

NETWORK-DRIVEN INTERNATIONALIZATION OF YOUNG FINNISH SPORT TECH COMPANIES TO THE US

Master's Thesis in International Business

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1 INTORDUCTION

1.1 Background

The vast majority of businesses around the world can be classified as small and medium enterprises. In the European Union, including Finland, the proportion of SME's of all private enterprises is over 99% (Eurostat 2016). Needless to say, the contribution of these firms towards economic growth for each nation, as employers and centers of innovation, is substantial. However, the small size of Finnish economy sets limitations to the domestic market opportunities for SMEs targeting niche markets. Thus, young firms are forced to seek growth and value creation across national borders close to their inception (Leonidou and Samiee 2012, 24; Torkkeli, Kuivalainen, Saarenketo and Puumalainen 2016, 212). Yet, Finnish SMEs show a lack of orientation towards internationalization and growth (Nummela, Puumalainen and Saarenketo 2005, 6; Torkkeli et al 2016, 208)

Entrepreneurship in general still remains an unpopular career choice in the region regardless of relative easiness of starting a business. Torkkeli et al (2016, 208) state that prevailing societal, governmental and managerial obstacles prevent the Nordic countries, especially Finland, to recognize the growth potential of these small firms. In addition, the risks and constraints associated with new ventures may hinder the willingness to pursue career as an entrepreneur. Evidently, the overall survival rate of young firms is very low and in fact, research on new venture mortality estimate that 40% of firms will fail within the first year of their operations, half of the firms within the first five years (Laitinen 1992, 323) and 90% of firms over the period of ten years (Shepherd 2000, 394). The reasons for such high mortality rate can be partly explained by the resource constraints or liabilities which characterize the early phases of the new firms. These include liability of newness (Stinchcombe 1965) and smallness (Aldrich and Auster 1986), which are applicable to all operational contexts. Young firms seeking business opportunities abroad face even more liabilities, namely liability of foreignness (Johanson and Vahlne 1977). Together the impact of these liabilities is increased depending on the dissimilarity of the target market compared to the domestic market (Korsakiene and Tvaronaviciene 2012, 298).

More recently, in a revision to their famous 1977 internationalization process model, also known as the Uppsala model, Johanson and Vahlne (2009) recognize the growing importance of networks in the internationalization process of firms. It states that internationally expanding firms without a position in a network will eventually result in a liability of outsidership. In addition to the liability concepts, Freeman, Edwards and

Schroder (2006, 33) propose that small firms face three main problems in internationalization: lack of economies of scale, lack of resources (financial and knowledge) and aversion to risk taking. Given the general reluctance towards entrepreneurship and internationalization combined with weak chances of survival even in the national context, how is it possible that newly founded firms are able to overcome the resource constraints and still successfully internationalize?

This phenomenon has received considerable attention in academia over the past few decades. During these years, many labels have emerged describing organizations targeting international markets close to their inception with intentions to gain a substantial proportion of their sales from those markets, such as "born globals" (Madsen and Servais 1997; Knight and Cavusgil 2004) and "international new venture" (Oviatt and McDougall 1994). However, despite the lack of unified conceptualization, all of the names are describing fundamentally the same phenomenon. Against traditional theories of internationalization and underlying assumptions of the new firm, these organizations are able to achieve rapid international expansion, even to several markets simultaneously (Knight and Cavusgil 2004, 124). Explanations for that kind of successful internationalization have been drawn from various theories such as the resource based view, dynamic capabilities and the network approach. According to Oviatt and McDougal (1994), international new ventures create sustainable competitive advantage from accessible unique resources. Fernhaber and McDougall (2005) emphasize strategic adaptation capability according to the operational environment and networking capabilities. Furthermore, development of distinguishable organizational capabilities derived from knowledge, as the most important resource of the small firm, determine the success of their internationalization (Knight and Cavusgil 2004, 126).

The network approach to internationalization and the International Entrepreneurship literature, which has emerged as a result of these new firms, both emphasizes the importance of networks in the internationalization process for new firms to overcome the liabilities previously discussed. Furthermore, in the Finnish context the network-driven internationalization and firms' ability to network in the first place becomes even more crucial due to the small size of the domestic market (Bell 1995, 72; Coviello 2006, 714; Torkkeli et al 2016, 208). Yet, network-driven internationalization specifically in the SME level has received relatively little attention (Nummela 2011, 249; Torkkeli et al 2016, 208). Also, despite the extensive overall coverage on networks and their applications, there seems to be a lack of holistic view on how and when these networks are actually used (Laurel, Achtenhagen and Andersson 2017, 114). Furthermore, Torkkeli (2013, 15) calls for a better understanding of the organizational capabilities involved in the creation of those crucial network ties. Thus, the effect of firm-specific capabilities for developing, maintaining and leveraging networks in the internationalization process need further examination.

The interplay between firm internationalization and networks will be closer examined in the context of Finnish start-ups within the sports technology industry in the US market. The next section will dig deeper into the industry characteristics, the US market and why this particular context was chosen.

1.2 Sports and technology

Over the past few decades, fast developing technologies have constantly created new industries and disrupted old ones. The field of sports is no exception and the recent impact of technological integration into sports has been substantial. Today, both professional and amateur athletes are equipped with technological tools to take their performance to the next level. According to Deloitte Sports US 2016, the most significant trends in the future of sports include wearable sports technologies and cognitive analytics. Over the next 5 to 10 years, Anzaldo (2015, 217) estimates that wearable sports and fitness devices will significantly increase their contribution towards the sports industry revenue. In 2014, the worldwide sports industry revenue totalled around \$700 billion, approximately 1% of the global GDP. Forecasts reveal that in 2020, the equipment segment including wearable sports and fitness devices is looking to generate over \$9 billion in worldwide revenue at 103% annual growth rate (forbes.com 17.02.2016). Below CCS insight (forbes.com 17.02.2016) breaks down their forecast in more detail and estimates that in 2020 fitness, activity and sports trackers will be a \$6 billion dollar market alone. The picture below is a global forecast for wearables and it presents the future outlook of each wearable segment in comparison to the current market situation.



Figure 1 Global Wearables Forecast, 2016 -2020 (forbes.com 17.02.2016)

Technologist magazine (2016) lists the revolutionary developments in sports technology to the areas of new materials as well as access and analysis of data through sensor technology. Sensors are at the core of wearable sports gadgets. The technology was first introduced in the field of biomedicine and the applications to the sports world seem to be endless. Currently, professional and amateur athletes alike monitor their bodies' physical parameters and their surroundings "by wearing wristbands, watches, headbands, necklaces, ankle bracelets, skin patches, belts and other fitness accessories – all of which include miniature, low-power sensors." (sporttechie.com)

The sensors themselves are not the revolutionizing aspect of these technologies. The traditional sports technologies, including the heart rate monitor have been around for decades and even though the development of these applications has taken leaps over the past years, the underlying functionality has remained the same. To ultimate goal is to provide the athlete with useful information. To do this more efficiently, these new solutions are utilizing wearable sensors or sensors attached to the area of the activity, sensors collect data and transmit it to the software or application which in turn provides an analysis for the users on different platforms such as smart phones and smart watches. The analysis thus provides more accurate feedback and information to the athletes and coaches. Current solutions provide, for example, tailored dietary suggestions, information for preventing injuries, technique specific information and trajectory tracking. Needless to say, professional sports teams especially have benefitted substantially form these new technologies. The extracted data and tactical insights are combined for achieving better performance and the athletes, high cost assets, are better utilized and safeguarded against injuries and over exhaustion with individualized training programmes.

Regardless of the sport, the competition at the top level is fierce and a fraction of a second can make a substantial difference between winners and losers. In a recent blog post by Petteri Alahuhta, Business Development Manager at VTT Technical Research Centre of Finland, states that coaches and trainers have traditionally had to rely on their professional eye, videos or laboratories for analysis but with the new technology applications the feedback is instantly available. Also, as data is collected on a day to day basis, the analysis will become even more useful as the performance can be measured against the performance in the past. According to Mounier Zok, the Technology and Innovation head of the USA Olympic team, "technology is the new secret sauce that will make or break any athlete, anywhere in the world." (vttblog.com) Overall, these new technologies are not just for top athletes looking to improve their performance but they also give regular people a better way to analyze their own training and therefore, expanding the potential market of these devices to basically anyone who is willing to do so.

That being said, the growth of this segment, sports tech for both professional and amateur athletes, provides promising opportunities for Finnish companies to grow internationally. Layoffs from technology giants like Nokia and Microsoft have paved the way

for new sports technology companies to emerge thriving from the strong expertise in Internet of Things, sensor technology, data analytics, and software development (vttblog). These new companies are drawing a lot of attention and investments to the already strong Finnish presence in the industry with brands such as Suunto and Polar. For this research, two successfully internationalized start-ups, Omegawave and SportIQ, were selected as case companies representing the new wave of Finnish sports technology.

1.3 Commercialization in the US market

It is safe to say that the US is an economic superpower which is mainly fuelled by technology and innovation. Moreover, USA is the world leader in science, technology and Innovation (PESTLE Country Analysis Report: United States 2017). Apple, Microsoft and Facebook are just a few examples of technological giants originating from the US. Formal institutions have been shaped to create a safe, competitive pro-business environment and despite the recent political developments, according to the World Bank's Doing Business report (2017) ranking countries with respect to ease of doing business, USA is still in the top ten out of 190 countries. In other words, the report indicates that the legal environment in the US is favourable for doing business and also, businesses can be operated and formed relatively easily. From a tech company perspective, protection and enforcement of intellectual property rights are well-established which in turn promotes new product commercialization. Also, the US government promotes economic efficiency by acting only as a regulator in the market making the United States one of the freest economies in the world (PESTLE 2017).

The mere size of the market, supportive orientation and environment for technology in general provides a great foundation for all technology companies. However, an equally important factor for sport tech companies is the American culture. A long history of passionate affiliation to sports has made the institutions and the American people into sports fanatics. Moreover, sports has integrated its position in the US culture through media, education system, clothing, music and language. Consequently, sports has had a substantial influence in shaping the American culture and vice versa, the value and admiration that the Americans place on athletes has undoubtedly affected the US' dominance in professional sports competitions throughout the history. (sportingnews.com)

In addition to this background, the average American consumer has the means to become a potential customer for new technology. According to the PESTLE Country Analysis (2017), in 2015 the average household net-adjusted disposable income per capita was substantially higher than the OECD average at \$41,355 and similar figures comparing financial wealth showed that the average American is more than two times wealthier than the OECD average.

Looking forward, the growth of sports technology and especially wearable sports technology in the US are aligned or exceeding the global trend presented in the previous chapter. The demand for wearable technology, including sportswear, has been steadily increasing in the US and the technology is becoming widely adopted. According to a recent press release by Markets and Markets (marketsandmarkets.com), the growth of this segment in the US can be attributed to industry leaders boosting the demand for consumer electronics such as wearable technology, high interest by investors to finance wearable technology innovations and last but not least, US' nurturing environment for innovation, which is largely responsible for the advancements in wearable technology. In conclusion, it has been estimated that the largest single market for wearable technology will be in North America in the following six years.

