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MASTER'S THESIS:
**INTERNATIONALIZATION PROCESSES OF FINNISH
SOFTWARE FIRMS:**
**THE INFLUENCE OF NETWORK RELATIONSHIPS AND PRODUCT
AND THE SYNERGY BETWEEN THEM**



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“Internationalization processes of Finnish software firms: the influence of network relationships and product and the synergy between them”

(= “Suomalaisten IT-yritysten kansainvälistymisprosessi: verkostot ja tuote sekä niiden yhteisvaikutus”)

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It-alan pk-yritysten kansainvälistymistä verkostojen näkökulmasta on tutkittu paljon, mutta verkostojen yhteisvaikutusta tuotteen kanssa vähemmän. Tässä pro gradu -tutkielmassa paneudutaan sekä verkostojen että tuotteen merkitykseen sekä niiden yhteisvaikutukseen IT-yrityksen kansainvälistymisprosessissa. Tutkielmassa on myös huomioitu muita kansainvälistymiseen vaikuttavia tekijöitä. Tutkielma jakautuu kirjallisuuskatsaukseen sekä empiiriseen osioon. Kirjallisuuskatsauksessa esitellään verkostoja ja tuotetta sekä niiden synergiaa käsittelevää kirjallisuutta. Empiirinen osio toteutettiin laadullisena tapaustutkimuksena, jossa haastateltiin viiden IT-yrityksen kansainvälistymisprosessin tuntevaa työntekijää. Teemahaastatteluissa paljastui niin yhteneväisyyksiä kuin eroavaisuuksia kunkin yrityksen kansainvälistymisprosessista. Pääsääntöisesti haastattelujen tulokset tukivat aiempaa kirjallisuutta: sekä verkostot että tuote/palvelu/innovaatio ovat tärkeitä elementtejä kansainvälistymisprosessissa. Kumpaakaan, verkostoja tai tuotetta, yritykset eivät osanneet arvioida tärkeämmäksi, vaikka tuotteen laatu kansainvälistymisen alkuvaiheessa onkin hyvin merkityksellinen. Pääsääntöisesti menestyminen kansainvälisillä markkinoilla on seurausta monesta tekijästä, eikä se ole ainoastaan riippuvainen verkostojen luomisesta tai tuotteesta ja tuotekehityksestä.

Asiasanat: kansainvälistyminen, verkostot, tuote, palvelu, innovaatio, pk-yritykset, pienet teknologiayritykset

ABSTRACT

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Internationalization processes of small- and medium-sized software enterprises have been studied largely in terms of network relationships. The interaction between networks and product, though, has been investigated less in the literature. The emphasis in this master’s Thesis is the importance of network and product plus their synergy in the internationalization process of software firms. Other affecting factors raised in the interviews have also been included into this paper. The study contains the literature review and the empirical part. Research and studies regarding network relationships and product are introduced in the literature review. The empirical part was conducted as a qualitative case study, thus, employees of five firms were interviewed. The interviews revealed that firms have similarities and differences in their internationalization processes. In general, the findings support previous research: both networks and product/service/innovation are essential in the internationalization process. Neither networks nor product was considered superior according to the representatives of the firms although the quality of the product is crucial in the beginning of the internationalization process. Success in the global market is mainly due to several factors, not only depending on creating networks and product or its R&D.

Keywords: internationalization, network relationships, product, service, innovation, STEs (=small technology-based enterprises), SMEs (=small- and medium-sized enterprises)

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1 INTRODUCTION

Internationalization theories of SMEs (small and medium-sized enterprises) have experienced a huge transformation since the 1970s, when the 'Uppsala model' of internationalization was introduced by Johanson and Vahlne. These theories have changed basically due to improved global communication and transportation infrastructures (e.g. Madsen & Servais 1997). Modes to enter foreign markets are changing more rapidly and directly at the moment, which is contradictory to gradual and slow internationalization theories presented in the past (Hedlund & Kverneland, 1985). In addition, the acceleration of internationalization occurs most obviously among high-technology firms since the product life-cycles are relatively short and R&D costs are high in the software industry (e.g. Allen, 2015; Hanna, 2016; Young, 1987; Kobrin, 1991). Thus, internationalization processes have been thoroughly precipitated during the past decades, particularly within IT sector.

The traditional approaches to internationalization of SMEs have been questioned, modified or replaced by other theories due to radical changes in the internationalization processes. Nevertheless, none of these approaches seem to be above others; these perspectives rather support each other. Software industry, in particular, has been on a special focus since IT firms seem to imply a specific internationalization process. According to Coviello and Munro (1997), the internationalization process of small software firms differs from the traditional incremental processes as follows: 1) the internationalization process may last less than three years 2) the process is limited only in three stages and excludes large foreign market evaluation, experimentation or trial 3) these small firms tend to act like large companies: they use simultaneously several modes of entry. Coviello and Munro also argue that software firms apply network relationships in order to externalize their market development activities abroad. Oviatt and McDougall (1994, 46-47) characterize these firms as *international new ventures* competing in a dynamic international market, where fast alterations and product obsolescence is present. Network relationships, nevertheless, seem to remain a common factor as a driving force in the processes entering foreign markets. However, for instance Nummela (2004) argues that the influence of network

relationships in SME internationalization process of SMEs has remained confusing.

At present, there is only a limited amount of literature concerning the significance of the product related to internationalization process and network relationships (e.g. Ojala & Tyrväinen, 2006). Coviello and Munro (1997, 379) affirm that network relationships can both accelerate and hinder product development and the diverse activities in the markets. Thus, the connection between the product, social capital and internationalization processes is very limited in the current literature. A special focus of this study is therefore on both the network relationships and the products - including the services - that software firms are offering to their customers. As a certain innovativeness is linked to both internationalization and product (Rönkkö et al., 2013; Wolff & Pett, 2006), the theme will be also briefly glanced in this paper.

In this study, I will first introduce the most relevant SME internationalization theories that are closely linked to software industry. These theories include the incremental theory of internationalization, called the "Uppsala theory". From network theories I will introduce the most significant ones related to software firms. Second, I will discuss the importance of the product and its influence on the internationalization process of software firms. As mentioned before, the life cycle of products within the software industry is relatively short. Thus, an interesting aspect will be what sort of limitations or opportunities firms may encounter in the global market due to product obsolescence, for instance, and is this relevant in the internationalization process. I will also include a related topic, innovativeness, into the same chapter. Third, I will examine the synergy between the networks and the product in the internationalization process.

Software firms, as stated above, tend to operate in a specific manner in their intentions to internationalize. Network relationships and the product do affect the internationalization process of a company but the question remains: to what extent? Thus, the primary study question will be accordingly:

- What is the significance and the synergy of network relationships and the product in the internationalization processes of Finnish IT firms?
- A further question will be, whether the product precedes networks in the process of entering the markets or vice versa?
- In addition, what other substantial features, for instance cultural issues, affect the internationalization process?

As a whole, the purpose in this study is to examine how Finnish software firms have succeeded in their intentions to internationalize and how relevant the combination between the product and the networks has actually been in the process entering global markets. Based on existing literature about the themes, some answers to the questions can be deduced but so far there is no clear and uniform theory in terms of the synergy.

2 INTERNATIONALIZATION THEORIES: FROM THE STAGE THEORY TO NETWORK THEORIES

In this chapter, I will present the most common theories related to the internationalization processes of software firms. I will begin with the Uppsala model, the traditional stage theory. Thereafter, I will present the most common views on the network approaches. There is a huge variety of network approaches, which will not all be presented. The selection here is based on theories that are traditionally linked to software firms (e.g. Bell 1995; Coviello & Munro, 1997; Oviatt & MacDougall, 2005; Ojala, 2009) and to their internationalization processes; these theories are continuously referred to and mentioned in the literature.

2.1 The incremental 'Uppsala model'

Johanson and Vahlne created a model of internationalization process in 1970's, which they revisited again in 2009. It is not surprising that many changes have occurred in business practices, business environment and company behavior since their first model in 1977. (Johanson & Vahlne, 2009)

According to the original Uppsala model, the internationalization process was labelled by establishment chain and psychic distance. Establishment chain refers to the entry modes, which were usually built with intermediaries, i.e. agents of focal companies abroad. When the sales of the firm grew, these agents were replaced by own sales organizations, and finally manufacturing, too, was transformed abroad. Psychic distance connotes the factors that hinder comprehension of foreign cultures and environments. The Uppsala model is dynamic and it is based on uncertainty and bounded rationality. Moreover, the model includes two changing mechanisms: first, companies learn from

experience of operations abroad, and second, the change occurs through the commitment decisions in the foreign market. In the original model, the researchers presumed that learning and commitment building require plenty of time, which explains why entries into potential but risky markets are incremental. (Johanson & Vahlne, 2009) Traditional internationalization theories were typically based on multinational enterprises (Acs & Terjesen, 2013).

2.2 From the incremental theory towards network theories

The stage theories have been challenged and modified due to radical changes in the internationalization processes. Bell (1995, 72) and Ursic and Czinkota (1984) confirm that the stage theories are valid in terms of *exporting*: small software firms focus on new export markets instead of high investments as the first step in the internationalization process. On one hand, foreign contacts explain how and why some software firms internationalized, which supports network theory as a significant tool in the process. On the other hand, the network approaches do not explain the success in internationalizing in cases where software firms do not have foreign contacts at all. Thus, Bell argues that neither the stage theory nor the network approaches clarify the internationalization process. (Bell, 1995)

Bell (1995) states that the software industry has characteristics of both the stage theory and the network theory. Internationalization process of these software firms is influenced by many factors, for instance foreign market orientation and simplicity in electronical distribution of the software might create a specific export behavior. The size of the software company does not seem to be relevant in the internationalization process either. (Bell, 1995, 72-73) Javalgi and al., (2003) state that service firms should seize the opportunities in the global markets since firm-specific factors - hence, the size of the firm - do not limit service firms similarly as in case of manufacturing companies.

Coviello and Munro (1997) integrate the stage theory and the network theory more detailed and systematically. The researchers propose a five-stage-process where they describe the internationalization of a small software firm. According to this framework, a firm creates a relationship with a larger firm, which provides an opportunity to enter a physically close market. Within three years, formal and informal relationships are developed, which facilitates entering foreign markets due to market knowledge offered by the new contacts. Gradually, the firm acquires visibility, which increases financial and human resource capabilities, as well as managerial experience and confidence in the foreign markets. In the final stage of this framework, the software firm desires autonomy, which rises into two alternative options: 1) the company begins to search for opportunities in product or market diversification or found its own sales offices abroad 2) despite of desired autonomy, the initial network partner may further control the small firms intentions, which leads to restricted growth and might limit developing new network relationships. In addition, relationships with hardware manufacturers may affect the export strategies of small software

firms (Bell, 1995). Currently, many firms choose therefore – instead of a large company as a partner - a governmental or a private agency as an intermediate assistant in their intentions to internationalize (see Acs et al., 2001; Ojala, 2009).

