Internationalization of Enterprise-solution Software
From Understand Your Product to Understand Your Network

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Abstract

Due to the characteristics of software, software products have been considered products with “pure” profits which are suitable to be sold in the international market. Enterprise software is one typical type of software which is mainly sold in business market. More and more enterprise software providers are going abroad to discover opportunities for their enterprise solutions. This thesis is to try to give more suggestions on internationalization for these enterprise software providers.

The empirical case is concerning the internationalization of the enterprise software provided by a Swedish software company, Company A. The case happens in the specific geographic area (China) which is far away from the domestic market, the Swedish market. Based on the business network of Company A, Software A has been successfully sold in the Chinese market. The analysis is on the basis of the empirical case and the relevant theories on internationalization.

In the context of the empirical case, the nature of enterprise software has been analyzed. Enterprise software is usually tangible and customized, and the internationalization of enterprise software is more relationship-based than mass software products. The discussion about the nature of enterprise software contains the “service” nature of enterprise software, the “service” typology of enterprise software in international marketing and some features of enterprise software which are influencing the internationalization of enterprise software. By understanding the nature of enterprise software, enterprise software providers are capable of crafting international marketing strategies in their internationalization processes. For example, enterprise software providers can develop module-based software or add more self-customization functions to decrease the risks of internationalization.
Internationalization has been discussed for a long time since the “Uppsala” model was come up in 1977. In the last thirty years, the business environment has been changing with the tendency of expanding through the network-based business relationship. The new “Uppsala” model, which was born in this new business environment, has been leaded me to analyze the success and failure in the empirical case. The internationalization of enterprise software is observed to follow the changes of the four elements in the new “Uppsala” model, in which “opportunities learning” and “trust building” are highlighted in the network-based business environment. The new “Uppsala” model is valuable for today’s internationalization to develop strategies for the more successful internationalization. From understanding the product to understanding the network, enterprise software providers can explore more international opportunities and internationalization strategies for their enterprise software instead of the traditional thinking.

**Key words:** Internationalization process, Business network, Enterprise software
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1 Introduction

The problem area, the relevant industrial contexts and the objectives of the study are stated in this chapter.

1.1 Problem statement

The software business has been growing rapidly around the world in recent years. Due to the development mechanisms of software products, the profits earned from a software product are usually considered “pure” profits since only fixed cost like human resources involved in the whole production process of a software product (Kittlaus & Clough 2009). The possibility of long-distance software production potentially enables software products to be international products which are preferably sold internationally.

Enterprise software products constitute one typical type of software products that is mainly sold to business markets. More and more enterprise software providers have been successful in selling their software products across cultures. With the traditional views on internationalization, companies are usually worried about cultural differences and conflicts when they intend to enter markets with different cultures. However, high demands in emerging markets, such as China, Brazil or Australia, definitely cannot be ignored by these ambitious software providers. But in practice, many software providers still find it difficult to convince customers with different cultural profiles especially on initial phases. Our research is to try to explore a suitable internationalization process along with valuable strategies for enterprise software providers in current business environments. Through the analysis of the empirical case which is about a Swedish software company’s international expansion, we are trying to help other enterprise software providers discover a common way to internationalize their enterprise software in today’s business environment. Company A, which is the focal company in the empirical case, aims at bringing its enterprise software product, Software A, to the Chinese market, which is far away from the domestic market in terms of psychic distance. They have been suffering from many problems in the internationalization of Software A. For example, the Chinese clients have not replied when they are unsatisfied with the price; or they have been completely silent even though a few proposals have been suggested by Company A. The start is usually the most difficult part. One of the reasons for causing these problems can be the lack of knowledge about the local market and the customers. In the traditional view of internationalization (Johanson and Vahlne, 1977), Company A can be seen as an “outsider” of the Chinese market. They think the “liabilities” of “outsiders” prevent local customers from accepting their solutions. This is something that many enterprise software providers are worried about.
In recent research on internationalization, the “network” view is getting more and more popular in the studies of the internationalization process and strategies since the current business environment is becoming more and more network-based and relationship-oriented. Johanson and Vahlne (2009) have come up the updated internationalization model to adapt to the current business environment. The network-based internationalization model (Johanson and Vahlne 2009) helps international marketers solve many problems in internationalization processes. “Outsiders” are possibly becoming “Insiders” on the basis of business networks in the view of Johanson and Vahlne (2009). This model is introduced to analyze the internationalization of Software A in our empirical case. In order to provide more relevant suggestions for enterprise software providers, the “nature” of enterprise software is also discussed for the first time in the research. Without ignoring the natural features of enterprise software products, an enterprise software provider would be more successful in internationalization by understanding the products as well as the network.

1.2 Objectives

The main purpose of this thesis is to provide suggestions for an enterprise software provider to internationalize its product. Through the case study on the international expansion of a Swedish enterprise software company, the research results of this thesis would be useful for software providers who are ambitiously intending to internationalize their enterprise-solution software products. One of the objectives of the thesis is to explain the internationalization of the focal company in the empirical case by applying a suitable internationalization model, the new “Uppsala model”, in this case. The other objective is to involve service classification method to help the focal company understand its product in the internationalization context. This is rare to be discussed. Understanding the product and network, an enterprise software provider can potentially explore more internationalization strategies instead of the traditional strategies on internationalization.
2. Research question

*This chapter contains the research question with the sub-questions and the limitations of the study.*

### 2.1 Research question

The research is based on the empirical case study about the internationalization of a Swedish enterprise software provider in a specific geographic area (China). But the “network view” in internationalization tells us the “network” approach is more suitable for today’s business environment and it can be used by different companies in their internationalization processes. Therefore, the results of this research are expected to be applied to different enterprise software providers who are trying to internationalize enterprise software in distant psychic regions and areas. However, due to the limited scale of the empirical case, the results should be tested by further studies on this subject.

One centralized research topic will be discussed in this thesis by involving theoretical studies and empirical case analysis.

“How does a software provider internationalize its enterprise-solution product on the basis of understanding its product and network?”

To provider suggestions of internationalization for enterprise software provider, our discussion begins with the nature of enterprise software and how it influences the internationalization process. Software, especially enterprise software, is much more complex than other international products. To understand the nature of enterprise software, an enterprise software product can be internationalized better. Based on the popular internationalization theories and the empirical case, I also try to apply internationalization theories to support the analysis of the empirical case. The research question has been divided into the two following milestones to solve the problems in two fields of the study area.

1. How does an enterprise software provider understand the nature of its enterprise software and its influences in the internationalization of enterprise software?

2. How can internationalization models and strategies be applied to understand different activities in internationalization of an enterprise software product in the current business environment?
2.2 Delimitations

A common internationalization process, which is ideally compatible for most of enterprise software providers, is explored in this thesis. Due to the scale of the empirical case, I do not have enough empirical data to test the suggestions in practice. However, the limitations of the empirical case have been diminished by the sufficient theoretical studies. The main limitations of my research are as follows.

The limited scale of the empirical case

The limited scale of the empirical case refers to the limited quantity of studied companies and the limited size of the focal company’s business scale. The empirical case focuses on the internationalization of one enterprise software provider’s one software product. The general discussion about internationalization of enterprise software providers is limited by the empirical data of a single case. Therefore, the conclusions of the thesis can only be suggestions but not principles for the enterprise software providers in similar fields. Moreover, the study is trying to analyze the internationalization of enterprise software no matter the size of the software providers. Due to the small business scale of Company A in the empirical case, the discussions are influenced to some extent. However, the discussion about enterprise software’s nature is not affected by the business scale sizes of providers. In the analysis of enterprise software internationalization, we use the new “Uppsala” model which has been proven as a common model for applying to both small and large companies by Johanson and Vahlne (2009).

The limited market information

The main discussion of this project is to explain and understand the actors, activities and resources in the network when these actors internationalize their products to distant markets. The network allows them to learn market-specific knowledge and opportunities from their partners in the network. The analysis focuses on the activities of the network in the internationalization of enterprise software. Therefore, in our discussion, I do not include a lot of information on the specific market, the Chinese market. Furthermore, this research is located in Sweden, so it is difficult to get the first-hand information about the Chinese market. However, the essential industrial background in China is still provided in the empirical case.
3. Methodology

This chapter introduces the approach and structure of this research.

3.1 Research Approach

In this research, the exploratory approach is used to explain and analyze enterprise software internationalization. The empirical case is based on the internationalization of a specific company. In the analysis, I have collected the relevant theories and applied them to the empirical case. Also, in my research, I am trying to “gain additional insights” into internationalization of enterprise software. This is also the common way that exploratory marketers do in their exploratory researches.

The empirical data is collected from the interviews with customer, partners and employees of the focal company. By following an exploratory approach, I aim at increasing the understanding of the phenomena in enterprise software internationalization rather than the testing of a hypothesis.

3.2 Selection and collection of the empirical data

The empirical case was chosen before formulating the research question in this thesis study. By examining the problems that the focal company faces, I define a study area containing the nature of enterprise software and the internationalization of enterprise software to help the focal company explain the success and failure of the internationalization of the focal product. Although the results of the analysis are in the context of the empirical case, the suggestions still can be studies and tested by further researchers. I would not say the empirical case is the best case in enterprise software internationalization. However, Company A was born as an enterprise software provider and now has been accumulating the experience of internationalizing the enterprise-solution software. The empirical case is considered a good case of today’s internationalization of enterprise software.

In the investigation of the empirical case, data collection consists of primary data and secondary data collection. The primary data is acquired from interviews with the employees, the customers and the partners of the focal company, Company A. The selected interviewees are the most influencing actors in the internationalization of the focal product, Software A. The secondary data collection is mainly based on the websites of the investigated companies and the industrial researches which provide additional information to complement the primary data. Nevertheless, other secondary sources, such as scientific articles, books and the Internet, also have been facilitated.
3.3 Research structure

The research structure is demonstrated as follow, and the paper is also divided into different chapters according to the research structure.

Starting with formulating the research question, the relevant theories about internationalization and software products are firstly reviewed. The findings from the empirical case, as the practical evidences, help us understand enterprise software internationalization in practice. The analysis, which is based on the theoretical framework and the empirical case, is to try to learn lessons from the empirical case and give suggestions for enterprise software internationalization. The conclusions summarize the results of the study.
4 Theoretical framework

This chapter describes the theoretical researches in the fields on the nature of software products and the popular internationalization theories that are applied in today’s business environment.

To understand a product that a provider wants to internationalize, I started with studying the general “nature” of all software products, which can be divided into the “service” nature and “product” nature. As a complex product, a software product is somehow intangible as a service product. Theories about the nature of service products and its application in internationalization are both significant to provide theoretical supports for the further discussion. Besides, software is also managed as a product in the studies of software product management nowadays. The “product” nature helps us understand the object of the internationalization, “enterprise software”. The studied features of enterprise software are also involved in the theoretical framework to understand the product better in the analysis chapter. Internationalization theories are also interesting to be learnt. Reviewing the traditional internationalization theories, we can see the changes of today’s internationalization process. The “network” view in internationalization is quite relevant with the context of the empirical case. Hence the theoretical studies also include basic knowledge about business network. Some relevant researches about software internationalization offer us a path to understand the practical situations in software internationalization.

4.1 Software and enterprise solutions

4.1.1 The nature of software

The concept “software” was initially introduced to the public by American statistician John Wilder Tukey in 1958 (Kittlaus & Clough 2009). However, at the beginning of computer industry emerging, software was born as add-ons of hardware products. Users did not need to pay additional fees for software. After NATO software engineering conference in 1968 entrepreneurs started to launch software business when software was separated from machines and hardware. (Cusumano 2004). Different from products in other forms, a software product can be defined as an intangible economic good, which normally contains value in no physical form (Kittlaus & Clough 2009). In the accounting standard, software is legally categorized as intangible asset and resource in a company (IAS 38). Software is also considered as “knowledge” factor which is different from the traditional production factors, capital, land and labor (Kittlaus & Clough 2009).
Due to the intangibility of software, it is categorized as service by many researchers (Lovelock 1983; Patterson & Cicic 1995; Lee & Carter 2009). Lovelock (1983) also claims that understanding the service classification helps international marketers understand the nature of service products and relevant marketing strategies.

Deriving back to the studies on classification of service, service can be classified in many different ways (Lovelock 1983). Lovelock (1983) claims that the classification should be defined to craft the most suitable marketing strategies to each type of service. He discusses five classification schemes to categorize different types of service. The first scheme he discusses is “the nature of the service art”, in which the service can be divided into four categories. In this scheme, a service involves tangible or intangible actions to serve people or things. A service can cover one or more categories from these four ways, he supplements. Tangible actions usually have direct intensity with people’s bodies, when intangible actions take place to people’s minds. The intangible actions also can be taken towards the intangible assets which belong to people. By understanding of the nature of the service, marketers can define the core benefits of the service better. Lovelock (1983) also explains that the outcome of the service is more important in some cases when service process is more critical in the others according to different types of service actions. If a manager can creatively think about the nature of the service, more convenient forms of service delivery can be figured out to serve customers better as well as increase customer satisfaction.

The second way to categorize the service is based on different types of customer relationships. Lovelock (1983) defines two categories of customer relationships, membership relationships and no formal relationships. For both types of customers, the delivery of service can be continuous or be with separated transactions. He emphasizes that customer relationship can influence the pricing process of a service. Lovelock (1983) also analyzes that more services are offered in formal and long-term customer relationships with customers in strategic marketing. In this way, service providers can repeat business and obtain continuous financial benefits. Tracking customers’ information in memberships also enables the company to improve marketing strategies. But in some service, marketers do not need to have much information about each customer, such as restaurants, movie theaters and transportation services. Regarding to no formal relationship, Lovelock (1983) also points out that marketers in such services know much less about their customers.

Lovelock (1983) claims that customers are usually involved in production process of service. Therefore, the third scheme defining a service is to measure the levels of customization. Customization can be described by levels of two extents: the characteristics of a service that are customized and the judgments of customers that can be considered in defining or improving a service to meet the needs of individual
customers. Some services are predetermined on the basis of menus or routines, such as transportation and fast food. In this case, these services are more standardized with less customized characteristics and less affecting judgments. But some other service providers give more flexible options for customers. In these services, customers can set preferences and pick some of options provided by service providers. The characteristics of a service can vary from one customer to another, but customers do not contact personnel that much. In some services, customers contact personnel and judge the service much more, but the characteristics of the service do not differentiate for each customer. The services in the last category are highly customized and contacted. Service providers in this category use their expertise to craft tailored services for different customers. Besides various characteristics of the service, customers also purchase customized activities that service providers do. For marketing managers, Lovelock (1983) suggests, finding a balance between customization and standardization is extremely important. Moreover, he also indicates that customization is not the only way to increase customer satisfaction, customers sometimes demand time and cost efficient solutions rather than customized solutions which require more time and cost.