To support this future outlook and previous discussion, in his recent article "Sports tech firms finding more love in the US than at home" (2017) John Stensholt discusses a situation that Australian sports technology companies face in their domestic market, which is "born global or die local". This is mainly due to the fact shared by all small open economies, including Finland, that the potential customer base is located somewhere else than the domestic market. Also, when it comes to professional sports in the US, teams and stadiums are often owned by the same entity which makes the decision to implement new technology a lot easier and quicker, compared to, for example, Finland, where the ownership structures tend to be more complex. Overall for Australian sports tech born globals, it seems to be easier to gain foothold in the US market than anywhere else as they are open minded toward new technology and hold the sports technology firms from Australia in high regard. There is no reason to believe that Finnish sports tech firms are worse off compared to their Australian counterparts given the strong reputation and representation of Finnish technology in general, but especially sports technology in the global market.

High technology industries including sports technology provide a perfect platform for examining the born global or international new venture phenomenon. Bell (1995, 62) explains that faster engagement toward internationalization can be most often found in the high technology industry, where R&D costs are high, product life-cycles are short and the market for those high technology products are concentrated. The dynamic nature of these high technology industries thus forces firms to seek potential markets internationally for quick commercialization of the new product.

According to Aarikka-Stenroos, Sandberg and Lehtimäki (2014), there are not many organizations in general that possess the required capabilities to even develop and manage innovations, let alone commercialization. The process of bringing a new product, especially in the case of a radical innovation, to the markets requires "acceptance and diffusion among networked market actors; a new product tends to fail if it does not attract

support from stakeholders" (Aarikka-Stenroos et al 2014, 365). This stage also determines those products that make it and those that do not. Moreover, commercialization in general requires the heaviest investments in terms of financial resources. Even though money is tight at this point in most cases as the new firms are bringing their product to the market, the scarcest resource for the new firm is still arguably time (Marvel and Patel 2017, 1). Therefore, the speed of product commercialization in international markets might be the key for success in highly competitive industry such as the sports technology industry.

According to Marvel and Patel (2017, 2), innovation speed, the time elapsed between an idea turning into end product, is crucial for the young firms' success. Innovation speed determines the first-mover advantages; firms that are able to establish themselves in the market and secure distribution channels before everyone else. Thus, it can be assumed that firms bringing new products to the market should do everything in their power to get there first. However, Johnson, Piccolotto and Filippini (2009, 9) argue that the speed race to the market alone does not determine the winners and losers. Instead, the authors suggest that speed to the market combined with market knowledge is the recipe for success. Firms with orientation to market needs are able to steer the new product development process to fulfil those needs.

To conclude, firms that are able to introduce new products do it in a timely manner and with right attributes. Simply rushing into the markets with underdeveloped and wrong product trying to capture first mover benefits will most likely end up in failure (Johnson et al 2009, 7). Therefore, the speed and need must be considered together as reinforcing and complementary elements of the new product development giving a better chance of success than concentrating on one or the other element in isolation.

1.4 Purpose of the Study

The purpose of this research is to contribute towards to the understanding of the role of networks in the early stages of young Finnish sports technology companies' internationalization process to the US. The mere existence of business networks does not guarantee international success. It is more important to understand the network dynamics underneath and therefore, this research aims for greater insight of the role of networks by investigating the most valuable relationships in this specific context, the process of developing and maintaining those relationships and finally, how these relationships help overcoming constraints. In addition, as suggested by Torkkeli et al (2016, 208), it is crucial to understand the organizational capabilities which allow firms to engage in the networking process to begin with. These capabilities could determine the winners and losers of inter-

nationalization, especially in the Nordic context where network-driven internationalization is found to be particularly high. Thus, to achieve the purpose of this research, the main research question follows:

• How do networks facilitate young Finnish sports tech companies' expansion to the US markets?

In addition, the following sub-research questions have been constructed to assist in the process of the main research question and are as follows:

- Which partners are most valuable in the early stage of market entrance and why?
- How are these network relationships created and developed?
- How do they help the young internationalizing firm overcome major challenges?

The information this thesis seeks to provide could shed light on some of the complexities that underlie the internationalization process of these young Finnish Sports technology companies, specifically relating to the US market entrance. The US offers a substantial potential for the sports technology companies. Therefore, information on network utilization and networking capability may be useful for firms at pre-internationalization stage, planning to expand to international markets. Additionally, this research presents some of the relevant extant literature on network approach to internationalization and development of competitive advantage form organizational capabilities to overcome liabilities underlying internationalization.

Given the significant contribution SME's have on the Finnish economy, it is vital to learn as much as we can about their operations. The economic development is reliant on these firms' ability to grasp opportunities abroad as the domestic market provides insufficient business for growth. Thus, the importance of understanding all possible aspects, networks and networking in this particular research, regarding to SME internationalization in Finnish context will be highly beneficial for both micro and macro level.

2 LITERATURE REVIEW

2.1 Internationalization of SME's

In simple terms, the concept of internationalization refers to "geographical expansion of economic activities over a national country's border" (Ruzzier, Hisrich and Antoncic 2006, 477). The history of internationalization research goes all the way back to Aharoni (1966), who was the first one explaining FDI choices of the firm based on the grounds of behavioral theory rather than classic economic rationality. This groundbreaking work has been the foundation of the widely accepted experiential learning models, also known as the incremental internationalization models such as the Uppsala model, established by Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977) (Li, Li and Dalgic 2004, 94). The Uppsala model was among the first ones directly related to the SME context (Torkkeli 2013, 29). However, not until recently, SME's and their internationalization process has gained more attention as the overall theme in majority of the International business research has historically revolved around various activities of MNE's (Ruzzier et al 2006, 476).

The business environment is constantly shaped by Globalization, which in turn has resulted from three widely accepted factors. First, developments in information and communication technology enabling raised awareness of international business opportunities. Second, diminished trade barriers and financial deregulation and thirdly, previously closed markets, especially in Asia and Eastern Europe have opened their doors for foreign investments. Thus, the reason for increased academic research on SME's is understood by the increased SME internationalizing activities boosted and enabled by Globalization. Additionally, by pursuing international growth small firms are becoming increasingly important contributors to economic growth and important players in the international business arena (Ruzzier et al 2006, 477-478). According to Li et al (2004, 95), the internationalization process of the firm can be divided into three main perspectives. These are, as briefly mentioned above, experiential learning models, systematic planning models and contingency perspective. Each of these will be looked at more closely in the following section.

2.1.1 Experiential learning models (I-model and U-model)

One of the most widely accepted internationalization models of the firm is the so called Uppsala model or U-model. Johanson and Vahlne (1977) followed the internationalization patterns of small Swedish manufacturing firms and constructed the famous model. It

explains internationalization as incrementally progressive "stages" of commitment to a foreign market. The progressive nature of market commitment is the result of market knowledge acquired through the firms' current activities. Hence, experiential learning facilitates the gradual increase in business activities in the foreign market. Furthermore, the accumulated knowledge from international markets enable firms to enter markets with greater "psychic distance". The underlying assumption of the model is that in market selection firm priorities similarity of the potential market to their domestic market, meaning physic proximity. Thus, the concept of physic distance describes the cultural similarity of markets in terms of language, education and business practices (Johansson and Vahlne 1977, 24).

The model consists of two dimensions: state aspects and change aspects. The relationship between these aspects is dynamic which means that one cycle of events influences the next. The below graph portrays the cycle of events between these variables.

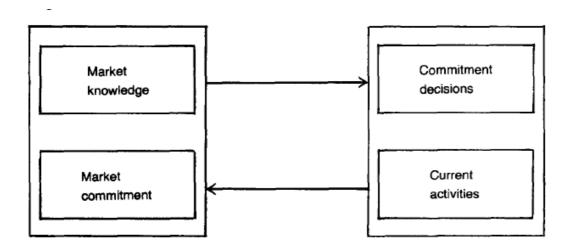


Figure 2 The Basic Mechanism of Internationalization – State and Change Aspects (Johansson and Vahlne 1977, 26)

Similar to U-model, the Innovation-related models or I-model of internationalization, the process flows through various subsequent stages which are considered as firms' innovations. The construction of these I-models such as (Bilkey and Tesar 1977; Cavusgil 1980) can be seen triggered by the Uppsala model (Li et al 2004, 95). However, the I-models are concentrating primarily on exports whereas the U-model also considers other modes of foreign operations (Torkkeli 2013, 29).

Despite the wide applications and contributions of these internationalization models, they have also received a lot of criticism. For example, the Uppsala model is too context dependent in Scandinavia and therefore lacks generalizability (Sullivan and Bauerschmidt 1990, 23). The model is also seen too deterministic (Melin 1992, 104) because individual decision making is not seen important. One of the largest challenges to these

stage models comes from the emergence of early adopters of internationalization (Ruzzier et al 2006, 483). Knight, Madsen and Servais (2004, 647) lists six challenges why the experiential learning models are not applicable to born globals or international new ventures.

- International expansion close to inception
- Several target markets simultaneously and "leap frogging" (Welch and Luostarinen 1988) or skipping stages
- The concept of psychic distance does not apply. Thus, psychically distant markets are targeted
- On the contrary to stage models, more resource committing operational modes may be used such as licensing, JV or even FDI
- Market knowledge acquisition and accessibility to distant customer bases have become easier thanks to the developments in ICT
- The entrepreneurial nature of the young firms towards international opportunities

Finally, even though the stage models rely heavily on experiential learning to overcome the psychic distance it fails to provide a medium or vehicle for acquiring that knowledge (Torkkeli 2013, 30). This is where the network approach to internationalization comes to play. In fact, considering knowledge-intensive SME's, the network model (Johanson and Mattsson 1987; Johansson and Vahlne 2009) is seen better suitable in explaining internationalization (Ojala 2009, 53).

2.1.2 Network model of Internationalization

First, what constitutes as network for the purpose of this research should be distinguished. According to Brass, Galaskiewicz and Greve (2004, 795) networks can be described as "a set of nodes and the set of ties representing some relationship, or lack of relationship, between the nodes." These nodes are network actors which could be individuals, work units or organizations. According to Johanson and Mattsson (1987, 35), the actors in the business network are customers, distributors, suppliers, competitors and government. The importance of inter-firm business networks as well as social networks of the entrepreneur in newly founded firms are found to be important in successful internationalization process (Mort and Weerawardena 2006, 552).

