Market knowledge in the internationalization process of MNEs

A case study of Sandvik Group's internationalization into Ghana

Master Thesis

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Abstract

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Research questions:

1. What role does market knowledge play in international process of the large multinational companies (MNEs) in developing countries like Ghana?
2. What are the major challenges and risks associated with a foreign market entry mode for large multinational companies (MNEs) in developing countries like Ghana?

Purpose of the study:

Purpose of this study is to scrutinize the role of market knowledge in the internationalization process of large multinational enterprises (MNE) and investigate the challenges and impediments that take place when expanding to frontier markets.

Methodology:

The data collecting for this research was semi-structured interviews and information from the company website, annual reports and other sources of data has been used. This data was then analyzed supported by a theoretical framework focusing internationalization, knowledge and business networks.

Conclusion:

Market knowledge is playing an important and inevitable role in the internationalization process of (MNEs), and firms have to acquire adequate market knowledge as well as make use of the Existing knowledge which already exists in the organization to overcome the impediments of internationalization.

Key words: Internationalization, Market knowledge, foreign market entry mode, Risk & impediments, Ghana, Sandvik, MNEs
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1 Introduction

The introduction section includes a short description of the research and purpose is stated in this study. An in-depth description of the case company is detailed in chapter 4 and will be completed with the structure of the entire project. Relevance of market knowledge in internationalization process of a firm will be discussed due to the presence of globalization which is helping shape the international market.

Involving in internationalization of business activities across national borders is typical of Multinational Enterprises (MNEs) since decades (Fan and Phan, 2007). The growing interest in internationalization by innovative firms and especially MNEs globally has created an avenue to understand the factors that underline MNEs ability to gain competitive advantage in the new market. According to Monster & Pettit (2002) there are five main reasons for companies to globalize which are Pursuit of growth, cost reduction, market responsiveness, Globalization of customers and competitive response. Market knowledge has become one of the reasons behind MNEs success on the international level and it is also considered a major determinant to internationalization process of firms (Casillas et al, 2009). Internationalization is vital for MNEs growth (Luostariinen, 1980) and for financial superiority for firms (Lu and Beamish, 2001). Hedman and Kalling (2002 p.95) argue that, knowledge is required as the vehicle by which firms and business models evolve. Companies are at a stage where they are present physically on the foreign market through sales agents, subsidiaries and more so having production abroad. This requires adequate knowledge on the local market which could also be both transfer knowledge from abroad commitment to resources to the new market gives the firm competitive advantage to its competitors. Knowledge has become fundamental prior to internationalization and also moving into the local market due to the uncertainties and risk (Casillas, et al, 2009). Today’s internationalization process is required firms to be an insider or an outsider. To be an outsider is to operate without a network which means having inadequate knowledge about the new market (Johansson and Vahlne, 2009). MNEs require different forms of knowledge characteristics both from local market and international market for the success of the business. It is therefore important for MNEs to effectively institute the right knowledge transfer mechanisms at the new market for growth. Firms incrementally expansion into the new market to acquire new experience and lack of knowledge about the
new market constitute failure. Thus, Forsgren (1992) explained that knowledge can only be acquired through experience from abroad. Gaining knowledge on the new market creates gradual expansion through series of investment due to reduce risks of uncertainties at the local market.

Historically, internationalization is a strategy for large scale firms to go abroad but recently, there are threats by small and medium enterprises (SMEs) thereby competing with large firms on the international market. MNEs according to Dunning (1988) are where companies undertake productive or value-adding activities outside their home countries. The common assumption is that, firms improve their profit by expanding (Mintzberg, 1989). But one has to understand that expansion alone into the new market does not necessarily indicate strong commitment, instead experience on the market necessitates commitment (Johanson & Vahlne, 2009). These also correspond to SMEs definition which is defined as “the process of increasing involvement in international operations” (Welch & Luostariinen, 1993, P. 156). SMEs differ from MNEs because of its limited resources and competences. This is in relation to the small size of SMEs compared to MNEs. For instance, Ruzzier et al (2006) agrees that scare recourses by SMEs constitute a vital barrier to market abroad and expansion but both SMEs and MNEs both require knowledge on the local market. It is also argued that, knowledge in the internationalization process is a competitive tool for international business for both small and medium enterprises as well as Multinationals firms (Petersen & Sharma, 2003). Research shows that internationalization process can be challenging if there is inadequate knowledge and experience from the market abroad. This is true in the case of frontier markets with potential investments but less developed as compared to developed markets and emerging markets.

“The African continent is home to many of the world’s biggest opportunities. But the trick is deciding where and how to seize them” (Chirango et al., 2011,p.117). This quote shows that many small and bigger companies from the developed and developing economies encounters dilemma when deciding on which African market to invest. But according to the December 2011 issue, the economist stressed on the fact that, the African continent is going to play a vital role in the economic growth of the world. The continent of Africa is still poor with regards to economic development but some few African countries are endow with natural resources which makes them developing countries. For instance, Ghana, Nigeria Mozambique, Angola and Rwanda have strong GDP growth during the economic crisis in the western world (The Economics, 2011) and from local market (Phatic, Bhagat and Kashlak,
2005). This makes it vital for MNEs to invest into new economies like Ghana which is our focus for this study. Though one can say there are several attempts to review literature on internationalization process of firms, a commonly accepted meaning is hard to find. Early internationalization models divided it into stages and network theories (behavior theories) and those coming from economic concepts (Saarenketo et al, 2004).

1.2 Problem statement
Most existing research into firms expansion concentrate on developed and emerging markets neglecting market knowledge in the least developed markets, using Ghana as a member of the frontier market (world economic outlook, 2009) For example, researchers like Lall (1983) and Wells (1983), focused on “Third world multinational” from emerging markets like the Brazil, Russia, India, China and South Africa (BRICS) economies while little has been researched on frontier markets which includes Ghana. This is supported by Forsgren (2002) who showed that transfer market knowledge in the foreign markets is still limited in international business. This study is therefore intended to examine the role of market knowledge in the internationalization process of firms in the frontier markets like Ghana and also to show the risks and challenges which are involved. For MNEs like Sandvik, lack of knowledge about Ghana market may be a hindrance for the market entry. This may be challenge for Sandvik if the right market knowledge is not acquired. This is because gaining tacit knowledge is about being active in the new environment.

1.3 Purpose and Research Questions
The inadequate market knowledge on MNEs internationalization process in the context of emerging markets is discussed in this study. A lot of study has been done focusing on MNEs internationalizing into already mature markets but this study looks at the different calls for study into emerging markets for which Ghana is no exception. An example of such calls by Meyer and Peng (2005) requesting for more studies into firms internationalizing into emerging markets Meyer and Gelbuda (2006) and also Yamakawa et al. (2008) on company’s emerging from newly created markets. In summary, the purpose of this study is to investigate the role of market knowledge in the internationalization process of multi-national Enterprises as well as the challenges and risks associated with the process the research purpose will be reached by discussing the following research questions:

What role does market knowledge play on internationalization process of large multinational companies (MNEs) in developing countries like Ghana?
What are the major Challenges and risks associated with a foreign market entry for large multinational companies (MNEs) in developing countries like Ghana?