According to Ojala (2009), focal network relationships - the most important contacts - are not critical in the beginning of the internationalization process. Firstly, these findings suggest that SMEs choose the target country and the entry mode. This supports previously presented idea of Bell (1995) that success in the internationalization process is not always due to network relationships. Secondly, these firms begin to create new relationships or they use existing networks in their internationalization process. Hence, entering a foreign market is based on a strategic decision; the opportunity to use existing contacts or to create new ones in the internationalization process is pursuing the strategic decision. Ojala notifies, however, that his findings consider only entering the Japanese market, which might have caused certain limitations in the results of his research. (Ojala, 2009)

Owusu et al. (2007) present a framework of *project business approach* in their study. This proactive approach should be included in a long-term relationship strategy. Hence, the firms ought to be actively observing the markets for proper countries and projects, they should profit from networks in order to receive useful information and they have to suggest projects for purchasers in order to create social and economic infrastructure. The development of trust and commitment is evident in this approach; long-term networks must be maintained between the projects. Project business strategy has partly similarities with the Uppsala model and the network approach. Additionally, the authors suggest that the project business approach can be applied in combination with other modes of internationalization. The strategy is most useful for industrial marketing where products, services, management capabilities and know-how are necessary for successful business. (Owusu et al., 2007)

2.3 International new ventures

Oviatt and McDougall (1994) launched a new term in the internationalization literature in the 1990s: *international new ventures* (INVs). These firms are international from inception. The companies enter foreign markets rather quickly with limited resources due to low-cost communication technologies, for instance, which facilitate recognizing business opportunities. Oviatt and McDougall stated, though, that INVs have existed for centuries, but the focus has been until now on multinational enterprises (MNEs) (Oviatt & McDougall, 1994). Jantunen and al. (2008) use the term *born globals* for similar companies and precise that these firms seem to have some common characteristics: they sell unique products and services, their international strategy is proactive and these firms are niche-oriented and specialized (Jantunen et al., 2008). Oviatt and McDougall (2005) have later broadened their INV theory into the theory of *international entrepreneurship*. The authors define mutually with Jantunen and al. (2008) that

international entrepreneurship is "the discovery, enactment, evaluation, and exploitation of opportunities—across national borders—to create future goods and services" (Oviatt & McDougall, 2005, 540). Knight and Cavusgil (2004) claim that lack of experience and youth of a firm are not crucial in the internationalization processes of born globals. Managers of these companies tend to possess a global vision and capabilities at the organizational level, including a strategic view that all together enable early adoption of internationalization and a global success in the markets. (Knight & Cavusgil, 2004)

As the business environment at present is relatively dynamic, the operations of born globals are based on networks (Nummela, 2004). Madsen and Servais (1997) state that network relationships have a significant role in the internationalization process in terms of born globals, particularly, but a certain need for combining the internationalization process to entrepreneurship exists. The term *entrepreneurship* refers, for example, to recognition and exploitation of an opportunity and to the development of a niche in the market (Cunningham & Lischeron, 1991) or to the content of entrepreneurial decisions (Lumpkin & Dess, 1996).

Hashai (2011) argue that born globals are not born from inception. The author claims that these firms internationalize quickly from the start by broadening the extent of foreign operations and the geographic scope. According to the research results, born global firms focus on the dominant internationalization path instead of switching between foreign operations and expansion of geographic scope. This indicates that born globals tend to reduce the risks in the internationalization process, which is in line with the Uppsala model of internationalization. In addition, an interesting finding in the study was that technology-intensive companies focus on a single path more likely compared to other born globals. This is a confusing result since technology-intensiveness is typically connected to internationalization to a large extent. To sum up with, the study of Hashai reveals that the internationalization path of born globals and the traditional internationalization approaches are much more connected than we previously thought. (Hashai, 2011)

Li and al. (2012) examine the early internationalization processes of STEs (small technology-based enterprises), which can be defined as born globals. According to the findings, many factors and combinations of these factors, for instance alliances, R&D intensity and advertising intensity, affect early internationalization processes. (Li & al., 2012) Hence, alliances may not be important without a successful R&D or vice versa. The statement that alliances are not the primary reason for international activities is equal to the findings of Ojala (2009), who stated that network relationships initiate only after a strategic decision - regarding internationalization process - is made (Ojala, 2009). Li and al. (2012) also suggest that the small size of the firm or inexperience in global markets does not necessarily limit successful internationalization process of a company. On the contrary, these previously thought disadvantages (small size, inexperience) may drive STEs to internationalize earlier than their larger and more experienced counterparts. These findings contradict the traditional theory

that large and experienced firms might possess more capabilities to internationalize successfully. In fact, the researchers propose that STEs are more flexible and able to exploit opportunities than their larger counterparts. This statement is supported by Knight and Cavusgil (2004), who claim that smaller size of the firm usually refers to a sort of flexibility, which is beneficial in foreign markets. Furthermore, Li and al. (2012) state that small inexperienced firms may not realize the risks in the global markets and these STEs therefore do not hesitate to continuously and bravely seek international business opportunities. The authors remind, however, that the focus of the study is on high-tech industries, thus, the results may not necessarily apply in other industries. (Li et al., 2012)

Knight and Cavusgil (2004) propose that early internationalization processes are driven by two trends, which have enormously reduced the costs when expanding the global markets. The first trend would be the globalization of the markets, which includes cross-border networks for product distribution and R&D. Moreover, buyer preferences are globally more homogeneous than previously, which mitigates the product development and positioning the product into international markets. The second trend is reduced costs due to technological development in communications and information technologies, transportation and product methods. Hence, the use of e-mail, the Internet and other technologies have enabled a cost-effective choice when entering the global markets. (Knight & Cavusgil, 2004)

2.4 Networks, knowledge-intensity and entrepreneurial orientation

Some researchers argue that born globals must choose hybrid forms when entering foreign markets: this indicates that network alliances are essential, and these alliances ought to be benefitted effectively. The term hybrid form refers to the combinations of internationalization modes and characteristics required in a successful process when entering the global markets. By using hybrid structures, for instance strategic alliances and networks, firms may compensate missing resources. (e.g. McDougall et al., 1994; Madsen & Servais, 1997; Owusu et al., 2007) Network relationships of small firms can be useful in creating R&D programs as a basis for product innovation. Furthermore, customer market intelligence - intelligence about suppliers and colleagues - is important when firms are providing differentiated products or services. (Verhees & Meulenber, 2004) Thus, relationships and customer-knowledge are the key factors particularly in the niche market. The character of the product or the services that will be provided to the customers is defined by these relationships and customer-knowledge.

McDougall and al. (1994) claim that the background, the motivation and the ambition level of the head of the firm has a huge effect on the appearance of INVs or born globals. Autio and al. (2000) have studied the influence of knowledge-

based factors and learning in the internationalization process. A special focus in this study was the firm's age at the time of the entry. (Autio et al., 2000) In addition, the production line and competences affect evidently the internationalization process and these should be linked, for instance, with the level of technology (Madsen & Servais, 1997). Jantunen and al. (2008) indicate that the most important impact on the international performance of born globals is *entrepreneurial orientation*. Lumpkin and Dess (1996) identify five dimensions regarding entrepreneurial orientation: 1) risk-taking 2) autonomy 3) competitive aggressiveness 4) proactiveness and 5) innovativeness. Innovativeness does not signify, however, that the owner of a company would be creative in all sectors (Verhees & Meulenbergh, 2004). Innovative managerial mindset drives born globals to maximize their international performance. This international entrepreneurial orientation leads the firm to develop high-quality offerings, which are specific and technologically advanced. (Knight and Cavusgil, 2004)

2.5 International orientation and growth

Jantunen and al. (2008) connect international performance, strategic orientations and international growth strategy in their study. From strategic orientations the researchers have chosen the perspective of dynamic capabilities, hence, entrepreneurial orientation, learning orientation and international-growth orientation. The researchers included born globals, born-again globals and traditionally internationalizing companies in their study. The results indicated that strategic orientations are, indeed, connected to the international performance of the company. However, entrepreneurial orientation seems to influence the international performance the least in case of born globals. According to the authors this may be caused by entrepreneurial orientation of born globals, which already remains at a high level compared to other firms. Furthermore, learning orientation seems to have a strong effect on international performance regarding born globals. Thus, both entrepreneurial orientation and learning orientation are significant on international markets. Jantunen and al. (2008) emphasize, however, that managers should find a suitable balance of international growth orientation and entrepreneurial orientation since exaggerated proactiveness is not improving international performance. (Jantunen et al., 2008)

Ursic and Czinkota argue that young firms are more willing to "consider international activities" (Ursic & Czinkota, 1984, 165). Autio and al. (2000) suggest that young firms are able to innovate, to learn new competencies and to adapt to dynamic environments in comparison to older firms. The arguments are in line with the research findings (e.g. Rönkkö et al., 2013), which reveal that the connection between innovativeness and internationalization exists mainly among young firms. Older firms either utilize other resources for internationalization or these older firms are already international (Rönkkö et al., 2013), thus, their expansion rate does not show in the findings.

3 PRODUCT IN THE INTERNATIONALIZATION PROCESS

3.1 Service business or product business

Satish Nambisan (2001) discusses the connection between service and product businesses in the technology industry. The author argues that often service businesses expanding into product businesses will fail, and vice versa. This is apparently due to the differences between these two sectors' business models and market forces influencing the sectors. Organizational practices, value creation and delivery habits differ in product and service sectors. On the managerial level, finding the synergy between these sectors remains a challenge but is a must in order to run a successful business. (Nambisan, 2000)

In this study, however, both product and service businesses will be examined under the same category, referring to 'an offering'. The important aspect of the study is how one of these offerings, product or service - influence the internationalization process of a firm. In case a target firm has expanded to both sectors, it will be interesting to observe whether entering the foreign markets, in that case, has been exceptional.

I will first present the division of product strategies based on Hoch and al. (2000). This division will be under a specific inspection in the empirical part as the nature of the product may intensely affect how target customers should be chosen. Second, I will present the linkages between product and the target market. Third, I will introduce the connections of product and innovativeness in the current literature.