Focus on social networks would be more fruitful in case of investigating international opportunity recognition of the entrepreneur (Ellis 2011, 100). Furthermore, Sasi and Arenius (2008) research on Finnish ICT international new ventures indicate that particularly

in the early phases of internationalization, the firms rely on the existing individual relationships of their founders rather than creating new inter-firm ties. Another division of different types of relationships in the literature are formal relationships, informal relationships and intermediary relationships (Ojala 2009, 52). Formal refers to relationships within the business network, informal to the social network and in intermediary relationships there is a third party actor connecting two firms. For the sake of this research, business networks and formal relationships will be the main focus, including social network as sub-network of the business network (Ruzzier et al 2006, 485), as an appropriate choice for viewing the firm in a bigger picture (Ellis 2011, 102). In addition, even though research on antecedents of early adopter of internationalization indicate that these firms are usually driven by managers with international orientation, previous international experience and likely more personal relationships, we cannot assume that this is always the case. Young inexperienced firms might have to build these relationships from scratch.

As mentioned earlier, Torkkeli (2013, 30) states that Johanson and Mattsson (1987) were among the first ones to introduce the missing piece, the networks, to the experiential learning models of internationalization. The emphasis in learning means that as firms engage in a cumulative process of establishing and developing exchange relationships with network actors, they gain access to those actors' resources. These relationships take time to develop and establish and are both changing and remaining stable. Thus, new complementary relationships, or "bonds", are formed and old ones are terminated for various reasons. For example, a firm seeking a new international market needs to establish a position in the new network. This might call for a reconfiguration of its existing network base, creating new ones and terminating olds ones. Also, as a result of firm internationalization, the number and strength of networks ties increase (Chetty and Blankenburg Holm 2000, 80) and thus, it can be assumed that international expansion, with increased and stronger ties to the resource bases of various network actors or "market assets", benefits the firm in its organizational development (product development etc.) as well as in new business relationship development (Johanson and Mattsson 1987, 36).

Building on the Uppsala model, Johanson and Vahlne (2009) revisited their famous model for modernization and to better address the growing importance of networks in the internationalization process. They also suggested that Johanson and Mattsson's (1987) model lacks of dynamism because of its heavy emphasis on specific relationships of network actors. Johanson and Vahlne's (2009) new model, The business network internationalization process model, underlies that various, complex and invisible patterns tie firms to each other forming a network of relationships which constitutes as the market. Relevant position within these networks, or being "an insider", is the key for successful learning, trust building and commitment, which are the essential preconditions for firm internationalization. Firms that fail to establish themselves in relevant network positions

will suffer from liability of outsidership. Under the network perspective, liability of outsidership is a better concept of describing constraints relating to internationalization than the more traditional entry barriers. Also, consistent with previous business network models, Johanson and Vahlne (2009, 1418) recognizes the influence of various network relationships in opportunity recognition which in turn affects the firm's foreign market selection as well as the entry mode.

Reflecting the changed business environment and extensive research conducted on the network approach, variables from the Uppsala model have been amended but the dynamic nature and dimensions of the model have remained the same. The below illustration describes the influence that each of the variables has on one another in the cumulative process. On the left, are the so called "state" variables including "Knowledge opportunities" and "Network position". The knowledge of opportunities is the most critical driver of the internationalization process. Also, knowledge about other network actors' resources and capabilities are seen important. Furthermore, crucial knowledge is seen to be restricted to the network insiders. Firms that are committed to each other by stronger ties, are able to learn and accumulate knowledge which in turn helps the firm discover opportunities. Given the dynamic nature of the model, accumulated knowledge may affect, positively or negatively, the two change aspects, which again influence the state aspects. Thus, a firms' position in a network, as discussed above, gives the firm advantage or disadvantage, depending on the strength of the relationships it has with various network actors.

The first one of the two "change" variables is "Learning, Creating and Trust-building". In the earlier models, this change aspect was labelled "current activities" which indicated the vehicle through which learning and trust-building occurred in a firm. The effectiveness of the activities depends on the firm's prevailing level of knowledge, trust and commitment. Thus, creative processes are reinforced by the existing amount of these critical resources. The second change aspect is "relationship commitment decisions". The level of commitment to a relationship is also determined by the accumulated body of knowledge. For instance, after learning and trust-building activities, a firm is better equipped to increase, follow a partner to foreign markets, or decrease, not follow, commitment decisions in a given relationship.

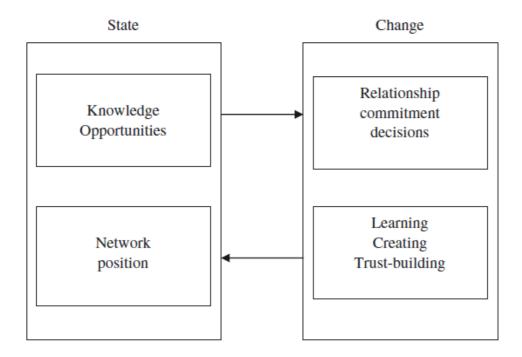


Figure 3 The Business Network Internationalization process model (Johanson and Vahlne 2009, 1424)

To summarize, the network view suggests that "actors are embedded within networks of interconnected relationships that provide opportunities for and constraints on behaviour" (Brass et al 2004, 795). Thus in internationalization context, the central idea of these network models is that the process is heavily determined by other network actors as well as firm's position in a network (Ojala 2009, 52-53). In other words, internationalization is the result of firms establishing and developing their position within those networks (Torkkeli 2013, 30).

Despite the wide acceptance of the network approach to SME internationalization to-day, some criticism has risen during the development of the theory. Chetty and Blankenburg Holm (2000, 89-90) list several weaknesses of the Johanson and Mattsson (1987) model. For example, the model fails to include the decision makers' and firm characteristics into consideration of the internationalization process. Some research has shown that international expansion is largely determined by the attitudes of managers. The model also fails to consider the external stimuli as in push and pull factors of firm internationalization such as domestic competition and an unsolicited order. However, as Torkkeli (2013, 29) points out, the network perspective has had a significant influence in modelling the SME internationalization. Specifically, by providing networks as the "missing piece" for firm learning and vehicle for accumulating knowledge necessary for the internationalization process. Consequently, the underlying implication of the network theory to firms

seeking successful international expansion is to concentrate their efforts toward their networks. Namely, how are these relationships established, developed and maintained in order to leverage from them in the internationalization process.

2.1.3 Identifying key network actors

In contrast to the Uppsala model, the network perspective does not explain the firm's behaviour in terms of market selection and entry mode. However, as was discussed above, these factors are heavily influenced by the firm's network actors. According to Ojala (2009, 52), past research on SME's has identified that the pattern of firm internationalization in fact follows this trend with the most common entry being to psychically close markets. In reality however, many small firms with innovative products are forced to seek opportunities in more psychically distant markets. In addition, even if the initial market entry is to psychically close markets, eventually in many cases firms will seek more distant markets. More research is required to understand the transition from small firms entering close markets first and then shifting to more distant ones (Ojala 2009, 53).

Freeman et al (2006, 48) provide a conceptual framework suggesting networking strategies, such as client followership and collaboration with actors in the value chain, for new international ventures to overcome internationalization hurdles. In addition, forming long-term relationships through networks is important for small firms to overcome the psychic distances and geographic dispersal of different stakeholders (Freeman et al 2006, 37). According to Li and Qian (2007, 29), small firms should engage in partnerships and strategic alliances to provide aid for the previously mentioned constraints and also, help the firm to allocate investment costs and risks among partners. Freeman et al (2006, 52) agrees by stating that by increasing market knowledge and sharing of financial burden through networks, small firms are able to penetrate multiple markets rapidly and simultaneously.

In the conceptual model provided by Freeman et al (2006, 48) the emphasis is on partnering up within the current value chain actors. On the other hand, Gabrielsson (2005, 207) suggest that instead of vertical integration along the existing value chain, firms should seek partnerships more horizontally "to offer opportunities for closer strategic integration, greater collaboration, and flexibility across activities" (Freeman et al 2006, 38).

Early adopters of internationalization tend to have unique technology and operate in niche markets without the presence of larger, more established organizations (Knight et al 2004, 661). Characteristics that come with the small size of these firms include flexibility and agility which in turn increase their adaptability and diminished response time

to market fluctuation. On top of flexibility, other dimensions associated with small, globally expanding firms are proactiveness, risk-taking and innovativeness (Leonidou and Samiee 2012, 24). These qualities can be also seen as sources for their competitive advantages. Simultaneously, these are some of the capabilities that larger firms, such MNC's, lack and thus, partnerships between a small born global and MNC could be complementary and mutually beneficial. According to Gabrielsson (2005, 203), recent research has identified an increasing trend of born globals leveraging MNC's resources in their internationalization process such as marketing operations. Furthermore, born globals seem to utilize especially the distribution channels of their larger partners' network. In exchange for born globals' flexibility and technology, which could be even integrated into their systems, the MNC could provide with already established sales channels, reputation and brands.

On the other hand, an agreement, which has once been mutually beneficial might not continue to be that way as businesses develop. For example, from the viewpoint of the smaller firm, alliances and partnerships are especially beneficial in the early stages of internationalization but increased dependence on the larger partner may backfire in terms of conflict of interests, renegotiation of pricing and terms of the overall agreement (Gabrielsson 2005, 207). Furthermore, the majority of research has concentrated only on the positive sides of networking capability. Mort and Weerawardena (2006, 565) calls the negative effects of networks "network rigidity". Involvement in these types of rigid networks could inhibit opportunity exploitation outside the boundaries of the network.

This section has reviewed literature on the experiential learning models and the network approach to internationalization. Next, the focus will be shifted to discussing systematic planning models and the contingency perspective to internationalization as suggested by Li et al (2004).

2.1.4 Systematic Planning models

The central theme of systematic planning models is that internationalization is an extremely rational process driven by systematic planning (Li et al 2004, 96) as the name suggests. Several models have been proposed identifying decisions firm must make on their path to international markets. For example, Yip, Biscarri and Monti (2000) suggest a model of SME's with the assumption that small firms who have more formal planning systems or a systematic approach, will be more successful in their internationalization compared to unsystematically oriented firms who make decisions on a more ad hoc basis. The model is called The Way Station Model and it consists of six sub sequential steps crucial for achieving successful international performance. Ultimately however, interna-

tional performance not only relies on the six steps of the model but the company's competitive advantage also plays an equal role in their international success. The steps are as follows:

- 1. *Motivation and strategic planning*: this is the initial trigger for internationalization, which results from various context dependent internal or external stimuli.
- 2. *Market research*: browsing for potential markets, gathering and accumulating knowledge.
- 3. *Market selection*: the decision is made based on the information from the previous step
- 4. *Selecting the entry mode*: firms choose the best entry mode for the selected strategy and market. Some influencing factors regarding to entry mode choice may include the level of control desired by the company, risk preference and available resources and capabilities.
- 5. *Planning for contingencies and problems*: being proactive and preparing for issues that may arise in international markets.
- 6. Postentry strategy and commitment of resources: after initial entry, firms need to deploy competitive strategies according to the environment. Critical success factors of resource commitment including human resources, organizational structure and marketing strategies.