1.4 The Ghana’s Economy

During the last decade, Ghana has achieved a successful macroeconomic reformations and a stabilize economy which began in 1983. The then government managed to achieve a stabilized budget balance to help boost the economy. Ghana is rich in resources such as gold, timber, cocoa, diamond, bauxite, manganese as a source of foreign trade. However, the discovery of oil in 2007 and the subsequent production in 2010 saw the economy in good shape attracting more investors due to the smooth political transition (World Bank report, 2011). There is increase in foreign direct investment and a decrease in poverty, and GDP has grown from 4.2% in 2001 to 7.3% in 2008 though the crisis in 2009 led to decrease in 2009. The World Bank in 2009 predicted a growth rate of 5.2% over the decade. With oil production inflation rate is stable to a single digit which is an indicator to attract investors (World Bank, 2009). The country established the Ghana Natural Gas Company to address the issue of power shortages where offshore Jubilee field possess crude oil and an amount of gas to address the problem. African development bank or the organization for Economic Co-operation and Development Africa Economic outlook reports the agriculture sector grew 4.8% and it accounted for a third of the GDP end employs 55%. This growth which has attracted many investors in the telecommunication, construction, refinery, mining and agriculture industries are due to stable political and legal institutions together with stable macro economy, good business environment such as education standards and infrastructure facilities and the strategies and operational structures of private sectors. The objective of the new government policy is to help Ghana attain middle income country within a decade. To achieve this, the government is strengthening the agriculture industry by given them incentives to farmers in the form of credits and spraying the cocoa farms. These achievements are made possible by the stable economy (World Bank report, 2011).
1.5 Disposition
This study is consist of six chapters starting from the introduction chapter then followed by the literature review of internationalization process which leads to the theoretical framework which is used to analyze Sandvik internationalization process. Two research questions are created. The third chapter designed to describe the methods. The fourth chapter gives information about the company background which is the focus of this thesis. The fifth chapter analyses the empirical data and finally the last chapter answers the research questions and offers some recommendations to Sandvik internationalization process and suggestions for improvement. Our preceding chapter discusses the theoretical framework for this thesis.
2 Theoretical Framework

The chapter elaborates on the theoretical background to the concept of internationalization process and highlights on the available theories and models necessary for the case company. It also presents the two main theories on internationalization of MNEs to be able to make it as clear as possible. The other theory that will be discussed is the network approach to internationalization and finally the development of the theoretical framework for the thesis. These models have been chosen because the case company was used during the development of the internationalization process models and it has been the main theory which other internationalization process theories has evolve.

2.1 Theoretical perspectives on internationalization

Internationalization as a concept is the process by which companies expand to foreign markets or the process where companies across national borders in pursuit of international business (Schweitzer et al., 2010) and the definition by Ruzzier et al. (2006,p.447) put it as "a synonym for geographical expansion of economic activities over national borders". Thus the internationalization as a concept is closely linked to globalization where a firm extends their products to the foreign markets (Nik, 2006). Johansson and Vahlne (1990) emphasized that, “internationalization of firms is a process in which firms gradually increase their international activities in the foreign market”. Strategically, companies expand internationally for many reasons; changes in technology and transport movement, significant incentives and opportunities for companies, market expansion and effective and efficient usage of resources (Knight, 2001), and changes in international laws, harmonization of business practice, combined with the intellectual property rights protection with regards to internationalization This process was seen much in the 1920’s and during the 1970’s globalization emerged speeding up internationalization of many companies (Gjellerup, 2000; Ruzzier, et al, 2006). One important issue that companies need to deal with is in regards to internationalization process are “what kind of market to enter?” and “how to enter the market they have chosen?” (Johansson et al., 2002). Answering this question will help to define the kind of market to enter, which helps to frontier market which is discuss in the next section.
2.2 Conceptual introduction to Frontier Markets

We live in the world where markets like Vietnam and markets in some part of Africa are not considered off-limits to corporate investors. Other countries like Turkey, Chile and Malaysia have become familiar to tourists that they don’t have to think before booking for vacation destinations (Dow Jones Indexes, 2012). At the same time, the uncertainties in the financial world have made it possible for business in the world to focus on increase relationship among different markets and companies globally (Johanson, Blomstermo & Pahlberg, 2002). These have led to the different classifications of country markets into developed, emerging, and frontier markets. Developed markets are most accessible and more supportive of foreign investors because of the high degree of consistency within these markets. Emerging markets have less accessibility compared to developed markets but shows some degree of openness and the frontier markets. To strengthen their market position Vietnam and the United Arab Emirates which forms part of frontier market have reduced the entry barriers to foreign investors by lowering foreign ownership limits on equity ownership. Frontier market will be discussed more due to its relevance to this thesis.

The economic term ‘frontier markets’ was first coined by IFC’s Farida Khambata in 1992 to describe a subset of a very small new emerging market (NEM) with low market capitalization and less liquidity compared to developed markets and other emerging markets. According to world economic prospect 2011 reports, frontier markets represents one of the fasters growing economies in terms of average annual gross domestic product (GDP) growth forecast in 2011 which was faster than countries like China and India in the emerging markets grouping. The forecast indicated the average annual GDP growth for Qatar 16%, Ghana 13%, Mongolia 12%, Eritrea 10% and Ethiopia 9% respectively. The source also indicated the developed economies declined in 2009 by 3.5%, the developing economies reduced their GDP growth rate by 2.4% whiles the least developed countries reduced their growth rate to only 4.0% in 2009. Frontier markets represent 22% of the world’s markets and the world’s GDP of 7%, but 3% of the world’s market capitalization as compared to that of emerging markets with 63% of the world’s population and 42% of the world’s GDP and 42% of the world’s market capitalization. Frontier markets are characterized by lower liquidity and turnover, restrictions in investments and poor trading infrastructures.
Even though many frontier markets have improved enormously in economic and market reforms, there are still more working ahead which need to be done. One example is Argentina which enacted capital control in 2008 for which investors can only access the market through depository receipts. The capital control made Argentina to be demoted in 2009 from emerging market to frontier market (World Economic Outlook, 2010). To make these markets accessible there is the need for firms to coordinate resources in the form of business network which is discussed later in this chapter.

2.3 Overview of Internationalization

Different studies regarding models and theories that describe the way firms go abroad has been established since the 1950s and the 1960s (Kaar, 2010). In the past decades, internationalization theories have changed and these theories always cover the shortcoming of previous models. This is because of the understanding of internationalization of SMEs and MNEs in the past years. On the other hand, the significant development of technology in the past decades has also influence the understanding of internationalization process. The growing of knowledge intensive firms and ICT as well as the Biotech firms has made it possible to understand internationalization. A lot of the early studies were drawn from the economic point of view which concentrated on explaining the behavior of multinational companies (MNCs) (Ruzzier et al., 2010). An important point to note is the main difference between internationalization process within small and medium enterprises (SMEs) and the MNEs is that of the resources availability. According to Bell (1997), MNEs has a lot of financial resources which is favorable when entering the foreign market. This is because of their acquisitions of foreign assets in the firm to position themselves through acquisitions, these acts as a mode of entry for the firm (Johansson & Vahlne, 2009).

Different approaches to internationalization process of firms includes; resource Based View (RBV), Knowledge Based View (KBV), Born Global, International New Ventures (NIVs) and the Innovative Model (I-Model). The RBV of internationalization regard firms as a bundle of heterogeneous resources rather than focusing on products and markets. The emergence of KBV also considered knowledge as important resources to firms (McNaughton & Bell, 2009). The innovation – related models which were derived from Roger (1962, cited in Ruzzier, Hisrich & Antoncic, 2006) and adopted the process by which subsequent stages of firm internationalization are considered an innovation to
firms (Ruzzier, Hisrich & Antoncic, 2006). These models of internationalization focus on export of small and medium enterprise to explain internationalization process of an innovative related perspective. Both innovations related model and the U-model could be seen as behavioral oriented and concentrates on incremental and sequential way of internationalization process. The I-Model and the U-Model also concentrate of knowledge of firms especially “experiential knowledge”, risks and uncertainty about resource commitment to foreign market. On the other way round, Johansson and Vahlne (1977) stressed on Penrose’s knowledge management as a facilitator to internationalization while Oviatt, Shane & McDougall’s (1994) focused on her entrepreneurial knowledge concept. Brennan and Garvey (2009), was also in agreement with Prahathan (2005) that, the different knowledge is not a barrier to internationalization of born global as indicated in the I-Model and the U-Model but rather it speed up the process.

2.3.1 The Uppsala Internationalization Model

The Uppsala model also called IP model was developed at Uppsala University by a group of Swedish scholars in the 1960s whiles studying the pattern of some Swedish firms’ internationalization. Prior to that not much studies were done on the subject in question but due to some changes in the market situation and the increasing presence of firms in Europe triggered the research interest by the researchers on the topic. The idea behind the research was to ascertain if there was any difference for firms to act in a single market than operating in different or multiple markets (Johanson et al., 2009). The Internationalization process model was seen as a stage model which suggests company’s internationalization through incremental learning (Johansson and Vahlne, 1977, 1990). The IP model sees internationalization as a process of increasing the accumulation of knowledge in the foreign market. This happens within the confines of international business relationships with suppliers, distribution, partners and foreign customers (Blomstermo et al., 2004). The change aspect has to do with commitment to decision and current activities to foreign market while the state aspect represents market knowledge and market commitment. A unique feature or assumption is that firm internationalizes by entering new market close to domestic market, this is termed “Psychic distance” where they gain enough knowledge and experience. Psychic distance becomes a measure of how a particular foreign market is relative to the domestic market, and it consist of determinants such as culture, commercial law, political system, language and
the level of development. The psychic distance in two markets prevents difficult to enter a specific market (Johanson et al., 2002). Psychic distance is a measure of how a market is relative to market at home and these include determinants such as laws, languages, culture, and political system. The psychic distance between two markets hinders the free flow of market knowledge and measures how difficult it is to enter a specific market (Johansson et al., 2002).