The nature of demand and supply of the service can be considered one reference to categorize services. Lovelock (1983) describes four types of services with different demand fluctuations and capacities in meeting peak demands. Organizations in the first category usually are capable of meeting peak demand and demand fluctuations are wide. For those service providers, demand can be increased out of peak periods. Service providers in second category can also meet peak demand but demand fluctuations are relatively narrow. Therefore, they have to decide if they should increase supply to meet growing demand or keep current supply. Some growing organizations, which are considered as in the third category, cannot meet peak demand. Hence, they need to de-market until their capacities can meet or exceed the status quo of demand. The fourth type of service providers has problems in meeting peak demand, and also it is with wide demand fluctuations. For those service providers, demand should be stimulated well and discouraged to match their capacities. Lovelock (1983) suggests service providers that offering special prices or value-added products in low demand period and introducing reservation system can help improve the ups and downs of demand. Besides, service providers should understand target customers, since different strategies should be adopted for different types of customers.

Categorizing services according to the methods of service delivery is the last scheme defined by Lovelock (1983). There are two extents relevant with service delivery. Nature of interaction between customers and service providers is the first extent. Lovelock concludes three types of interaction, customer initiation, service provider initiation, and “arm’s length” transaction. In customer initiation, a customer has to go to a service provider, in which the convenience of the service is the lowest. Lovelock (1983) states that providing more outlets for a service can increase convenience but problems of quality control would happen. For those services in which service providers go to customers, the convenience of service is high but more expenses in personnel and equipments would be involved. “Arm’s length” transaction means
that organizations offer service to customers without physical contact. Instead, emails and electronic methods are adopted in communication. The other extent is “availability of service outlets”, which contains single site and multiple set. Lovelock (1983) also points out that some services can be separately treated from core service on the basis of different delivery nature.

![Figure 4.1 Summary of the service classification model (Adapted from Lovelock, 1983)](image)

Adapting from Lovelock’s research, Patterson and Cicic (1995) develop classification schemes in the context of the internationalization. Their study focuses on the ranger from professional services to services with tangibles goods, which are rarely discussed by other researchers but are more suitable for internationalization (Patterson & Cicic 1995). Hence, two relevant dimensions have been defined to categorize service in international context: “the degree of intangibility” and “the degree of face-to-face contact”. According to their analysis, service can be typed as “location-free professional services”, “location-bound customized projects”, “standardized service packages” or “value-added customized services”. There are two directions of “degree of intangibility”, “pure services” and “services bundled with goods”. Software is identified as service which is embedded in goods by Patterson and Cicic. They also indicate that such a type of service is more suitable to be directly exported since the production and consumption of service can be separated from one country to another. The service can be encapsulated in the tangible medium, for instance, disk, book, or user manual. Lee and Carter (2009) also mention that these types of services are easier to be sampled and tried before customers make decisions. Patterson and Cicic (1995) evaluate that vendees are willing to order abroad if the services are more tangible, such as
Moreover, the risks of exporting service embedded goods are less than internationalize pure services. Besides intangibility range, they also discuss the other dimension the contact style of a service. High contact services, such as software and system support, require interpersonal contact, whereas low contact services can be delivered by “technology” in the international context (Patterson & Cicic, 1995). They also point out that, in high contact services, the personnel, who are serving customers, are required to have not only the technical skills but also the interpersonal skills. Moreover, the local presence often should be involved for a service provider going abroad. Due to these high contacts between providers and customers, Patterson and Cicic (1995) also conclude from their empirical studies that personal contact and relationship is seen to be extremely important in the intercultural context. The other type of service, which is with lower contact, is more standardized rather than customized. The cultural sensitivities are not so relevant in low contact services and the local presence is not required all the time.

Patterson and Cicic (1995) describe different services based on organizational, behavioral and attitudinal, entry mode and international operations profiles. Software services including software development and software support are covering the range from “standardized service packages” to “value-added customized services”. Both of services are featured as “services bundled with goods”. Service packages are more standardized and they can be directly exported in traditional manners. But value-added services require much more client-provider interaction. With the feature of involving customization, this type of services can be seen as customer value adding. Organizational scales of standardized service providers are mostly small when value-added customized service providers are normally medium-sized and usually have higher foreign ownerships. In their empirical studies, value-added customized service providers gain much more benefits in internationalization than other types of services and the profitability is much better as well. Since this type of service providers usually “follow” their clients to go internationally to maintain relationships, they explain. Furthermore, the profits of international markets are observed higher than domestic markets in the cases of value-added customized service providers. However, higher risks usually are involved in this type of service. For standardized service providers, international markets are profitable as equal as home markets, but they are involving lower risks. For small-sized firms, standardization is suggested as the best entry strategy of adaptation for a few markets. However, if they intend to enter more markets, they need to network with other small companies to obtain enough resources. (Lee & Carter, 2009). Patterson and Cicic (1995) also examine the entry mode profiles of these service providers. Most of services bundled with goods are preferably considered suitable for all kinds of entry modes. In the evaluation of international operations, Patterson and Cicic (1995) conclude that most of value-added service providers are international companies which have much better international performance. Packaged service providers are reported lower international intensity but their performance is in a medium level.
In the theories of software production and management, software is preferably defined in the term of “product” (Kittlaus & Clough 2009). In their definition, software products combine goods and services and software is the “primary” element representing customer value. A piece of software, which the vendor intends to sell separately, can be considered as a product. Like other products, the “rights” of software are usually defined by vendors and these “rights” include rights of use, property rights or rights to release (Kittlaus & Clough 2009). Licensing terms and contract terms are usually involved in purchasing software products. A software manufacturer can select various variations before the distribution of the software, as well as carry out a “customer-specific” customization of a software product for a specific customer. Customization can be carried out by customers themselves as well. Distinctive from other products, software products also can be delivered in source codes. It means customers can do “pure” customization based on the source codes. But in this case, the quality control would be much more difficult for software vendors.

Software products vary in different attributes they are featured. Kittlaus and Clough (2009) define basic description criteria referring to different types of software. Firstly, from the market perspective, software products can be sold to mass consumers or business customers. Packaging and pricing are different for different markets. Secondly, software products can be typed as operating systems, middleware and applications according to different functional areas and installation styles. Operating systems refer to basic facilities which are on the under layer to connect hardware. Middleware is playing a connection between an operating system and a user application, such as virtual servers. Applications are programs running for end users. Thirdly, regarding to different development focuses, software can be divided into standard software, services and individual development. At last, with different conditions and terms of contract, different types of software are involved, for example, open source, freeware, licensing and SaaS (Software as a service).

Kittlaus and Clough (2009) also describe the financial characteristics of software products. The total product costs of software products are the fixed cost. Only basic sales should be carried out to archive the break-event point in start-up period. The revenue beyond break-even point can be seen as pure profit in software business. Software companies can internationalize products to increase sales by simply adding new user interfaces or translating documentation. The software market is considered as a more international market even though there are still some software companies focusing on local solutions. Most of product managers in software companies are responsible for international orientations besides local market strategies. They also talk about that software development is distinctive from other products’. Software development usually only requires “good know-how” and development tools, such as PCs. The most important asset of a software company, as they say, is “know-how” which is in the brains of employees. The distribution of software products can be easily done through the Internet for many
international software companies. Therefore, they also mention, software market is much more competitive because of the low market entry barriers in software industry. However, applying a software product requires training and efforts of personnel in a customer company. Due to the problem of the system compatibility, a customer would not shift to a new software provider if the current software has good enough performance. This principle is not only suitable for enterprise software solutions, but also for mass packaged software (Kittlaus and Clough 2009). The main reason they analyze is that most of software is used in an integrated way in which all software applications should be compatible with each other. Relevant work mechanism would be changed, and either personnel or customers involved all need to adapt all new changes if some software tools have been changed. They also mention that customers would think about alternatives only if there are major improvements in the alternative software. To maintain a long-term use of a software product, a provider usually offers various ways to guarantee the usage of the software. Maintenance, support, upgrade protection and subscription are four ways along with software as additional services to keep customers’ satisfaction, as Kittlaus and Clough (2009) describe. Products with problems would be fixed and new releases are often included in maintenance. Support is defined as that providers help users apply software in an appropriate way. Upgrade protection, which can be included in maintenance, is to keep updating software by the newest releases for users. Upgrade protection can be done by providers as well as users themselves, but sometimes providers should inform about new releases by emails or newsletters. Subscription refers to an offer that includes maintenance, support and upgrade protection.

Regarding the “product” nature of software, Kittlaus and Clough (2009) conclude that, software can be copied and delivered overseas for software vendors. A software product which is correctly used can be seen as one of important competitive advantages. Some software even can affect the effectiveness and efficiency in production and operation of customer companies.
4.1.2 Classification of software and enterprise solutions

Besides the classification scheme in software installation mentioned in Section 4.1.1, there are two other popular ways to categorize different software from the marketing perspective.

The first scheme is come up by Hoch, al. (1999). They define three different segments in software industry which have been emerging over the time: professional services, enterprise solutions, and mass-market software. Professional services mostly refer to software programming services, in which a programming service provider produces “customer-made” programs and software for a specific customer. Professional service providers are found to be the first independent software companies. The number of customers in professional services is much smaller than the other two categories, as Figure 4.2 shown. Packaged mass-market software has been emerging since 1980s (Hoch, al. 1999). Packaged software for mass markets can be bought in the normal stores or the online shops and not too many other additional services along with. That means users can easily install these software products by themselves. Packaged mass-market software can be sold to millions of customers. Enterprise solutions are provided for customers in business market. Other additional services usually are offered along with the software as well.

Nukari and Forsell (1999) describe the other popular classification scheme of software products. As figure 4.3 demonstrated, customer-tailored software, embedded software and packaged software product are described by them. Customer tailored software is designed on the basis of customization from different customers. Packaged software products usually which can be sold separately without additional service have similar features as packaged mass products, but they also could be enterprise solutions. However, embedded software, which is integrated in a “non-software” product, is not included in the concept of software product (Kittlaus & Clough 2009).
Enterprise solution software is one of typical software product, which is especially developed for business customers. Business markets commonly are defined as firms, institutions, or governments that acquire goods and services (Anderson et al. 2008). The main features of business market are normally involving fewer customers than consumer market and are focusing more in interaction with customers. Creating customer value is the most important process in business market. Networking and customer relationship are much more important for business providers. (Anderson et al. 2008).

With the features of products in business market, enterprise solutions are generally not sold as many as mass software products in consumer markets. For example, Microsoft has sold over 240 million copies of Windows 7 until October, 2010 (Microsoft, 2011). But SAP, as the world’s largest ERP (Enterprise Resource Planning) provider, on the other hand, installed its R/3 software at about 16,500 sites worldwide over a period of five years (Hoch, al. 1999). Enterprise solution products need customization and additional services which create more customer value for business customers (Hoch, al. 1999; Anderson et al. 2008). Different from mass packaged software, more time and efforts are required in installation and implementation of enterprise solutions. The installations of enterprise solutions may need more time regarding to different customization for customer companies. For instance, the SAP R/3 installation at Hewlett-Packard took 18 months for whole system (Hoch, al. 1999).

Alajoutsijärvi et al. (2000) state that more and more European software providers have been starting to produce packaged software to sell internationally rather than tailored software products which are sold regionally. They define “project business” and “product business” which separately refer to tailored software and packaged software. For packaged software providers, the central capabilities are productization, channel management and strategic networking when tailored system providers should do
project marketing and management. Packaged software providers produce standard products but they are
designed for different operating system and hardware. Tailored systems are usually designed for a
specific operating system or a hardware environment. Packaged software products usually can be sold
internationally when tailor system are designed for customers from domestic market or closed networks.
They also describe that project business is more interactive than product business, and it’s long-term
oriented. (Alajoutsijärvi et al., 2000)

In the view of software production and management, the fixed development cost of an enterprise software
product is almost the all cost of production. The variable cost, such as shipment or documentation, can be
ignored. But continuous maintenance costs more for a business customer, but they are usually charged
separately (Kittlaus & Clough 2009).
4.2 Theories of internationalization

4.2.1 Traditional internationalization process

Since the born of the “Uppsala Model”, theories of internationalization process have been developed over 30 years. “Uppsala Model” (Johnson & Vahlne 1977) is the famous model in internationalization theories, and the original ideas of the “Uppsala Model” were carried by two Swedish researchers based on the empirical cases on the international expansions of the Swedish corporations. In their research, they find out that companies are following two internationalization patterns. First one is called “establishment chain” in which companies initiate internationalization in help of local representatives and agencies first. After that they start to open their own local offices and subsidiaries to enlarge the scale of local business. Second track “psychic distance” is that companies start internationalization in the foreign markets which are near the domestic market (Johnson & Vahlne 1977; Johnson & Vahlne 2009).

In “Uppsala Model”, Johnson and Vahlne (1977) mainly describe the mechanism of internationalization process which involves four elements, market commitment, market knowledge, current business activities and commitment decisions. In four elements between, market commitment and market knowledge are considered as state aspects, and commitment decisions and current business activities are change aspects. The state aspects affect change aspects and change aspects impact state aspects as well. The model is described as a dynamic model. On one hand, companies change through learning experience from current business activities, such as operation and management. On the other hand, companies change through their commitment decisions which may enhance or weaken the positions of companies.

![Diagram of Uppsala Model](image)

Figure 4.4 The basic mechanism of internationalization (Johnson & Vahlne 1977)

In state aspects, “market commitment” refers to the resource that has been committed to the foreign market. The level of commitment is higher; the resources which should be commitment are more.
Resources are considered as commitments to new markets from their explanation. The other state aspect, the “market knowledge”, refers to the knowledge about the foreign market in a specific time. Companies make commitment decisions based on their market knowledge in this view. They point out “experiential knowledge” is more critical than objective knowledge. They also think “market-specific” knowledge which is different from general market knowledge, should be obtained through experience. Market knowledge, as they conclude, also can be seen as a resource. If market knowledge obtained by a company is more valuable, the commitment level would be higher to that market. In change aspects, the “current activities” are considered as the primary source of experience. The performance of current activities requires experience. Hence in this case, more experienced personnel should be hired to improve current marketing activities. Commitment decisions are made to response to opportunities or problems companies meet based on experiential knowledge, according to their discussion. Commitment decisions affect market commitment, for example, scale-increasing decisions usually require uncertainty-decreasing commitments.

Besides the “Uppsala” model, the “staged” models of internationalization have been discussed by researchers for a long time. Many different stage-based internationalization models have been created by many researches (Bilkey & Tesar 1977; Johanson & Wiedershein-Patterson, 1975). A stage-based model divides the internationalization process into different stages. For example, Bilkey and Tesar (1977) define six stages for an internationalization process. On the first three stages, the management of a company has been changed from being with low interests in exporting to being with exploration of feasibility of active exporting in an internationalization process. From the fourth stage to the sixth stage, a company exports to psychologically close countries first and then gradually goes to psychologically distant countries.