3.2 Product strategies

Hoch and al. (2000) separate software companies into three groups according to their product strategies: 1) professional service firms that offer tailor-made software solutions, 2) enterprise solution firms providing software products for business users, and 3) mass-market software firms with products targeted at consumer markets. The authors argue that success factors in the foreign market depend highly on the product strategies selected by the software business. Ojala and Tyrväinen (2008) agree with Hoch and al. that product strategies distinguish software businesses and these strategies also define success factors in the target country in terms of the internationalization process. Alajoutsijärvi and al. (2000) argue that small software companies tend to orientate towards the product business, which refers to standard products instead of tailored systems. Research findings (e.g. Ojala & Tyrväinen, 2008) indicate, however, that a clear need for tailored software products exists.

Alajoutsijärvi and al. (2000) have suggested, though, that a new business logic will be involved in the internationalization process in the near future, since the traditional project and product businesses will be outdated due to advancing Internet technology, electronic commerce and Internet marketing. We could question whether the division of Hoch and al. (2000), for example, could be interpreted as a part of the new business logic since facing the foreign market challenges is based on the strategy selection of software firms. This view is supported by Ojala and Tyrväinen (2006): their research indicated that the product strategy is firmly linked to the selected foreign entry mode.

3.3 Product and the market

Ojala and Tyrväinen (2008) have focused in their study on the Japanese market, which is considered as a specific market area. According to their findings, all aspects of the product dimensions, i.e. quality of the product, packaging, uniqueness of the product and product customization ought to be conceptualized as an entity. As the quality requirements of the Japanese customers are high and the Japanese market environment is extremely competitive (Shetty & Kim, 1995; Czinkota & Kotabe, 2000), foreign software firms entering the Japanese markets must be able to offer both services and support that are related to their products. Since the local Japanese competitors can provide high quality products themselves, foreign software firms entering the markets need to plan their product strategy well and find the right niches (Reid, 1995). Ojala has argued (2009) that entering Japan is basically a strategic decision, and network relationships are created only afterwards. In terms of the product, it seems that the quality of the product would be more critical entering the Japanese market (Ojala, 2009). Thus, a question arises: Is the product tightly related to cultural issues and to the requirements in the target market?

High-tech industries tend to sell their innovations or products very quickly since the requirements and needs of the customers are relatively homogenous (Madsen & Servais, 1997; Li et al., 2012). Li and al. 2012 also claim that small technology-based enterprises (STEs) must enter multiple markets simultaneously as they must increase production volume, typically in case the products are targeted at niche markets. In addition, product awareness of the customers is easily spreading across countries, which leads to further demands in more distant markets. (Li et al., 2012) Previous notifications signify that requirements in the target market do affect internationalization processes but at the same time the tastes of different customers are becoming more homogenous worldwide.

3.4 Product and innovativeness

SMEs (small- and medium-sized enterprises) usually have limited resources compared to multinationals. On the other hand, radical innovations are mostly created in small companies, whereas multinationals focus on creating access abroad. Acs and al. (2001, 249) define globalization as a "process of entrepreneurial discovery", which combines creating products through innovations, discovering profitable and worldwide applications and gathering the revenues. In this process, SMEs and multinationals can profit from each other: The small company possesses the innovation, and the multinational provides the market access. Thus, the small company sells the product - the result of innovativeness - to the multinational, and the multinational deals with the customers abroad. (Acs et al., 2001). Moreover, this sort of entrepreneurial discovery or "intermediated internationalization" (see Acs & Terjesen, 2013) could also be seen as a network relationship between small and large firms. In this sort of symbiotic relationship both SMEs and multinationals gain profit in the foreign markets.

According to the findings of Wolff and Pett (2006), internationalization together with an innovative attitude affect positively new product and process enhancements. On a large scale, firms willing to succeed in the global markets must be innovative and able to recognize the profit opportunities based on the innovations (Acs et al., 2001). Moreover, internationalization and product enhancement affect positively the firm's growth. The research of Rönkkö and al. (2013) embraces the statement: the researchers emphasize that internationalization is a vital condition for growth in terms of firms that perform in small domestic markets.

New products in the high-tech industries tend to be incomplete, which may result in a market failure. Moreover, a typical problem for innovative small firms is the launching of a new radical product or process: access to the global markets must be relatively rapid, but due to lack of (financial) resources, entering the markets might often cause difficulties. (Qian & Li, 2003) Acs and al. (2001) have criticized the institutions or agencies that are specialized in assistance and

guidance during the internationalization processes of small firms. The findings of Ojala (2009), however, indicate that small firms profit successfully from these agencies in their intentions to enter the global markets. Kunday and Şengüler (2015) suggest likewise to Ojala that support programs for SMEs and their innovations should be created by policy makers.

Onetti and al. (2010) propose a managerial approach in which the innovation, internationalization and entrepreneurship are firmly linked. This approach is suitable particularly in technology-based industries, which are affected by rapid, continuous changes and the complexity of markets. These changes might arise process and product innovations, and furthermore, the changes demand new business strategies in order to seize the opportunities in global business. The managerial approach is supposed to support the entrepreneurial processes and create a sustainable growth in international markets. (Onetti et al., 2010)

4 SEARCHING FOR SYNERGY BETWEEN NETWORK RELATIONSHIPS AND PRODUCT

A selection of network approaches concerning internationalization processes of IT firms have been presented above. Moreover, some views in the literature in terms of product and its influences in the internationalization process have been introduced. However, the views regarding the product are rather limited in the current literature, as well as the synergy of networks and product. Thus, I will here summarize some topics raised by the introduced literature and present my own views based on them. In addition, I will briefly introduce recent literature, which is partly related to synergy between networks and product in terms of software firms.

4.1 Network relationships in the global markets of IT sector

The incremental Uppsala theory is considered as the original internationalization theory, and it is intensively referred to in the literature even today. This theory is not excluded from the internationalization processes at present – for instance born global firms are considered to follow certain patterns similarly as “old fashion companies”. Hashai (2011) claims (see 2.3. *International new ventures*) that born global firms are actually rather timid and cautious in their initial steps when entering the foreign markets: these born globals choose typically the dominant internationalization path, which can be regarded as a manner of avoiding risks. Choosing one path is also typical to high-tech industries, which is confusing since technology-intensiveness is largely linked to internationalization. (Hashai, 2011) This connection between traditional internationalization theory and born globals is ambiguous and raises questions, whether risk-seeking behavior among born global managers is not as common as expected. Apparently, the managerial level of born globals prefers premediated decisions and an explicit business strategy in their international actions.

Bell (1995) argues that neither the traditional theories nor network relationships define the global success of software firms. Nonetheless, software industry possesses characteristics of both theories (Bell, 1995). Ojala (2009) also states that focal networks are not significant in the early stages of international process of IT firms. Hence, we could propose that network relationships alone do not guarantee a successful entering into global markets, although these networks might be vital later in the internationalization process.

Bell (1995) and Javalgi and al. (2003) claim that the size of the company is not relevant. Instead, the service firms should seek for opportunities in the global markets as the size of a service company does not limit opportunities similarly as in case of manufacturing firms. These statements are supported by Knight and Cavusgil (2004) who state that small firms are probably more flexible. Moreover, Li and al. (2012) claim that small firms are not aware of all the risks in the global markets, and therefore these companies continue exploiting opportunities in the international business more willingly than their larger counterparts. In addition, small firms often create partnerships with larger companies or use governmental or private agencies as an intermediate in their international activities (Coviello & Munro, 1997; Ojala, 2009; Acs et al., 2001). We can therefore conclude that the small size of the company is not a crucial factor in the current internationalization process.

4.2 The significance of the product in the internationalization process

Hoch and al. (2002) divide product strategies into three categories: software products for mass-markets, software products for business users and tailored products. Ojala and Tyrväinen (2006) state that selected product strategy is connected to foreign market entry mode. I could argue that product strategy is one of the key factors in the present internationalization processes, particularly in terms of software firms. I also suggest that managers of IT firms select networks based on the product strategy of the company.

Madsen and Servais (1997) claim that the needs of the customers at present are very homogenous. Li and al. (2012) confirm this statement and affirm that technology-oriented firms must sell their products at several markets in order to increase production volume when the products are targeted at niche markets. Since the product life cycle in the technology-industry is very short (e.g. Allen, 2015; Hanna, 2016), the software firms must expand quickly in their attempts to internationalize. Thus, the product obsolescence possibly drives software firms into fast decisions and forces them to create new innovations. A negative consequence of rapid innovations or modifications might be, however, the incompleteness of the product (Qian & Li, 2003), which obviously leads to dissatisfaction among the customers.

To sum up with, the software industry does not seem to be as risk-seeking sector as previously thought. The fast actions in the global markets are rather due to a short product life cycle. Nevertheless, the initial step in the internationalization process seems to be an intended decision based on well-planned business and product strategies. The future network relationships will be created and exploited according to the selected strategies.

4.3 Literature related to the synergy of product and networks

Galimberti and Wazlawick (2015) have examined French software SMEs that are planning to internationalize and stay global. The researchers have concentrated on four dimensions in the internationalization process: innovation, entrepreneurship, relationship network and knowledge about the foreign market. Innovation in their research refers to product and service and is therefore connected to this study. Thus, the research of Galimberti and Wazlawick (2015) includes, among others, product and networks - the main objects of this study. According to their findings, the importance of networks is not as essential as innovation, for example, in the internationalization process. Galimberti and Wazlawick (2015) base their chosen dimensions on the model of Galimberti and Dorion (2011), who applied the same model in the research concerning the software SMEs in Brazil.

Kunday and Şengüler (2015) have investigated how innovation, business skills and the motive to start the business influence the internationalization process of SMEs. The researchers do not, though, focus directly on software industry nor network relationships. According to their research, innovation has a vital impact on export orientation of SMEs.

Chetty and Stangl (2010) have observed the effect of the network relationships in the internationalization process combined with innovation. Chetty and Stangl (2010) examined ten software firms (SMEs) in New Zealand and used semi-structured interview method. The researches confirm that there is a gap in the literature regarding SME research concerning these three dimensions, contacts, innovation and internationalization. According to the researchers' findings, firms with a diversity of contacts possess radical innovation and internationalization whereas firms with few contacts internationalize incrementally.

Galimberti and Zanella (2019) have examined 104 software firms online in four languages in their quantitative research. According to the research, all analyzed four dimensions, innovation, entrepreneurship, networks and foreign market knowledge remain essential in the internationalization process.