The Way Station model emphasizes the thoroughness of research in the first five steps. These steps represent the systematic planning process including data gathering and knowledge accumulation. In addition, information in these steps enables strong commitment to the selected market which is seen vital for successful international performance.

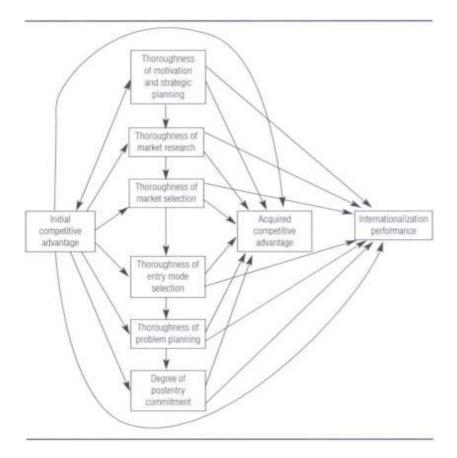


Figure 4 The Way Station Model of Internationalization (Yip et al 2000, 17)

The systematic planning model's emphasis on the extensive market research, information gathering and processing poses a challenge for young and small firms who seek rapid internationalization (Li et al 2004, 96). Therefore, referring back to the commercialization discussion in the first chapter, firms in high tech industry are usually trying to get their product out as fast as possible and enjoy first mover advantages as long as possible. These windows of opportunity are often short and new technology becomes obsolete relatively quickly or larger firms come at play pushing the prices down. For that reason, systematic planning models are not the best at describing the internationalization process of the high technology born globals.

2.1.5 Contingency perspective

Perhaps the most recent perspective on internationalization is the contingency perspective. It sees internationalization as a result of contextual factors and thus, probably the best at taking the turbulent and constantly changing business environment into consideration. Several studies indicate that while in certain conditions firms tend to follow the more traditional route Uppsala model, there are a growing number of exceptions to the model, whose actions can be best explained by contextual factors. The accelerated and

unsystematic internationalization process of young SME's is central to research on born global firms (Li et al 2004, 97).

The most recent development in firm internationalization theories is a new stream of research focusing on these early adopters of internationalization. International Entrepreneurship (IE) has emerged at the intersection of international business and entrepreneurship. The International entrepreneurship research focuses on "the discovery, enactment, evaluation, and exploitation of opportunities across national borders to create future goods and services" (Oviatt and McDougall 2005, 540).

Combining with the network approach, the primary focus of this study is on the contingency perspective, as it can be seen the most current view on the evolutionary path of the internationalization research. It fits in the complex and constantly changing business environment of young internationalizing firms. Also, it contains the recently emerged stream of research in International Entrepreneurship which concentrates on the newly founded firm's early internationalization process, explaining the antecedents necessary for early adoption of internationalization and necessary resources or capabilities for international venture sustainability. International Entrepreneurship will be discussed more in detail in the following section.

2.2 International Entrepreneurship

Oviatt & McDougall (1994) can be seen as the starting point of this new stream of literature. The purpose was to address the fact that some firms did not follow the traditional stage theories. Thus, the authors built a framework for explaining the ad hoc internationalization behaviour of the small firms, calling them international new ventures. Over the decades of research however, firms that "from inception, seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries" (Oviatt & McDougall 1994, 49), have been given many names. One reason for the multiple names could be that early internationalization of firms emerged around the world within a relatively short period of time and individual researchers did not have a universally accepted label for it. Luostarinen and Gabrielsson (2004, 386 - 387) have gathered a list which chronologically identifies all the different terms used for describing basically the same phenomenon.

- 1. Deviations, inconsistencies, variations from mainstream stages pattern (Luostarinen, 1970, 1979, 1994; Johansson and Vahlne, 1977; Luostarinen and Welch, 1990; Luostarinen and Hellman, 1994; Luostarinen et al., 1994)
- 2. New, technology-based firms (Autio et al., 1989, Luostarinen et al 1994; Autio, 1995)

- 3. High-technology start-ups (Alahuhta, 1990; Jolly et al., 1991)
- 4. High value-added exporters/emerging exporters (McKinsey & Co., 1993)
- 5. Born Globals (Rennie, 1993; Knight and Cavusgil, 1996; Madsen and Servais, 1997; Kirpalani and Luostarinen, 1999; Autio et al., 2000; Sasi et al. 2000; Knight et al., 2001; Knight and Cavusgil, 2004)
- 6. Innovative SMEs with a global business idea (Luostarinen et al., 1994)
- 7. Global start-ups / International new ventures (Oviatt and McDougal, 1994; McDougal et al., 1994)
- 8. Gazelles (Vahcic, 1995; Birch, 2001)
- 9. Born internationals (Majkgård and Sharma, 1999)
- 10. Instant internationals (Preece et al., 1999; Dana, 2001)
- 11. Global, knowledge-intensive firms (Almor, 2000)

The first remarks of the phenomenon indicate that firms which did not follow the widely accepted incrementally progressive stage models were merely "deviations" or "inconsistencies" in regards to the norm. However, as reports about firms around the world deviating from the norm started to increase in the late 1980s, so did the attention of scholars and the business world. During that same time period, the world economy and global business environment has undergone a dramatic change which have enabled firms to expand internationally more rapid than ever before. These environmental changes are discussed next.

2.2.1 External factors

Leonidou and Samiee (2012, 23-24) identify the following external forces shaping the landscape as the main enablers for small firms to internationalize near foundation. First, as a result of rising disposable incomes, consumer mobility and intensifying economic trade integration, the consumer tastes and needs are become increasingly homogenous. This trend is also known as Globalization. It means that markets are also becoming universally more similar enabling small firms to enter the markets with less resource commitment in acquiring market specific knowledge and strategy development. Also, producing one product for global markets and thus, achieving economies of scale is attractive to the small firms.

Sometimes, the regulatory environment at the home country pushes firms to seek international sales at inception. For instance, the pharmaceutical industry is highly regulated but variations between different countries exist. The research on young internationalizing firms has especially concentrated on small and open economies, such as Finland.

In many of these cases, the domestic market is simply too small and thus, potential customers are searched elsewhere. Also, as was mentioned earlier some highly competitive industries force firms to internationalize rapidly.

The growing dynamism of the markets, resulting from requirements of customers and competitive pressure, provides young firms opportunities in the global markets. In order to be successful in exploiting these opportunities, firms have to be quick, efficient and holistic.

Lastly, advancements in production, transportation and communication technology have created fertile grounds for early adoption of internationalization. Niche products can be manufactured at a lower cost, those products can be distributed all around the world more efficiently and information about foreign markets is more easily accessed via the internet.

Despite the fact that markets are becoming homogenous, the barriers for entering new markets have lowered and the overall international transaction costs have diminished, it does not automatically imply that all new firms are willing to and seeking international expansion at or close to inception. Thus, the enabling force of these external changes has merely created a foundation for willing firms not only to concentrate on their domestic markets, but also seek opportunities globally (Oviatt and McDougal 1994, 52). However, some environmental conditions force small firms to adopt internationalization early.

The vast majority of firms reportedly striving for internationalization right after inception were typically in the high-tech industry (Leonidou and Samiee 2012, 18). An industry, which requires heavy knowledge-intensive products, indicates that firms are able to develop high knowledge-intensive, niche products for worldwide distribution. This can be seen as a result of the environmental changes as well since firms are now better equipped for acquiring knowledge to develop their organizational capabilities. These internal capabilities in turn, are what distinguish successfully internationalizing firms from the unsuccessful ones (Oviatt and McDougal 1994, 60). The following section emphasizes the importance of these knowledge intensive organizational resources and capabilities.

2.2.2 Internal factors

According to Oviatt and McDougal (1994, 52), if firms have valuable unique assets, they are able to benefit from accelerated internationalization as well as following success in the international markets. Consequently, the international playground has been vastly dominated by the large and resource rich MNC's. However today, changes to the overall business environment described above have made international business easier for

smaller firms as these valuable unique assets or resources are more easily accessible. Oviatt and McDougal's (1994) framework draws from entrepreneurship literature, how new firms could control resources without owning them, and also, how concepts from strategic management help to understand how those resources are used and developed for competitive advantage to overcome major challenges. The model below, figure 5, illustrates the elements for sustainable international new ventures.

Necessary and Sufficient Elements for Sustainable International New Ventures

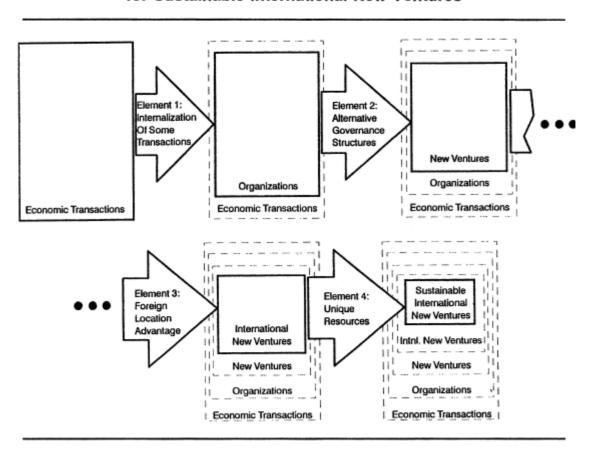


Figure 5 Necessary and Sufficient Elements for Sustainable International New Ventures (Oviatt and McDougal 1994, 54)

Each box represents a certain economic transaction while the arrows explain what distinguishes the previous, larger scope from the following more narrow subset. The progressive model begins with the notion that internalization of some transactions is necessary for "organizations". Alternative governance structures separate "new ventures" form organizations. This means that newly founded firms need to find ways of controlling important assets, internalization, through alternative modes of ownership because they tend to suffer from resource scarcity and lack of assets. An efficient way of doing this is to

share complementary assets via established networks. Moreover, these firms are stretching the boundaries of traditional organizations due to the heavy reliance on networks (Nummela 2004, 128).

Moving on to international context, new ventures taking advantage from foreign locations are called "international new ventures". To overcome the various liabilities arising from being a new, small firm in a foreign country, the international new ventures should rely on the most mobile resource, which is knowledge. Combining private knowledge in the foreign locations with more immobile resources may diminish these liabilities. On the other hand, knowledge is a highly movable resource and may result in gained advantages over competitors; the advantages are threatened by the easy accessibility to knowledge. In other words, knowledge is easily disseminated and thus, to create sustainable international new venture firms need look after their "unique resources" carefully. Similar to Johanson and Vahlne (2009) network internationalization process model, knowledge, including opportunities as a subset, is the most important driver of firm internationalization. In addition, crucial knowledge can be acquired through the network relationships (Mainela, Puhakka and Servais 2014, 109).