To explain the dynamic mechanism of the internationalization process, a distinction was made between the state aspect and the change aspects on internationalization. The state aspect which is the “market knowledge” and “market commitment”, the change aspect constitutes commitment decisions and current activities (Johansson and Vahlne, 1977, 1990). The concept of market commitment was associated with the amount of resources and the extent of commitment involved. Commitment here refers to investment made and it can be tangible such as in property or machines, and it can also be intangible resources in the form of agreeing to commit to a relationship that is significant to the operation (Figuera-de Lemos et al., 2010). It is willingness to commit resources and time in order to develop the relationship. Investment can be on international business relationship which is not easy to recover (Johansson and Lindbergh, 2010), and this means high level of resource commitment. The process of commitment leads to trust which is more resource and time consuming (Figuera-de Lemos et al., 2010)

Figure 1: Uppsala model of internationalization process (Johansson and Vahlne, 1990)
The original model assumed that learning by experience leads to a more differentiated view of foreign markets activities. The mechanism outlined two types of knowledge; “objective knowledge” and “experiential knowledge” which can only be gained through personal experience and market-specific knowledge. It is through the activities of the firm abroad and the interactions between foreign customers, suppliers and distributors that the firm develops experiential knowledge because the firm supplier’s lessons learned from previous operations to future activities (Blomstermo et al., 2004). One type of experiential knowledge which is vital to internationalization firm is the “market-specific knowledge” (Eriksson et al., 1997). The market-specific knowledge includes knowing the customer, market situations and competitors in a specific market environment and not forgetting the government institutions in that specific country. Such knowledge is developed through the interactions with specific customers, suppliers and distributors. Another type of experiential knowledge vital to internationalization process of firm is the “international knowledge”. This is the accumulated stock of experiential knowledge developed from the interactions in the foreign market. International knowledge is not specific to a particular location or business relationships unlike market specific knowledge (Chetty, Erikson & Lindbergh 2006, Eriksson et al., 1997), thus experiential knowledge is developing knowledge about the market abroad which is experienced in the foreign market operation because it reduces the risk of uncertainty about going abroad and it encourages resource commitment (Blomstermo et al., 2004). It is also assumed to have reduced the uncertainty of the market situation (Johansson and Vahlne, 1990). This helps managers to perform better on their international assignments because of the knowledge accumulation in the foreign market (Stoian, Rialp and Rialp, 2011).

2.3.2 Business Network

Håkansson and Snehota (1995) developed an approach to network where they viewed relationship in a broader perspective in the network structure. Their framework concentrated on connectedness of the relationship among companies about how they can coordinate their activities and resources which is possible to affect other parties in the relationship. They conceptualized their framework to analyze business activities links, resource ties and actor bonds (Håkansson and Snehota 1995). The exchanges in the business, a relationship which is connected to all companies is also captured by Mattson (2002) in the activity-Resource-Actor link (ARA) model which emphasis on the “complex connections between activities coordinated and resource combinations and the subsequent impact on the actors’ structure” (Mattsson, 2002, p.169). A network comprises of different enterprises or individuals who are
linked up through relationship. It consists of different actors as well as customers, suppliers, clients, subcontractors and competitors in a firm (Chen and Chen 1998).

The business connectivity creates network which offers a customer the ability to build a relationship with the company, at the same time there is the possible relationships between suppliers which affect the companies and its customers. The network approach to business emphasized that any business activity is interdependent with other business activities; this is a common feature of Hansson et al., 2009. Analyzing a firm using network perspective extends the relationships into different networks without limits. Every firm has its own network but these networks are interconnected and this is not limited to a particular market, business or industry (Johansson et al., 2002). By using the network perspective, we distinguish between different boundaries and different markets segments which are for example relationships between actors within a market, market boundaries, actors outside the market, relationship across the market boundaries. Some actors in the market can share common laws and regulations, languages and business culture that is different from those actors outside the market. These similarities and differences explain the necessity for different theories and models in explaining the internationalization process of firms and they also describe how firms select a particular foreign market and the means to enter. Our next sections will overview the significance of the chosen theories for the study.

2.3.3 The Network Approach to Internationalization

The network internationalization process approach assumed that companies within the network forms an important component to the achievement of its objectives. The IP model stressed on decision and planning to enter new market and the entry modes while the network talks about the actual process of market entry and being a member in the network (Salmi 2000). In the network perspective the market is seen as a social system and industrial relationship among family, competitors, suppliers, customers and friends. Under the network, Internationalization is created by becoming a member in the network and committing resources in those networks in different countries (Johansson and Mattson, 1988). Besides, the firm can have less physical assets in the domestic country but still operate efficiently in the international network (Björkman &Forsgren, 2000). The firm can also gain experiential knowledge without going through the same process as other firms in the network experiences (Erickson et al., 1998). Growth in business develop incrementally in size due to changes and adaptations, however when favorable situations are not adequate to engineer sustainability, companies tends to consider building relationships either through already existing network or
tends to enter new network. The idea behind the model is gradual learning in order to develop market knowledge through the interaction within the networks (Ruzzier, 2006). This is in correspondence to the idea behind the Uppsala Model, but the only difference from the network model is the interplay between knowledge, uncertainty and commitment in building relationships rather than countries.

“Network” can be seen as a set of connected actors (Cooper et al 1997, p 6). It consists of firms and the relationship they create among them, and can also be built on different levels; be it organizational level, individual and international depending on the kind of relationships and resources available. According to Johansson & Vahlne (2003, p.92) “business network” defines as a set of interconnected business relationships which build and conceptualized by collective actors. Network relationship is time and resource consuming because the different actors have their own interest, strategies and norms. Thus, they argued that companies cannot understand the foreign county network market because every relationship is important and learning through the structure of interaction helps the different actors’ gradual learning process within the networks and the interaction helps deepens their market knowledge. Johansson and Mattson (1993) established four stages of the internationalization due to the interconnection between firms-to-firm and firm-to–network.

2.3.4 The Establishment Chain
The question as to which market to enter is answered by the establishment chain which explains the step by step process in the search for market knowledge.

The IP model explains that firms are uncertain about investing in international market. This is because of adequate knowledge about the foreign market and this knowledge can only be minimized by acquiring market knowledge which can be gained through experiential knowledge. The lack of resources and knowledge to internationalization was the main hindrance and they can be minimized through incremental decision about the foreign market. Johansson and Vahlne (2009) explaining that lack of knowledge and the importance of knowledge acquisition are vital to internationalization and that knowledge gained on the market helps to minimize the risks of foreign market investment. Firms gain confidence when they operate on home market before entering the foreign market. The establishment chain begins with sporadic sales when the firm starts to learn about the market, this helps to reduce the uncertainty in the specific market. As a result of that the firm increases the commitment of resources given that there is less risk at the initial findings. The next step is to look for agent,
then open a sales office and finally get into manufacturing units in the market (Johanson et al., 2002)

Figure 2: The establishment chain  source: own adaptation

2.4 The impediments on Internationalization

The IP model concentrates on gradual acquisition and integration when internationalizing to foreign market, it also indicate the use of knowledge which is lacking and it becomes an impediment in developing international market (Johansson & Weidersheim-Paul, 1975, Johansson and Vahlne, 1977, 1990). The impediments can be seen from two different types of knowledge when internationalizing; **market-specific knowledge** and **internationalization knowledge**. Internationalization knowledge has to do with routines applicable in different market and this is only gained through experiential learning. Market specific knowledge can be objective knowledge and general knowledge. The lack of market specific knowledge becomes a disadvantage for firms entering new market compared to actors already competing in the foreign market. In this case the firm has to offer a unique product to customers to be able to stay in the market; successful international business entails building a good relationship both with domestic customers and customers abroad but dealing with people in the business world always involve some difficulties which must be solved in order to be effective and successful. The relationship must also ensure that customers are satisfied with the product offered; the culture of the specific country can also be an impediment if there is lack of knowledge about the culture of the specific country which Johansson and Vahlne (2003) described as having relation-specific Psychic distance.