Traditional internationalization models have been applied in different fields for many years, but more and more researchers find out lots of limitations and shortages of these traditional model. The creators of “Uppsala” model also state that the old internationalization models are no long effective in the new business environment (Johanson & Vahlne 2003). Although these traditional models have been helping companies understand the fundamental process of internationalization, researchers criticize and doubt these models more and more. For example, Bell (1995) states those “stage” models only can be narrowly applicable since the practical internationalization behavior is more complicated, dynamic, and interactive. Andersen (1993) also criticizes that these traditional models are too descriptive in nature. Axinn and Matthysses (2002) point out limits of these traditional models in terms of speed of internationalization, psychic distance, experiential learning and so forth. Furthermore, most of traditional internationalization models are only discussed from the firm’s perspective, but importance of managers and “managerial mindsets” is ignored (Knight and Cavusgil 2004; Moen and Servais 2002). To adapt to the new business environment, the “network” view, which is more and more popular in internationalization, has been frequently discussed in recent years (Johanson and Mattsson 1988; Coviello & Munro 1997; Johanson & Vahlne 2003; Johanson & Vahlne 2006; Johanson & Vahlne 2009; Chetty & Stangl 2010).
4.2.2 Network view in Internationalization

Business network theory

The theory of “business network” has been applied and developed by researchers in business marketing and international marketing. A business network refers to “a set of two or more connected business relationships” (Anderson et al. 1994; Anderson et al. 2009). One of “connected” parties conditionally exchanges in one relation since the exchange in the other relation will be affected. Two or more parties in a focal business network also connect with other direct or indirect parties. The typical case is demonstrated by figure 4.5. The focal relationship in this case is connected to other relations that the supplier or the customer has. There are also the “third parties in common” existing in a larger and more complex business network between the supplier and the customer. The business network with particular interests is defined as “alliance network” by Gulati (1995). Firms who are engaged in an alliance network can explore new business together, speed innovation process and even share risks together (Anderson et al. 2009).

![Figure 4.5 Connected relations for firms in a dyadic relationship (Anderson et al. 1994)](image_url)

The characteristics of business network are concluded by Anderson et al. (2009) as follow. Firstly, a business network is usually established for developing visible market opportunities. Secondly, the relationships between firms are usually multiple rather than simple ones. Thirdly, business networks are more and more international and they are not limited in a domestic market.

A business network, which involves couples of parties, would be difficult to understand. Therefore, A-R-A model can be introduced to analyze not only simple but also complex networks (Anderson et al. 1994). The first “A” that stands for “Actors” refers to firms or organizations in a business network. The “actors” implement activities and commit resource in a network. “R” is the resource that is used by each “actor” to create value and contribute to the network. Resources could be any kind of capital, such as technical
know-how, equipment, personnel or other capitals. The last “A” refers to “activities” that “actors” perform for the aimed objectives of the network. Creating value through a business network is the most important aim of being connected to each “actor”.

Anderson al. (2009) also come up three concepts along with A-R-A model to understand business networks better. “Network horizon” means an actor’s view of the network extension. The “network horizon” is somehow determined by an actor’s experience as well as the features of the structural network. “Network context” is determined by actors and their resources and activities. It describes who the actors are, how they are connected with others, what activities these actors perform, what resources are used in a network. These contexts can be shared by all or some of actors in a business network. At last, “network identities” are required when we analyze business networks. The identity of a firm in a business network includes how it is seen by itself in a network as well as how it is viewed by other actors in a network. To maintain a positive position in a network, a firm should “signal” its willingness and reliabilities to other actors. Before a firm in a network decides to undertake activities, it also should consider its partners in other connected relationships. Defining network roles is also helpful for analyzing and managing business networks. Network roles are applied more in some alliance networks. To understand the nature of relationships between different parties based on technologies above, firms in business networks are easier to craft marketing strategies (Axelsson & Johanson,1992).

*Network view applied in internationalization process*

Besides applying network view in business marketing, the popularity of “business network” theory enables researches in international marketing field to review internationalization process using a new view in current business environment. Johanson and Vahlne (2003) express a new network model is highly needed for explaining internationalization process. Chetty and Stangl (2010) state that firms with various network relationships usually implement more radical internationalization comparing to firms with limited networks.

The network view combined in internationalization process is especially used in the international expansions of small-sized software companies (Coviello and Munro 1997; Moen al. 2003; Coviello 2006). Coviello and Munro (1997) also indicate that the processes of internationalization of small-sized software companies can be driven and accelerated by their formal and informal business relationships. When Moen al. (2003) discuss about internationalization of small-sized software companies and their different entry modes, relying on representatives and partner is the most important thing for those companies. They also emphasize that relationships and interactions with partner are more crucial. The new ventures, which are born globally and are only selling internationally without starting from local market, are also proven that business relationships and networks play key roles in their successes (Coviello 2006).
Based on the arguments in the view of business network, Johanson and Vahlne, who are the inventors of “Uppsala” model, revisit and improve the “Uppsala” model in order to adapt the new business environment and fulfill a demanding need of a new internationalization mode (Johanson & Vahlne 2009).

Johanson and Vahlne (2003) firstly revisit the traditional view of entry processes, in which barriers are various when a company enters a market in psychological distance. These barriers include culture, languages and local market conditions (Johanson & Vahlne 1977). However, those barriers are less significant in current internationalization processes of many companies to strengthen their positions in their business networks. They claim that the existing business relationships enable and affect a company to consider the particular geographical market to enter and which entry model to use (Johanson & Vahlne 2003). Johanson and Vahlne (2010) indicate that networks can be considered as markets in which strategy marking has been changing in business network context.

Johanson and Vahlne (2009) develop a new internationalization model in the context of business networks. Firstly, they consider markets as networks comprising many business relationships and firms in those networks are connected with each other in diverse, complex and somehow invisible patterns. The “insidership” in relevant networks is important for the success of internationalization. Secondly, networks and relationships provide potential opportunities for a company to learn market knowledge and establish commitments. Both types of activities can be considered as preconditions for entering a foreign market. Before building the new model, Johanson and Vahlne (2009) also analyze the changes in knowledge learning, trust and commitment building, opportunities development in the context of current business environment. They agree with the relevant researches in which general knowledge about internationalization is also important. Hence they come up “relationship-specific” knowledge to supplement the original “knowledge”. But still, market-specific knowledge is proven as critical knowledge by many researchers (Barkema et al., 1996; Luo & Peng, 1999; Petersen, Pedersen, & Sharma, 2003). Views on knowledge are also different in business networks. Actors in a business network can not only learn knowledge from each other but also learn new knowledge from interactions with each other (Johanson & Vahlne 2009). They enhance again the importance of “trust” in business networks. The lack of knowledge can be substituted by trusted knowledge resources, for instance, the trusted middle-men (Johanson & Vahlne 2009).
The new network model of internationalization is shown by figure 4.6. In state aspects, they firstly add relationship-specific knowledge which is obtained and developed through interactions in a business network. Relationship-specific knowledge includes resources and capabilities network members have. The interaction in networks is expected to contribute in more general knowledge about international relationship development which can help the other actors learn development of different and transferable relationships in alternative situations (Johanson & Vahlne 2009). The added “opportunities” in state aspect emphasizes that the opportunities that any relationship is developing are critical in internationalization process. By adding “opportunities” as supplement to the original “knowledge”, Johanson and Vahlne (2009) are intending to notice that opportunities are playing the most significant role in the body of knowledge. Both of them drive the internationalization process. Needs, strategies and networks are also important parts in the body of knowledge. “Market commitment” has been replaced by “network position” in the other state element. In a business network, actors usually have their own levels of knowledge, trust and commitment. Different levels cause different activities of each actor for successful internationalization. If knowledge learning and commitment building are both under an ideal process, the focal actor can hold an enjoyable network position.

Johanson and Vahlne (2009) also replace original change aspect “commitment decisions” by “relationship commitment decisions” in order to highlight that “commitments” which are made to relationships or networks. Relationship commitment decisions indicate that a firm in its business network decides whether to increase or to decrease commitments to its partners and network. These decisions can be observed through changes in entry modes, investment size or changes in organization caused by other partners. Johanson and Vahlne (2009) also describe two possible types of commitment decisions that could be made by a firm. Exploring and developing new relationships is the first way in which a firm can build bridges to new networks or fulfill gaps in existing network. The other type of decision is to keep state
quos to support existing networks. The other change aspect “current activities” is shifted by the outcomes of these activities which are “learning, creating and trust-building”. The term “learning” includes more abstract concept than original “experiential learning” according to their explanation. In the new model, learning and creating knowledge as well as building trust are not only based on a firm’s own knowledge, but also obtained from partners who find potential opportunities. They also state that high levels of learning, creating and trust-building lead more efficient internationalization processes in a business network.

Johanson and Vahlne (2009) also state that internationalization of a firm is depending on its relationships and networks. If the focal firm wants to go abroad, the internationalization process should be based on its network in which significant partners are committed to this process. So the opportunities and challenges a firm faces in an internationalization process are turning to a matter of relationship-specificity or network-specificity rather than traditional country specificity. Moreover, Partners in a business network could be from home or other countries. The reasons of foreign expansion are different in the context of business network. First reason is finding attractive business opportunities. The other one is following the partners who are going to other markets in a firm’s business network. The focal firm is usually willing to follow the partners who have valuable network positions in foreign markets. By following its partners, a firm could also show its commitment to their relationship.

Regarding the scale of business, the original “Uppsala” model has been proven more valid for the internationalization of small firms (Johanson and Vahlne 2009). The business network view on internationalization is ideally compatible for small business as well as large corporations (Steen & Liesch 2007). However, a large company is able to acquire a new company in the new market before it implements internationalization. But this action is mattered more by the experience of the company rather than the size of the company. Johason and Vahlne point out that the network view also explains one of main reasons of the rapid expansions of the international new ventures. Those entrepreneurs of international new ventures have been learnt market knowledge from business network before they go to a specific foreign market.

4.2.3 Software internationalization

The internationalization of small-sized and middle-sized software firms is one of the most popular topics when researchers discuss about the internationalization of small business (Bell 1995; Coviello & Munro 1997; Moen al. 2003; Coviello 2006). Small software firms usually go abroad by following their clients or network partners (Bell 1995; Coviello & Munro 1997). The traditional internationalization of process is not valid any more for the expansions of most of small software firms (Bell 1995). But many software providers have been successful in psychologically distant markets through partnerships or business
relationships. For example, the success of SAP R/3 system in US market which is supported by its strategic alliance (Meissner 2000).

Software products are usually marketed as service, when the studies of service internationalization are much more mature than the discussion about software internationalization above. Grönroos (1999) identifies three typical types of service internationalization patterns which are client following, market-seeking and electronic marketing. Services can also be defined as different strategic types when providers internationalize their services. For example, Välikangas and Lehtinen (1993) suggest three strategic types of services which are low priced basic services, specialized services and customized services. However, local acceptance is one of problems service providers worry about in internationalization. Local customers have difficulties to accept the services of a foreign company because of ethnocentrism and nationalism. Moreover, local governments sometimes would protect local companies by resisting foreign service providers. However, Grönroos (1999) finds that younger and more educated persons are more willing to accept foreign services.
4.3 Summary

The theories concerning the “service” nature and the “product” nature of software helps us analyze the nature of the enterprise solutions, the features of enterprise software products as service-type products; Second, typology of international services helps us understand the attributes of enterprise solutions in the context of internationalization; Third, the specific features of enterprise software products, which are different from the features of other types of software products, enable us to know which parts of theories or the empirical case are suitable for figuring out the nature of enterprise software products.

The traditional internationalization models are not suitable in the current business environment. A lot of limitations of the "staged" models are found out and pointed out by many researchers from time to time. The old "Uppsala" model also has been criticized by many researchers who are working in the fiend of business relationships and network. It is also found only applicable to small-sized companies, but when the new "Uppsala" network model can be used in discussing small-sized firms and large-sized corporations. Therefore, the new "Uppsala" model will be used in analyzing the empirical case. The theory of “network” gives a simple model “A-R-A” model to analyze different roles in complex business networks. Internationalization of enterprise software will be analyzed with the help of “A-R-A” model and new “Uppsala” model. The research results in the field of software internationalization are also useful to explain other problems happening in the empirical case.
5. Empirical Case

The empirical case is introduced in this chapter. The focal company, the product, and the network in the empirical case are described. The primary data from the interviews and the secondary data from the relevant research organizations are both stated in this chapter.

5.1 Introduction of the empirical case

The empirical case observed is on the basis of a real scenario in which a Swedish software company, Company A, is trying to sell its award-winning enterprise software to Chinese customer companies. In the context of the empirical case, some other relevant roles are also involved and influenced including a customer, Company B, in China, a local service provider, Company C, in China, and one of the most relevant partners, Company D, in North America. The main results of interviews and other internal information from Company A are presented as the first hand data. The industrial and market background in the context are both introduced as the second hand empirical data.

5.1.1 The focal company

Company A, as the main actor in the empirical case, is a Swedish software company who has been internationalizing enterprise knowledge management and competitive intelligence software around the world. Since year 1999 when the company was launched, Company A has been succeeding in disseminating its software product in the overseas markets. Many successful customer cases have been carried out home and abroad. Relying on a stable international cooperated network, Company A went through two passing tough years and survived from the international economic crises.

Being a leading provider of the enterprise information access software, Company A is focusing on designing and developing knowledge management and competitive intelligence software to provide enterprise solutions for industrial customers. With the headquarter office in Kista science city near Stockholm, the capital of Sweden, Company A is currently operated by the founders of the company with a small but passionate work team. As a spin off from Ericsson, one of the biggest communication and information technical multinational corporations in the world, the managers of the company boast the abundant experience in not only technology development but also business management. With an integrated productivity mechanism, Company A plays roles of a producer as well as a seller. The customers of Company A include the successful companies in a variety of industries such as energy, retail, healthcare, pulp and paper, pharmaceuticals, packaging and telecom. The customer installations scale all the way from ten up to many thousands of users. By involving global representation through a mature partner network, Company A sells software with the help of resellers, consultants, and system
integrators around the world. Through the partner network Company A can offer the associated services, for instance, needs analysis, implementation training and system integration.

The services provided by Company A are around the main product Software A, which is an integrated software product with many functions. Based on the advanced concept of knowledge management, the software developers in Company A have been designing and developing Software A which is associated with the technology of the information collection and the enterprise search engine. Their solutions enable customers to improve efficiency of obtaining knowledge and make more confident decisions. With their solutions, the knowledge, which customers base decisions on, can not only be accessible faster, but also be of higher quality. Since year 2003, Software A has been recommended by many industrial organizations. Software A is also an award-winning software product in knowledge management and competitive intelligence field.

After establishing the partner network in Europe, North America, and Australia, the company has been starting to draw its ambitious blue print in the Chinese market since October 2009. However, they met couples of problems and started to feel frustrated in the beginning. For instance, difficulties of introducing the concept contained in the product into the new market and problems of transferring value proposition to the Chinese customers with totally different preferences and behaviors, when they are promoting their software in Chinese market. In reality, many ICT companies have same or similar problems like Company A as well when entering a new market with a different culture. Therefore, the thesis project about internationalization of enterprise software products started to catch up the Chinese project in this sharp time.