5 RESEARCH METHOD

The empirical part of the master's theses has been conducted as a qualitative interview research. Five Finnish small software firms (SMEs) were interviewed for the research. The aim was to interview one person from each firm, which occurred. In addition, in one of the firms I had excellent chats with two other employees around the coffee table, without recording the chats, though. These employees work in managerial level beside their daily work. I soon noticed that getting an interviewee was a hard task. Finally, four cases for the interviews were found through friends and one case was arranged thanks to Arto Ojala, one of my mentors. Thus, the networks and connections are important not only in the internationalization process but also while gathering data for a research.

Pre-requisites for the firms were that 1) they are originally Finnish and 2) they have, or they have had international activities during their existence. One or two key persons would be interviewed, and those should be persons who know properly the internationalization processes of the firm in question. A recorder was utilized in the interview occasions and notes by hand were made additionally. Interviews were individual. The first questions were wide: the purpose was to hear the story told by the interviewee. Later, more detailed questions were made in order to fill the missing gaps in the information flow and to clarify the details.

The research interview method was chosen for this study since interaction in social situations is the most natural way to receive information. Getting an answer is usually easiest by asking a question, face-to-face. The purpose of a research interview is to produce material, based on a speech, to be included into a research. (Ruusuvaori & Tiittula, 2005, 7, 79) I used *focused interview* in the interview situations, thus, the approaches in the research were fixed and decided but the order or the form of the questions varied from one interviewee to another. In other words, the interviews were *semi-structured*. (Hirsjärvi & Hurme, 1981)

The semi-structured method was selected since the interviews would evidently reveal a diversity of themes around the study questions. Hence, a clear single answer was not expected but a variety of answers. As Hirsjärvi and Hurme

(2000) state, a semi-structured method opens certain themes in a good manner to analyze the features arising from the interviews. Valli and Aaltola (2015, 27-28) describe the intention of a theme interview as a discussion between the interviewee and the interviewer. The purpose in the interview, in other words, is to discover the interesting features concerning the research topic.

5.1 Study questions

The study question in this thesis is: **What is the synergy between networks and product in the internationalization process of software firms?** Furthermore, is the product needed first before the relationships? In addition, are there other significant issues influencing the internationalization process, e.g. cultural issues?

Hence, the interest in this study is whether product, network relationships and possible cultural influences or other elements affect or not in the internationalization processes of software firms. Based on the observations during the interviews, themes arisen from the interviews have been analyzed and findings have been gathered. Moreover, discussion on interpretations of these themes (see e.g. Alasuutari, 2011, 41-47; Tuomi & Sarajärvi, 2009, 93) has been conducted in the chapters 6 and 7.

5.2 Collecting the data

In this research, theme interviews have been used to collect the data in order to recognize the role of network relationships and product in the internationalization processes of IT firms. Collecting the data occurred between the years 2016-2018. The sources of interviews were collected among Finnish IT companies (SMEs). A previous statement: *“Due to its small domestic market, internationalization is generally a common growth strategy for Finnish software firms.”* confirms that internationalization paths are salient for Finnish software companies, and thus, a notable research object (Ojala, 2008).

As I used to live in the area of Pirkanmaa, Finland, these firms were first searched around Tampere. The interviewed firms were finally found in several towns in Finland: one of the firms holds a headquarter in Helsinki, another one in Jyväskylä. Two of the firms are operating in Tampere and one of the firms has several offices in Finland, but the interview was held in Kuopio. A focus on several regions is a more interesting approach rather than concentrating on the capital region of Finland, which is usually the region that receives plenty of attention. Moreover, IT firms e.g. in Pirkanmaa region are currently investing intensively to the development of their businesses (Korpimies, 2017).

The interviewed IT firms represent various sectors in the software business. Two of the companies work among the health sector, one of them in the finance field, one is developing solutions for catering field and one for facilities management and maintenance sector. The firms are named according to alphabets, in other words the firms are called A, B, C, D and E in this research.

E-mail and phone were used to contact a suitable person from the firms. The firms were chosen randomly from the Internet. From the beginning, it was clear that it was extremely hard to receive interviewees. The e-mail answers were "Now we are too busy, maybe after the holidays". After the holidays, these firms were still too busy. The interviews were finally actualized, owing to the interviewer's friends' and my mentor's help as mentioned before, by meeting the persons from the IT companies and interviewing the persons with a pre-planned, semi-structured interview-form (see Appendix 1) as a help for the interviewer. The anonymity was guaranteed before starting the recording. The approximate time for a single interview was from 25 to 45 minutes.

The interviews were followed by a transcript as it is a part of the interview method. The focus of the interviews was not on communicative factors, i.e. intonation, tone, gestures, pause etc. On the contrary, the emphasis was on the content of the interviews. Thus, the nature of the analysis was content analytical, in which the relevancy of the product and network relationships in terms of the internationalization processes of IT firms was emphasized. The transcript was made according to the arising themes: according to Hirsjärvi and al. (2004), only the relevant parts related to the themes would be selected. As regards my transcript, everything was written down, but I did not pay attention to irrelevant factors, for instance repetition of conjunctions, e.g. "product and... and... and contacts". This sort of details was irrelevant information concerning my theses.

I had considered possible challenges in the interview situation, and these challenges, in my opinion, must be recognized beforehand in order to receive proper results. Hirsjärvi and Hurme (1982, 52) specify that an interviewer must be able to observe the interviewee's nonverbal and verbal hints in order to conduct the interview successfully. The interviewer must also understand that his or her behaviour might affect the interviewee and his/her willingness to answer. The interviewee should not act too ostentatiously, and s/he ought to arbitrate a trustful image of himself or herself. (Hirsjärvi & Hurme, 1982) The interview data is also bounded to the context and situation; the interviewees might answer differently in other occasions (Hirsjärvi et al., 2004). Hence, these tips I tried to keep in mind in the interview situations.

The research interview method contains plenty of strengths: first, interaction is straight and simultaneous. The interviewer can always ask a more detailed question if the first answer does not cover the question. Thus, the interviewer can ask further clarifications, and hence, the information can be deepened in the interviews. Second, collecting the data can be regulated and the order of the themes can be modified. (Hirsjärvi et al., 2004, 204-205)

5.3 Analyzing the data

The research follows the traditions of the qualitative research. Since the interviews are only semi-structured, it was quite unpredicted beforehand, what the interviewees would reveal. However, the analysis tools have been discussed above, which will be applied in this thesis. As expected, and warned in the literature, I was prepared to meet a variety of interviewees. All of them were finally polite and answered all my questions. Some of the interviewees had more stories to tell than the others but none of the interviews was difficult to transcribe or interpret.

As explained in the previous chapter, the focus in the transcription part and analyzing the data is not on quantities of certain words or phrases used by interviewees since this research is a qualitative research. Neither quantitative aspects of internationalization, for instance costs or revenues of the interviewed firms, are not interesting factors. The emphasis will be on the case stories and themes arising from the interviews.

Using the theory-driven content analytical approach, the case stories were analyzed verbally (see e.g. Tuomi & Sarajärvi, 2009, 97, 105-113) and the aim was to find main themes that are repeated in the interviews. Based on these themes, I have structured my chapters and presented my research findings. As a content analytical approach should not remain at the level of classifying the results (see e.g. Ruusuvoori et al., 2010, 18-26), the findings have been discussed in chapter 7. Theories that will be reflected with the outcomes in the discussion chapter are internationalization theories that are introduced in the chapter 2 and theories concerning the product in the chapter 3.

As there is a slight gap in the current research literature concerning the role of product and networks and their intertwined influence when a software firm is entering the international markets, the connection between product and networks has been argued in the discussion chapter: the arguments are based on outcomes that emerged from the interviews, and they are compared to the existing literature. Furthermore, I have debated whether the networks still have an important role or is their role possibly smaller than the role of the product. Or vice versa, if the role of networks is very essential, I will question whether there is a smaller need for recognizing features that are needed in the internationalization process in terms of the R&D of the product. Possible other dimensions or elements that are affecting the internationalization process - in case they are noticed in the interviews - will be reflected in this study as well.

6 ANALYSIS OF THE DATA

6.1 Main themes observed in the interviews

As expected, the interviewed companies had different stories containing similarities but also differences. Surprises were also found, which will be discussed more detailed below in this thesis, in the discussion chapter. In this chapter, I will present main themes identified in the interviews.

I will divide the outcomes of the interviews under four topics. First, I will discuss the meaning of the networks to the companies. Second, I will discuss the product and its development. Third, I will focus on the central curiosities in the history of the interviewed SME's and fourth, I will examine the challenges and strengths of each case in their internationalization process. As regards the previous chapters, I will also observe whether the challenges are due to cultural reasons or probably as a result of other elements.

6.2 The influence of the social capital

None of the interviewed firms denied the positive influence of social capital, in other words network relationships. The CEO of the firm A admitted that in Finland everybody knows each other in the IT sector since Finland is a small country, and it is therefore crucial to have good connections and further maintain them. Otherwise the firm might end up having no customers.

“One bad word and that’s it. Or vice versa: the other one is attracted by our product, tells about us to the other firms and finally everybody loves our product.” (The CEO, the firm A)¹

The CEO of the firm B declares similarly that if there is one huge customer, it can increase the business fundamentally.

The CEO of the firm E considers that the connections enable the *presentation* of the product. The CEO also added that he thinks there are countries and places where only networks basically matter; the product itself comes after the contacts.

“The product is important as with product you create the interest. The networks are important since without them you cannot even present your products. In the end, it is probably a matter of the markets and the target country, plus the culture. In some cases, only the contacts and the networks do matter, the product, even if it was a brilliant one, does not count.” (The CEO, the firm E)²

The CEO of the firm D, on the other hand, considers that being international is rather normal in terms of financial field within IT sector. Nevertheless, he also affirms that obstacles might occur due to physical distance and due to lack of local presence. Hence, contacts in the target country seem to upsurge significant while an IT firm is heading to the global markets.

“...that there would be local presence that someone would create a common language for these two in the business in the very beginning” (The head of Services, the firm D)³

Hence, networks are tightly linked to cultural issues, in this case into a common language.

¹ “Se on yks huono sana niin that's it. Tai toiseen suuntaan hän on ihastunu tuotteeseen ja kertoo niin sit on kaikki muutkin.”

