meetings was to find out if the companies would benefit from receiving marketAlerts and in that case what type of trade information that would be interesting for them to receive. At each meeting we were accompanied by an IPEX staff member to help us with the language barriers.

It was valuable to visit the exporters out on the field. But both we and IPEX are not sure that all of them are in the right target group for receiving marketAlerts since they all use e-mail and prefer to do so but some of them also use SMS as a communication channel in their business both within the company and with external business contacts. They all had a positive attitude towards the service and if they were to receive marketAlerts they all want the information in the business opportunities to be as detailed as possible. At one of the meetings we were told that one of the potential recipients attended the launch of marketAlerts that IPEX held in April 2007. But he is confused.
“I attended the launch held in April but after nothing more happened. I have not received a single SMS, what happened?”

He also requested more individual information about the service, his suggestion was to maybe inform about the service via an e-mail or a phone call.

5.3.4 Usage of the service marketAlerts

It is not decided how frequently the marketAlerts will be sent, of course it depends on how often IPEX receives relevant information that is appropriate to send in a SMS. The staff members at IPEX have indicated that the plan is to send marketAlerts at least once a week and more if needed. We stressed the importance of being flexible and send the marketAlerts after incoming information since the aim of marketAlerts is to send trade information in real time.

MarketAlerts has barely been used during our visit. When we together with a staff member sent the first SMS we thought it would be the start of the usage of the service. But we are afraid that it was a misunderstanding. IPEX intention was not to start the usage of the service for real, we felt that the sending of the first sending of the SMS was just to show us how it works, which we already knew and it was more a form of good will from the manager.

Our trials were concluded with mixed results. One example of a less successful trial is when we formulated a message and sent it to a number of recipients. The system indicated that the message had been sent. Nevertheless after contacting the recipients it was discovered that the system had failed to deliver the message. Just to test the system the same message was sent again but this time only to one of the recipients, the result was the same as before namely the system indicated that the message had been sent but the recipient had not received it. (For further reading about the trials of the system see Appendix IPEX Report).

During more of our trials of sending SMS some of the alerts failed to be delivered, the reason for this and the example above is unknown. It is not clear if it is because of the system or if it is because of an incorrect number?

Staff member B is responsible for contacting the potential receivers, e. g. exporters and trade associations, to update their contact information. When we arrived the contact list was still not updated. The problem is that this staff member’s phone is broken and when the phone is fixed she is not allowed to call external calls unless she goes through the switchboard which only has one external line for the entire company. She has raised this problem with her superior without any response. We feel that their attitude is simply “this is the way it is and there is nothing we can do about it”. We do not think that they understand the importance of the contact list.
6. Discussion

This chapter presents our reflection and discussion on the overall innovation climate at the Institute of Export Promotion (IPEX). The chapter also presents a discussion of the potential reasons why marketAlerts has not been implemented in their daily work and suggestions on how to do so.

6.1 Innovation climate

It is stated that the organisation’s innovation climate is important for the staff members’ attitude towards innovation implementations (Klein & Knight, 2005). When it comes to the staff members at IPEX we feel that they are interested in marketAlerts and that they feel preferential that they have been provided with the service. Yet we get the feeling that they see it more as a distraction from their present work than as a priority. From our view we do not think that the implementation of marketAlerts would be a big “distraction” from their work, since marketAlerts does not substitute their old way of mediating trade information, it is just a complement on top of their other communication channels. Neither do we think that it would be a drag on their performance as Klein and Knight (2005) indicate as a possible concern for staff members implementing innovations. Yet we are afraid that the staff members have inveterate working routines and that they have fallen into what Pfeffer and Sutton (2000) calls the knowing-doing gap. However the fact that they are not prepared to make marketAlerts a priority indicates that IPEX lacks a positive innovation climate (Klein and Knight 2005). Since the innovation climate is a predictor of innovation use (Holahan, et al. 2004; Klein, et al. 2001) this is very disturbing and we think that this is a big part in why IPEX has not been able to successfully implement marketAlerts.