5.1.2 The product and services

Software A is an enterprise software product which is developed and sold by Company A. Software A is designed for industrial companies to manage knowledge and explore competitive intelligence. Software A can be used to create solutions within areas, such as knowledge management, competitive intelligence, market research and enterprise search.

Software A is designed on the basis of the combining technologies in business search engine, knowledge management and competitive intelligence. As an enterprise search engine, Software A can help customers search more efficiently than before. According to different focuses of customers on different products, markets, and industries, the classification engine can create customized taxonomy of topics which help customers search more relevant information in specific areas. As a knowledge management platform, Software A has the following functions. First of all, it aggregates content and information from several different sources. Those sources can be external sources, such as news, market research, analyst reports, e-mail, Internet resource or RSS (Really Simple Syndication). They also can be internal sources in a company, for example, intranet information, internal emails, LAN (Local Area Network), Documents,
Sharepoint sources. Secondly, Software A classifies content by using topic taxonomies, and this enables customer to search for any source by inputting keywords, tags or topics. The classification engine of Software A sorts all the information into the topics included in each customer’s taxonomy. Users can easily find information through a browsable list of topics, either by using Topic Maps or by Topic Browse. The Topic Map shows all first and second level topics in the topic structure. Topic Browse is a more advanced alternative that allows users to combine and several topics to filter the result and also to free text search within a topic. Thirdly, it can analyze trends and patterns for customers through analysis models and tools it involves. It contains bench-marker which can demonstrate the trends and general information of industrial benchmarks. Popular analysis profiles are also included, such famous analysis models, PEST, PARTS Model, Value Net Analysis, Five Force and SWOT, which help customers analyze the market and competitions. Matrix Analyzer is also useful to create matrix reports. All analysis the system produces can be exported as the electronic documents for customers. Thirdly, Software A provides personalization functions for individual users of the system. For example, users can set personal alerts via e-mail, RSS or the start page of the software, which can notice users new sources and information they are interested. Every user has his/her own library and that means every user can save information into a personal library. Users can also create reports in different formats like HTML, PDF or DOC. The personalization provides more flexible settings to different users with different habits.

Software A is normally implemented in a group-work environment. The users of the software A can be all employees in the company. But it should be managed by specific administrators in an organization. Software A also offers different administration functions, such as group management, usage tracker, content retriever and classification engine settings. Administrators can set different access rights of users as well. However, normal users are able to publish information, find information, share information and analyze information.

The fundamental development criteria of the design of software A are to design a software platform that is modular and flexible. Software A consists of ten functionality modules which enable customers to add and integrate different functionality according to their needs. Software A is also configurable in many ways and can easily be customized to match customer companies’ visual identities. As an international product, Software A supports multiple languages using the Unicode character set. The following languages are fully supported: Danish, Dutch, Finnish, French, German, Italian, Norwegian, Spanish, Portuguese, Russian, Swedish, Chinese, Japanese, Korean, Czech, Greek, and Thai. The installation process of Software A lasts from half a day to one day, and it can be done either on line through long distance support or by physical installation.

Along with the product, Company A has developed a comprehensive portfolio of services in order to help customers optimize the success of an investment in Software A. The service offerings reach out to all the phases of Software A’s implementation process, from planning to implementation and launch. The
implementation process of Software A involves different stages with different needs of guidance and services. A well-performed planning phase is crucial to the success of Software A implementation. At this point a “mapping project” is conducted to ensure that Software A will match future users’ needs. A “mapping project” normally includes analysis of information needs, content and sources, taxonomy, roles and responsibilities and IT environment. There are five stages in a mapping project, start-up meeting, interviews with core users, workshop, review and final report. A smooth and fast technical installation service, which is the second service Company A provides, is based on the final report of the mapping project. This service also involves the installation of Software A, the topic map set-up, content retrieval as well as customizations of layout and functionality. The third service offering, “Academy”, offers a range of training and support services. These include both introductory webinar sessions as well as in-depth, hands-on courses on functionality and usage. The courses are designed to match different stages of the implementation as well as the subsequent operations of the system. “Managed Hosting”, as the fourth service offering, enables outsourcing of the investment in necessary hardware/software to transfer this responsibility to the hosting provider. This helps a customer company control the costs of the required IT environment. The “Agents” service is also available to monitor web sites and automatically retrieve news and information in order to quickly and cost-effectively populate the system with content. At last, maintenance and support services are designed to ensure that Software A operates in a reliable manner and runs with optimal performance.

Figure 5.1 Customers value of Software A

The customer value that Software A and services create includes save time, reduce cost, increase revenue, decision support, tendency following and learning interaction, as Figure 5.1 shown. Software A is developed on the basis of the practical user experiences from several companies and industries. Technology of Company A’ has been tested and used by many famous companies in the world. Several thousand users of Software A have placed careful requirements that should be met. Therefore, Company
A continuously invests in product development with new versions coming out regularly since year 2000. This has resulted in better solutions that are cost-efficient, scalable, fast, modular and flexible.

### 5.1.3 The networks

One of the most significant business development strategies of Company A is to expand globally on the basis of its international partnership network. Three types of channel partners are defined by Company A to distribute Software A. *Resellers*, the first type of channel partners, are all well trained and experienced in the business aspects of investing in Software A. Resellers guide and support potential customers through the purchasing process as well as be their future account management liason. *Consultants* are companies that are instrumental for successful implementation and usage of Software A. Consultants perform mapping projects, training and guide customers towards, during and after launch of the system in-house. At last *System Integrators* are companies that ensure a smooth technical installation and integration with third party products. They can also take on maintenance agreements with customers. The partners of Companies are mostly international companies from different regions, such as North America, Australia, and Asia.

Customers of Company A are industrial companies in the range from small business to large corporations. From competitive intelligence at a biopharmaceutical firm to content aggregation at a telecommunication firm, to knowledge management at a law firm, to locating experts at a construction company to market analysis at an online search directory. Company A has been developing flexible solutions for today and tomorrow and adapting them for the needs of specific customers. The customer network of Company A has been established domestically and internationally.

### 5.2 The expansion endeavor in Chinese market

#### 5.2.1 Industrial background and context

The industrial background described in this section is based on the secondary information provided by the official statistics and the local research organizations in China.

Before looking into knowledge management software market, the overview of the management software is worth it to be presented first. According to the statistics from CCW (China Computer-World) research (2010), the international brands of management software in China are mainly targeting high-end market with the low market shares in 2009, for example, SAP with 6.7% market share, Oracle with 4.2%. Meanwhile, the local management software brands with 49.2% market share almost monopolize middle-end and low-end market.
The market situation in knowledge management software industry is quite different, since the market is just emerging with high potentials. The growth rate of KM (Knowledge Management) software is estimated by CCW (2010) at 20% after year 2011. At the same time, the national standard of knowledge management framework (Standard number: GB/T 23703.1-2009) was structured by the Standardization Administration of the People’s Republic of China and it has been effective in China since November 1st, 2009 (Chinese Standardization, 2009). The potential customers of knowledge management software in China are mainly from the manufacture industry and the finance industry (CCW Research 2010).

The market shares of the local knowledge software providers are demonstrated by Figure 5.2. Local brands almost grasp over the half of the whole pizza in KM software market. In head of Landray, local brands have been more and more accepted and trusted by Chinese customer companies. By examining war history of those companies like Landray, they are all fighting as much as possible to offer software with higher quality and higher satisfied service. In the high-end management software market, local brands started to compete with international brands by equal quality of products. In latest two years, local brands almost monopolized the whole shares of middle and low ends market. Moreover, many local companies contribute a lot in management software and KM software industry. Famous local KM software suppliers, such as Landray and UFIDA, also participated in designing the national standard of Knowledge Management (Internal materials 2010).

![Figure 5.2 Local players in the Chinese Knowledge Management Software Industry 2009 (CCW Research, 2009)](image)

5.2.2 The Chinese customer cases

Based on the successful experience of selling Software A internationally, Company A made the decision to enter the Chinese market in September, 2009. When the business development director of Company A visited Shanghai, the largest city in China, he introduced Software A to Company B who is a Chinese company doing market research and consulting. They communicated quite well with each other, so that Company B started to have intention to attempt Software A. The contact between Company A and
Company B is originally from their common third partner Company D, a US research and consulting company. Company D is an important partner either for Company A or for Company B. Company D suggested Company A to enter Chinese market with them, so Company A had the original idea of entering Chinese market. In the Chinese case, Company C, who should be involved as well, is the local integrator reseller as well as technical consultant of Company A. Company C is a local technical development and consulting company in Shanghai. Through one-year communication and following up, Company A and Company B signed customer and partner contracts in November 2010. Company B now is one of the most important customers of Company A in China. As a channel partner, Company B will also help Company A sell Software A in Chinese market. Company B intends to enter European market as well, so the cooperation between Company A and Company B is constantly going on. However, Company A failed with the cooperation of the other Chinese company the Company E before the success of establishing network with Company B. Company E is a local chemistry manufacturer in China. Company A gave the presentation to Company E as well in September, 2009. The good reflections of the presentation have not enabled Company E to use Software A. Either the successful case or the failed case helps us analyze the internationalization process of Software A in the next chapter. In order to demonstrate different roles in Chinese case, the list and short description of the involved companies are shown as follow,

**Company A** Swedish Enterprise Software provider who is developing and selling Software A  
**Company B** Chinese Market Research and Consulting Company who is the customer and partner of Company A  
**Company C** Chinese Technical development and consulting company who is the potential consultant and local integrator of Company A  
**Company D** North American research and consulting company who is the channel partner of Company A and partner of Company B in US market  
**Company E** Chinese Chemistry Manufacturer who have not reacted to and replied Company A’s proposal

### 5.3 Interviews

The interviews have been carried out in the context of the empirical case. Besides the first hand information from the business development manager and other employees in Company A, the interviewees also include one of the customers of Company A as well as a channel and technical partner in China. All the interview questions are available in Appendix 1, 2 and 3.
The customer interview

The customer interviewed is Company B, which is a market research consulting company as mentioned in section 5.2.2. Company B is the first and the most important customer of Company A in China, and it is also a channel partner who is responsible for promoting Software A to Company B’s own clients. The interviewee Ms. Wu is the contact person in Company B who is carrying and following the project with Company A. The main business of Company B is to provide market research consultant for industrial customers. They are helping their clients get insights to competitive intelligence about competitors and markets. The typical customer of Company B can be an international company who is planning to enter Chinese market or a company in manufactory sector. As Ms. Wu mentions, the daily work of the employees in Company B contains information exploration, analysis and reporting. Therefore, she is of the opinion that the information management software like Software A is quite useful for Company B. But she states that there are very limited options to pick providers of knowledge management software in the Chinese market. Concerning the matter of other types of management software, such as ERP, Company B does not need them too much and at least not every employee needs other management software. Ms Wu also says that their customers in manufactory industry are currently not using enterprise management software.

The interview is set up in terms of different aspects around the internationalization of the Software A. The comparison between international brands and local brands of the management software constructs the first scheme of the interview. Ms. Wu evaluates that local management software is much cheaper than international brands. But she complains that the technology and service of the local brands are neither mature enough. Moreover, the update speed of local management software products is quite low according to the experience of using the software provided by local management software companies. About international brands she thinks that they have more mature technology and service system. The updating to the trends and technology is much faster and is meeting the business needs all the time. But she is worried a little about other services like technical support and consulting which may have lack of local language support. She doesn’t think long distance support could be a problem for Company B but the service without supporting local language. Because Software A ideally should be used by everyone in Company B and not everyone in the company can well communicate the technical problems of the software in the English. She does not ask for local service and believes Company B can tolerate long distance support. She insists that support in local language is much more important than the forms of support. However, the best way on her opinion is to communicate face to face in service delivery.

The value proposition and delivery of the product is another aspect discussed in the interview. Ms Wu mentions that it’s easier to present the value of Software A to those companies who have specific teams working on or understanding the relevant technology about knowledge management and competitive intelligence. It’s critical that a specific team in a customer company is responsible for presenting the value
to personnel and following up the usage of the software in the company. Regarding Software A, she thinks the most valuable benefit is that saving time in information collection and the uniformed templates of information create more efficient work flows in the company. She was impressed by the presentations given by Company A when Company A visited Company B in September, 2009. She evaluates that their presentations are interesting, impressive and innovative and they are distinctive from the ones presented by local providers. But she hopes more real cases of using Software A should be introduced more in the presentations to convince local customers better. According to her experience, she thinks presentations that shock and surprise customers by involving some real but dramatic examples give her more impression and persuasion.

The third topic in the interview is cultural differences in business communication and how to improve the communication. As an international company as well, Company B is doing business with international clients. Hence, Ms Wu did not find too many barriers in intercultural communication with Company A. But the only thing she complains is that European companies have problems in replying and following up efficiently due to the time differences and the vacation system. Company B asks for more well-caring services that guarantee the usage of Software A all the time. About the improvements that Company A should take care of, she hopes that Company A can spend more time in guiding and training users of Software A in Company B. Company A preferably should provide more instructions and manual guidance on settings in local language, and those can help them get used to the Software A within a short time.

The partner interview

The partner interviewed is a technical company who is providing the local integration service and technical supports for local customers. The interviewee is Mr. Wang who is the founder of Company C. As a technical partner, Company C has been doing some local tests and technical improvements for Software A, for example, reporting bugs in the program and adjustment in local language. When talking about the demands of the software, he states that the needs of knowledge management type software like Software A are emerging but the competitions will be getting exposed as well when the market is getting more mature. Therefore, currently he believes that local service providers should help improve software as well to meet the needs of the local customers. He also compares local brands to international brands. Local brands are more flexible in development with low cost when the software products in the names of international brands are originally designed on the basis of the different customer behavior and languages. Company C holds the position in which they improve the local service and development by considering the local context.

As a technical partner, Company C is expecting that Company A can do more efforts in exploring customers in local market since Company C has inputted a lot of resources to improve the product and the
local services. Mr. Wang also emphasizes Company A is expected to input more resources in the cooperation, for example, human resources for the local services and long distance support. Regarding to the work process, he also thinks that the reaction of Company A is slower than local companies, hence Company A should enlarge the scale of the resource base. In the local tests, Company C found some bugs as well as some limitations of Software A, for example the compatibility with other management software such as CRM (Customer Relationship Management) software. He hopes that the level of the cooperation between Company A and C would be higher since he thinks the local customers are picky and hard to please even though the market is highly demanding. More efforts should be done in the Chinese case if Company A is ready for expanding rapidly. He also thinks the existing network Company A has can be considered as a significant resource that can help them establish the new local network with local customers as well as local partners. When mentioning the reasons of the cooperation with Company A, he explains that the initiation of the cooperation is based on their private contact with the business development director of Company A. But Company C is also convinced by the attractiveness of the software product and the economic potential of the local service along with Software A.