2.4.1 Market specific impediments

Developing a successful business is to make a relationship-specific psychic distance in effective manner which matters to both customers in domestic market or in the foreign market. Going abroad will have some immediate impact and sometimes more difficult to
understand. To go abroad, the firm must have a deeper knowledge about the different actors involved in the network to create opportunities and to know the risks associated to the different markets in terms of the language differences, laws governing the country and the culture differences (Doole and Lowe, 2005). The numerous differences can be seen as the market-specific psychic distance and it’s important to discuss it in line with internationalization process of firms (Eriksson et al., 1997) explained that market-specific knowledge is of two types; institutional knowledge and business knowledge and those firms must be conversant with this knowledge when going abroad.

2.4.2 Business knowledge impediments

Many firms assume to have some kind of information about already existing actors in the foreign market in which they want to internationalize, but majority of the information might be hidden or unknown until they operate abroad. Knowledge about suppliers and customers operating in the network may be unknown before the market entry, so good business knowledge is needed to identify opportunities, potential customers and treats in the foreign market. Doing business can change depending on the product features and the specific product specification to suit the demand of the customers in the country. Some products must follow certain norms and it is only when adequate business knowledge is available before you can offer a competitive product in the new market (Jonsson S. and Lindbergh J. 2010).

2.4.3 Institutional knowledge impediments

There might always be problems and differences governing firms going abroad; political differences, language and laws affect the way business is conducted in the foreign market. Firms have ideas about laws and regulations in different regions but laws and regulations differ and will be a problem for many firms. The differences in agreement might be dissatisfied when one party decides to leave the business relationship. Political situation can be disturbing in some countries since they influence businesses and the environment which the firm operates can also be a factor. For example in February 2003, the Swedish National Contact point for OECD Guideline for multinational enterprise(NCP) received two specific notices from Attac Sweden or Friends of the Earth Sweden about operations of Sandvik mining and Atlas Copco in Ghana. The report was that the two firms and the business relationship with two mining companies have not followed the guidelines of OECD regarding human rights and environmental conservation in the areas they operate. This was because the people living there complain of pollutions including their drinking water and farming lands. The two Swedish companies decided to pullout from Ghana but later the problem was solved.
and the company remained (OECD watch, 2003). Another example can be when Microsoft wanted to setup office in Beijing and decided to use Taiwanese subsidiary to develop a Mandarin language version of windows, this cause a huge problem in China and this made Bill Gate to relieve the whole original management team of their job at that time (Doole and Lowe, 2008). The impediments reviewed above shows that firms are bound to face multiple problems when embarking on internationalization process however we observed that the interviewee could not say the exact problems they encountered because he was not part of the team when they first moved there but stressed that the company had adequate knowledge about the growing market and had the best resources at that time.

2.5 Organizational learning and managing knowledge

The influence of knowledge in a firm becomes a competitive tool and it should be well distributed in the organization. Knowledge seen in the U-model refers to the intensity of knowledge and market knowledge in the production or services. Knowledge helps to accelerate the process of internationalization and it is the core of the process model by Johansson and Vahlne (1977). Organizational learning is defined by Autio et al., (2000, p.911) as “the process of assimilating new knowledge into the organizational knowledge base”, and implementing organizational learning and knowledge management can become an important tool for the firm’s success (Muscatello, 2003). Organizational learning defines as “a system of principles, processes, activities and structures that helps a firm to realize the potentials inherited in the knowledge and experience of its human resources or capital” (Shani et al., 2009 p.445).

Having such principle in place may not only accumulate internationalization knowledge about specific market but also how knowledge can be transferred from the parent company and the new manufacturing unit. Managing knowledge is a challenging issue in a cross-national setting where differences in time zone, language barriers, culture differences and institutional laws are involved (Kuemmerle, 2002, and organizational learning and knowledge management can be affected by organizational structure, management style, human resources policy (Lin & Klobas, 2000).

At this point, it's important to differentiate between information and knowledge; managing knowledge involve tacit knowledge and explicit knowledge necessary for an organization whiles information management involves forms of documentations, databases, books and forms record (Lin and Klobas, 2000). The ability for a firm to learn about the foreign market
speeds up the opportunity to exploit whiles practitioners of knowledge management are of the view that attaining and assimilation new knowledge necessary for international process is critical so it is important to keep in mind the already existing knowledge. They are the view that, knowledge found in an entrepreneur firm is individualistic to the founder (Almeida & Blood good, 1996). In the case of firms internationalization process, one predictor becomes common; “firms knowledge resources”, a major indicator for internationalization (Yli-Renko, Autio, and Tontti, 2002). Theories about knowledge, society and economy have changed dramatically since the advent of the concept of knowledge in the model (Petersen el al., 2003). Different types of knowledge are needed when entering new market and at different phases. In the original model (1977), market knowledge is used to elaborate the kind of knowledge needed when entering foreign market. In the same model, objective market-knowledge and experiential market knowledge were emphasized. Objective market knowledge can be taught while experiential market knowledge can be learn through personal experience which support the distinction about tacit and explicit knowledge by Polanyi (1967), Nonaka (1991). One can also differentiate between general knowledge and market specific knowledge. General knowledge concerns some behavior of certain kind of customers and marketing methods use whiles market specific knowledge refers to knowledge on specific market and specific customer.

2.6 Study's Framework

The purpose of the framework is representing the central concepts of study and to provide an understanding of how these concepts connect to each other.

![Theoretical framework](Figure 3: Theoretical framework)
In order to investigate the role of knowledge in internationalization process, it is important to integrate the Uppsala process model and the Network model to be able to bridge the two theories for the purpose and studies on the internationalization of firms. The Uppsala process model refers to companies going abroad through gradual acquisition and market knowledge. The theory has a relationship with network theory in the sense that, company’s forms relationship with their customers as well as other firms within the network. The market knowledge gain and the relationship about target customers utilize decisions making concerning resource allocation, competitive advantage over its competitors. Additionally the knowledge acquisition helps the firm to invest at the right market. The Uppsala model and the network theories provide the right knowledge about customers.

The above framework shows the relationships and the different ways of knowledge acquisition. The framework indicates that, market knowledge increases due to current market activities hence firm’s resource commitment to a particular market. At the network level, a source of knowledge is created by local and foreign business relationship.
3 Method

This chapter provides details into the research methods used in the findings and shows reasons for choosing the selected topic & case, as well as describes the quality standard and delimitations, of the study.

“Facts do not simply lie around waiting to be picked up. Facts must be carved out of the continuous web of ongoing reality, must be observed within a specified frame of reference, must be measured with precision, and must be observed where they can be related to other relevant facts. All of this involves methods.”(Ghauri, 2005, p3)

The thesis process started after initiating the topic about internationalization of MNEs. Since it was a broad topic after discussion with the supervisor the authors were advised to narrow it down to an aspect of the model which leads us to concentrate on market knowledge for the study purpose. After searching for information it was discovered that entering market entails a lot of challenges since it required the firm to have knowledge about the host market so the researcher decided to look into the challenges of internationalization and the risks associated during the process. Pierkkari & Welch (2011) acknowledged case studies and other qualitative approach are strong and useful tools for investigating phenomena in the field of international business. The case study is a main research strategy in international business and international management (Piekkari al.2009). According to piekkari &Welch (2011) some research approaches just investigate a single MNC as a case studies one or more cases in a single MNC. The researchers decided to conduct the thesis based on case studied in a single MNC. Also because the authors are living in Sweden and there are many successful companies in this country which are globalized the study carry in one of those companies. Sandvik were chosen as a research case company due to easiness of accessibility and fast response of company representatives. The selection of host country were described previously in chapter one. Applying theories and models like the Uppsala Internationalization model and the Network Approach to internationalization which has been deeply useful for the internationalization process of firms helped to conduct the study.