² “Tuote on tärkeä siinä että se luo mielenkiinnon, verkosto on tärkeä sinä että sä yleensä mihkään pääset esittelemään tuotetta. Loppupeleissä riippuu ehkä täysin markkinoista ja kohdemaasta + maan kulttuurista. Osassa vaikuttaa suhteet ja verkosto, vaikka olis mikä tuote ja sit taas ... vaikka olis huipputuote niin silläkään ei olis mitään merkitystä. (Mut kuitenkin jos ei oo perusratkasut kunnossa et pystyt kertomaan et mitä osataan ja missä ollaan hyviä niin sillan verkostot kaatuu. Pitää olla jotain lihaa luitten ympärillä.)

³ “siinä mielessä että olis ikäänkuin sellasta presenssiä, että olis joku henkilö alkuvieheessa joka loisi ikäänkuin yhteisen kielen näille kahdelle toimijalle”

6.3 The influence of the product in the internationalization process

All five interviewed firms declare that the product or the products must be excellent before marketing and selling them.

“The product must be absolutely complete. You cannot spoil the business (with an unfinished product).” (The CEO, the firm B)⁴

The marketing executive of the firm C declares that since they began to have competitors on the market, the quality of the product became more significant and they had to focus progressively on the R&D.

The firm E considers that product is not the only factor in a larger scale. The CEO affirmed that since the firm started to receive inquiries from abroad, they realized that some of their products had a very good competitiveness. The CEO also stated that there was a good market situation at the time being and without the *timing* the firm could not have entered to the international markets. Thus, an international success depends enormously on a combination of factors. One single element is not enough to cover the whole internationalization process. Nevertheless, the firm seemed to have inquiries particularly due to the reputation of their products.

“Our product selection is very large and respected, and it can be localized. We knew for a long time that our solutions are competitive and interesting. But it took a long time before we had enough resources to localize the products in a way that it is cost-effective.” (The CEO, the firm E)⁵

The Head of Services of the firm D declared that their product has never received bad feedback. Losing a competition to another firm was always caused by other reasons.

⁴ “Tuote pitää olla täysin valmis. Ei voi pilata kauppvoja.”

⁵ “Pitkään oli tiedossa, että (meidän) ratkaisut on kilpailukykyisiä. Ja niihin on kiinnostusta. Mut pitkään meni, ennen kun meillä oli riittävä vahvuus, että niitä pystytään lokalisoimaan ja et se on kannattavaa. Kaikkialle ei kannata mennä ja jos mennään, niin mennään tosissaan”

6.4 Main curiosities in the history of the interviewed firms

The interviewed SMEs seem to have an own internationalization path and some surprises did emerged in the conversations.

The firm E had actually begun their business abroad in the 1990's. However, after the project together with Finpro, the firm started to create solutions only in the home markets in Finland, and they did not consider the international business would have been beneficial at that time. After more than twenty years later, the firm has restarted global business again.

The firm C started their business in the 1990's as well. Since their product was the only one at that point and they did not have competitors, the internationalization process was smooth, fast and uncomplicated. The problems begun as more challengers entered the markets and created similar solutions with an excellent user interface that could be used online instead of old programs that had to be installed into the computer. Thus, the firm C had to start renewing their old programs into online solutions, which took time and money.

“Our Norwegian competitor is ahead of us in the usability of the product. As regards the public bidding competitions, we usually get the worst points in usability, and that is why we are improving it now” (Customer Services Manager, the firm C)⁶

The firm B has had a rather similar path with the firm C. However, the product of the firm B seems to be so exceptional that the competitors are still far behind the firm B. No other firm has similar product to offer; the firm is a pioneer in the diversity of features and in the easiness to use the product. The CEO admits that they should have entered the global markets earlier, instead of refining the product, which was already excellent.

“We could have gone abroad earlier and sell the product in a large scale; we could have increased our turnover. Possibly it would have been useful to go with an attitude “business first” but I concentrated on the R&D with my small team. A Finnish sin, “not ready, yet”. (The CEO, the firm B)⁷

⁶ ”meidän norjalainen kilpailija on meitä selkeesti edellä... ohjelman käytettävyydessä. kun julkisissa tarjouskilpailuissa pisteytetään tietyt asiat niin me ollaan saatu huonommat pisteet nimenomaan käytettävyydessä, minkä takia siihen ollaan nyt paneutumassa et saadaan käytettävyys paremmaks”

⁷ ”oltas voitu aiemminkin lähtee myymään isossa määrin tätä ohjelmaa, kasvattaa liikevaihtoo. Olis ollu ehkä hyväkin mennä business edellä mut mä keskityin sillä pienellä porukalla tuotekehittelyyn. Suomalainen synti, ei vielä valmis.”

The firm D has developed its product “in a global atmosphere”, which is a valuable advantage. The R&D, however, has taken more time than the developers expected, and they have not reached the global markets as soon as they assumed.

The firm A has started after the millennium likewise the firm D. These firms did not need to redevelop and modify the product as they started to directly create an online solution. The firm A believes that an office abroad, for instance, is not necessary today. The firm D, though, considers that a *local presence* is essential to start any business abroad.

6.5 The strengths and weaknesses in the markets

The SMEs clearly have different obstacles and opportunities in the markets, depending on the sector they represent. This is obvious as the sector defines massively the problems to be faced. In addition, the time when the firm was established, i.e. the age of the firm, is a relevant factor in IT field as IT field is in continuous turbulence everywhere. (see e.g. Onetti et al., 2010; Autio et al., 2000)

The health sector, for example, confronts challenges with legal issues on the national level, for instance privacy matters. Nowadays, however, privacy seems to be a global problem in general, and must be considered in the solutions as the patient details must be secret. The firm B also mentioned governmental issues as a hindrance in their business. For example, some actions of Donald Trump, the president of the USA, have delayed their business in the United States. Since Mr. Trump cancelled Obamacare, it is not easy to sell a health sector related product anymore.

The firm that is dealing within the financial sector believes they lack visibility and credibility in the global markets as they are quite a small company. Clients easily choose the huge multinational competitor even though it is not necessarily any better choice. Otherwise, our interviewed firm working in the financial sector has never heard a bad word about their product.

The firms that are pioneers in their field seem to maintain a high position rather extended time. The firm B that we interviewed is and was a pioneer with their product. No other firm seems to have a similar solution that would be easy to use and would contain such a diversity of features. The firm has, nevertheless, refined the product extremely well and a long time, which possibly delays internationalization process. The CEO admitted that the timing to finally take the first steps and enter the global markets could and should have happened earlier.

The firm C considers equally to the firm B that their strength is the variety in their product. A huge fragility in their product is the user interface, which is under redevelopment now.

One of the firms, the firm A, highlighted the ability to tailor the product for the customer. The firm A from our interviewees mentions that they are offering

a solution that is simple to tailor according to the customer, which they consider as their strength in the markets.

In terms of cultural issues, the interviewed firms seem to approach obstacles slightly differently. The CEO of the firm E clarified that cultural problems are evident as a firm plans to enter the global markets.

“Sure, I see it as a part of the process. Sometimes less, sometimes more. We must consider that carefully, but I think it is part of the basic activities, which is part of the service.” (The CEO, the firm E)⁸

The CEO of the firm B had an interesting experience when trying to enter African markets. He realized that their product was too advanced to be sold in Africa. The CEO seems to have made an enormous effort in order to make business, but he finally failed.

“When I went to an agreed appointment, the person I was supposed to meet was not there... In some point, we were very close to the deal in Africa but finally they did not do any decisions. It was just “Africa” the whole business.” (The CEO, the firm B)⁹

The firms E and B are struggling with an issue that seem to affect to a large extend to businesses: how many markets can they enter at the same time. The firm E states that they are focusing only a couple of markets, or probably just one in the beginning, since otherwise the business will fail. The CEO of the firm B admitted that in some point they were everywhere, which was an error. They sent a trial of their product but forgot the client after that. Thus, the firm had too many cases at the same time.

The ‘old firms’, B, C and E, stated that they had turned into national agencies, which support companies trying to enter global markets.

6.6 Findings

In the summary, the common trend seems to be that both connections, i.e. network relationships, and product are important in case the firm is seriously heading abroad to the international markets. The focus might vary on the way: the product and its R&D is usually crucial in the very beginning, and later, the social capital – the contacts - needs to be gathered in order the company is able to enter the global markets. It was also discovered that in case the product is old, it usually must be updated in some point as information systems tend to change

⁸ “Varmasti jatkossa, näen sen osana prosessia. Välillä tulee varmaan heikommin, välillä vahvemmin. Pitää huomioida se tarkasti, mut se on mun mielestä perustoimintaa jota pitää huomioida osana palvelutoimintaa.”

⁹ “Kun meen sairaalan johtajaa tapaamaan sovittuna aikana niin ei ole paikalla... oltiin pitkällä siellä mut mistään ei tule päätöstä et se oli ihan afrikkaa se koko touhu siellä”

and develop rapidly nowadays. Update normally means quite a huge work in the development. Today, the systems normally run online while in the 1990's these systems had to be installed into the computer. Hence, in three cases of all the interviewed firms (B, C, E), the product was first created during the 1990's. Reaching the millennium, the product was old fashioned and had to be replaced by a new online version. In all the interviewed cases this meant the product had to be re-developed basically from the beginning. This takes a huge amount of time and resources of the capacity in the firm.

All in all, weaknesses and strengths in global markets are defined by various reasons. One of the affecting details is the sector, the other one the age of the company, and third, the time when the firm is starting the internationalization and moreover, whether in that point there are competitors in the market. In this chapter, strengths and weaknesses that are related to the sector have been presented, in other words, features that are affecting the internationalization process. According to our findings, a strength in one sector might be a weakness in another: local presence was crucial to one of the cases but to another it was irrelevant. In addition, the size of the company affected remarkably to the internationalization process regarding one case.

Cultural, legal and political issues were remarkable for certain interviewed firms. These features, cultural, legal and political, were basically delaying the internationalization process. Consequently, the firms seem to constantly reflect possible obstacles and how to avoid them in advance. In some of the interviewed cases, however, barriers caused by cultural or legal issues were regarded as a part of the internationalization process, which refers to an open mindset and an opportunity-seeking attitude at the entrepreneurial level.

7 DISCUSSION

Results of the interviewed firms have been presented above and the results will be reflected into existing internationalization and product theories in this chapter. Both similarities and differences have been delightedly perceived in comparison between the theories and the results. First, the results will be reflected with the literature as regards the network relationships. Second, the observations in terms of the product will be compared to the literature. Third, the synergy between network relationships and product will be investigated based on the findings and compared to the existing literature. In addition, a figure containing the main results of this study is presented and discussed in the same chapter.