About the improvements in the cooperation, Company C is expecting more communication in deeper technology, for example, programming rather than only in the application level. According to the knowledge of the Chinese working processes, Company C recommends that the time of technical support should be increased beyond the normal working hours.

The focal company interviews

The company interview was held to supplement information about China expansion that cannot be found on paper in the internal materials of Company A. The interviewee is the founder of Company A Mr. G and he is the business development director in the company. Mr. G is responsible for international expansion and partner relation development in Company A. Several interviews were held with Mr. G regarding to different problems happening in the Chinese case in different time periods. Following are the summary of the interviews. The main questions of the interviews can be found in Appendix 3.

Starting with the intentions of entering Chinese market mentioned in the interview, Company A has two main types of motivation as Mr. G mentions. First, the market of management software especially of knowledge management software is currently emerging in China and they want to grow their international business in this perfect timing. Second, Company A started to consider Chinese market because one of their important partners and resellers Company D who has entered Chinese market through the partnership with Company B. Company A and Company D have been cooperating with each other for many years. Company D is the reseller of Software A in US market. Through Company D, Company A got the contact with Company B who is becoming one of the important customers of Company A in China.
Company A has met many problems in the Chinese case, and two main problems are summarized from the interviews. On one hand, Mr. G found that the Chinese customers did not reply any proposal that they were unsatisfied. Mr.G talks about the case of Company E, in which Company E has not replied any proposal that Company A sent. However, Company E showed interested in the presentation that Company A gave in October, 2009. Mr.G has ever asked for the reasons of no reply through other Chinese companies, and the answer is that Company E thinks the price of the software is too high. Secondly, they found that most of Chinese companies showed interested in the presentations of the product, but not every company intends to do a real purchase. Therefore, Mr. G thinks that the way of the presentations should be improved for the Chinese customers. Besides, Company A also has been learning some preferences of the Chinese customers from their technical partner Company C. Company A is planning to improve the business search engine according to the preferences of the Chinese companies in the next version of Software A. Due to the problem of long distance and time differences, Company A is providing different additional services for the Chinese customers from the services they are providing for other customers. For example, adding more Chinese support and self-configuration functions. In the case of Company B, Company A is providing training services for some employees of Company B in Stockholm. They are learning how to install and configure the software, and how to solve some common problems. In this way, the conflicts of time and distance can be weakened.

When taking about the business relationship of Company A, Mr. G confidently believe the business network of Company A guarantees its success in different regions. Regarding the new relationship with Company B, Mr. G is satisfied with the new business partner. Company B not only becomes one of the most important customer but also explores new opportunities with Company A in China. Company B also has a plan of entering the European market, and Mr. G says they will also support Company B in its internationalization. Concerning the relationship with Company C, Company A has decided to postpone the cooperation with Company C in December, 2010. Mr. G considers that Company C has asked for too much commitment from Company A that they cannot afford. The requests of more technical communication also broke the bottom line of Company A. Therefore, they temporarily disconnect from the relationship with Company C. However, in the cooperation with Company B and Company C, Company A has been learning knowledge about the local market and the local customers. The opinions of the partners also affect their decisions in the Chinese market. Company A hopes they can learn more knowledge through the partners, and also they will establish more relationships in China with the help of Company B.
5.4 Summary

The empirical case is concerning the internationalization of an enterprise software product provided by a Swedish software company. The main findings of the empirical case can be summarized as follow,

(1) The internationalization of Software A is based on the business network of Company A. Company A has been following its partner Company D to enter the Chinese market. Company A also has established a new business relationship in China with the partner of Company D, Company B.

(2) From the customer to the partner of Company A, Company B plays a crucial role in the internationalization process of Software A. Company A has explored the new opportunities with Company B, in which Company B distributes Software A to its own customers in China. Company A has been learning the knowledge about the new market from Company B.

(3) The conflicts between Company A and Company C reflect some problems should be noticed in involving a new partner.

(4) The failure of the Company E case reminds Company A that it should expand through business network when they are unfamiliar with the local market and the local customers.
6 Analysis

In this chapter, the analysis of the nature of enterprise software and the internationalization of enterprise software is discussed on the basis of the empirical data and the relevant theories.

6.1 The nature of enterprise software

From the theoretical study, we know that enterprise software is one type of software products which is offered to business customers, such as firms, organizations or governments according to the definition of business market (Anderson et al. 2008). Enterprise software products have features of involving less customers, longer installation time and more customization requirements (Hoch, al. 1999). Software A is an enterprise software product, which is designed and sold to a specific quantity of business customers. Software A contains the customization functions and the additional services around the implementation process of Software A should take days or weeks to optimize the usage of Software A.

6.1.1 The nature of enterprise software

As a software product, Software A and other enterprise software products inherit the nature of software. According to the theoretical framework, the nature of software can be explained by its “service” nature which includes the classification of service and the typology of service in international marketing, as well as its “product” nature which can be explained by the science of software production and management. I am using the service classification model along with some opinions about the “product” nature of software products to explore the “nature” of enterprise software.

Understanding the nature of a service product will help product managers and marketer define, classify and market their services (Lovelock 1983). Now we use the five classification schemes developed by Lovelock (1983) to analyze the nature of enterprise software products. The first scheme is to identify the intangibility of a service act. Lovelock provides four types of service in this scheme, they are: tangible actions to people, intangible actions to people, tangible actions to things and intangible actions to things (Lovelock 1983). Taking Software A as an example, Software A is a knowledge and content management platform which enables people to reach the relevant information more efficiently. The effect of using Software A is that efficiency of information management and work process is improved. The effect of using Software A is difficult to be evaluated.
for a customer although it can be represented by other ways. But in this process, people are getting more efficient with the help of the knowledge management and classification taxonomy search functions. Enterprise software products are designed for companies and they are used by people in the organization (Hoch, al. 1999). From the explanation of business marketing, service providers should create customer value for their business customers (Anderson et al. 2008). Then we can understand that an enterprise solution provider intends to create customer value to their customers through the enterprise software product and services they offer. Value is obviously an intangible asset here. Moreover, the company and the people in the company are whom an enterprise solution acts to. Therefore, if we don’t include embedded software in machines as software product (Kittlaus and Clough 2009), we can conclude that, the “service act” of an enterprise software product is mainly taking intangible actions to people.

The second scheme is about relationships that service providers establish with their customers. Lovelock (1983) comes up four types of relationships a service being with, membership with continuous service, no formal relationships with continuous service, membership with single transaction, and no formal relationships with single transaction. It is not so difficult to identify the relationships between an enterprise solution provider and its customers. According to the features of enterprise software, on one hand, the customer quantity is not so big, that means, it is possible for an enterprise software provider to manage customer profiles and to maintain long-term “memberships” with customers. On the other hand, an enterprise solution normally requires customization, so the provider has more interaction with the customer. A long-term relationship is more easily formed in this situation. Moreover, network learning and commitment is more and more important for internationalization (Johnson and Vahlne 2003; Johnson and Vahlne 2006; Johnson and Vahlne 2009). Hence establishing a long term relationship with continuous services is critical to an international enterprise software provider. As a result, we can consider the relationship in enterprise software business is normally “membership” with continuous services.

Turning to the third scheme, customization is the most important part in an enterprise software package (Hoch, al. 1999). Lovelock (1983) suggests that the level of customization can be evaluated in terms of characteristics of service that should be customized and judgments of customers should be considered. The levels of standardization and customization contained in Software A would be useful in this case. The main design idea of Software A is to modulate software by different functions. Company A designed ten functional modules in Software A. That means, Software A is produced and developed as a standard package, in which a customer can pick functions they want into their customized software product from these ten modules. This customization can either be done through implementation services Company A provides or be done by customers themselves. Other customization services Company A provides also include the manual guidance and the mapping projects that differentiate from one customer to another. The characteristics of an enterprise software solution usually can be customized. But customization not only can be done by solution providers, but also can be launched by customers themselves. According to
Kittlaus and Clough (2009), if a software product is provided by giving source codes, this customization can be considered as “pure” customization. But this software product still can be produced as a standard package. So in this point, we can see that, if a software product has been well designed, customization can be manually done by customers themselves. It can reduce the risks in internationalization through exporting its standard packages rather than the tailored packages. Moreover, it can also increase the flexibility of the software so that customers can control the time of customization by themselves. As Ms. Wu from Company B said in the interview, they hope they can do more manual settings and customization by themselves, so that they can solve problems on time instead of contacting Company A with difficulties of time differences between China and Sweden. The level of the considered judgments and the level of the frequency of contacting personnel are both much higher in enterprise software business. But sometimes international software providers will consider the preferences of customers in a specific foreign market in developing their new release of the products, as Company A do. They think about to improve search engine by adding “pinyin” identity to their next release specially for Chinese users after they found that this is a common function that the Chinese search engines are compatible. However, it is impossible for an enterprise software provider to consider every judgment of customers to do dramatic changes in their product. The frequency of contacting personnel would not so high when Company A sells the product internationally. In order to reduce the difficulties of contacting personnel in time, Company A launches scheduled webinars on Wednesdays to present functionalities of software and frequent problems.

The nature of “demand and supply” is discussed in the fourth scheme. To understand the nature of “demand and supply” of a service product, there are two extents that should be considered (Lovelock 1983). Whether a service provider can supply with enough capabilities at the peak time or not is the first extent. An enterprise software provider, like company A, usually can estimate how many customers they can handle for following reason. Customers of an enterprise software product are recorded within their memberships. So the provider, for example company A, knows the maximum number of customers they may serve at the peak time. The other extent is the demand fluctuations are wide or narrow. Although the market of enterprise software is competitive due to low entry barriers, it is more stable than consumer market which usually has wide fluctuations.

The last scheme is the nature of “delivery” which can be understood by nature of “interaction” and availability of “service outlets”. There are three interaction types in service business, customers go to providers, providers go to customers, and “arm’s length” transactions. In enterprise software business, these three international types can all possibly happen. A customer may go to an enterprise software provider when they search for their solutions on the Internet which can solve their problems. More possible situation is a customer goes to the provider when some problems happen to the software they bought from the provider. But these two ways of customer going to provider are not really “going” as Lovelock (1983) means. He means that customers physically go to providers. But the convenience of
Service delivery is still relevant in the empirical case, since it is determined by how convenient the contact methods a provider offers. Providers definitely should go to customers in enterprise software business. As business development director in Company A said in the interview, face-to-face contact is the most efficient way to launch new business with new customers and also the best way to offer additional services. Ms Wu from Company B also prefers face-to-face support services. The “arm’s length” transactions are quite common in international marketing. The international clients of Company A could receive services through webinars, long distance desktop, telephone, email, or other “technology” based methods like providers do in “arm’s length”. The outlets of enterprise software could be single or multiple. As a result, we can see that the fifth scheme cannot classify the service in the context of enterprise software. But it is still helpful for creating more convenient service delivery methods for customers.

Figure 6.1 The nature of enterprise software

6.1.2 Enterprise Software in the context of internationalization

After understanding the “service” nature of enterprise software, the “typology of international service” which is come up by Patterson and Cicic (1995) can help us analyze the features of enterprise software in internationalization. Understanding this typology is the precondition of understanding the
internationalization process of enterprise software in Section 6.2. Here we also combine the “product” nature of software products in the analysis.

When we discuss an enterprise software product in the context of internationalization, we should divide a software package into two elements first. One is the functional product which refers to software itself, and the other one is the services a software package contains or potentially involves. First of all, we discuss about the software product itself. Patterson and Cicic (1995) define four types of international services, in which software development is considered as service bundled goods. The intangibility of service bundled goods is lower than “pure service” and it is usually location-free. Enterprise solutions software, as a software program, can be “sampled” like mass packaged software (Kittlaus and Clough 2009). For Software A in the empirical case, Company A is providing a demo version for customers to try and for technical partners to discover bugs in the system. The demo version can be accessed through the Internet. A customer can learn the appearance and the basic functions of the software before formally implementing it. A customer also can attend Webinars Company A organizes every week on the Internet. Based on the demo trail, the uncertainties of a customer can be reduced. This is also something different from other services. A software product also can be burnt on a CD that can be kept or an application file that can be downloaded by customers internationally (Kittlaus and Clough 2009; Lee and Carter 2009). So for a customer, a software product is getting quite similar as other physical products. They can try them before buying, can keep them when using and can get maintaining while they have problems. The uncertainty of using a software product can be reduced when a customer can get more “tangible” information or goods before buying it. Lovelock (1983) mentions that customization might increase the uncertainty of a service customer, since a customized service usually requires more time and cost. Software is programmed by codes, so functions can be defined by codes. Software can be customized easily if customers are allowed to modify the software manually. Kittalus and Clough (2009) even indicate that some software can be “pure” customized if the sources codes are provided by the software providers. However, regarding to different levels of know-how of software customers, a software product can be customized in different levels. The customization of Software A can be done by Company B through their services, when it can also be done by know-how employees in a customer company. But Software A is a special case, because it can be customized easily by adding or removing modules according to the needs of the customers. The Software A is designed as a packaged and modeled product, but more manual functions are provided. According to this special attribute of software products, it is possible for a software provider to design a packaged software product with more self-customization functions like Software A. The standardization not only can reduce the cost for a software provider, but also can increase the transferability of a software product in an internationalization process. Moreover, a standard product can be considered more “tangible” because a customer can learn advantages from successful cases and other users of the system. The advantages of an enterprise software product can be learnt from the successful cases of other similar customer companies. Company A provides different but successful customer cases to potential customers so that those potential customers can learn more
information that is not so “intangible”. The nature of a software product is earlier to be changed due to the flexibility of design codes. The nature of an enterprise software product can be changed more frequently because “customer value” is the most important element in business marketing of enterprise software products (Anderson al. 2008). Patterson and Cicic (1995) believe that the service with more standardization can be more easily exported rather than customized services. More standard the product is, less interactive the contact between a provider and a customer is involved (Patterson & Cicic 1995). The culture differences are less relevant in a service with less interaction and the local presence is not required too much either (Patterson & Cicic 1995). That means, enterprise software like Software A, which is designed in a packaged framework, does not involve too many interactive contacts with customers. A provider, like Company A, just needs to initiate the project physically and to show up when some critical problems occur in some periods. In this way, a provider can retain a customer better. The local presence of providers in this type is not so important all the time in this case. As in the empirical case, the customer company does not worry about software itself but the services like technical support and consulting; that will be discussed following.