6.2 Manager

Besides the lack of positive innovation climate, the manager has played a big role in the implementation (Klein & Knight, 2005). The manager has over and over again told us about how excited he is about marketAlerts and how much he wants to start using it on a regular basis, which indicates commitment. However we do not feel that this is the message he sends out to his staff members, since the manager has not yet done much to try and make marketAlerts a part of their daily work. Given that the manager’s support and dedication to innovation is crucial to the success of the implementation (Klein & Knight, 2005; Repenning 2002), we feel safe to say that he needs to revise his attitude towards marketAlerts. If he decides to wholeheartedly dedicate himself to implement marketAlerts he needs to see it as a long-term process in order to achieve long-term benefit (Klein & Knight 2005).

6.3 Technology

Another factor that could have affected the implementation is technical problems. IPEX had technical issues before our arrival and during our trials we also found that the system unfortunately still had problems. This should have been expected since it, for them, was a new technology (Klein & Knight, 2005; Leifer, et al. 2000). Problems like these can often result in
frustration (2005) and studies have also shown that it can affect the employee’s satisfaction and the use of the innovation (Klein & Ralls 1995). However it was surprising to us that the employees showed no signs of frustration. Just like the case with the broken phone it felt like they were indifferent. Therefore we do not think that the technical issues affected the satisfaction. Yet it is clear that it has had an effect on the use of the innovation. We got the impression that the team uses the technical problems of the system as an excuse for not using it. The reason for this might be because they were not a part of the decision making process. We do not know for fact whose decision it was to adopt the service in the first place but considering the hierarchal culture we experienced in Mozambique we feel that it is safe to say that the employees were not a part of the decision making. Issues like this are also raised in several studies (Linton, 2002; Klein & Knight, 2005).

6.4 Financial issues
Implementation also requires financial resources (Klein & Knight, 2005) and this is not an exception. The big difference here is that the implementation cost in this matter does not lie on IPEX since ITC provides the service, training and initial credits. IPEX financial issues are the credits, which they use as another excuse for not using the service. We were informed that one of the reasons for not using the service was that they did not want to run out of the credits that ITC had provided them with for the year 2007. But we do not find this as an acceptable excuse, since our visit was in the fourth quartile of the year 2007 and the credits left was more than enough to start sending marketAlerts regularly throughout the year. We know that the credits are included in the budget for the year 2008, still they were concerned that this would not be enough to send marketAlerts once a week as they plan. Therefore we ask ourselves if the plan is to send marketAlerts at least once a week is thought through and defined as a goal.

6.5 Policies
Regarding the policies and practices that can include training are mentioned by Klein and Knight (2005), we have not found any records of an established implementation policy regarding marketAlerts on top of the received training. This is not crucial, but policy of high quality does influence the effectiveness of the implementation (2005). We think that the lack of policy is one of the reasons why the implementation only has been adopted and not implemented. From our view we think they should have established a policy and planned the implementation with consideration to for example the different implementation phases acquiring, executing, launching and sustaining (Tidd et al. 2005).

6.5.1 Acquire
Before we arrived in Mozambique we speculated that they had not completed the acquiring phase. Since the training they received was in February and still in December they had not started to use the service regularly. At first we thought that this could be because they might have forgotten how to use marketAlerts. But we later ruled this out since this was not the case, they all know how to use marketAlerts. So in that sense they have completed the acquiring phase. In the theory (Aiman-Smith & Green, 2002) it is stated that innovation complexity plays a big role in how fast the staff members can become competent users of the
innovation. Since marketAlerts is not very complex to use we believe that that is the reason why IPEX managed to fulfil the acquiring phase.