Knight and Cavusgil (2004) build on the assumption that small internationalizing firms need distinctive internal capabilities to succeed and the ultimate source of these capabilities is knowledge that resides from multiple sources. Moreover, organizations that have an innovative and internationally oriented culture are better suited for acquiring necessary knowledge to create organizational capabilities which in turn drives international performance. "Organizational capabilities reflect the ability of firm to perform repeatedly, or 'replicate', productive tasks that relate to the firm's capacity to create value through effecting the transformation of inputs into outputs" (Knight and Cavusgil 2004, 126-127). Given the nurturing organizational culture, the authors present the following four different knowledge-based business strategies enabling increased international success.

- Global technological competence: firms' ability to leverage new technologies, create superior products and adapt them to international markets
- *Unique product development*: roots in marketing strategy, differentiated and valuable products aimed at niche markets enable firms to distinguish themselves from competitors and allow them to enter foreign markets close to inception.
- Quality focus: the innovativeness and knowledge of these young firms seem to reflect on high quality products. High quality in turn has been associated with increased domestic and international performance. Also, emphasis in quality as a basis for marketing strategy has been associated with increased international performance.

• Leveraging foreign distributor competences: finding a right partner with localised market knowledge and ability to quickly respond to the changing environment is important. Also, partners with strong distribution channels helps in product promotion

The role of the entrepreneur or top management has been also strongly linked to the international behaviour and performance of young entrepreneurial firms in the International Entrepreneurship literature (Knight and Cavusgil 2004; Mort and Weerawardena 2006). According to Ruzzier et al (2006, 490) the impact of human capital in SME internationalization indicate that "international competencies" such as knowledge, skills and experience of the entrepreneur separate internationalizing firms form those who do not seek international expansion. Furthermore, international business skills, international orientation, perception of environmental risk, and management know-how have been positively associated with internationalization. Oviatt and McDougall (1995, 34-37) present success factors for Global start-up international performance. They argue that one of the most important elements is the global vision of the founder along with accumulated international experience of the managers. On a firm level, early adopters of internationalization should exploit pre-emptive technology or marketing, closely linked product or service extensions and close coordination of worldwide operations. In addition and in line with literature presented in previous sections, Oviatt and McDougall (1995) identify unique knowledge as the key intangible asset for sustaining competitive advantage and strong network of international alliances for accessing necessary resources to facilitate international expansion and growth.

The concepts of "firm-specific capabilities" and "unique resources" as sources of competitive advantage are also central to the resource-based view (RBV), which views the organizations as heterogeneous bundles of resources. These bundles, depending how valuable, rare, inimitable and not easily substituted they are, determine firm's competitive advantage (Barney 1991, 116). The next section will take a closer look at how resource-based view, dynamic capabilities and network approach have been used in the previous research.

2.2.3 Networking capability

Over the years, the development of resource-based view and the network perspective seem to be intertwined to some extent. Also, overlapping models adopting elements from both views have emerged (Ruzzier et al 2006, 488). For example, Lavie (2006) with the help of resource-based view focuses on accessible resources within the business network

as a source of competitive advantage. These network resources provide strategic opportunities and also, affect a firm's behaviour and value.

In the International Entrepreneurship literature, RBV has been widely used for explaining how small firms overcome the several constraints of internationalization. Especially in the context of small firms' competitive advantage, resource-based models emphasize the role of intangible knowledge based resources. The heterogeneous resource base of the firm also guarantees a differentiated configuration of those resources and therefore, unique competitive advantage over its competitors (Barney 1991, 116). The RBV also address that in addition to ownership or control of these resources, the "dynamic ability" to develop new resources through organizational learning is important (Ruzzier et al 2006, 486). In other words, firms need "unique tacit knowledge about global opportunities and the capability to leverage such knowledge to gain competitive advantage" (Peiris et al 2012, 288). Thus, the nature of these resources can be both tangible and intangible namely, assets, capabilities, processes, routines and knowledge. On top of knowledge, as a critical intangible resource for creating competitive advantage, the access to the network resource base in general is important for new international venture success and the network itself is a resource for the firm (Torkkeli 2013, 15). Namely, resources such as organizational, human, physical and financial are attainable through networks.

The RBV has been called too static in explaining how resources are developed and maintained for sustainable competitive advantage (Torkkeli 2013, 35). To reflect the dynamic nature of organizational resources, the dynamic capabilities view has emerged from RBV. Furthermore, Knight and Cavusgil (2004, 126) argue that capabilities have two major aspects. The first is the dynamic nature of the business environment and second, the adaptation of knowledge-based capabilities according to changes in the business environment. However, often the distinction between capability and resource seem to be blurred (Peiris et al 2012, 289). Fernhaber and McDougal (2005, 114) separates these two by arguing that tangible or intangible resources are observable, can be valued and traded. Capability on the other hand is unobservable and thus, cannot be valued or traded. In other words, "a capability is a high-level routine embedded within an organization that enables distinct activities to be performed" (Fernhaber and McDougal 2005, 114). Similar to the RBV, the uniqueness of the capability results in greater competitive advantage.

The necessary capabilities for developing competitive advantage are context dependent which means that there is no universal recipe for success across all industries. However, in general level some capabilities have been associated with better performance regardless of the context. Fernhaber and McDougal (2005, 119) identify two types of capabilities for international new ventures that help them tackle the constraints set by their limited resources and newness and enable them succeed. These are strategic

adaptation to the operational environment and networking capability. International new ventures' vision of what the reality will be once markets are accessed might be false. Entrepreneurial firms may have to disregard original business concepts completely and readjust their strategy based on new information. The networking capability in turn refers to firm's ability build and maintain relationships. The benefits of networks as a resource and source of resource has been discussed more in previous sections and the importance of networks in every stage of new venture's development is well justified (Fernhaber and McDougall 2005, 126-127). Thus, following the dynamic capability view, networking as capability is a crucial element for INV's success and it could be argued that firm's that are better at networking create themselves a competitive advantage over their competitors. Networking capability on the other hand, is the foundation for recognizing and exploiting market opportunities (Mort and Weerawardena 2006, 568).

In their research, Mort and Weerawardena (2006) dig deeper into the role of networking capability in the internationalization of born global firms and construct a conceptual model, figure 6, illustrating how international entrepreneurship orientation and networking capability affect the process.

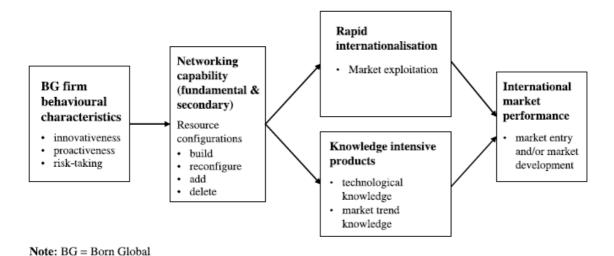


Figure 6 Conceptual Model of Networking Capability and IE in born global firms (Mort and Weerawardena 2006, 567)

Overall, they find that dynamic networking capability enables rapid internationalization, helps in creating knowledge intensive products and effects international market performance. They also find the essential role of the entrepreneur in the networking capability building activity depicted in the model as the "Born global behavioural characteristics". Their findings indicate that networking capabilities evolve over time reflecting the nature of dynamic capabilities. Entrepreneurial firms usually begin with utilizing owner's/manager's fundamental networks, personal relationships from the time before

founding the firm, and build towards secondary networks, which are utilized in the growth process of the firm and market opportunity exploitation.

To conclude this section, given the high reliance on networks in the internationalization process of especially Finnish firms, the ability to create and build ties with external actors becomes increasingly important. Therefore, it is beneficial to dig deeper into the networking process within the case companies to better understand how they have managed to form important relationships in this specific context.

2.3 Synthesis

In this section, previously introduced streams of literature and relevant theories are synthesized into a conceptual framework for guiding this study onward. The discussion of extant literature begins by explaining the evolution of internationalization theories and recognizing the contribution of experiential learning models of internationalization. Furthermore, the traditional internationalization models describe the process as accumulation of knowledge resulting in a gradual increase of commitment to foreign, culturally and geographically close markets only after establishing themselves in their domestic market (Johanson and Vahlne 1977). However as we have learned, even though this type of internationalization still exists, there is an increasing number of firms who do not follow this path. Instead, these firms engage in internationalization close to their inception viewing the world as their primary marketplace.

To reflect the behavior of these firms, Johanson and Vahlne (2009) revisited their model and updated it to accommodate networks as "a vehicle for learning" (Torkkeli 2013, 30). The previous model, Uppsala model, was criticized for being too deterministic and thus, the updated model proposes that firms internationalize as a result of trying to gain better position within a network. In addition, the networks play an important role influencing the decisions about where and how the firm will internationalize. In the Finnish context, the firms' ability to utilize their networks in international expansion is elevated due to the small size of the domestic market (Torkkeli et al 2016, 208).

As stated earlier, key network actors have a strong influence over the decisions about target market and entry mode. Earlier research has found that young firms seek partnerships from the existing value chain (Freeman et al 2006) or with MNC's to leverage from their brand and distribution channels (Gabrielsson 2005). In return, MNC's benefit from the flexibility and innovativeness of these smaller firms. The complementary nature of these relationships is also recognized in the networking theory.

The network approach to internationalization also suggests that the network base of the firm is constantly changing. In practice it means that as new relationships are formed, old ones are terminated (Johanson and Mattsson 1987, 35). Moreover, it is seen

as necessary and natural evolution of the relationships as firms are trying to gain a better position in their network. For instance, entering a new market often requires new ties to be formed with new actors. Developing these new exchange relationships also takes time, but it is seen necessary for creating strong ties which is a prerequisite for learning and accessing the resource base of the network actor.

Access to these resources bases, combined with both tangible and intangible firm-specific resources are the source for competitive advantage (Torkkeli 2013, 15). The dynamic capability view emphasizes the importance intangible resources, or capabilities, in creating competitive advantage, reflecting the dynamism of the business environment. In the context of young a internationalizing firm, networking capability refers to the firm's ability build and maintain relationships, and it has been found to critical for successful internationalization (Fernhaber and McDougall 2005; Mort and Weerawardena 2006)

Following the contingency perspective to internationalization theories, International Entrepreneurship provides the most recent explanation for successful international new ventures (Li et al 2004, 97). Moreover, Oviatt and McDougall (1994) and Knight and Cavusgil (2004) explain how the young internationalizing firms are able to overcome resource scarcity and other prevailing liabilities characterizing their operations. Given these circumstances, in order to achieve sustainable competitive advantage, international new ventures use "alternative governance structures" to gain control of important assets and more often, networks provide an efficient platform for doing so. Distinctive to international new ventures is also their ability take advantage of their most precious resource, knowledge, in a foreign country. Furthermore, According to Knight and Cavusgil (2004, 126), knowledge is the ultimate source of the distinctive capabilities which allow firms to overcome the internationalization hurdles. Yet again, networks become crucial in obtaining knowledge for developing organizational capabilities enabling international success. In addition, this knowledge serves as a basis for four key international expansion strategies for born global firms: global technological competence, unique product development, quality focus and leveraging foreign distributor competences.