7.1 Network relationships in the global markets of IT sector

Three most common internationalization theories have been presented in the chapter 2. The interviewed SMEs seem to have characteristics from all three categories, in other words, 1) traits from the Uppsala model, 2) network theories and 3) international new ventures, can be noticed among the firms. In the following chapters, we will discuss and reflect these traits in the literature to the findings in the interviews. First, I will examine the outcome as regards the features corresponding the Uppsala model. Second, I will investigate the discovery in terms of network relationships. Third, I will observe the elements concerning international new ventures or born globals. Furthermore, I will examine whether our outcomes correspond to the theories introduced in chapters 2.4 *Networks, knowledge-intensity and entrepreneurial orientation* and 2.5. *International orientation and growth*.

7.1.1 Features relating to the Uppsala model

The incremental Uppsala theory is considered as the original internationalization theory, and it is intensively referred to in the literature even today. This theory does not seem to be excluded from the internationalization processes in terms of our interviewed firms, either. The software firms, in general, tend to remain rather cautious concerning international markets. The SMEs are careful particularly in global markets where they do have competitors. In case an SME is a pioneer in its field, competition is quite absent, and the company can somewhat freely do business without obstacles. Nevertheless, in that case here must be a huge demand concerning the product or the service the software company is offering.

Two of the interviewed firms (A, D) are relatively young in the business. Both share markets with their competitors, and it seems that these firms are aware of the threats in the markets in general. The rest of the firms (B, C, E) have been on the markets for decades, and the assumption would be that these companies are struggling in the markets nowadays. One of them, the firm B, on the contrary, has maintained its position extremely well:

“Now we have realized that there is no such product in the markets, which could defeat ours... We can do things that nobody haven't even asked, yet.” (The CEO of the firm B)¹⁰

The firm C has clearly confronted obstacles that were slightly expected for an older SME. Their competitors have developed better interfaces, which customers value. The outdated program that must be installed into the computer has come to its end: online solutions are mainly used and preferred today. Renewing the old program into the online solution takes plenty of resources and time as regards the firm C. In addition, they must battle with opponents in the markets.

The firm E is an exception regarding their internationalization process. This firm has started abroad, and only after that the firm has begun the business on the domestic market. Two decades later this company has re-entered abroad with small steps according to the Uppsala model. In fact, this born global again firm has several characteristics corresponding the Uppsala model as regards our interviewed firms. The firm E has, for instance, made a strong decision to enter abroad and commits to the process (Johanson & Vahlne, 2009) despite of possible impediments on the internationalization path.

¹⁰ “Nyt on huomattu, että vastaavaa tuotetta ei tuu vastaan markkinoilla... Me osataan tehdä asioita, joita kukaan ei vielä edes kysy”

7.1.2 Traits associated to the network theories

As we are investigating software firms, it is not surprising that internationalization processes contain several features linked to network theories since SMEs tend to access moderately fast into global markets operating with help of networks, whether these firms are using already existing relationships or they are creating new ones. According to Ojala (2009), entering a foreign market is based on *a strategic decision* rather than already existing contacts. Network relationships are created only after a strategic decision. (Ojala, 2009)

Our interviewed firm E, which has re-entered abroad, admits that some of the old connections are useful. However, the CEO states that networks are not enough while accessing the international markets. The timing, the demand and the quality of the products are also essential in the process. Thus, the whole package, i.e. many aspects, influence the success in the business. This outcome is supported by the theory of Bell (1995), in which he argues that internationalization process of software firms is influenced by many factors, for instance foreign market orientation and simplicity in distribution of the software.

The firm A emphasizes, however, the significance of the networks:

“If somebody has something it goes to the others. Particularly in Finland, the circles are very tiny, no matter which field, everybody knows each other.” (The CEO of the firm A)¹¹

The CEO refers to the fact that the circle around the software industry is rather small in Finland and the reputation, whether is good or bad, spreads easily as a rumor from one CEO to another.

The CEO of the firm B had an excellent experience related to the lack of networks combined with cultural issues. The African market is not an effortless area to enter due to cultural differences, but nonetheless, the CEO fearlessly tried to sell the company’s product there. He believes that his firm would have obtained the whole African business if they had succeeded with one customer. Hence, the African networks remain rather a unified territory and is a very closed market to foreigners.

The firm D claims that the size of the company creates credibility. Since the firm D is slightly a small company, it often loses the deal to a bigger firm, even if their product is considered excellent. Thus, lack of name, which is partly based on the size of the company, might cause obstacles in the global markets, although Bell (1995) states that the size of the company does not seem to influence the internationalization process. Here I can argue whether the obstacle is that a multinational company, the competitor of the SME, has obtained contacts earlier, and this reinforces new firms to get network relationships so easily.

¹¹ “Jos jollain on jotain, niin se menee kaverilta kaverille. Suomessa varsinkin piirit on todella pienet, ihan sama millä alalla on niin kaikki tuntee kaikki.”

7.1.3 Characteristics related to international new ventures

According to Hashai, (2011, see chapter 2.3), born globals, as we often nominate INVs, tend to select the international path from the beginning. This reduces risks in the internationalization process and is, in fact, in line with the traditional internationalization processes. Two interviewed firms maintain elements based on the INV theories. The firm A and D are relatively young companies that are focusing on limited areas while entering abroad. In the case of the firm A, the target country is the US and in the case of the firm D the target customer was selected to be mainly the Nordic countries from the very beginning. Our firms sell unique services and they specialize in certain products or services. This synchronizes with the theory of Jantunen and al. (2008). The theory of Knight and Cavusgil (2004, see chapter 2.3) claims that firms possess a global vision of internationalization and these firms believe in early adoption and success in the international markets. Our interviewed firms A and D obviously respect the theory. The firms are evidently not afraid of internationalization despite the small size of their capacity although the firm D has already recognized obstacles due to their small size.

Li and al. (2012) have studied STEs (small technology-based enterprises), and according to their findings small companies might be more flexible compared to larger ones and therefore they can enter the foreign markets easier than their bigger competitors. The CEO of the firm D revealed that they have lost competitions to larger companies due to their small size, even though their product is considered excellent. Nevertheless, the firm has also won competitions and is regarded as a skilled firm. Thus, the theory of Li and al. (2012) corresponds partly to our results. However, the firm D has obviously understood that despite of the small size, the company must focus on several factors, for instance R&D and alliances. Regarding various elements in the internationalization process is considered as a vital issue according to many researchers (see e.g. Ojala, 2009; Knight & Cavusgil 2004; Li et al. 2012).

According to Knight and Cavusgil (2004) buyer preferences are nowadays more global and homogeneous than before, which supports positively entering global markets. In addition, reduced costs due to technological improvements enable fast internationalization today. For example, online solutions are straightforward to use everywhere without shipping costs. (Knight & Cavusgil, 2004) Easiness in the internationalization process can be noticed in all our interviewed firms but typically in case of the firm A, whose CEO considers that an office in the target country, for instance, is not necessary.

7.1.4 Customer-knowledge and entrepreneurial orientation

Understanding customer needs has arisen in our interviews as a remarkable feature: the head of the firm B realized in the end that entering the African markets was an impossible mission, most probably caused by lack of cultural

knowledge. The firm E, on the contrary, has recognized the importance of customer-knowledge since this firm had already created contacts two decades earlier. The firm E has advanced rather carefully in the global markets whereas the firm B tried to acquire the markets of the whole continent. According to Verhees & Meulenbergh (2004), companies providing niche products or services must recognize the needs of the customer in order to make profitable business.

"In practice, there would be a need for a product or two (in the target country), but the solution we are offering is co-operation. We must advance discreetly. You cannot go there and say "you'll need this and that", even if they would." (The CEO, the firm E)¹²

The findings of Oyson and Whittaker (2015) confirm that entrepreneurs head towards the international markets only if international opportunities are on the horizon. Otherwise, the entrepreneurs do not proceed to foreign markets. Hence, the firm E has followed these theories and seems to be successful in its global businesses.

The firm B seems to be rather entrepreneurial orientated (Jantunen et al., 2008), which refers to the ambition level of the head of the firm (McDougall et al., 1994) and the aim of the firm to offer high-quality products to the customers (Knight & Cavusgil, 2004). Thus, the head of the firm B was noticeably proactive and fearlessly risk-taking person, which may result in success in the internationalization process.

Alvarez and Barney (2007) have approached entrepreneurial actions by questioning whether opportunities are only to be discovered or if they are created by the entrepreneurs and their actions. The authors describe the difference between these theories as 'mountain climbing', discovery, and 'mountain building', creation. The CEO of the firm B seems to be a businessperson who either recognizes and explores opportunities or he creates opportunities iteratively and forms a business plan after an opportunity is installed. (Alvarez & Barney, 2007). All in all, the CEO appeared to be ready to build the mountain.

Oyson and Whittaker (2015) claim that entrepreneurial imagination compensates lack of knowledge while discovering international opportunities. In the case of firm B, it seems that imagination has played an important role in the internationalization process; possible lack of knowledge in terms of cultural issues, for example, have been replaced by imagination.

7.1.5 Strategic orientation and international growth

Jantunen and al. (2008) have stated in their study that strategic orientation influences the internationalization performance of the company. On the other hand, researches underline that the company should find a balance in the

¹² "Käytännössä siellä olisi tarve yhdelle jos toiselle (tuotteelle) mut se ratkasu mitä tarjotaan on se että tehdään yhteistyötä. Että pitää hyvin diskreetisti edetä. Että sinne ei voi lähteä kertomaan että te tarvitte tätä ja tätä (vaikka tarviiskin)."

internationalization process since an extravagant proactiveness is not increasing the international performance (Jantunen et al., 2008). The interviewed firms B and E are excellent examples of these findings in the literature. The firm B obviously chose quite an aggressive approach in the global markets and failed. The firm E, on the other hand, seems to have chosen a moderate strategy in terms of its global businesses, and so far the business seems to be productive. Both firms underline the relevance of the business strategy.

Masum and Fernandez (2008) have formulated a framework considering network theories and how they influence the internationalization process of SMEs.