3.1 Research design

The aim of this paper is to the role of market knowledge in internationalization process of firms as well as challenges and risks which takes a place and this attempted to be investigated as a case of Sandvik Company’s explanation to Ghana.
To reach the goal, and based on existing studies more closely related to the topic of this particular research a case study was distinguished to be the most suitable method, whereby we were analyzed the developed solution to the defined problem. The challenges and risks factors can be difficult to determine with survey because the underlying factors can be hidden. The other way round could be case studies which the findings are often difficult to generalize to other case (Bryman& Bell, 2007). This also mentioned by Cohen & Morrison (2007) that the primary aim of case study is to generalization rather than picturing a single case. A case study can involve both quantitative and qualitative approach but the common one is qualitative (Ghauri, 2005). For the case study different research method can be used accommodate qualitative material and qualitative data (Fisher, 2010) “Quality research tends to be more explorative and unstructured with the emphasis on understanding” (Gharai, 2005, p202) In the book Gharai (2005) also described qualitative research as the most common in social and behavior sciences and among researchers indented to understand human behavior and studying organizations groups.

We adopted qualitative approach which it is intend to gain more understanding and insight as to why firms internationalize, how they go abroad with their business activities and the challenges our case company (Sandvik) faced during the internationalization process. the other reason is the nature of our topic in question includes for example language difficulties and culture differences which are difficult to quantify the effects therefore our data generated from the interview has been analyzed and categorized in a qualitative way to find out which factors are possible to have effect on the outcome of the internationalization process.

3.2 Collecting Data

In order to conduct and complete the research successfully it is significant to choose an appropriate method for data collecting, and the most commonly used are interviews, questionnaires, panels, documents and data bases (Fisher, 2010). Also Yin (2003) indicated that, collecting empirical data for case studies comprises of documents, interviews, direct observation, participant observation, archival records and physical artifacts. This is argued by Creswell (2007) that conducting a qualitative research involves hearing stories from individual, experiences and sometimes voices. Data could be categorized in two types: Primary and secondary. Primary data are gathered by researches initially for a particular research project, since Secondary data are those that have already been collected previously for another purpose, but are also of particular importance for the current research project. (Stevens et al, 2006).
The primary data which is required to carry out the study was collected through interviews with relevant representatives of Sandvik both in Sweden and Ghana.

There are three types of interviewing, open interview which is informal conversation with the interviewees about the specific subject, pre-coded interviews which in contrast questions were prepared beforehand and no deviate from it is acceptable by interviewer. And finally semi-structured interview which is in between of these two mentioned and interviewees have much latitude to response (Fisher, 2010). Semi-structured interview allows the interviewee to freely express and elaborate on what he or she feels is essential and this a method commonly used to gather qualitative data (Bryman and Bell, 2007). The method for primary data collection for this research was semi-structured interview. Questions were mailed beforehand to the respondents. And the interview questions are attached in appendix we interviewed some representatives in Sweden for the reason of analyzing the company’s business process also because the parent company is in Sweden. Also interview in Ghana was necessary for the reason of the host country which investigated was Ghana and it was significant to hear from other part of company in host country. Empirical data for the study has been collected through interviews with the contacted persons summarized in the Table below.

<table>
<thead>
<tr>
<th>Name</th>
<th>position</th>
<th>location</th>
<th>Time duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fredrik Fogelklou</td>
<td>Business Development Manager, EMEA</td>
<td>Stockholm, Sweden</td>
<td>36 min</td>
</tr>
<tr>
<td>Nuhu Salifu</td>
<td>HR Manager Sandvik</td>
<td>Ghana</td>
<td>45</td>
</tr>
<tr>
<td>Petra Hanson</td>
<td>Sandvik school trainer</td>
<td>Sweden</td>
<td>20</td>
</tr>
<tr>
<td>Emmanuel Hasford</td>
<td>HR Adviser</td>
<td>Ghana</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 1: Summery of the interview conducted

“Secondary data are useful not only to find information to solve our research problem, but also to better understand and explain our research problem” (Gharai, 2005, p91) Accesses to secondary data is easier in compare to primary ones, but also there would be a risk of different intention of gathering such a data which made it unsuitable to use for the current research and
also the risk of bias and exaggeration in information. (Gharai, 2005) in order to find relevant information about our case we searched Sandvik official website, annual reports and other relevant documents such as “Sandvik Ready for the increase in competition” by Wright (1999)

### 3.3 Analyzing the data

Fisher (2010) state there is no commonly method for analyzing the case research this is the nature of qualitative researches and researches have to work it out themselves. Researchers analyzing data in order to achieve understanding, describing the problem and test the theories and hypothesis “through analytical operations the researcher dissects, reduces, sorts and reconstitutes data” (Gharai, 2005, p 206). This is suggested with Miles & Humberen (1994) that in qualitative method data should be reduced then displayed and finally the conclusion draw out. In this research first we listened a few times to the interviews, and then wrote an abstract with focusing to the important parts about the interviews and after that organized the information and verified them. There are many theories related to internationalization process of firms however we narrowed it to the Uppsala internationalization process model and the Network approach to internationalization. Besides this, various literatures were reviewed on knowledge management and organizational learning which have been described in chapter 2.

### 3.4 Quality Standards

According to Fisher (2010) in all researches, there is always some degree of subjectivity when it comes to interpreting the material in general. “When interpreting research material a major concern is the validity or truth of our interpretations “ (fisher ,210 p 267). According to Denscombe (2000), the validity of a study determines the extent the researcher measures what was intended to measure. Thus reliability is a measurement of and to which extent a study would conclude the findings if repeated and thereby yield consistent results (Denscombe, 2000). Empirical data for this research were collected by doing interviews with the respondents from the office in Ghana and Sweden. In order to be transparent our study states the name of the interviews and their positions in the company were listed in appendix, furthermore the theoretical framework has been developed and this would guide the study for reliability purposes. The interview guide was followed consistently thereby making sure the respondents and the researchers understand the effect by generating the same results when used by another researcher. Using the Peer reviewed journals and academic articles theoretical frame work and core concepts increased the validity of the study. Additionally, we confirmed the interview’s responses with the interviewees to make sure that we wrote exactly the same
answer that they mentioned in the interviews; also interviews were recorded and attached at the end of the research since recording of the interviews will allow the interviewer to be focused instead of taking notes which all increase validity of our research.

3.5 Delimitation

The internationalization process of MNEs is a comprehensive topic to research and many factors are to be considered when doing research. It is not also possible to consider all the characteristics of internationalization process within the limited time as we want to consider the role of market knowledge in the internationalization process of Sandvik and the impediments associated with its internationalization. There is only one case company involved in this research which it could have been better if we compared two or more MNEs to give a true picture of the challenges in the wake of entering new foreign market.
4. Empirical data

This chapter gives an overview of the empirical data gathered over the interviews and other mentioned sources.

4.1 Sandvik

Sandvik AB was founded by Göran Fredrik Göransson in 1862 and ever since the management has been built of the same fundamental values. The first is on innovation and technology and the second is having direct contact with customers. The concept is to develop, manufacture and market the products. It is an international network of more than 200 firms and nearly 95% of sales come from outside Sweden. Originally using the Bessemer method in the 1960s and developing into 5 business units. It can be traced back to the formation of Högbostål& Jernwerts AB in 1962 after obtaining license to us the Bessemer process. Their aim is to improve productivity of its customers and profitability in their operations. The activities performed at Sandvik are based on these two core values. Worldwide activities are conducted through representatives in over 130 countries. In 2011 the company had 50,000 employees globally and sales more than SEK 94 billion. Investment was about SEK 3 billion in research and development and had about 5000 active patents (Sandvik.com, 2012-04.01). Sandvik business concept is to offer services, products and support that increases customer productivity and profitability. The firm has established itself through high-technology development focusing on metal-lurgies and material technology. The firm manufactures engineering tools, products in high-alloy materials and mining and constructions equipment’s.

Sandvik operations in 2011 comprised three business areas: Mining and constructions, Sandvik Tooling and Sandvik materials but in January 2012, the business areas are extended to 5 business areas with the inclusion of Sandvik ventures and Sandvik construction, a split from Sandvik mining and constructions (Annual Report, 2011). But for the purpose of this thesis Sandvik Mining and construction is discussed jointly.