Now we goes to services that one software package contains. Patterson and Cicic (1995) put “software support” in the category of value-added customized services, which need more “client-provider” interaction. The additional services a software package contains are mostly chosen by customers themselves. Kittalus and Clough (2009) conclude four types of typical software services, which separately are “Maintenance”, “Support”, “Upgrade Protection” and “Subscription”. For an enterprise solution like Software A, those services are much more important to retain a customer for a long time. Anderson al. (2008) indicate that finding a new customer can be more expensive rather than retaining a loyal customer in business marketing. The services the Software A package contains include most of terms in Kittalus and Clough’s theory. But the main special services Company A is providing are the mapping projects and other services before Software A is fully implemented. Since Software A contains lots of manual, administrative, self-customization functions for customers, the longer learning time is required for training and consulting. The way Company A chooses is to provide training face-to-face to one or one group of employees in customer company especially in intercultural cases like the empirical case. In this way, more self-customization can be done and more technical problems can be solved by those trained employees. Normal services, such as maintenance and technical support, are done by long distant support or via a local technical partner. The customer company Company B in the empirical case has two requirements of technical support. Firstly, they expect the technical support can be provided in the local language, Chinese. Secondly, they hope there are more manual functions and more detail user instructions. They are willing to solve problems as many as they can since sometimes Company A is not available for support, such as in vacations or in a different work time. Company A and Company B eventually achieve the agreement in which one employee in Company B has been being trained before Software A is implemented in Company B. We can see that, the training seems quite important in this case. Company A hopes that future’s technical problems can be solved appropriately by customer themselves as well as the
local technical partners of Company A in China. The relationship between Company A and Company C is subtile. Company C helps Company A find many bugs through local tests. But the thing Company C is complaining is that the technical communication is not enough as they expected. By developing relationship with technical partner, Company A invites Company C to solve technical problems for local customer rather than to do technical development for Software A. As some problems happened in Indian software offshore, Company A also worries about technical stealing or other threats of technical offshore. So they are not opened to all the technical communications with Company C. This might threaten the relationship with Company C, who is paranormally willing to improve the system through getting deep insights into the technology. In this case, Company A is quite clear about the role of a local technical service provider, who is only providing local technical consulting for customers or reflecting problems of the software like bugs. According the experience of Company A in other overseas markets, they only do improvements for customers’ direct requirements and they can definitely handle bugs by themselves. Company C is a positive partner in the empirical case, but Company A believes that protecting the technology would be more important for their company. The conflicts happened between Company A and Company C reflects that a company always consider their own benefits in a network decision. Hence, more communication should be involved to understand network horizon, context identities of each partner in a business network. This will be discussed in more detailed in Section 6.2.

From the empirical studies done by Patterson and Cicic (1995), value-added customized services like software support are more profitable in internationalization than the packaged product itself, such as software. Although the risks of internationalizing value-added customized services are higher than other services’, and such type services can create more value for customers and more profits for providers. Value-added customized services are considered much more significant for an enterprise software provider, especially in the empirical case. In the product and service descriptive brochures, the services Company A provides have been introduced as much as the functions of the product. However, the services are provided in different ways according to Company A. For example, the mapping projects might be replaced by communicating with and training technical engineers from the customer company. After this, the larger scaled training can be done with the help of these trained engineers in the customer company. In the service descriptions, we can find that services are designed in a standard way so that we can also think the services are also designed in standardization. But the difference from standardization of designing the software itself is that this standardization is like a default option for customer. Services vary for different customers according to different cases. Most of services provides, as in the empirical case, help customers optimize the performance of Software A. As an enterprise solution, delivering customer value is quite important to convince customers (Anderson al. 2008). Through additional services an enterprise solution provider can create more value for a customer since the major aim of these services is to optimize the performance of Software A.
6.1.3 Influencing features of enterprise software

At last, we borrow the features of enterprise software that we summarize from the relevant researches into our analysis. Two aspects about enterprise software are going to be discussed here, since these two aspects might influence the internationalization of enterprise software. Firstly, the marketing strategies for an enterprise software product are distinctive from other types of software products. Different from professional services and mass packaged software products, enterprise solutions are focusing on business markets (Hoch, al. 1999). Company A is targeting manufacturers and industrial companies as the target customers. Software A is a group based platform which is used by people working in groups or organizations. A user of Software A could be either a line manager or a common employee. By introducing the technology of business search engine, Company A has been designing and developing an enterprise solution for business markets. Business markets are defined by Anderson et al. (2008) as firms, organizations and governments who are purchasing products or services. Marketing strategies that a business market provider is adopting are crafted to create more customer value and retain long-term customer relationships (Anderson et al. 2008). The marketing strategies for a business product or services are distinctive from the consumer marketing strategies. Creating value is becoming the primary task that Company A should accomplish for their “business” customers. Company A is marketing Software A as a time-to-knowledge solution which saves time for customers. By adopting Software A, customers of Company A can share information, follow industrial tendencies, and make more confident decisions. With more successful decisions, customer companies can reduce costs and gain more “real” revenues. In the discussion earlier, we identify the “service act” of an enterprise software product as to take intangible actions to people. Although an enterprise solution provider is creating value in an intangible way, performance of customer companies can be changed and improved by this way. The results of adopting enterprise software products could be represented as value that providers create for customers. In the theory, customer value usually can be calculated into different economic elements in marketing performance assessment (Anderson et al. 2008). Hence, representing an enterprise software product as customer value is a strategy that is different from the consumer marketing strategies. However, as Anderson et al. (2008) indicates, business marketing focuses on specific customers rather than mass customers in consumer marketing. Keeping relationships are more critical rather than exploring new customers. Value-added services are customized according to different customers’ needs. Marketing strategies are usually dynamic and should always be crafted in different business environments (Anderson et al. 2008). In the empirical case, Miss Wu describes that local customers in China are easier to be convinced by “real” economic value. Marketing performance assessment method (Anderson et al. 2008) might be helpful to convince the local customers.

Customization is the second element that should be discussed in enterprise software. Nukari and Forsell (1999) provide the other way to classify software, we only discuss “packaged” software and “tailed” software here since “embedded” software is also considered as software products according to Kittlaus &
Clough (2009). To avoid ambiguous confusion, here we exclude additional services first and only software is discussed. In the analysis of “customization” of enterprise software (Section 6.1.1), we have mentioned the Software A is packaged but with self-customization functions. Software A is designed into different functional modules that can be picked by different customers. We can say, Software A is packaged since the software has been developed as an integrated solution for each customer. Meanwhile, customers can pick some or all of the functional modules to use in practice. The module-based design of Software A makes the process of tailing and customization more simply and cost-efficiently. Customization can be done by either providers or customers themselves. But from the empirical case, we can see that, designing more self-customization functions will help the provider diminish costs and contact time, although more training services are required. This strategy can be used by organizations who own limited resources or not enough capabilities to supply in foreign markets.

6.1.4 Summary

The nature of enterprise software is discussed on the basis of the “service” and “product” nature of software, the typology of software in the context of internationalization and main features of enterprise software. The nature of enterprise software can be summarized as follow,

(1) The “service act” of enterprise-solution software is taking intangible actions to people or people's minds. The services that enterprise software providers offer are mainly continuous with a long term customer relationships. Enterprise software products are mainly developed in standardized processes, but the additional services are usually customized. Also, self-customization functions can be designed and developed. An enterprise software product not only can be designed as standardization packages but also can be developed as a "pure" customization product according to different customer needs. The enterprise software providers can supply at the demand peak time, since the demand at peak time usually can be estimated and the supply can be scheduled based on "membership" tracking in enterprise software business. The delivery of enterprise software can be done in various ways to deliver. For example, a provider goes to a customer, a customer goes to a provider, or "arm's length" transactions. The deliver outlets can be simple or multiple.

(2) In the context of internationalization, if an enterprise software product can be developed in more standardized way, the risks of the internationalization and uncertainties of customers are both decreased. However, additional services contained in a software package can be more customized since the value-added services usually bring more profits rather than the packaged services.

(3) There are two features of enterprise software which are influencing the internationalization of enterprise software. On one hand, business marketing strategies should be involved in international
marketing of enterprise software. For example, value proposition and delivery both seem more important to enterprise software marketing. On the other hand, enterprise solutions always contain “customization”. The software design and service defining are both affecting the level of the customization.

In the research, the discussion about the nature of enterprise software products is innovatively involved to provide more valuable strategies for enterprise software providers. Enterprise software providers can adopt these strategies with the network-based model to enhance their internationalization process. For instance, more module-based design and more self-customization should be involved in enterprise software development; Also, more practical cases and data should be introduced in product introduction when the product is relatively intangible for customers.
6.2 Network-based internationalization

To get more insights into enterprise software internationalization, internationalization process and mechanism of enterprise software should be understood. In the case of Software A, five companies have been introduced in Section 5.2.2. Internationalization is a company-based action especially in the current business environment. In this section, the analysis is based on the most popular view, the “network view”, in the recent studies of internationalization. Different roles in internationalization process are firstly discussed with the help of A-R-A model from network theory (Anderson al. 1994). Relevant network horizon, context, and identities are also included in the A-R-A model analysis. The internationalization process are analyzed based on the new “business network internationalization model” which is developed by Johanson and Vahlne (2009). Theories in service internationalization and software internalization are also relevant with the analysis. The empirical case is one of examples in which enterprise software products are internationalized on the basis of networks that providers have established.

6.2.1 “A-R-A” model: Networks in internationalization

Starting with identifying all the actors and their activities in their business networks, it is simpler for us to analyze the complex networks that involve different players. Here we apply “A-R-A” model that we have introduced in Section 4.2.2 to help us understand business networks better in the empirical case. From the description in empirical case, we have introduced five companies interplaying in the Chinese case. Company E, as we have mentioned, has not approved any proposal Company A has come up. So we only discuss the other four companies in “A-R-A” model analysis. Anderson al. (1994; 2008) use “focal relationship” to connect focal parties in business networks. We identify three focal relationships in the internationalization of Software A. Network horizon, context and identities are all discussed in each focal relationship.

Focal relationship 1: Company A and Company D

The first focal relationship is between Company A and its channel partner Company D. Before the Chinese case, this focal relationship has been existed since Company D is the channel partner of Software A in US market. Although Company D has not participated any conversations between Company A and Company B, it still plays a significant role in the internationalization of Software A. Company B is the partner of Company D in China, when Company D was entering the Chinese market. As the channel partner of Company A, Company D invited Company A to expand to the Chinese market by introducing Company B. As we can see, the network horizon has been changed in this focal relationship. In the original relationship, Company D has been defined as the “consultant” and the “system integrator” by Company A in North America. The network horizon has been geographically expanded to North America
and China when Company A broadened its horizon by targeting the Chinese market. When we discuss the network context here, three dimensions in “A-R-A” model should be discussed in the terms of the primary and secondary functions of the relationship (Anderson al. 1994). In first focal relationship, Company A and Company D are the primary actors. The primary actors are channel partners and their business relationship is formal and protected by contracts. Company B and Company C are the secondary actors in the focal relationship between Company A and Company D. Company B has formal business relationship with each primary actor, but Company C only has personal contracts with Company A and Company D. We exclude Company C in the following discussion since its relationship in the network is informal. This informal relationship is discussed in the third focal relationship between Company A and Company C in detail. The activities of the actors in the network can be represented by the primary functions as well as the secondary functions. The primary functions of this focal relationship can be divided into two aspects. On one hand, they share value and risks in their cooperation of selling Software A and providing local services in North America. On the other hand, Company A has been following Company D to enter the Chinese market. The results of their original cooperation and expansion to China could be either positive or negative. The secondary activities separately take place to the cooperation Company B with either Company A or Company D, whereas the secondary activities only affect the primary activities that Company A and Company D take in the Chinese market. However, these secondary functions of Company B are quite important in the internationalization of Software A in the empirical case. The resources that are involved in the network include knowledge, experience and relationships of each actor in the network. We do not expand resources here, but the process of “learning” resources in the network is analyzed in section 6.2.2. The secondary resources that Company B has committed to offer are critical to the internationalization of Software A. For example, Company B is the only party in this relationship who has relatively more knowledge about local market. The first focal relationship provides many preconditions for Company A to internationalize Software A. This matches the researches that international marketers have the pre-knowledge from the business relationships before entering a new market (Johanson and Vahlne 2009). Company B holds a strong network identity in this relationship, since Company B opens the door for Company A and Company D to enter the Chinese market. The uniqueness of geographic business location is the most important factor that affects Company B’s network identities.

Focal relationship 2: Company A and Company B

The second focal relationship is significantly influencing the internationalization of Software A for Company A. As we mention in the first focal relationship, Company D is the connection between Company A and Company B when they two established the formal business relationship. In the second focal relationship, Company D becomes the “third party in common” of the focal actors, Company A and Company B. Company B currently is one of the customers of Company A, and it is becoming the reseller of Software A in China as well. Company A and Company B start with the network horizon in which they
are both targeting the Chinese market. Company A starts to consider European market after the establishment of this focal relationship. We do not include the European expansion of Company B in our discussion here, but it shows that the network horizon has been changing from time to time and the network context has also changed consequently. The activities involved in this focal relationship are almost relevant with the internationalization of Software A. The primary interaction between Company A and Company B has been going as follow. Firstly, Company A initiates the first face-to-face conversation about the internationalization of Software A with Company B in China. Company A introduces Software A in terms of the concepts, value, and the functionalities of the product. Secondly, Company B returns the feedbacks about the presentations about Software A. Ms Wu gives some suggestions according to her work experience and feedbacks of other employees in Company B. The concepts of Software A seem to be attractive and interesting in the view of Ms Wu. Company B eventually is convinced by the value of the product. Moreover, Company B enhances its network identity and position again since it not only understands the value of Software A but also is familiar with the local customers. Therefore, Ms Wu hopes Company A can improve the product presentation in the way of giving more examples of the practical applications and tangible performance of Software A. In this specific case, Company B is also confident with their capability of market research as a market research consulting company. In the common case, the local partner might not like Company B. But as resellers they understand their customers on the basis of their experience in local markets. The network position of Company B here is a little complicated. Besides playing as a reseller, Company B is also a customer of Software A. The dual network identities also enhance the network position of Company B, since the relationship contains not only a customer relationship but also a partnership. But the most important view Ms Wu comes up in the interview is that an enterprise software provider can enable its local partner to understand the customer value of the enterprise product. In business marketing, business providers present and deliver value of products and services to their business customers (Anderson al. 2008). Based on this, we propose that it would be easier if channel partners can understand the value of product or service like a real customer. However, this strategy cannot be applicable for all common cases, since not all enterprise software products can be used by channel partners. But in choosing the first partner, providers can consider this as a reference.