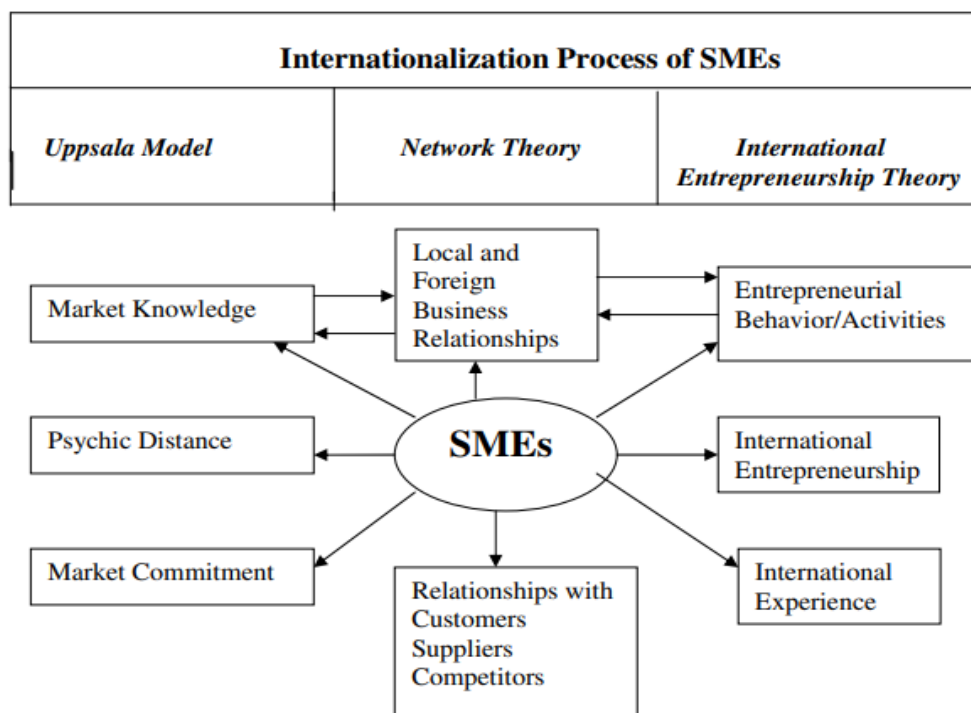


Figure 1. Internationalization process of SMEs by Masum and Fernandez (2008).

The authors claim that market knowledge is the key factor when entering the global markets. In addition, networks and opportunity seeking behavior support market knowledge according to their framework. The outcomes from the interviews in this study are in line with the framework presented above. Furthermore, all the aspects portrayed in the figure are relevant for the interviewed firms in this study.

International experience and market knowledge have undoubtedly facilitated the internationalization process of the firm E. The firm E also emphasizes the importance of market commitment: the first obstacle is not a reason to retreat.

The firm D, though, admitted that psychic distance may cause difficulties when establishing business abroad. This firm considers the local presence as an essential factor in international business in order to create contacts and a common

language between the business partners. Moreover, the firm D considers that the firm was launched in a global atmosphere, which refers to the international entrepreneurship. As Mainela and al. (2018) affirm in their study, international entrepreneurship is highly linked to collectiveness and to entrepreneurship community. The firm D clearly considers their position as a part of a larger community performing on their sector, in other words, financial sector. The Head of Services of the firm D regards that financial sector operates globally in the same way.

Entrepreneurial behavior was most obvious in the case of the firm B. The CEO has strong opportunity seeking behavior, even on a totally unknown territory.

7.2 Product in the internationalization process

Satish Nambisan (2001) has claimed that a company needs to offer either a product or a service, otherwise their business will fail. According to our findings, nevertheless, the firms do not seem to separate the product and the service anymore. Customers' demands are not focused only on the product nowadays. The whole package – the product and the services around it - are essential. Thus, an IT firm must pay attention e.g. to the maintenance of the product after selling it to a customer. We are therefore talking here about product or service, depending on the context. In addition, the term *innovativeness* is presented in the same category with *product* since these topics seem to be firmly connected in the literature.

7.2.1 Product strategies

In the introduction part, we presented the division of Hoch and al. (2000). According to the research, software companies can be separated into three categories: 1) professional service firms that offer tailor-made software solutions, 2) enterprise solution firms providing software products for business users, and 3) mass-market software firms with products targeted at consumer markets. The interviewed firms in this paper represent somewhat the first or the second option, hence, firms that are focused on tailor-made software solutions or providing products for business users. The interviewed firms argue that they are not producing tailor-made products or services at the first place, but these firms are targeting their products to business users, not huge customer markets. Alajoutsijärvi and al. (2000) and Ojala and Tyrväinen (2008) have argued whether software firms concentrate on tailored products or only on business users who might be interested in their products. According to the outcomes in this study, it seems that software firms are somewhere in the middle of these two options. The

products or the services are targeted for specialized markets and businesses, but the products are tailored only if it is considered as an essential act in the business in question.

The study of Ojala and Tyrväinen (2006) indicated that the product strategy is tightly linked to the selected foreign entry mode. The firms of this research obviously investigate first whether it is useful to enter foreign markets or not. The firms do not seem to rush into markets, but they explore the opportunities and the challenges in the markets and the needs of the customers or businesses abroad. Thus, if the products are not clearly needed, the firm will not enter the foreign markets. One of our interviewed firms was noticeably an exception: the head of the firm B tried fearlessly to acquire new contacts and customers even in Africa. The CEO was convinced that he could sell an excellent product to a continent where the need of the product was not clear. A possible failure was not a reason to give up.

7.2.2 Product and the markets

Ojala and Tyrväinen (2008) have claimed that all product dimensions, i.e. quality of the product, packaging, uniqueness of the product and product customization should be theorized as an entity. Our interviewed firm E obviously considers global markets based on a combination of features. The firm E apparently trusts the reputation: the products are valued, and that was one of the reasons to re-internationalize. The firm also seems to investigate carefully if the foreign markets are worth entering in terms of competition. The firm has entered a country where the products are needed, including the R&D. Furthermore, the company E considers the time of entering the markets. Sometimes the timing matters in a large extent whether it is worth trying to enter a certain market (e.g. the firm E).

Researchers (see e.g. Madsen & Servais, 1997; Li et al., 2012) have noticed that STEs are facing more homogenous markets. Our interviewed cases seem to follow this trend, although some details of the products must probably be remade or tailored according to the target country or the customer. Our interviewed firms clearly choose the countries to enter: the requirements of the target country and the offerings of the firm must encounter, otherwise the firm should not try the internationalization process.

7.2.3 Product and innovativeness

Acs and Terjesen (2013) have introduced the term "intermediated internationalization", which refers to the relationship of small and large companies. In this case, both SMEs and multinationals can benefit in the foreign markets. None of our interviewed cases used this method so far since all of them seem to have specialized in the R&D of their offerings – products or services.

The findings of Wolff and Pett (2006) state that an innovative attitude affect positively new product and process development. The study of Kunday and Şengüler (2015) confirm that innovation enhances export orientation of SMEs (Kunday & Şengüler, 2015). Altogether, firms willing to succeed in the global markets must be innovative and they must recognize the profit opportunities based on the innovations (Acs et al., 2001). Some of our interviewed firms, e.g. the firm E, have focused their R&D partly abroad. In other words, the product to be utilized in a target country will be developed there as well. All the interviewed firms recognize the possible need for tailoring the offerings. Nevertheless, the trend seems to be that the product or the services will be tailored only when needed. This is probably due to extra costs that customizing would cause. However, sometimes innovations may be created rather quickly, and modifications in the development are effortless.

The findings of Ojala (2009) suggest that small firms benefit from the agencies that are offering guidance to companies entering the global markets. Kunday and Şengüler (2015) propose equally that policy makers would create support programs for SMEs and their innovations. In fact, three of our interviewed firms (B, C, E) have turned into this sort of agencies, and somehow the received information through these agencies have been useful. In many cases these agencies have executed a market research in the target countries, and the interviewed company has obtained important information whether the requirements in the foreign market encounter the offerings of the firm. Hence, the firm will know if it is worth trying the internationalization path in the target country (see e.g. Oyson & Whittaker, 2015). Moreover, all these firms - B, C and E - represent firms founded in the 1990s. Hence, these companies probably recognize the benefit of the agencies due to their age and possible lack of innovations or creativity.

7.3 Synergy between network relationships and product – does it exist?

As regards the synergy between network relationships and product, I have argued in the chapter 4.2 *The significance of the product in the internationalization process* that the software industry is not as risk-seeking sector as researchers previously thought. This theory is highly supported by the interview outcomes. All the interviewed firms expressed – in a way or another - that the decision to enter global markets is substantially planned and based on a business strategy and in most of the cases followed by a previously conducted market research. The interviewed firms evidently base their international businesses on various details and a combination of features that might affect the businesses. The decision to enter is a long-term project: even though the product life cycle in the technology-industry is very short (e.g. Allen, 2015; Hanna, 2016), the STEs rather

focus on fast innovations or simple modifications, thus, directing the energy towards development, modernization and upgrading the products or services.

All the interviewed cases stated that neither product nor contacts is enough in the internationalization process. Thus, synergy between these two is evident. There is neither a clear result for the question, whether product or the networks would go first in the internationalization process, although the interviewed firms emphasize the impact of quality of the product before entering the global markets. It seems that the significance of the two switches during the whole internationalization process. On the other hand, the synergy between the product and the networks occurs likewise in the domestic markets: STEs must balance between the offerings and the networks, as well as between many other features that affect the business.

7.3.1 Reference to the model of Galimberti and Wazlawick

Galimberti and Wazlawick (2015) have examined the factors that facilitate software SMEs entering and remaining in the international markets. The researchers have chosen four dimensions – innovation, entrepreneurship, foreign market knowledge and networking – plus many variables inside those dimensions to describe the successful internationalization process. Innovation refers to high value-added products or services.