4.1.1 Sandvik Mining and constructions

Sandvik mining and construction (SMC) is one of the world leading business in the area within the Sandvik groups. SMC is also a leading supplier of excavation machinery, drilling, tolls, equipment, and service mining and construction industry. SMC was formed following the purchase of Tamrock in Finland and later merged with Sandvik rock and tools in 1998 (Sandvik homepage). Today Sandvik mining and construction employs 17,200 globally and sales amounted to SEK 41,481 M in 2011 respectively. It is made up of three segment areas: Underground mining, construction and surface mining.
4.1.2 Sandvik Tooling
Sandvik tooling is one of Sandvik three business areas. It’s also a global market leader in the manufacturing of tools and tooling systems cutting. Products are sold under a number of international brands and they includes; such as Sandvik, Dormer, Sandvik Cormorant, Walter, Wolfram, Safety, Diamond Innovations. In 2011 sales amounted to SEK 165 billion and the employs 16,574 globally

4.1.3 Sandvik Materials and Technology
Sandvik Materials Technology specializes in high value-added products in advanced metallic and ceramic materials for demanding industries and fields of applications. It cutting-edge expertise is based on an integrated production platform and world-leading metallurgy and R&D. Their product areas are: tube, strip, heating technology, wire and Primary Products. Sales amounted to SEK 16,339 M in 2011 and it employs 8,200 globally in 2011 (Annual Report, 2011).

4.1.4 Sandvik Ventures
Sandvik Venture is a new business area that creates opportunities for growth and profitability in small, fast-growing and attractive businesses as well as for smaller operations of major strategic value to other parts of Sandvik. Operations are done in the following product areas: Diamond Innovations, Sandvik hard material, Wolfram, Sandvik Process Systems, Sandvik MedTech and Dormer. Sales amounted to SEK 8,056 M in 2011 and employed 4,100 globally in 2011 (Annual Report, 2011)

4.2 Enterprise Risk Management at Sandvik
The purpose of Sandvik risk management is to reduce risks and to ensure opportunities are leverage in the best possible way. Because of the uncertainties in the global market, Sandvik aim to work strictly and control some key global market niche against any financial loss. The integrated risks management creates and heightens risk awareness in an organization from operational decision- makers. It also supports board of directors in ensuring strategic decision making by identifying strategic risks. Risk management also improves and controls the company by implementing a group-wide model and methodology to consolidate risks. Enterprise risk management (ERM) Process at Sandvik is presented below.
The aim of this section is to gain understanding as to how Sandvik internationalized and how they selected the foreign market. These questions are more knowledge oriented and its purpose is to discover how the role of market knowledge aid Sandvik internationalization process.

Questions 1 and 2 from the interview guide will discuss how Sandvik internationalized and the result will help understand the reasons behind the company’s internationalization and the role market knowledge played in the process. The answer to the question “What motivated Sandvik to go international”? The business development manager stressed that, the fundamental principle for the founder was to innovate and also to be able to follow customers. This idea opened up new markets for Sandvik and because of its innovation and knowledge of its founder. Mr. Fogelklou stated;

“Our first market was to establish and sell product to nearby countries. We sold to Denmark and Norway where the language is similar and it was pretty easy internationalizing from Denmark to Norway”

The role of the founder was vital together with his international experience ensured that Sandvik become competitive and a leader in mining industry. The main reason was based on opportunity the founder realized after the second war which required more demand for
Sandvik product. The question regarding “What do Sandvik need to achieve the internationalization process”? The answer was “innovation and technology” and he goes on to say “the founder had international experience and saw opportunities in the market.... We started selling abroad very early, we created opportunities to set up partners in Denmark, Germany, and France based on the experience in domestic market”.

According to Fredrik Fogelklou, business development manager, the aim of Sandvik internationalization was that, it wants to target larger market share in terms of customers and also become the world-position in several niche. It is also stressed that Sandvik wanted to internationalize because by then Sweden offered a small home for new companies. More so the knowledge and experience from the founder made it possible for the internationalization

4.3.1 Selection of Market
Sandvik generally is characterized by favorable business situation with the mining market particularly displaying strong trend exhibiting demand and investment activities in countries like Australia and North America performing well. Sandvik operate worldwide with the aim of becoming the leading supplier and focusing on growth and establishing market-leading position in selected markets. The market is divided into region: Europe, Asia, North Americans (NAFTA), Africa or Middle East, Australia and South America. Sandvik market selection is mostly through acquisitions and economic conditions of the specific market, the availability of economic resources and demand for niche products from specific countries. The key areas Sandvik look at is the economic viability of the country, the climate situation, the availability of customer and the attractiveness if the market.

4.3.2 Mode of Entry
Sandvik as an international company adopts different modes of entry whiles internationalizing to a new market. There are different stages even though they follow the establishment chain but currently there are modifications to the mode of entry. Thus the decision the company makes should reflect on market potential and capabilities (Ghauri et al, 2005. Sandvik internationalization process to Ghana used the establishment chain model as a strategic work. We divide these stages into phases: cooperate locally with global partner’s presence in Ghana, in this case using Atlas Copco presence in Ghana, Partner with local agents and development of subsidiary at the local market.

Answering question 7 from the interview guide on “what are the phases of entry modes normally used by Sandvik in its internationalization process”? Below statement was made:
“About 20 years ago Sandvik sold mining equipment’s through its partner in Ghana; here I am referring to Atlas Copco, now our main competitor in Ghana. Though I was not part of the business setup then, the idea is to maintain our leadership in the mining industry........., We are competing with other companies and what I know is we develop strong ties with agents and the business networks presence in Ghana. Sometimes it’s important that way if we are not going through acquisition and more so we are not familiar with the country so it is better we use other strategy instead of building our own subsidiary at the initial stage”

Sandvik also decide whether to enter the country as a joint venture or go through neighboring countries where they already have established markets. The next stage is to look for partners or register the subsidiary and the sales department step up in the market. The company creates a local sales organization to the local market. The final state is to expand the local sales and establish aftermarket as well as expanding their offering in the local market

4.3.3 Pattern of Sandvik Internationalization process

Sandvik internationalization process started early in the 1860s for acquiring market knowledge in culturally closed countries by establishing the first agencies in Norway, Denmark, Russia, Germany, great Britain and France. This was possible in the first year of Sandvik establishment when Anders Göransson travelled widely in Europe taken orders for products and establishing agencies (Aronson, R., B., 1998, pp. 134-38). Internationalization intensified during the second world war though export collapsed but the market was diverted at home after introducing cemented- carbide products in the 1940s -60s. Sandvik then opened more agencies after the world war separated Krupp AG, the German company that invented the cemented- carbide allowing other players into the business. Internationalization continued when Karl Fredrik Göransson, the grandson of the founder studies in the United States and through that made some contacts which laid the foundation for scouting for partners in the US market. The company manufactured rock drilling equipment and the building of new factory for Sandvik .Cormorant in the 1960s made Michael Porter in his Competitive Source of Power suggested that the reason for Sandvik success was because of its hardest rock which is among the best in the world (Wright, C., 1999, p.29)

Expansion was mainly through acquisitions in the 1970s-80s and through joint ventures such as Saeger Carbide Corporation was set up in the US with Greenleaf Corporation. In 1972-73, expansion in France and Spain were acquired and in 1972 rock drilling manufacturing operations was acquired in the United States. To have market knowledge through export,
Sandvik in 1976 to part in the world trade fair in Philadelphia and the first US sales representative were booked through an agent. In the 1960s, Sandvik opened its first plant in India, Mexico and Brazil and a sales warehouse was in Singapore. In the 1970s, internationalization let to opening plants in the US and Canada and production of cemented carbide in Japan, and in the 1980s and office was opened through a representative in Beijing, China. Up to date almost two thirds of Sandvik production and more than 95% of its sales take place outside Sweden (Sandvik.com). Sandvik continued the expansion and in 1999 internationalized to Ghana after selling some of their machines through Atlas Copco at the initial stages until they gained required knowledge about the market. Sandvik-Ghana at present has 3 office in Ghana but in April 2012 the forth office being in construction in Kumasi (Sandvik.com).