Focal relationship 3: Company A and Company C

The last focal relationship, which is between Company A and Company C, is established on the basis of the informal personal contacts. We can find that several problems happen in this relationship. The focal relationship is established on the personal contacts between the manager Mr Wang of Company C and the business development director of Company A, Mr G. From the interview with Mr Wang, I record a lot of complaining from Company C. The conflicts between Company A and Company C can be represented in terms of two focal actors’ different views in network horizons, contexts and identities. Based on the sound personal relationship between Mr Wang and Mr G, Company A expected a good business
relationship with Company C. Company A considers Company C as a local technical consultant who is providing the technical support for local customers in China. But Company C has different opinions in identifying itself in this relationship. Firstly, Company C is intending to be the cooperative developer of Software A so that they ask for more technical communication about the product that has been exceed the range of providing technical support. Secondly, Company C is asking for local investment in hiring local employees to follow the project. As an international company, Company A has a lot of experience in cooperating with different partners in the world. On one hand, Company A has not yet required any cooperative developer when they do not have much knowledge about the local customers. On the other hand, Mr G thinks that it is much more risky to commit resources when Company A does not have enough specific market knowledge. The activities that Company C has taken weaken the trust from Company A, so this is a lesson we have learnt from the empirical case. With different views in network horizon, context and identities, the network perceives more risks of breaking up.

6.2.2 The new “Uppsala model”: Internationalization process in practice

Johanson and Vahlne (2009) revisit the original “Uppsala” model and come up a new network-based model that is suitable in the current business environment. The four aspects which are described in the new “Uppsala” model are discussed in the empirical case. We can see that, from the analysis of “A-R-A” model, the focal relationship between Company A and Company B is extremely relevant and significant to the internationalization of Software A. Therefore, the discussion of the internationalization process is concentrating on the focal relationship between Company A and Company B. The secondary actor Company D, as the third party in common, is also discussed here. The conflicts and failures that happened in the internationalization of Software A are also involved in the discussion.

The original and the new “Uppsala” model are both dynamic. The state aspects would be updated if the other two aspects have been changed to some extent. Companies usually make decisions or take activities on the basis of their knowledge and other relevant changing aspects. The internationalization process of Software A in empirical case can be explained by different changes in the dynamic “Uppsala” model. From being introduced into a new business relationship to internationalizing Software A, aspects in the “Uppsala” model (Johanson and Vahlne, 2009) have been changing all the time. Each aspect is discussed here to help us analyze the internationalization of Software A.
Starting with the first state aspect, we ideally assume that Company A has not explored any opportunity in China and has not yet gained any knowledge about the Chinese market without considering the impact of its business network with Company D. In the traditional internationalization process, Company A can only start the internationalization of Software A from the regions in close psychic distances and it must follow the “establishment chain” according to the original “Uppsala” model (Johanson and Vahlne 1977). Company A can only make commitment decisions of the internationalization of Software A on the basis of its own experience and knowledge. The experience and knowledge that determines or affects Company A’s decisions can only obtained by the current activities of Company A. Now we introduce the business relationship with Company D into the case. Company D has entered the Chinese market with the help of Company B. Company D has explored some opportunities in the Chinese market and has gained knowledge from its own experience as well as its own business network. When Company D suggested Company A to enter the Chinese market, Company A started to perceive the opportunities in China from Company D. Johanson and Vahlne (2009) emphasize the position of the “opportunities” aspect in the model, and they think the “opportunities” aspect is the most important part in the body of “knowledge”. Johanson and Vahlne (2009) state the traditional view of opportunity discovery provided by international entrepreneurship. The traditional discovery of opportunities is associated with the “ongoing” business activities. According to this view, opportunity learning is usually associated with the prior knowledge of the focal company. But in the empirical case, Company A discovers the opportunities in the Chinese market through its partner Company D. This way can be explained by the other view of opportunity discovery. Companies are seeking opportunities by learning from their partners in their business network (Johanson and Vahlne 2009). The “opportunities” aspect is considered by Johanson and Vahlne (2009) as the most critical driver of decision making. In Company A’s case, the discovered “opportunities” in the Chinese market enable Company A to enter the new market when Mr. G explains one of the reasons to enter the Chinese market even though they has not yet learnt any market-specific knowledge by themselves. But this is not the only reason Company A decided to enter the Chinese market.

In the “knowledge” aspect, Johanson and Vahlne (2009) add “relationship-specific” knowledge which is obtained from partners in the business network. “Relationship-specific” knowledge contains resources and activities of each member in a business network. Company A obtained the contact with Company B from Company D. Here, the contact can be seen as one of resources in the network. Different from the traditional way, the first information about the market is coming from partners rather than is obtained by the focal company itself. In this way, international marketers have pre-knowledge about a new market and these companies can initiate businesses with the help of different partners (Johanson and Vahlne 2009). As a local company, Company B have much knowledge and experience about the preferences of local customers. In this case, the knowledge about local customers can be considered as a “relationship-specific” resource. The knowledge firstly is learnt by Company D, then Company A.
Relationship commitment decisions

Now we are moving to the first changing aspect that is affected by knowledge and opportunities. After learning knowledge and opportunities, the relevant commitment decisions are made by a focal company. We can see companies have their own drivers to make decisions in a network. Traditionally, the commitment decisions are made from the knowledge of a focal company. In the previous analysis, we ideally think that Company A has no knowledge about the Chinese market. But in reality, Company A knows some knowledge about the Chinese market through some professional experts or organization. The non-official knowledge is seen as one of drivers to make the initial decision. In our case, the initial decision is to commit resources to enter the Chinese market. As we mentioned, the “opportunities” aspect highlighted by Johanson and Vahlne (2009) is the second driver of decision making. These opportunities can be discovered not only by a focal company itself but also through the network. The third driver is from the business network, and here we should involve other two aspects in the model. Firstly, a focal company enhances its network position by committing resources to its business relationship. Secondly, the committed resources can increase the trust from other partners in the “learning and trust building” aspect. In this way, the focal company can earn trust to obtain more knowledge for the following commitment decisions.

With the help of “Uppsala” business internationalization model (Johanson and Vahlne 2009), we can understand how actors make commitment decisions and why they make these decisions. We firstly review the decision of Company D in which Company D bring the “opportunities” and commits relevant resources to the relationship with Company A. For Company D, the decision is mainly driven by the three driver. Firstly, Company D needs to enhance its network position by showing its commitment to Company A. Without the relationship with Company D, Company A may not currently enter the Chinese market even though they have some market-specific knowledge from other resources. So the importance of Company D to Company A has been enhanced by the decision. Secondly, Company D can consequently receive more trust from Company A by the decision. Company A is more willing to commit resources to Company D when new opportunities emerge. Although Company D is only a connection between Company A and Company B at the beginning of the internationalization of Software A, Company D enhances its position in both two different business relationships. Besides this driver, Company D also made this decision on the basis of its current knowledge and the “opportunities” it has learnt.

In the empirical case, Company B has made three relationship commitment decisions. First of all, they decide to initiate the conversations with Company A when Company D tries to connect two companies. To make this decision, Company B on one hand is showing its trust and commitment to its existing partner, Company D. On the other hand, Company B establishes a new business relationship with Company A and potentially builds a base for its expansion in the European market. Secondly, Company
B decides to become the customer of Company A. The main reason that drives Company B to consume 
Software A is that they understand the product can create the value for Company B. This decision is 
mainly made on the basis of Company B’s own knowledge about its own business. Meanwhile, Company 
B explores a new opportunity of its own business in which the customers of Company B are evaluated as 
the potential customers of Software A. This opportunity is perceived when Company B has understood 
the functions and value of Software A. So we can also say, the opportunity is also gained from its new 
business relationship with Company A. Based on this opportunity discovered in a new business 
relationship as well as Company B’ own knowledge, Company B made the third relationship commitment 
decision in which it becomes a channel partner of Company A. Here we also involve the Company E case 
as a comparison in our discussion. As we mentioned, Company E is another potential customer of 
Company A but no decision has been made by Company E. For Company E, its own knowledge is the 
most important decision driver. Company E does not need to consider its network position since there are 
no existing “third party in common” of Company E and Company A. So we can say, there is no existing 
trust base between Company A and Company E. The decision can be made only when Company E 
considers the Software A is the most competitive alternative they should choose on the basis of its own 
knowledge and opportunity seeking mechanism. From the comparison, we cannot say that the drivers 
from business network determine the commitment decisions, whereas a company should always consider 
its business network when it makes any decision.

At last, we come to the commitment decisions that are made by Company A. Company A firstly make the 
commitment to its existing partner Company D before establishing the new business relationship with 
Company B. In this way, Company A made the commitment of following the key partner Company D to 
a new market. In the traditional internationalization model, companies should choose suitable market and 
entry modes when they decide to internationalize themselves. In the network model, we can see that these 
decisions are not fully made by a focal company itself. Following partners is more important decision a 
focal company should make in not service market, especially in software internationalization (Bell 1995; 
Coviello & Munro 1997). Moreover, different commitment decisions can be made to different business 
customers or partners in business marketing. Market or entry models may be affected or determined by 
business partners in today’s internationalization. In the case of Company A, the market is selected by both 
Company A and Company D. Meanwhile, entry modes usually need to be negotiated with different 
business customers or partners in local markets. Therefore, we can prove that the traditional thinking 
about the selection of market or entry modes is irrelevant in the empirical case as well. Secondly, 
Company A not only discovers new opportunities with the help of Company D but also enhances its 
network position in the business relationship with Company D. The obtained opportunities and 
knowledge from Company D both affect the following decision in which Company A decides to establish 
the new business relationship with Company B. The primary aim of establishing this new business 
relationship is to convince Company B to be the customer of Company A in China. In fact, Company A 
has succeeded in selling Software A to Company B. Company A has convinced Company B by the
functions and the value of Software A. After that, they develop a new decision in which Company B becomes the channel partner of Company A in China. Company B not only accepts Software A and believes it can be sold to its own customers. The last decision can be seen as a benefit of the new business relationship between Company A and Company B. Company A and Company B both discover the new opportunities in the interaction with each other and the opportunity learning from each other.

Learning, creating and trust building

In the new model, the original “current activities” is replaced by “learning, creating and trust building”. Building on the revisited views concerning knowledge learning, creating opportunities and trust building, we can have different understanding about the process of learning, creating and trust building from the traditional views. We have mentioned some relevant activities of actors in the empirical case in which they are learning relationship-specific knowledge from each other in their networks. Now we discuss it from a further perspective. “Opportunities” aspect is considered as the key part of “knowledge” body, so we discuss knowledge learning and opportunities development together. In first two focal relationships in Section 6.2.1, Company A are both learning knowledge from its existing partner Company D and its new partner Company B. But the learning processes are distinctive in two business relationships. In the relationship with Company D, Company A has perceived a new opportunity from Company D. Johanson and Vahlne (2009) mention two ways of knowledge development. The learning process of Company A and Company D in the empirical case belongs to the first type, in which they are learning from each other. Company D is more familiar with the new knowledge about the new market including the new opportunities. Company A is directly learning the knowledge from Company D before making any decision. The other way of knowledge development is learning from the interaction with each other in a business relationship. This is exactly what happens to Company A and Company B. Company A has been learning about its new customer Company B from Company D. After being the customer of Company A, Company B is also becoming a channel partner of Company A. This decision is made on the basis of the interaction between Company A and Company B. The supporting knowledge for decision making is produced in the interaction of Company A and Company B. As we previously say, this cooperation, which is from a customer relationship to a partnership, is not suitable for all the enterprise software providers. In the empirical case, the users of Software A can be either the employees in Company B or the customers of Company B. Although not every enterprise software is designed for all kinds of companies, it is still possible to apply this “from customer to partner” model of business relationship development for some of enterprise software providers. From the empirical case, we also have learnt that the new concept “relationship-specific knowledge” is extremely crucial for the internationalization process of Software A. If there is not knowledge from the existing partner as well as from the new customer, Company A will not confidently make decisions at this time point. However, the other element in this aspect should be considered as well. The “trust” building is quite important in the whole learning process in Company A’s case. The “trust” can explain the reason why Company A can be convinced to make commitment
decisions when it is unfamiliar with the new market. Johanson and Vahlne (2009) emphasize that lack of knowledge can be substituted by the trusted knowledge from the trusted partners. When Company A makes decisions to show its trust to Company D, the more trust between Company A and Company D has been built for their business relationship. Also in the empirical case, the high trust between Company A and Company D also enables Company A to trust Company D’s partner Company B and to establish a new business relationship. Moreover, when Company A trusts Company B, the trust between Company A and Company D has been enhanced again. So we can see that the trust building between Company A and Company D not only happens when Company A trusts Company D to start new business in a new market but also occurs when Company A trusts Company D’s business relationship with Company B to establish a new business relationship with Company B. The difference between going broad via business network and internationalizing through unknown local respective is the level of trusting local distributors. On the basis of trusted business relationships, risks of internationalization can relatively be reduced. Especially for service products with higher risks, internationalization can be supported and guaranteed by their stable business networks. As a changing aspect in the new “Uppsala” model, trust building is affected by different activities of each actor in a business network. Trust drives focal companies to believe the knowledge they are learning from the network is reliable, and decisions affected by the reliable knowledge conversely contribute higher level of trust among actors in a business network. As one of the most important process, the knowledge learning and trust building aspect is consequently affecting different actors’ states of network positions in a business network.

**Network position**

The original “market commitment” has been replaced by “network position” which especially refers that an internationalization process is established in a network (Johanson and Vahlne 2009). The “network position” of a company in its network can be used to describe its business relationship in terms of different levels of knowledge, trust and commitment (Johanson and Vahlne 2009). In the discussions about other three aspects in the new “Uppsala” model, “network position” has been related in the discussion many times. Moreover, we have learnt that the network positions of Company A, Company B, Company C and Company D have been changed in the internationalization process of Software A. However, not every party enjoys a strong network position. For instance, the network position of Company C has been weakened by its activities in the internationalization process of Software A. As we previously mention, Company C and Company A hold different views on the technical cooperation. For Company A, Mr. G appreciates the active attitudes of Company C but he thinks two companies are expecting different things from the relationship. Consequently the cooperation is postponed. We can try to explore why the network position of Company C is getting weak. In the empirical case, Company C asks for too much commitment from Company A which Company A cannot afford. Afterwards Mr. Wang, who is the CEO of Company C, is complaining not only in the interview but also in other ways that Company A cannot provide enough commitment to their relationship. But reality is that, Company A still has its own knowledge to decide how much it can commit even though it should consider its “network
position”. There are three perspectives we can consider here. Company C firstly is not clear enough about its “network identity” which it can play for a better “network position”. Secondly, complaining is not a good way to convince the partner but to weaken the trust between two parties. Thirdly, the timing of Company C’s proposals may not be suitable enough for Company A to make decisions. We can see that a company still makes decisions on the basis of its own knowledge and resources not only for a better network position.