Combining these elements from extant literature, this research seeks to understand the facilitating role of networks in this specific context and that way contribute towards to the relatively scarce research body on the network-driven internationalization of smaller firms. The next section will discuss the choices of methods made by the research for achieving this purpose.

3 RESEARCH DESIGN

Research design can be defined as a map or "a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of conclusions (answers) about these questions" (Merriam 2014, 55). Research as a multistage process typically begins with the researcher's self-assessment in terms of personal contribution towards the inquiry (Cresswell and Poth 2017). These personal stances or positioning then provide direction for the study, starting with research question formulation and guiding the process of finding ways to answering those questions. Research design also reflects the researchers' philosophical assumptions and the exploration of the philosophical concepts help in strategizing and designing the overall research (Eriksson and Kovalainen 2015, 27).

Merriam (2014, 8) introduces two main philosophical assumptions that researchers may undertake in social studies: *ontology* and *epistemology*. Ontology seeks answers to questions about the nature of reality, its characteristics and what there actually is in the world, while epistemology is concerned about knowledge and how it is produced. The two opposite aspects to these philosophical assumptions are objectivism, which sees the social world as "out there" or a separate reality which could be measured and observed. This assumption is typically found in quantitative researches. Qualitative research, on the other hand, is often *subjective* in nature (Eriksson and Kovalainen 2015, 14). In ontology, subjectivism or *constructionism* means that individuals construct unique realities and that reality does not exist outside without individuals' interpretation. Constructivism in epistemology sees that knowledge is socially constructed. Eriksson and Kovalainen (2015, 15) state that within epistemology, various directions associated with the main philosophical positions exist. One of these is *substantialism* which assumes that reality is material but at the same time the reality can be constructed depending on people's interpretations in various contexts. Substantialism is thus often associated with critical realism (Eriksson and Kovalainen 2015, 16).

For the purpose of this study, critical realism as a philosophical position is adopted as it allows the researcher to capture the causal and interpretive nature of the social phenomenon (Welch, Piekkari, Plakoyiannaki and Paavilainen-Mäntymäki 2011, 9). In other words, critical realism sees a positivist world which exists beyond our consciousness but at the same time, knowledge in the positivist world is socially constructed and social phenomena are given meaning individually (Eriksson and Kovalainen 2015, 20).

Thus, as the objective of this research is to study how networks affect new firm internationalization, the actual role of the networks in this process is not determined by existing theories. There is no denying of the explaining power of the theories yet each case is uniquely constructed. Also, this research studies the causal links between networks and internationalization but at the same time seeks holistic understanding of the process

in this specific context and how the people in it have created reality surrounding them. Critical realism as a research philosophy provides the necessary tools to do so.

3.1 Research method

According to Merriam (2014, 5), doing research is simply a systematic process where information is gathered about the subject of the study which results in more knowledge of that subject contrary to prior research. The types of research can be divided in to two broad categories: qualitative and quantitative. Quantitative research usually focuses on determining what causes certain events and how they can be predicted in the future. Also, quantitative research seeks clarifying relationships and facts between these certain events and phenomena by studying how specific attributes are distributed in a given population. Qualitative research on the other hand strives to understand what these phenomena mean for those people who are involved, how do they interpret and give meaning to their experiences.

Quantitative research tends to follow a more linear model giving the researcher little room for revisiting and reconfiguring research design. Qualitative research on the other hand does this by allowing the researcher to move back and forth between the different phases of the more iterative research process (Eriksson and Kovalainen 2015, 32). Thus, central to qualitative research is to place the researcher into the world for increased reflexivity, more accurate description of the complex phenomena and better representation of the participants' voices (Merriam 2014, 13). Erikson and Kovalainen (2015, 33) emphasize "reflexivity" of the researcher in qualitative studies. It is the subjective view of the researcher and it is the assessment of the knowledge "production process". With ties to epistemological assumptions, reflexivity in research should describe how knowledge is created for the purpose of this research, what is it and how it can be related to previous knowledge. Discussions about reflexivity tend to revolve around qualitative research to add transparency and source information.

Qualitative method was selected for this research due to the nature of the research purpose, which is to gain better understanding of how networks of small Finnish sports technology company affect their internationalization process. Characteristics of qualitative research discussed above provide better design to grasp the complex social phenomenon at hand.

3.1.1 Research Strategy

Case studies are a highly popular form of qualitative research and one reason for that is "its ability to present complex and hard-to-grasp business issues in an accessible, vivid, personal, and down-to-earth format." (Eriksson and Kovalainen 2015, 117). The emphasis in case study research is to produce contextually rich, detailed and holistic knowledge, which is the opposite of experimental quantitative methods which seek statistical generalizations (Ghauri and Gronhaug 2005, 171). In addition, as suggested by Ghauri and Gronhaug (2005, 171) case studies are a suitable research strategy in complex business related issues, when quantitative methodologies are not applicable. Also, Welch et al (2011, 8) state that case studies allow deep understanding of rich contextual issues and therefore are well suited for studying the human experience. Consequently, theorizing potential from case studies is vast; however, that potential is not currently fully utilized. Given the distinctive characteristics of case studies and objective of this research, case studies are seen the best fit as a research strategy.

The way a case study is actually conducted can be either *intensive* or *extensive*. In extensive case studies the goal is to study several cases to identify common patterns and generalizable theoretical constructs. An intensive case study targets one or few cases to gain deeper insight of the complex phenomenon and understand the perceptions of the people involved (Eriksson and Kovalainen 2015, 120). An intensive case study is thus appropriate for this research, as there are not many firms that have successfully entered American market in this specific industry. This research aims to provide clarity by investigating the best practices of those few firms that have made it and thus, provide high context specific knowledge for young firms in the beginning of their internationalization process, especially in this specific context.

Eisenhardt (1989, 532) argues that the primary goal of case studies is theory building. Moreover, as mentioned above, Welch et al (2011, 6) state that case studies provide a suitable platform for generating novel and ground-breaking theories. In addition to the traditional and dominant inductive method of theorizing in international business, the authors introduce three different ways to expand the theorizing potential from case studies. The below figure demonstrates the relationship between the theorizing methods and how they are located on the contextualization/causal explanation scale. *The inductive theory-building* method fails to provide either strong contextualization or explanatory value. Central to it is a positivist view and aim to provide links between constructs and variables for further testing. *Natural experiment* on the other hand provides greater explanatory power in terms of cause-effect linkages in testing existing theories. *Interpretive sense-making* case studies emphasize the uniqueness of each case by providing "thick descriptions" with constructionist philosophical orientation. Even though both natural experiment and interpretive sense-making provide greater theorizing potential, they also fall

short in one or the other dimension of the contextualization/causal explanation scale. Fundamentally, these two dimensions are seen mutually exclusive as rich contextualization takes away from generalizability and the other way around. However, Welch et al (2011, 18) argue, that *contextualized explanation*, following the previously mentioned critical realism which combines the positivist and constructionist views, provide a new approach to theorizing that does not fall into the trade-off between explanation and understanding. Thus, contextual explanation reconciles between the two aspects and is well suited in International Business research, including this study, to account for complex phenomena in rich context.

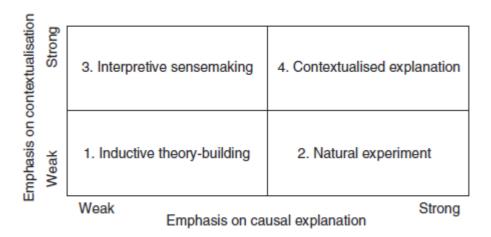


Figure 7 Four Methods of Theorizing From Case Studies (Welch et al 2011, 11)

3.1.2 Case selection

The case selection process for this research follows Eisenhardt (1989, 537) suggestion, which recommends the researcher to be flexible regarding to the number of cases. The intensive nature of this study however limits the total number to only a few, evaluating the incremental contribution of each case one by one

The objective of this study is to gain greater insight and understanding on the phenomenon of interest and therefore, cases with highest learning potential have been purposefully selected. The process of scanning for case study candidates followed "criterion-based selection" by LeCompte and Preissle (1993). First, essential contextual factors were identified. These attributes are essential to the study and firms should fit in to the international new venture/born global category. In extant literature, the criteria for qualifying into these categories are under debate and no universal classification exists. As was earlier established, the naming convention of this phenomenon is largely dependent on the school of thought and so are the classifying criteria for each definition. According

to Gabrielsson and Kirpalani (2012, 4), criteria defining born global forms include the intention to expand globally close to inception, the extent of the expansion, time elapsed between inception and first international transaction, usually 0-3 years, and lastly, the proportion of sales recorded from outside domestic markets. For the purpose of this study, the researcher did not see any benefit in narrowing the criteria too strictly based on the before mentioned criteria due to their vagueness and thus, internationalization relatively close to inception is adopted.

The second phase of criterion based selection is finding units that fit the previously established broad criteria, which is that firms have some international transactions within the first years of their operations, and also that some of those transactions are in the US. The sports technology industry is also central to this study and thus, targeted firms should operate in that particular field in one way or another.

Preliminary scanning of potential case companies was conducted online. List of potential candidates was established and further examination revealed firms that fit all the before mentioned criteria. As a result, two case companies, Omegawave and SportIQ, were selected. Both of the case companies will be presented more in depth in chapter 4.

3.2 Research Approach

Eriksson and Kovalainen (2015, 22) recognize three main approaches to doing research: induction, deduction and abduction. Deduction is commonly found in quantitative research where the starting point is theory. The objective is to draw hypothesis from the theory for further empirical study. Induction on the other hand, as was discussed above, works in the opposite direction compared to deduction, meaning that the research process moves from empirical data towards theoretical results. In reality, however, both deductive and inductive reasoning is often utilized in research. The combination of these two methods is called abduction which is the approach adopted for this study.

Dubois and Gadde (2002) introduce a *systematic combining* approach which falls into the abduction logic. Systematic combining as a process is illustrated below in figure 4. Compared to induction, systematic combining calls for stronger reliance on theory but at the same time, steers further away from deduction. Central to systematic combining and also to abduction, is thus continuous movement, back and forth, between the empirical world and theory. This process, also known as *matching*, allows the researcher to readjust the research focus as well as the theoretical framework along the way as a result of increased understanding of both the phenomenon and the theory. In other words, the *framework* describes "preconceptions" of the researcher which can also evolve through discovery, analysis and interpretation of the empirical world. These findings in turn shift, *direct*

or redirect, the course of the search for empirical data and may result in subsequent findings that might have not been previously deemed as relevant. Consequently, the current theoretical framework might be inadequate and the theoretical model needs to be changed. Overall, systematic combining is a method for building theory. A preliminary framework guides the research but the objective is to discover something new and thus, develop existing theories.