4.4 Searching for partners in the new market

Sandvik has an international market manager at all the various segments that are responsible for searching for potential partners in the new market. One important source for finding information about the market is using the Swedish trade council. However searching for new partners in an untapped entity needs the approval of the board. Sandvik also uses its own contacts to a large extent for example in Ghana Sandvik sold its product through Atlas Copco before finding an agent. The Ghana chamber of commerce, Atlas Copco and the agents provided written documents however the information needed in the new market is more of tacit knowledge than explicit knowledge this is because tacit knowledge is related to experiential knowledge which firms rely on for incremental commitment. The interviewee supported this by saying that the fragile nature of state institutions do not allow them to commit until they start operations at the new market.

4.4.1 Sales, delivery and after sales in the new market

Sandvik uses different modes or channels in selling their products at the foreign market. Here the company distinguishes between equipment sales and aftermarket. Sales can also be done by organizations taken care of the production and organizations in charge of sales. There are different customers depending on the projects undertaken. Sandvik always provide after sale services and training the customers on the use of the product. The company performs other services such as warehousing and value added services for their customers. Sandvik operations are in four regional production units, organization, purchasing and delivering services. Sales are also categories into regions; EMEA, NAFTA, APAC. Sandvik international delivery manager is spread across every continent that they operate, however in
some cases one manager can oversee several countries. Their clients in the foreign market receive the same delivery services as in the case of other countries. The company provides additional follow-up services by way of workshops and visit to customers. In some cases one manager can be in-charge of the neighboring countries. For instance the country manager for West Africa is responsible for Nigeria, Ghana, Mali and Burkina Faso where they have sales representatives. There are other consultants from their suppliers also who actively engage in the company’s project. Personal from caterpillar are called on to when the need arise since they supply engine parts to Sandvik in that particular market. One area which is also important after the delivery is the role the sales function. The idea is to establish is to establish good relation with Sandvik customers. Weekly newsletters are sent to their customers about information and new machines. After sales function also meet the needs of the customers from the early stages of the mining process and also ensures customer can improve productivity and profitability. Sandvik provide education in the form of seminars covering best practice around the world together with advice on how to use the tools and machines and this is done by their expert personnel from different offices across the world.

4.5 Managing knowledge at Sandvik
Managing knowledge and knowledge transfer between different departments can occur in a number of different modes some may occur hierarchical mode between two departments of the same company and it can also occur through market transaction between two independent companies. It can also be a hybrid means of managing the company (Borgs and Jemison, 1990) such as forming joint ventures or licensing arrangement. Sandvik knowledge management and transfer of knowledge typically occur by means of hybrid which is more focus on knowledge transfer through mergers and acquisitions. Employees who are recruited receive formal training at Sandvik training center where special trained people in the spirit of learning by doing. Newly recruited staffs are encouraged to be opening minded and take responsibility for their actions during the training period. The main idea here is that knowledge in the company is held by individuals and expressed in regularities by cooperate members in the social community. Sandvik ability to increase knowledge in the firm is more thorough knowledge transfer between independent firms, through joint ventures, within the firm and through the many acquisitions.
5 Analysis

Our theoretical framework indicated some impediments that hinder internationalization; institutional knowledge impediments, market specific knowledge and business knowledge impediments. Expanding in any foreign environment require resource commitment with greater uncertainty which can lead to loss of market share to other competitors in the same market. Below we will apply our theoretical framework to analyze Sandvik situation.

5.1 Market selection
The reason for Sandvik entering Ghana can instead be explained by the vision of the founder as to how to follow the customer which is more of the role of the individual. The pattern of Sandvik internationalization process thus conforms to the Uppsala model discussed in (section 2.3.1). We gathered information from Mr. Fogelklou that the strategy Sandvik has been adopting for its market selection is mainly through acquisitions and that also depend on favorable economic and political situations of the selected market. Sandvik internationalization process to Ghana was not through acquisition. The model used to enter Ghana could well be captured in the activity-resource-actor model by Mattson (2002) as discussed in section 2.3.2. This is so because Sandvik prior to entering Ghana had strong business link with Atlas Copco and this relationship facilitated the entry of Sandvik into Ghana. This could be an active strategy adopted by Sandvik in extending sales to the customers in Ghana. We can see that the strategy overall worked well for the company since knowledge gained through the relationship helped them to be proactive in the local market.

5.2 Mode of market entry
Sandvik mode of entry as a strategy has been following the establishment chain already discussed in figure 1. Sandvik also adopt a global strategy depending on the particular market or country. From our interview, the business development manager of Sandvik said that, Sandvik entered Ghana relying on agents and through the network connections. This is in relation to the question “How do Sandvik enter new markets?” He explained that, prior to establishing office in Ghana, they committed resources to local market through agents and later local manager was hired. The idea being that large linguistic and cultural differences made it hard to do business without being there physically. Mr. Fogelklou also emphasized that for them to be successful; the mode of entry played an important role in the business
process. To Ghauri et al. 2005, firm’s choice of entry must reflect the kind of potentials in the market; its capabilities and the level of commitment management are prepared to invest. Furthermore, Mr. Fogelklou stressed on Sandvik using neighboring countries as an entry mode to sell products to their customers in countries where there are political instability or where the market is not too big. An example is Sandvik in South Africa sells to Botswana because they are not physically present in that country and Sandvik in Ghana also sell to neighboring countries. However, during the last five years Sandvik local manager hire other people to represent their company in the neighboring countries to reduce the cost of traveling and the risk as indicated when we discussed the risk factors under the establishment chain. The other means adopted was to collaborate with existing networks between Sandvik and Atlas Copco which is more like B2B interactions. In some cases, Sandvik used joint ventures but this was not in the case of Ghana where they adopted agent before going full operation and at the same time serving neighboring West African countries.

5.3 Analysis of Sandvik Internationalization process

![Diagram of Sandvik internationalization processes]

Table 2, Sandvik internationalization processes relating to the market knowledge

This section discusses the different processes already discussed in the empirical section to see how related they are to the theoretical framework. Sandvik uses consultants, Ghana chamber
of commerce, Swedish trade council to get information about the business knowledge. Some business knowledge also resides in the manager who has more experience at the foreign market. Institutional knowledge which is connected to legal and language issues can create problems when looking for agents in a new market. Sandvik did not encounter any problem since English language is the corporate language for Sandvik however the idea is that, managers on the foreign market must have some knowledge of the local language.

5.3.1 Searching for partners in the new market
The search for potential agents in a new market is vital process for Sandvik because it is the first contact for the firm in the new market. Agents are normally use to narrow the gap of lack of market-specific knowledge, at the same time Sandvik must think about the issue of business knowledge in the specific market, cultural knowledge and institutional knowledge. The knowledge about the business in the search for agent relates to knowledge about agents in the business network in the new market.

5.3.2 Sales, delivery and after sales service in the new market
An important business process is to generate revenue through sales. For sales to be effective there is the need for the firm to know the differences in customers and this is made possible when the firm becomes active in the foreign market. The delivery process involve a lot of workers at Sandvik even though the staffs do not benefit in any way from the business knowledge at the foreign market level but benefits immensely with cultural knowledge and institutional knowledge because of the importance of relationship between the customers and the workers. One impediment regarding the institutional knowledge is the language and what differ are the differences in the accounting principles in every country particularly the VAT system in the different countries. Sandvik work together with their customers, and has adequate business knowledge about business. Regarding the cultural knowledge, it relates to the communication and the relationship with customers because they have to work together even though there are cultural differences at certain point especially training of new recruits and the differences in the institutional knowledge and the cultural knowledge which helps the employee’s performance in the delivery process. The impediments regarding after sales service and support at the foreign market is the lack of business knowledge. The sales role needs information about connectivity of the existing network and knowledge about the customers in the different subsidiaries.
Support and after sale service is very keen for Sandvik, and they organize training sections for their customers about the product lines and their staffs also go for routine checks on the machines. The above processes help us to see the success of Sandvik internationalization process.

5.4 Managing knowledge at Sandvik
Managing knowledge by Sandvik is to be able to disseminate knowledge within and outside the business. As it discussed before, a firm is able to learn about foreign market which speeds up opportunity to exploit the market. Sandvik has a good structure which is well organized using their Enterprise Risk Management (ERM) system. A lot of effort is done to transfer knowledge at Sandvik that has potential if well implemented. Sandvik has a well-structured organization which expands to other support functions which is vital for Sandvik as knowledge based.