6.5.2 Execute
The purpose with the executing phase is to get ready for the next step: the launch (Tidd et al., 2005). IPEX should have planned more carefully for this phase, from our point of view they skipped this phase completely. They should have used this phase as a preparing, and trial and error period, which is suggested by both Tidd et al. (2005) and Klein and Knight (2005). We feel that the staff members should have thought about how the service would influence their individual work and taken own initiatives on how they could contribute to a smooth implementation.

As it is described in the data collection only the manager and two staff members are directly involved in the use of the service. The manager should encourage the employees to give input and stress the importance of their involvement, which is a key factor in successful implementations (Edmondson et al, 2001). In order to send marketAlerts IPEX has to have a correct and complete contact list with mobile numbers. Since staff member A is responsible of updating the contact list, A should have taken own initiatives and started to do so, instead this was pointed by the manager after our arrival. However the problems with the phone were experienced as a big issue for this activity. Since the manager gave A the task to update the contact list we think that the manager should have taken actions to solve this problem as soon as A pointed it out. Since the problem with the phone now is solved, A should as soon as possible start updating the contact list. When it comes to staff member B, who is responsible for physically sending marketAlerts, we think that B should have on own initiative started to conduct trials of the system directly after the training. If this would have been done the problems could hopefully have been solved right away. Instead the trials of the system were conducted on our initiative during our visit. We think that that B should continue with the trials of the system and in case of new errors it is important that B informs the provider ITC of the problem so that the matter can be looked into.

We are concerned that the executing phase was overlooked due to a combination of hierarchy and lack of interest. First of all we got the impression that they are not encouraged by the manager to take own initiatives. Second of all we feel that their attitude “this is the way it is and there is nothing we can do about it” unfortunately indicates a lack of interest.

6.5.3 Launch
When it comes to the launch IPEX first had a kick off the same week as the training and shortly after launched the service. We can understand that they had the kick off since they were eager to present the innovation that they were adopting. But it would have been better if this would have been considered as a presentation of the service instead of a kick off. When it comes to the launch this was too soon, since they had overlooked the executing phase and could not deliver what they launched. From the meeting with potential recipients it is obvious that launching too soon can cause confusion for people involved. This was clearly expressed at one of the meetings with the potential recipients:

“I attended the launch held in April but after nothing more happened. I have not received a single SMS, what happened?”
We feel that it is of great importance that IPEX launch the service again when they have completed the executing phase and are ready to start sending marketAlerts. Besides the new launch IPEX should take every opportunity they get and use every communication channel available to promote the service. It is also important that other departments within IPEX also takes the opportunity to inform about marketAlerts. We have therefore together with IPEX redesigned the information sheet Trade at Hand already uses when promoting marketAlerts and made it more specific for IPEX (see Appendix A). The information sheet has two objectives. The first one is to give quick and simple information about the service. The second objective is to gather the interested receivers’ information details, which will facilitate the update of the contact list.

6.5.4 Sustain

The next step according to Tidd et al. (2005) would be to sustain the use of the innovation. Since IPEX has only completed the acquiring phase, failed to complete the executing phase and the launch we do not believe that they are equipped to take the next step which is to sustain the adoption.

According to Linton (2002) an implementation does not end until the innovation has become a routine. So when IPEX is ready to start the sustaining the adoption we strongly advice them to look over their use of marketAlerts and make it in to a routine of their daily work. In a study it is stated that implementation can disrupt the hierarchy (Klein & Sorra, 1996). We feel that hierarchy inhibits their use of marketAlerts and would benefit from being disturbed. Other studies also points out that implementation often requires a shift in roles, routines and norms (1996) and that it is important for a successful implementation to delineate responsibility (Allio, 2005). When it comes to the process of sending marketAlerts the manager has all the responsibility. Our concern is that this makes the process more time-consuming than it has to be. We think that the process would be more effective if the manager takes a step back and delegates the work to his staff members, this can be conducted in different levels.

1. The manager keeps instructing A to search for trade information (step 1) and let A have the responsibility to decide what is appropriate information and directly hand this over to B. By doing so both step two (A finds trade information and then hand it over to the manager to get his approval) and step three (B receives the trade information from the manager) is excluded.