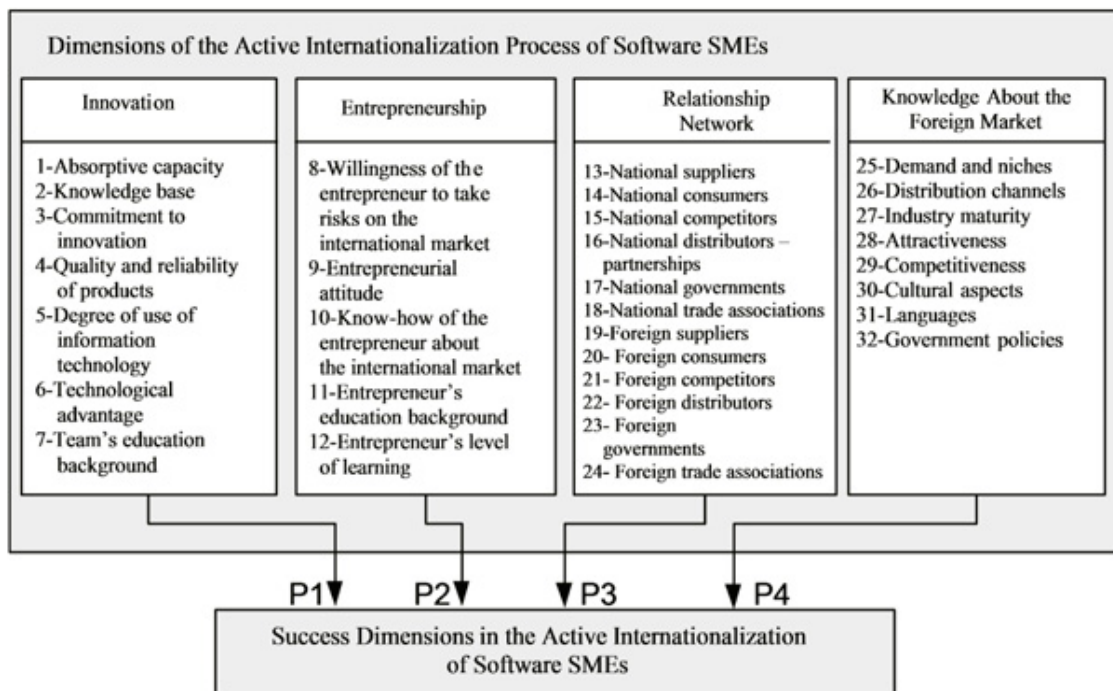


Figure 2. Dimensions of the Active Internationalization Process of Software SMEs by Galimberti and Dorion (2011).

The outcomes in this study are supported by the model of Galimberti and Dorion to a large extent, although networks were not crucial in the study of Galimberti and Wazlawick (2015) concerning the French SMEs. The findings in this study, on the other hand, reveal that networks hold a huge impact in the internationalization process.

In this study, the firm B emphasizes the quality of the product and maintains technological advantage in the markets; hence, the firm B highlights the impact of innovation in terms of maintaining the business in the global markets.

The firm E focuses on entrepreneurship and knowledge about the foreign market: former know-how of the international market is advantage as well as monitoring the demand and competitiveness in the target market.

The firm D underlines the influence of cultural aspects in the start of creating business contacts. In terms of relationship network, the firm D states the threat of the competitors that might win in the last round due to a well-known name.

The firm C is concerned about government policies that might largely affect their business. Moreover, the outdated quality of the product is a matter of uneasiness in the firm.

The firm A expressed the meaning of relationships that affect both negatively and positively. The firm also spotlights the demand and niches, in other words the firm A is focused on providing tailor-made solutions if needed.

To sum up, the findings based on the interviews in this study contain variables from all dimensions presented in the model of Galimberti and Dorion (2011).

7.3.2 Model based on this study

Features affecting the internationalization process according to the findings in this study are presented in the figure below. The main features are networks and product/innovation/service, and the rest is categorized under one or the other. The division has been made based on interpretation and the context in the interviews. This division and a new figure have been made since the model of Galimberti and Dorion does not include, for example, timing or age of the firm, which are relevant dimensions according to the results in this study.

Features affecting internationalization process



Figure 3. Features affecting internationalization process in this study.

The category **Network Relationships** includes four aspects noticed in this study. *Market knowledge* contains *cultural issues* and possible *language barriers*. The firms B, D and E expressed difficulties regarding cultural issues or language barriers. *Size of the firm* was a vital hindrance for the firm D; small size seems to reduce the firm's credibility in the competition with bigger enterprises. *Entrepreneurial behavior* is a bipolar feature according to the outcomes: Opportunity seeking behavior is an advantage in the internationalization process. On the other hand, in the case of the firm B, an excessively risky attitude might cause defeats while entering global markets. *Local presence* is evident in case of the firm D even if the firm considers being founded in a global atmosphere. On the other hand, local presence seems to be irrelevant in case of the firm A.

Under the category **Product / Service / Innovation** contains *political issues*, *legal issues*, *timing* and *age of the firm*. Political decisions might delay selling the product: in the case of the firm C, the cancellation of Obamacare has impeded business in the USA. as well as legal issues affect likewise: especially health care solutions are difficult to sell to another country if privacy policies radically differ between the countries. Timing turns out to be essential, particularly in the cases of B and E: the firm E has recognized that time is proper for entering abroad. The firm B, instead, has realized that internationalization could have started earlier

in their case. The age of the firm affects particularly in case of old firms, B, C and E, as they need to modify and update their products.

8 CONCLUSION

In this study, some of the most important internationalization theories have been presented concerning particularly software sector. Furthermore, the existing, though limited, literature have been browsed about product and its possible influences on the internationalization process. Product, in this case, refers to both products and services that software firms are providing to their customers.

Network approaches in the internationalization processes seem to be widely examined in the literature. However, there does not seem to be a consensus about the most practical and efficient manner to enter the global markets. Internationalization processes tend to be rather a mixture or a combination of multiple entry modes, capabilities and knowledge in a certain field. On a managerial level, however, it is critical to recognize the traps and opportunities in the global markets when the actual aim of a company is to internationalize successfully.

Product is typically linked to innovations in the literature concerning technology-based industries. Product seems to influence entering the markets and is therefore an important object in this study. Previously, I assumed that the division of the product strategies would most probably be highlighted in the empirical part since the strategy is highly linked to the target customers. Indeed, the product strategy seemed to be vital to all interviewed cases, but it is prominent in the domestic markets as well, not specifically in the internationalization process.

The original research questions were:

- What is the synergy between networks and product in the internationalization process of IT firms?
- Is one or the other, networks or product, more important?
- Are there other significant features affecting the internationalization process beside networks and product, e.g. cultural issues?

According to the outcomes of the interviews, the firms are willing to concentrate on R&D of the product or the service. The firms seem to recognize that life cycle of the products in the software industry is rather short, and

modernizing the offerings, whether product or service, is therefore evident and part of the business strategy. An excellent product seems to be crucial before entering the global markets or creating contacts.

Network relationships maintain their importance in the internationalization process. All interviewed firms acknowledge the importance of contacts - if they do not already exist, they must be created.

The synergy between the product and network relationships is evident according to the findings. The interviewees could not precise which one - product or contacts - would be more significant. Both are essential in some part of the internationalization process, and it is rather difficult to discern them from each other: in some point of the process the contacts are more important than the product, sometimes it is the product, which must be brilliant in order to form business partners. Moreover, the interviewed firms seem to understand that internationalization process is a combination of a bunch of details. The timing and the size of the company are essential dimensions when entering abroad, not to mention market knowledge and entrepreneurial behavior. Legal and political issues were also highlighted in this study. Nevertheless, without an excellent product or service entering the global markets is ineffective according to the interviewees.

In terms of theoretical implications, this study contributes to the existing network theories in a large extent. Furthermore, the study discloses the influence of the product or services beside the contacts in the internationalization path of Finnish small technology firms. A relevant topic for further research would be examining the product more properly: a larger sample of software firms would clarify and confirm the results of this study. This sort of future research would probably be efficient to execute as a quantitative research in order to receive detailed information concerning the influence of the product. Moreover, as the limitation in this study is that all interviewed firms operate basically according to the same product strategy, professional service firms that offer tailor-made software solutions, it would be interesting to investigate whether different product strategies affect and modify the outcomes.

As regards the contribution to the entrepreneurial level, firms tending to enter the global markets should carefully consider the significance of product and contacts: neither of them is sufficient. Firms must be aware of continuous changes during the whole internationalization process and bear in mind the influence of various elements, for instance cultural, legal and governmental issues and the timing when entering global markets. Market knowledge and entrepreneurial attitude beside networks and product are also essential in order to achieve a successful internationalization process.

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APPENDIX 1 Interview questions

Brief introduction to the interviewee: the focus in the master's theses

- How do network relationships affect the internationalization processes of IT firms?
- How relevant is the product strategy in the process?

Questions for the interviews:

1. Would you first tell your name and your position in the firm, please?
2. What is your role in terms of the international activities of the firm?
3. Is your firm offering a product, a service or both?
4. What is your main target group: Do you sell to niche markets, mass markets or business markets?
5. Would you then tell about the steps in the internationalization process of your firm, please? In your own words. I'll ask further questions if needed.
6. How and when did everything start?
7. Were you the active counterpart in the process?
8. What is the role of the product/service in the internationalization process (in your opinion)?
9. In case you sell both product and service, what sort of differences are present?
10. In which countries do you have international activities?
11. In which forms (e.g. agent, own store...)?
12. Are all your products/services on international markets?
13. What sort of problems have you faced in the internationalization processes?
14. What are the strengths of the firm that have kept you in the international markets so far?
15. Do you have competitors?
16. Have cultural issues facilitated or caused problems in the internationalization process? How?
17. Are you planning to further internationalize in the near future? Into which countries?

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- Kuinka verkostot vaikuttavat IT-yritysten kansainvälistymisprosessissa?
- Kuinka oleellinen on tuotestrategia kyseisessä prosessissa?

Haastattelukysymyksiä:

1. Kertoisitko ensin nimesi ja työtehtäväsi yrityksessä.
2. Mikä on roolisi yrityksen kansainvälistymisprosessissa?
3. Tarjoaako yrityksenne tuotetta, palvelua vai molempia?
4. Mikä on yrityksen pääasiallinen kohderyhmä: Myytekö räätälöityjä ratkaisuja, yritykseltä yrityksille (B2B) vai massamarkkinoille?
5. Kertoisitko ensin omin sanoin yrityksen kansainvälistymisvaiheista?
6. Kuinka ja milloin kaikki alkoi?
7. Olitteko aktiivinen osapuoli kansainvälistymisessä vai lähestyttiinkö teitä?
8. Mikä on mielestäsi yrityksenne tuotteen/palvelun rooli kansainvälistymisessä? Onko se ollut merkittävä tekijä verrattuna muihin tekijöihin?
9. Mikäli myytte sekä tuotetta että palvelua, myykö toinen niistä paremmin?
10. Missä maissa teillä on kansainvälistä toimintaa?
11. Missä muodossa (esim. kohdemaassa myymälä, agentti, tuotanto jne.)?
12. Ovatko kaikki tuotteenne/palvelunne kansainvälisillä markkinoilla?
13. Millaisia vaikeuksia olette kohdanneet kansainvälistymisprosessissa?
14. Millaisia vahvuuksia yrityksellänne mielestäsi on kansainvälisillä markkinoilla?
15. Onko yrityksellänne kilpailijoita?
16. Ovatko kulttuuriset seikat vaikeuttaneet tai helpottaneet kansainvälistymistä? Millä tavoin?
17. Suunnitteletteko aluevaltausta uudessa kohteessa lähitulevaisuudessa? Missä maassa?