5.5 Sandvik Mining and Uppsala Internationalization Process Model
The Uppsala Model states categorically that companies internationalize into foreign market by gradually gaining the required market knowledge either through joint venture or through licensing agreement (Johansson and Vahlne, 1997). Our findings indicate that Sandvik mining acquired market knowledge through Atlas Copco who was then acting as sales agent or intermediary by selling their products. The firm later sold their products through sales agents before taking full control of operations. It also states that an in-depth market analysis about doing business was conducted to have first-hand information before going into full ownership. This means the company placed emphasis on assessment before choosing the target market. According to Forsgren (2002), the vital point in the Uppsala model is how firms learn and the way learning impact their investment decisions. Our findings indicated the learning process helped the company to adapt to customers specification based on the information from their customers and the relationship building which necessitate investment.

The model also indicated how national culture could play a significant role in internationalization process which tends to also affect their choice of entry into a particular market. Johansson and Vahlne (1997) explained that firms enter new market with the preference of having some similarities in education, languages, business behavior, culture and ethics. However, our findings from the interview show the company did not enter Ghana based on the similarities but solely on market potentials. Sandvik culture believes cultural differences are part of business ethics and this is emphasized by selecting local sales forces to work for the company. In addition he stressed on the experiences from international market
experience brought in by their managers representing the company abroad. In our own view the business models used by firms in their internationalization process changes in the new market due to political, social and judicial systems. An example in this case will be IKEA’s business operation in the US where they were forced to change the Swedish model to suit the US market (The IKEA way).

5.6 The network role in the internationalization process

As we discussed before, today’s internationalization process is about firms being an insider or an outsider. According to the international marketing and purchasing (IMP) group, network in business terms consist of firms involving in production, distribution and using goods and services to establish and maintain relationship. Likewise business network also consist of interconnected business relationships built on collective actors and their interdependency of firms either as suppliers or customers. In view of the interview with Mr. Fogelklou, we ascertained that Sandvik do not interdependently produce all their products but also rely on its network of suppliers abroad and at home for their raw materials and equipment’s. The company is able to develop long-term relationship with other suppliers in the network to be able to adapt to their customer’s needs. The long term relationship also helps Sandvik to learn from their customers’ needs and be able to supply the right product offerings to maintain larger market shares at the local market. This is in support of what Johanson and Vahlne (1990) described in their model. Here Mr. Fogelklou stressed that “the relationship helps the company to learn and adapt to the needs of their customers in the local market”. This corresponds to what Ruzzier (2006) emphasized on the idea that the model is a gradual learning process to gain the right target market through the different actors to deliver at the new market.

5.7 Role of knowledge in the internationalization process of Sandvik

In the theoretical framework, Nonaka (1991) distinguished between explicit knowledge and tacit knowledge. The analysis showed that explicit knowledge was found in written documents and governmental publications. The Ghana chamber of commerce, Atlas Copco and the agents provided written documents however the information needed in the new market is more of tacit knowledge than explicit knowledge this s because tacit knowledge is related to experiential knowledge which firms rely on for incremental commitment. The interviewee supported this by saying that the fragile nature of state institutions do not allow them to commit until they start operations at the new market.
Tacit knowledge can be acquired by operating on the local market which helps to understand the customers’ needs how to handle other bureaucracies in Ghana. According to Nonaka (1991), tacit knowledge is the root of the company’s competence since the firm become competitive to its competitors. Market knowledge and business knowledge also plays an important role in Sandvik internationalization. Thus the strategies and knowledge about the different actors, competitors, customers in the new market has been the backbone of Sandvik success.

Table 3. Summary of the role of market knowledge at Sandvik
6. Conclusion

Finally, this chapter presents the findings and conclusions drawn from the analysis and the research questions from the first chapter will be answered. Our conclusion is also categorized into three theme; individual level, organizational level and strategic level followed by recommendations and further implications that the study has for the role of market knowledge in internationalization as well as the risks and impediments

Individual level

The literature review and the empirical data from our study show that, market knowledge and especially experiential knowledge helped in the internationalization process. The personals in management positions have the experience and business knowledge from previous assignments abroad. One strategy to suggest is that the company must always be proactive to internationalization. Regarding the language skills, we believe Sandvik makes effort by recruiting local managers to aid the business processes. Sandvik also applied the logic of the Uppsala internationalization model by adopting the learning process whiles operating in Ghana. The company depended on their network to get the needed resources for their customers at the local market. From this point it could be said that Sandvik used market knowledge to gain competitive advantage. At individual level top managers have adequate experiential knowledge while doing business abroad and at the same time language as a barrier is not an issue since the managers’ work together with local managers so the problem of language is not an issue.

Organizational Level

At organization level, Sandvik efficiently acquired the right market knowledge by collecting information from the Ghana chamber of commerce and the local agent. We believe that both tacit and explicit knowledge played a vital role in the internationalization process into Ghana. Sandvik has dedicated personals with responsibilities and comprehensive transferring knowledge to other staffs at the local level but still preserving the company’s culture. It also specifies how MNEs expand internationally using acquisitions and partners abroad. At the same time the internal and external resources, networks and knowledge speed up the internationalization process. It is identified that, organizational knowledge and language skills are embedded in individuals whiles work procedure and information gathering are found in
the organizational level. We found that knowledge and resources can be found within the network of actors and this knowledge can be used to overcome the impediments of internationalization.

### Strategic Level

The study shows that Sandvik made full use of the logic of the establishment chain during the internationalization process. Another finding is that, the aspect of market knowledge was fully helpful. It’s also noted that the company adopted the learning process and the market knowledge as described by the Uppsala model. Sandvik success can also be attributed to the fact that had knowledge about the culture and laws of the country before setting up subsidiary. This was possible by employing local managers and working through their agents and business network which was also an adequate strategy to overcome the risks problems described earlier.

Furthermore it is found that the existing studies on internationalization process of firm is broad and do not take into consideration or address market specific issues in a particular country. It also found that deficiency of market specific knowledge is an impediment as a result firms have to put an effort on the efficient and sufficient knowledge acquisition as well as make use of the knowledge already existing in the organization, and be able to develop good relationship with the people of host country by understanding their culture.

To conclude our study, we will like to also answer our second research question; “What are the major Challenges and risks associated with a foreign market entry for large multinational companies (MNEs) in developing countries like Ghana”? This study identified some hindrances relating to resource commitment to the foreign market, this is due to the risks associated in doing international business which has be discussed in chapter 2. The problem associated in foreign expansion are not only having new offices and new employees but also about learning and training enough workers to keep the company in the foreign market. Being involved in many markets with different projects as well sending international staffs to the local market potentially causes some organizational strain.

One other hindrance could be knowledge about the culture which could affect the business. That is how business is done in the local market especially in a market which serves different neighboring countries. Thus, it will be generally harder for management to get in touch with the right people. In conclusion, most of the vital hindrances discussed and identified in our
literature related to business knowledge, cultural knowledge and institutional knowledge associated with internationalization process.

6.1 Recommendations and further studies:

Based on the findings, the following managerial recommendations are made to reduce the risks of uncertainty for internationalization by having adequate knowledge about the specific market:

- Management should encourage cooperation and integrations between the network of relationship and other actors in the business environment.
- The foreign firms should pay attention to small issues surrounding the interactions and should involve leaders in the society when there are partnership negotiations
- Language barriers must be taken into consideration when the assigned manager require interaction with local customers and host market in general
- Firms should find the best partner in the local market and be able to join business networks which are the source of market specific- knowledge needed for firm’s survival in the specific market. This is because it is possible for partners in the network to have market specific knowledge about the foreign market.

Further studies:

The research also has possibilities for further studies. A number of them are listed below:

- Examine varied theories to see if they can describe the internationalization process of the MNEs could be tried.
- Another possibility is to look into and compare the different markets that Sandvik has entered and how the role of knowledge has been processed and shared.
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7.2 Appendices

7.2.1 Appendix1: Interview guidelines

What motivated Sandvik to go international?
What do Sandvik need to be able to achieve the internationalization process?
How Sandvik do uses its market knowledge in the internationalization process?
How do Sandvik enter new foreign market?
What are key success factors for Sandvik when they enter new market?
How do Sandvik evaluate potential markets before selecting a particular market?
What are the phases of entry modes normally used by Sandvik in its internationalization process?
How would you describe the organization culture?