2. The manager divides the operational responsibility between A and B. Which means that A would take own initiatives to search for appropriate trade information, but continues to let the manager decide whether the information is appropriate or not and let the manager hand it over to B. By doing so step one is excluded.

3. The manager appoints staff member A to have the total control of the entire process. This would mean that this staff member would be responsible of taking the initiative to both search and send marketAlerts.

From our point of view we think that the third level would be the ideal level of delegating, since it shortens the process considerably. But with consideration to the strong hierarchy we experienced in both Mozambique’s society and business world, we do not think that TMIC is
ready for this level yet. Mostly because the staff members are not use to having so much responsibility and taking so much initiative on their own which is required at this level. When it comes to the first level of delegation the manager will lose the control over the information being sent in marketAlerts, which creates a risk that financial credits will go to waste in irrelevant marketAlerts. Therefore we think that the second level would be suitable for IPEX, since this level entail that the manager encourages own initiative and give the operational responsibility to A, but keep having an overview of the information being sent. This level also means that neither A nor B have to take full responsibility of the operational work. Yet this is risky since if they are both absent this would mean that no marketAlerts would be sent. Therefore we suggest that there always is a backup and since everyone in the team took part in the training of marketAlerts anyone should be able to function as a backup.

Furthermore, to sustain the use of the innovation IPEX should conduct follow ups of the use of marketAlerts. One of the reasons is of course the financial perspective but it is also important to do follow ups to make the use of the service as effective as possible. We think that IPEX should continue to have an open dialog with the recipients.
This chapter presents our conclusion of why marketAlerts has not been implemented in the Institute of Export Promotion’s (IPEX) daily work and based on the suggestions discussed in previous chapter a plan of how IPEX should work from now on to implement the tool is also presented.

Many organisations fail to realise the benefits of adopting an innovation. Which the theory has shown is most likely due to a problem with one certain phase in the innovation process: the implementation. It is crucial to not only guide how to adopt an innovation but also how the innovation should be implemented and sustained. Our purpose was to, by a practical example illustrate, the risks and problems one can come across in an implementation and the consequences of this. The first research question is: Why has marketAlerts failed to be implemented in Mozambique? Our conclusion is that IPEX has managed to adopt marketAlerts but has failed to implement it in their daily work mainly due to the fact that they only completed the acquiring phase. The failure of completing the remaining phases is due to a combination of hierarchy and lack of interest. Because of this no routines have been established and therefore the service of sending trade information in real time is not working. In order for IPEX to make the best use of marketAlerts we believe that they have to go back and start from the executing phase and implement the service once again. Since the purpose also was to give suggestion on how it is possible to resume an implementation process when the process once has failed, we have created a possible plan for IPEX to do so. The plan is based on theories about project management by Lindstedt and Burenius (1998).

First phase – the red light

IPEX has to start with defining all the interested parties and make sure that the roles are clear. The Interested parties are everyone that is affected by the project in different ways. IPEX should think through and establish who they are and what needs and expectations they have. Important ones in this project are;

- The exporters and Trade associations (The recipients)
- The staff members involved in marketAlerts (The team)
- ITC (The provider)

They should also continue to listen to the recipient’s opinion of the marketAlerts so that the messages can be developed to meet their expectations. In the initials stage of a project there are often uncertainties about the aim. Therefore IPEX should define the project through goals, deliveries and delimitations.

The second phase – yellow light

It is important for IPEX to create a policy for how the marketAlerts will be able to carry out. In order to reach the goal they should start with getting an overview of how the whole project will be carried through before concentrating on the details. By doing so it is easier to avoid being misled. A god idea is to create milestones which describes in what order important activities should happen for example;

- Make sure that the contact list is updated
- Make sure that the technical issues are solved
The third phase – green light

The manager should together with the staff members involved establish routines for the use of marketAlerts
8. References