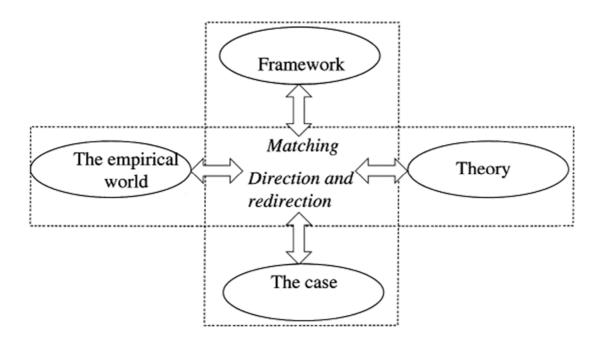


Figure 8 Systematic Combining (Dubois and Gadde 2002, 555)

According to Dubois and Gadde (2002, 554), systematic combining facilitates continuous confrontation of theory and the empirical world, as the main objective of any research, as well as confrontation of the evolving framework and the case throughout the whole research process. Lastly, critical realism as the research philosophy prevents pure induction or deduction. Instead, abduction allows the critical realist to "redescribe" or "recontextualize" the phenomenon in case unanticipated observations emerge (Welch et al 2011, 9)

3.3 Data collection

As one of the objectives of this study is to achieve greater contextual understanding of how young Finnish sport tech companies utilize networks in their endeavor to reach the American market, Merriam (2014, 2) suggests that "a data collection instrument which is sensitive to underlying meaning when gathering and interpreting data" is required. In

qualitative research, this means that key activities such as interviews, observing and analyzing the data is performed by human beings. Thus, for the purpose of this research *interviews* and the researchers' observations are used to obtain deep insight from the information-rich cases necessary to answer the research questions.

Eriksson and Kovalainen (2015, 80) introduce a typology for three types of interview studies which focus on different types of research questions. The positivist interview approach concentrates on facts and the goal is to find out the truth. Thus, questions in this type of interview are often highly structured and mostly begin with 'what'. The second approach to interviews is *emotionalist* or *subjectivist*. This approach tries to tap into the experiences of the participants. The goal is not to find the truth but to learn about the participants' perceptions, emotions and understanding. The third approach is constructionist, which mainly focuses on 'how' questions. Constructionist interviewers usually initiate a conversation with some preplanned questions; the following interaction then determines the course for the interview. This interaction between the interview and interviewee is central to the constructionist view as a way for the interviewer to understand "how meanings are produced" (Eriksson and Kovalainen 2015, 81). In addition to the positivist structured interviews, the process itself could also be semistructured or even unstructured. The nature of unstructured interviews is self-explanatory. In contrast to the structured interview, it does not follow a predetermined plan. This technique is commonly used in situations where the researcher does not know enough to form structured or semistructured questions. Consequently, the objective is to form an understanding to be able to prepare interview questions for future preferences (Merriam 2014, 90). Perhaps the most used method in business research is located in between these two extremes. Semistructured interviews provide elements from both sides: predetermined outline of topics but also flexibility to deviate from the original plan (Eriksson and Kovalainen 2015, 83). The selection between these approaches described above and the formation of the interview questions is done based on the research questions and what type of information is needed to answer them. That being said, this research adopts semistructured interviews combining the subjectivist and constructionist approaches as suggest by Holstein and Gubrium (2004). Questions include open-ended 'how' questions as well as more informative 'what' questions. The key concepts and questions relating to them are described in the operationalization table below.

Operationalization table						
Research question	Sub-ques- tions	Theory	Concepts	Concepts in litera- ture	Interview questions	
How do networks facilitate young Finn- ish sports tech com- panies' ex- pansion to the US mar- kets?	Which part- ners are most valua- ble in the early stage of market entrance and why?	Network ap- proach	Key network actors	2.1.2	11-13	
			Complemen- tary relation- ships	2.1.3 / 2.2.2	14-15	
	How are these net-work relationships created and developed?	Dynamic capa- bilities / Net- working capabil- ity	Finding the right partners	2.1.3 / 2.2.3	16-18	
			Optimizing re- lationships (erase/add)	2.1.2 / 2.2.3	19-21	
	How do they help the IBV/BG over- come major challenges?	International entrepreneurship	Asset owner- ship (valuable, unique, shared)	2.2.2 / 2.1.3	22-24	
			Knowledge (markets, op- portunities) as a key resource	2.2.2 / 2.1.3 / 2.2.3	25-28	

Table 1 Operationalization Table

Two interviews were conducted for this study in total. The case companies' CEOs were appointed as interviewees since they held the best knowledge of the predetermined

themes. Both interviews were held face-to-face in the companies' offices and the approximate length for each interview was an hour and 15 minutes. The interview with Omegwave was conducted in English since it was the mother tongue of the respondent, while the CEO of SportIQ is a native Finn and thus, the interview was conducted in Finnish. Both interviews were recorded and later transcribed in their respective languages. To ensure accuracy of the researchers' interpretation and appropriateness of the Finnish interview's translation into English, the findings discussed in the following section were sent to both companies for revision.

3.4 Data Analysis

In essence, the analysis the collected data is used to provide answers for the research questions (Merriam 2014, 176). Merriam's (2014, 178) framework for qualitative data analysis provided a useful step-by-step guide for making sense of the collected data. As suggested by Merriam (2014, 170), the data analysis for the research began in conjunction with data collection as first impressions and hunches were written down while the data was collected.

The first step in the analysis process was *category construction*. Field notes and word-for-word transcriptions of the recorded interviews were read through carefully and preliminary open coding of potentially relevant pieces of data was performed. Recurring patterns were constructed into categories based on these preliminary codes The codes were also useful in order to retrieve specific pieces of data for the analysis and writing up process. Furthermore, this type of coding and categorizing becomes helpful in interpreting the data and finding relevant information for answering the research questions (Ghauri 2004, 121)

The next step in the analysis process was *sorting categories and data*. In this phase, the original categories were further revised and fine-tuned into a more concrete set of themes and the transcribed data was then rearranged accordingly. Even though there are computer programs designed to help the researcher in this process, sorting and rearranging the data for this research was done by hand due to the relatively small scale of the study.

The following step was *naming the categories* and deciding the final number of categories. The final categories were named based on the researcher's reflection of the data while simultaneously keeping in mind the purpose and theoretical framework of the study. The number of final themes for writing up the narratives was condensed into four as it was deemed a sufficient number for communicating the findings.

3.5 Quality of the study

Central to all qualitative studies is that the researcher is the vehicle for collecting data and analyzing it. Placing the researcher into the real world has its strengths which were discussed in the previous section. There are, however, some limitations as well arising from human nature. Everyone has their own biases which inevitably affect the research in one way or another. These "subjectivities" are not necessarily always negative but instead, the researchers' unique touch in interpreting and analyzing data might provide new theoretical insights within the ethical conduct of producing valid and reliable knowledge (Merriam 2014, 211). The research "validity" and "reliability" dimensions are conventionally used as measurements of trustworthiness in quantitative research. However, in qualitative research their accuracy as evaluative criteria has been questioned. For instance, Ghauri (2004, 118) states that instead of reliability, the main issue in qualitative research is authenticity and the objective should be presenting the researchers authentic understanding of the subject. Furthermore, Lincoln and Guba (1985, 290) introduce four alternative terms for assessing the authenticity and trustworthiness in qualitative research. These are credibility, transferability, dependability and conformability. According to the authors, the concept of trustworthiness refers to the level of attraction of the inquiry to the readers. In other words, how can the researcher convince the audience that their study is worth paying attention to?

Credibility is perhaps the most important element in establishing trustworthiness in qualitative research. Lincoln and Guba (1985, 301) list several techniques to ensure that the inquiry portrays the researched phenomena in the most accurate manner and thus, increases its credibility. The following table summarizes the activities, suggested by Lincoln and Guba (1985, 301) and Shenton (2004, 64), which have been adopted for increasing the credibility of this particular study.

Activity	Description	
Triangulation	May refer to the use of different sources,	
	investigators, theories and different data	
	collection methods including the range of	
	different data sources utilized. For the pur-	
	pose of this study, face-to-face interviews	
	and researcher observation constitutes as	
	the primary vehicle for data collection.	
	Secondary data is collected from media	
	coverage and case company publications	
	and documents according to the guidelines	
	introduced by Sinkovics, Penz and Ghauri	
	(2008, 696 - 698)	
Debriefing sessions	Feedback and discussion with the project	
	supervisor has helped the construction of	
	this research in every aspect. Advice from	
	an experienced academic has been utilized	
	for enhanced credibility.	
Peer scrutiny	Feedback and fresh viewpoints from col-	
	leagues and fellow students from various	
	disciplines have provided vital aid along	
	the process.	
Member checks	A researcher is the instrument of collect-	
	ing and analysing data in qualitative stud-	
	ies. Thus, frequent checking of the accu-	
	racy of the collected data is important for	
	credibility. This means that interviewees	
	are provided with transcripts of the inter-	
	view process to double check their valid-	
	ity, that all relevant information is cap-	
	tured and that there are no misinterpreta-	
	tions	

Table 2 Activities to Increase Credibility

In addition to the activities in table 2 and following the guidelines introduced by Sinkovics et al (2008, 696-698), this research is based on well-established theories introduced in the literary review section and the research design in aligned with the accepted

and widely deployed methodologies. Not only do these aspects raise the credibility but also, *conformability* is increased.

Confirmability evaluates the objectivity of the research. Despite the fact that objectivity is not the aim of qualitative research, it is still important that the findings reflect the interviewees' world as accurately as possible (Shenton 2004, 72). To ensure that the researcher's personal biases do not dictate the content of the results, before mentioned triangulation is used for increased confirmability. Also, this section of the research, methodologies, is dedicated to providing a description of the methods used as well as the reasoning behind the selection of those particular methods. Lincoln and Guba (1985) suggest providing "an audit trail" which allows the reader to trace back the steps taken by the researcher to reach the conclusion. For this reason, an operationalization table, table 1, is included in previous section. It illustrates the relationships between research questions, theory, constructs and interview questions and thus, provides an audit trail for this research.

The trustworthiness of a study can be also evaluated by its *dependability*. Similar to the concept of audit trail on confirmability, the researches' dependability is evaluated by how well the research process itself is recorded allowing the same research to be repeated in the future. Also, a detailed recording of methodologies allows the reader to evaluate whether appropriate research conduct was followed. It also gives the opportunity for the reader to evaluate the effectiveness of those particular methods. Adopting Shenton's (2004, 71-72) suggestions for increased dependability, the following sections are included into the study:

- Research design: a road map from research question formulation to conclusion
- Detailed explanation of how data was gathered

The last criterion for evaluating trustworthiness is *transferability*. It is similar to the concept of generalizability which refers to the extent to which the results of the research can be applied to different contexts (Shenton 2004, 69). However, this research does not aim to provide generalizable explanations due to its contextual specificity and therefore, the transferability of the findings to different contexts relies solely on the readers' discretion. Eriksson and Kovalainen (2015, 295), describe transferability as a degree to which a particular research is comparable with other similar researches'. Thus, it is the researcher's responsibility to help the reader to evaluate the transferability of the study. This research provides a "thick description" of the phenomenon as well as deep insight to contextual settings for establishing transferability.