Except Company C, the network positions of Company A, Company B and Company D have been enhanced by their commitments to their networks. Company D has shared the knowledge and opportunities with Company A to increase the trust from Company A. By this way, higher trust enhances Company D’s network position. Company D also has introduced Company A to Company B so that Company D plays a key connection in the new relationship of Company A and Company B. Therefore Company D not only enhances its business network but also promotes its importance in its business network. Company B has also intensified its network position by defining a unique “network identity” in its business relationship with Company A or Company D. As the partner of Company D and the customer as well as the partner of Company A, Company B has a unique position in Company D’s or Company A’s network. Showing big advantages of knowing local customers in the Chinese market, Company B holds a strong network position because of its unique and strategic identity. The commitment decisions Company B has made also has enhanced its network position. Two main activities drive Company A to enjoy a better network position in its business network. Firstly, Company A shows its commitment and trust to Company D by accepting its proposal to enter the Chinese market. The trust, which is shown by its commitment decisions of entering the new market as well as engaging with the new partner, is also producing the trust from Company D. The newly built trust enhances Company A’s network position in the relationship with Company D. Secondly, the commitment to build the new business relationship with Company B enhances Company A’s network position in a new market. In the new “Uppsala” model, the aspect “leaning, creating and trust building” affects the “network position” state. However, the changes of network position should be also affected by what commitment decisions a company has made to its business network.
6.3 Suggestions for enterprise software internationalization

As an example of enterprise software internationalization, the case of Company A gives us lots of hints in enterprise software internationalization. We are now giving some suggestions and learnt lessons from our analysis of the empirical case for other enterprise software providers. The empirical case happens when Company A starts to bring Software A to a new market, the Chinese market. Therefore, our discussion mainly focusing on the time period in which an enterprise software provider initiate its business in new markets.

We have used the network “Uppsala” model (Johanson and Vahlne 2009) to analyze the internationalization process of Software A which is on the basis of Company A’s business network in Section 6.2.2. I cannot subjectively conclude that “network-based” internationalization models are applicable for other enterprise software providers. However, the network-based internationalization models can somehow inspire enterprise software providers who are still thinking in the traditional ways.

Johanson and Vahlne (2009) have not pointed that the new “Uppsala” model is suitable for the companies in any specific industry. But they have described the changes in knowledge learning, trust building and the application of the “establishment chain” in today’s business environment. Based on the relevant researches and the empirical studies on today’s internationalization, Johanson and Vahlne (2009) add the “business network” view to update the “Uppsala” model. Therefore, the new “Uppsala” model is established on the basis of convinced theoretical researches and empirical studies. The new “Uppsala” model is also promoted by Johanson and Vahlne (2009) as a more common model which can be used by companies with different business scales, but the original model is more suitable for small business. From the view of today’s business environment, the new “Uppsala” model ideally can be applied by most of companies who want to internationalize their products and services.

Start with different levels of “Knowledge and opportunities” and “Network position”, an enterprise software provider can pick suitable business partners to learn more knowledge, create new opportunities and retain or start more trustful relationships. In these activities, network commitment decisions are made to enhance its network position so that more knowledge and opportunities can be learnt from the business network. The selection of entry modes and market is not only by a provider itself but is affected by its business partners in its business network. “Establishment chain”, which is come up in the original “Uppsala” model (Johnson and Vahlne, 1977), is also not suitable for today’s internationalization as well as enterprise software internationalization. The four aspects in the new “Uppsala” model are more relevant to be discussed in today’s enterprise software internationalization.

“Opportunities” is becoming the most important part of the “knowledge” body in the model. An enterprise software provider can learn the “opportunities” from its business partners in specific markets. It
can also create new “opportunities” during the interaction with its business partners. The perceived opportunities drive an enterprise software provider to make decisions of selecting markets. The other kind of knowledge should be noticed by enterprise software providers. Relationship-specific knowledge learnt from business network is considered as one of knowledge resource that can help an enterprise software provider overcome geographical and cultural differences in internationalization. Relationship-specific knowledge contains market-specific knowledge and general internationalization knowledge according to Johnson and Vahlne (2009). But in our discussion about the empirical case, we have learnt that knowledge about an enterprise software product should be also delivered as one type of relationship-specific knowledge. In knowledge about an enterprise software product, we highlight the value of the software. If your business partner can also understand the value of the software, more opportunities can be explored through your partner.

“Commitment decisions” that are made for business relationships, should be based on the certain knowledge and opportunities learnt from business networks. By committing decisions, an enterprise software provider is showing the commitment and trust to its business partners so that it can enhance its network position in its business network. These decisions are not only important for internationalization of the product but also for the future’s cooperation with business partners. However, these decisions should be made on the basis of good understanding business networks including actors’ activities, resources and their network positions. Enterprise software providers should also understand their own network horizons, contexts and identities when they make any relationship commitment decisions.

“Learning, creating and trust building” is an extremely critical process in the whole internationalization process. “Learning” refers to knowledge learning, which contributes the essential knowledge for decision making. “Creating” regards to opportunity creation, which is exactly crucial for an enterprise software provider’s international expansion. “Trust building” is not only significant for internationalization of any enterprise software provider but also for retaining business relationships. A trustful knowledge resource can substitute lack of knowledge. Enterprise software providers should on one hand increase its reliability to attract trust from other parties in their business networks. On the other hand, they can choose to involve the most trustful partners in their business networks into their internationalization processes.

“Network position” of an enterprise software provider can affect other partners whether to commit decisions, share knowledge and opportunities and trust for future’s commitments. An enterprise software provider should not only show commitments to its business partners by making relationship commitment decisions to business networks, but also should strategically define its own network horizon, context and identities in its business network. Correct understanding its business partners’ network positions is also critical for an enterprise software provider to choose the most suitable or the most trustful partner to learn in its internationalization process.
Besides following the new “Uppsala” model, we can also learn some strategies from our empirical case, which can be adopted for internationalization of other enterprise software providers. On one hand, value understand of a software product can start from local partners. In the empirical case, the value of Software A has been understood by Company B when it starts to be the customer of Company A. The better understanding value of Software A drives Company B to learn the new opportunities in the Chinese market. From a customer to a partner, the main reason is that the value of Software A has been successfully delivered by Company A. Value of an enterprise software can be also seen as relationship-specific knowledge which should be delivered by an enterprise software provider. On the other hand, as an actor in the business network, an enterprise software provider should also consider which commitments cannot be made. The lessons we have learnt from the case of Company C in the empirical case. When you ask for commitment which your partner cannot afford, the relationship can possibly be threatened and the trust of the relationship also can probably be weakened. So understanding your own position and your partner’s position in your network is equally important when you make any relationship commitment decisions.

The main distinction of our discussion from other studies on internationalization is that we also consider the features of the main products in the internationalization. Although internationalization process has been considered as a company-based process, I still think the enterprise software providers should also fully understand their products since enterprise software products are more intangible but more flexible than other products in internationalization. This idea is not only appropriate for enterprise software providers but also for other software providers. In other word, understanding your products helps you choose suitable internationalization methods and internationalization strategies which make the internationalization process more efficient and effective. Here we also summarize some strategies for enterprise software providers on the basis of our discussion about the “Nature of enterprise software”.

First of all, more self-customization functions can be introduced by an enterprise software provider. In our discussion about customization of enterprise software, we have mentioned that the module-based design of Software A enables the customization process much simpler. Moreover, more self-customization functions not only reduce the contact time but also solve some problems of time differences or lack of local services. However, the disadvantage is more training or more guiding about these self-customization functions should be involved. Secondly, more practical cases and data should be introduced when the product is relatively intangible for customers. Not only for the customers in the Chinese market, are most of software customers more easily convinced in an economic way. Although software can be sampled before purchase as we say, the effectiveness of the software can be different for different customers. A software product may be difficult to be assessed in an economic way, but some technologies like marketing performance assessment method should be helpful for value proposition of enterprise software products.
7 Conclusions

The main results of the study are concluded in this chapter.

Based on the discussions about the “nature of enterprise software” and the “internationalization” of enterprises software providers on the basis of their business networks, I have tried to help an enterprise software provider discover an efficient internationalization process from understanding the product and the business network.

The nature of enterprise software has been firstly studied to help enterprise software providers understand their enterprise software products. By using Lovelock’s service classification schemes (Lovelock 1983) and Patterson and Cicic’s international service typology (Patterson and Cicic 1995), enterprise software is figured as tangible and customized service but standard product from the analysis. An enterprise software package can be divided into the product itself and the incidental services. Software product is identified more standard than additional services in internationalization. Additional services of the software can be more customized since these value-added services usually create more profits according to Patterson and Cicic’s study.

The internationalization of enterprise software has been discussed in the context of the empirical case. The new “Uppsala” model, which is developed by Johanson and Vahlne (2009), has been applied to analyze the internationalization of Software A. The internationalization is a dynamic process in which four aspects interplay with each other, “Knowledge and opportunities”, “Relationship commitment decisions”, “Learning, creating and trust building” and “Network position”. In the model, knowledge and opportunities can be learnt by an enterprise software provider from its business partners. The relationship-specific knowledge has been considered as the knowledge which can help an enterprise software provider overcome distant psychic differences in internationalization. The lack of knowledge also can be substituted by the knowledge of the trust business partners. The learning process and commitment decisions are both taken to by an enterprise software provider to enhance its network position. The internationalization of an enterprise software product can be viewed as a process, in which an enterprise software provider is learning more and more knowledge from its business partners, holding stronger and stronger network position and going to more and more markets on the basis of its bigger and more trustful business network.

The empirical case is one example of today’s enterprise software internationalization. The success of Company A’s first endeavour in the Chinese market has been supported by its strong business network. From understanding the product to understanding the network, Company A has not only been developing its product by following an advanced design idea, but also chose the right business partners to learn knowledge and create opportunities. From understanding the product to understanding the network, an enterprise software provider can start to think about its internationalization in a new way.
8. Proposition for future work

This chapter provides some proposition for the future’s work of other researchers in this field.

As an exploratory research, I have applied the new “Uppsala” model to explain today’s internationalization of enterprise software providers in the context of our empirical case. By suggesting this model along with the discussion about nature of enterprise software, I am trying to suggest more suitable internationalization strategies for enterprise software providers. The future work based our study can be suggested by following three perspectives.

Based on the research about nature of service products and knowledge about software products, following researchers can explore internationalization strategies for other software providers, for example, mass packaged software providers. Besides, with the trend of “Software-as-service”, this new type of software service form can be also studied on the basis of the service nature of software. Enterprise software is one type of software products which we can find in the market.

The application of the new “Uppsala” model in the empirical case inspires us that the network view gives a new way to implement internationalization. However, I still cannot answer, the network view is just a new perspective of internationalization as a supplement or it can be applied as a common view for enterprise software internationalization. The new “Uppsala” model still should be tested by more empirical cases on today’s enterprise software internationalization.

At last, for those researchers who are interested in enterprise software business or international marketing strategies, I suggest that the studies about value assessment of software can be discussed further more. We have mentioned that understanding value of a software product is quite important for a software provider. From the knowledge of business marketing, the value of business services or products can be calculated by involving marketing performance assessment method (Anderson al. 2008). If the value of a software product or service can be represented in an economic way, the intangibility of a software product can be weakened in internationalization.
References

*The Open Resources: Following are the open resources that are published in journals or on the Internet*


*The Closed Resources: Following are closed references that are provided by Company A*

Homepages of Company A, E, C, D, E

Product Description, Marketing guide and Users’ Manuals from Company A
Appendix 1 – Interview questions (A)

Following are the interview questions (A) for a Chinese company who is the customer and the channel partner of Company A. The interview was carried out via telephone at the headquarter office of Company A on Apr. 29th, 2010. The questions have been translated into English, since the interview was held in Chinese.

1. What do you think of enterprise management software? Is knowledge management and competitive intelligence software which is provided by like Company A practical and useful for your daily operation and business?
2. What do you think of enterprise management software which is in the name of an international brand comparing to a local brand? Which one is your company willing to use more, local brands or international brands? Can you talk about pros and cons of both?
3. According to your experience, which methods of value proposition and delivery could be more acceptable by local customers? What do you think of the value and knowledge delivery of Company A? Is it easy for you to understand their proposition?
4. Besides software itself, do you think local services that a software package contains are important to your business?
5. What is the biggest benefit of the Software A to your company do you think?
6. Do you think there are some problems of the communication with Company? Any language barriers or cultural differences involved? What are the biggest distinctions between cooperation with an international company and with a local company?
7. Do you have any suggestions or comments to the cooperation with Company A? Or any suggestions for value proposition and product introduction?
8. According to the existing relationship and communication with Company A, what should Company A make efforts to improve the relationship and cooperation?

Thank you so much for answering my questions!

Organization of Supervisor: Company A
Organization of Examination: Royal Institute of Technology
Responsible and contact person: Xin GUO
Appendix 2 – Interview questions (B)

Following are the interview questions (B) for a Chinese company who is the potential technical partner and local service provider of Company A in China. The interview was carried out via telephone at the headquarter office of Company A on May. 3rd, 2010. The questions have been translated into English, since the interview was held in Chinese.

1. According to your knowledge of local customers, what do you think of their needs of enterprise software, such as enterprise knowledge management and competitive intelligence software?
2. As a technical service provider, what do you think of enterprise management software that is in the name of an international brand comparing to a local brand? Which one is your company willing to corporate more, local companies or international companies? Can you talk about pros and cons of both?
3. According to your experience, which kinds of value proposition and delivery ways could be more acceptable by local customers? What do you think of value and knowledge delivery of Company A? Is it easy for local customers to understand their proposition?
4. Been becoming the channel and local service provider of Company A, what are the most attractive advantages of Company A? Or what are the main reasons for your company to establish commitments with Company A?
5. By noticing your website, your company has done some local tests of the Software A. What are the results? What do you think of the market potential of this software?
6. Do you think there are some problems of the communication with Company A? Any language barriers or cultural differences involved? What are the biggest distinctions between cooperation with an international company and with a local company?
7. Do you have any suggestions or comments to the cooperation with Company A? Or any suggestions for value proposition and product introduction?
8. According to existed relationship and communication with Company A, what should the Company A do to improve the relationship and cooperation?

Thank you so much for answering my questions

Organization of Supervisor: Company A
Organization of Examination: Royal Institute of Technology
Responsible and contact person: Xin GUO
Appendix 3 – Interview questions (C)

Following are the interview questions (C) for Company A, the focal company in the empirical case. The interviews were carried out at the headquarter office of Company A during the time period from February 2010 to December 2010. The questions have been summarized as follow,

1. What are the main intentions of entering the Chinese market?
2. What challenges and problems has Company A met or been meeting in the internationalization of Software A?
3. What services does Company A provide for the Chinese customers? How does Company A handle the long distance problem in the internationalization? For example, installation, technical support and maintenance services
4. Who are the target customers of Software A in China? What are the main characteristics of these target customers?
5. What improvements is Company A doing for the Chinese customers according to their preferences?
6. What do you think of the reasons of the success in establishing the new relationship with Company B? How do you evaluate the relationship with Company B?
7. What do you think of the requests from Company C about more technical communication and cooperation? How do you evaluate the relationship with Company C?
8. How does Company A make decisions in internationalization? For example, entry modes and market selection, partner selection etc.
9. How does Company A obtain market knowledge when you are unfamiliar with the local market?
10. What do you think of the importance of business network in the internationalization of Software A?

Organization of Supervisor: Company A
Organization of Examination: Royal Institute of Technology
Responsible and contact person: Xin GUO