4 EMPIRICAL FINDINGS

This chapter presents the research findings and analysis of the case companies. As discussed in the previous section, the primary data was collected by interviews and supplemented by secondary sources such as company web sites.

The following discussion has two sections, one for each company. Both sections begin by introducing the company and then proceed with the main themes of interest outlined by the research questions and emergent from the interviews with the case companies. In order to understand how networks facilitate the case companies' internationalization to the US, it is beneficial to begin the process by identifying the relevant network actors influencing US market entrance and the nature of these relationships. The following themes focus on the process of finding and selecting partners, development of these relationships and lastly, how they have helped in the process of entering the US.

4.1 Omegawave Oy

Omegawave Oy is a sport technology start-up based in Espoo, Finland. The company was set up in 2013 and in addition to its HQ in Espoo, it currently has a sales subsidiary in Oregon, US. Shortly after their inception, Omegawave has been able to become a well-established player in the US market with their talent protecting solution. In essence, Omegawave describes their training and performance management solution as a method-ology which utilizes technology and combines multiple physiological measurements to provide information for optimizing individual training. In other words, the data collected by Omegawave's products help coaches and athletes to maximize results by training at the right time and right intensity level "while avoiding injuries and overtraining" (Omegawave).

Products and solutions aiming for that same purpose are being introduced to the market at an increasing rate and some of the toughest competitors for Omegawave originate also from Finland, namely Firstbeat, Checkmylevel, Polar and Suunto. However, none of the competitors' methods are quite as comprehensive as Omegawave's thanks to their ability to combine different measurements.

Omegawave focuses on B2B channels and not so much on individual athletes. The company's core business, 90% of the revenue, comes from selling their products to organizations such as Olympic federations, professional sports clubs and franchises. United States is their primary market generating around 70% of their total revenue while the rest comes from Europe. In addition to the US, the company sees China's market as a promising growth opportunity as it has shown growing interest towards sports technology solutions.

The reason why the company chose USA as their primary target market was obvious. According to the company's CEO, the professional teams in the US are interested and willing to try out new technologies, which is quite the opposite, compared to for example Europe. In addition, the financial aspect is often an issue for the Europeans whereas in the US, coaches and managers have a "win at any cost" mentality and the cost is rarely an issue, especially at the University level. The magnitude of College sports is hard to describe to people who have not experienced it first-hand. The investment and resources that go into the Universities sports programmes and their training facilities exceeds even some of the professional teams in Europe. Other advantages are the size of the market, referring to the number of potential users, and one language. Even though EU is one market, it has several different languages which make selling to each individual member state difficult for Omegawave.

The US market is also developing in favour for Omegawave. The main users within the organizations they are targeting are often strength and conditioning coaches or physiotherapists. Along with the development of more advanced training methods and more accurate physiological measurement technology, the profession of strength and conditioning coach itself is gaining more legitimacy and more responsibility in the overall training and thus, attracting more capable people. Simultaneously, performance analytics in sports is also making a huge impact. Analytics is also drawing talent from various disciplines such as biology, physics and even mathematicians.

Even though there are major opportunities in the US market, Omegawave recognizes some challenges that characterize their US operations. First of all, despite the fact that in the US they want simple products and Finnish products tend to be even overengineered, the US market is also fickle. Therefore, the market should not be entered before proper preparations have been made. Otherwise, the market can become hostile. Another major challenge for Omegawave arises from geographical distance between their Portland based sales subsidiary and the Finnish headquarters. More specifically, the 10hour time difference between the locations puts a lot of pressure on efficient communication. It is demanding for both offices to find time for communication. While Finnish employees are having dinner, the US is just waking up. It is also challenging to find people, especially in Finland, who are willing to commit to these kinds of unspecified and undetermined work times. Managing the company efficiently also requires the top managers to be in two places at the same time. To tackle this issue, the managers need to travel frequently between the continents which of course is constraining both the individuals as well as the cost structure of the young firm. Nevertheless, the benefits and opportunities in the US market for Omegawave exceed the challenges and thus, the company is willing to continue to increase their investment in the US market.

"We overinvest in the US because that's where we see the success coming in the sports technology market." (The CEO of Omegawave, 09.11.2017).

4.1.1 Key network actors in the internationalization process

The internationalization of the company had begun even before Omegawave Oy was set up in Finland. Originally, the Omegawave brand was founded in the US, so they had already created a preliminary connection to the market. However, the US roots did not significantly help the company to establish themselves in the market.

Recognizing the US as their main market right from the beginning, the company aimed their actions for successful commercialization of their product in that specific market. These actions were namely getting a US patent and validation for their product. The legitimacy of their solution not only relies on the strong patents, but also on the ability to show that their solution is scientifically proven to work. This is a common factor in "new" technologies like Omegawaves's. People need to be ensured that it actually does what it says it does. One mistake Omegawave did in the beginning was that they tried to enter the market without a proper validation that the solution actually provides accurate information on what it claims. Even though the technology and the physiological measurements, such as central nervous system measurement, had been around for years, it had not been necessarily validated in sports or for Omegawave's products in particular.

The validation and testing period was extensive and it took a long time as it required academic research to be conducted on the product. Since the US market was the company's first priority, Omegawave reached out to Kentucky University to seek those validations.

"So I think one of the big changes for us which we went after was science validation, and again because we were going after the US market, getting Kentucky University who were one of our customer agreeing to do a PhD study on our product. That we could then get published, would then get peer reviewed, and so, that was a game changer. It was quite important so, now have that plus the principles of the patent and the validation. It's much easier for us now to go and protect our business as we go forward." (The CEO of Omegawave, 09.11.2017).

An important factor in the market entrance and product commercialization for Omegawave was cooperation with US based network actor, Kentucky University. As stated earlier, the company had tried to enter the market before the validation process and from that period, they had created preliminary contacts and even some customer relationships in the US. However, for truly enabling Omegawave to establish themselves in the

US, getting Kentucky University's, a prestigious institution, stamp as a proof of concept was the key.

Parallel with the validation process, the company was able to form relationships with a couple of early adopters who then started using the products and that way helped to disseminate awareness of the brand and the product itself.

"In the early days, we got some key influential people who then started to use our product from a [...] I would even almost say now at this point four or five years later that those guys have almost built their career on using our product." (The CEO of Omegawave, 09.11.2017).

These relationships with the early adopters and to-be opinion leaders were mutually beneficial. As indicated above, they helped Omegawave by using and promoting their products and in return, these individuals were able make their own name and advance in their careers and gain better position within their own networks, with the help of Omegawave's products.

Furthermore and more importantly for Omegawave, they were able to find more than just early adopters. They found a person who was in charge of Seattle Sounders' (Major League Soccer team in the US) strength and conditioning training. He truly believed that Omegawaves' products would help him to do a better a job at keeping the players fit.

"We were lucky to find and convince this person on what we were doing and how were doing it and the principles of what we were doing and then he became an evangelist [...] so back to the point of [...] we had to do the legwork, we had to go there and meet everybody. We found realistically an evangelist, product user evangelist, not just someone who you have to pay to evangelise our product [...] we found a couple of like-minded people like him, two or three." (The CEO of Omegawave, 09.11.2017).

At the time, these evangelists were in the beginning of their careers and they were looking for opportunities to climb up the ladder. They were also perfect individuals for Omegawave's purposes as they were looking at traditional training methods differently and they were willing to think out of box to do a good job. Soon after:

"The teams started performing well [...] Seattle Sounders' strength and conditioning coach has a very rare piece where the head coach, which is always the hard guy, the head coach started to let him run the training sessions. It flipped completely and based on what we were doing, where we were measuring players and saying here is what you should

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train today, here is the load you should give the players. That helped." (The CEO of Omegawave, 09.11.2017).

Since entering and going through that long period of validation process and successfully establishing the Omegawave brand into the market, other companies have actually sought to use Omegawave's solution to validate their own products. It indicates that the company has been able to, with the help of the US based networks actors, gain legitimacy and respect not only from customers but from other companies as well.

In addition to the US network, Omegawave identifies important actors in Finland. Good relationships with key stakeholders such as the manufacturer, investors, lawyers and the bank are essential for building a successful company or even get the business started. However, strictly focusing on the key entities in Finland enabling internationalization, the company stresses the importance of Tekes and angel investors.

"Sports tech start up wanting to do international expansion [...] Tekes, is really a key. Even for us, we have got an investment from Tekes in the beginning to actually get the funding in place. So having a good solid relationship and a good sponsoring with Tekes [...] But more importantly, which has been very valuable to me in the last four years, is having the right investors." (The CEO of Omegawave, 09.11.2017).

4.1.2 Finding and selecting the right partners

As indicated above, even though Omegawave did not enter the industry cold, they were not able to establish themselves in the market before key relationships were formed. According to Omegawave, finding those early adopters and other relevant network actors was simply a result of hard work with a hint of luck. An important lesson for Omegawave was that sending out emails and doing cold calls did not work in the US context, they needed to physically be there to find the right partners.

"...getting meetings, getting off to the streets, talking, going and asking the clubs, who do you know, who's good, who do you trust. So fishing basically and trying to see what people are coming up with. You can start joining the dots few times, and then you go to a couple of conferences and you see the people, you talk to the people. It's about human evaluation, you evaluate if this is a good human, who can help you do what you need to do and they are like-minded, so that was really key." (The CEO of Omegawave, 09.11.2017).

Another thing that Omegawave did in their search for potential partners was that they targeted up and coming individuals, not the most prestigious names in the field. This was a strategic choice and they wanted to find those to-be opinion leaders who would use their products to become more respected in their own small worlds.

"We had those guys who were trying to do something different. Looking around to do something different and create their name and they got successful and that helped us. So that was probably quite key that it was mutually beneficial." (The CEO of Omegawave, 09.11.2017).

Omegawave's CEO gives an example of similar tactics deployed by Under Armour in athlete sponsoring. Under Armour sponsors several athletes who are not at the top yet. However, chances are that at least one of them will eventually become successful. It is a different approach compared to for example Nike that focuses on elite athletes who have already made it. These choices are of course related to the level of resources that these companies have, Under Armour being the contender while Nike is the market leader.

It should be also noted that while the market in terms of number of athletes is the largest in the world, the target group for Omegawave's products is in fact relatively small. It emphasizes the importance of finding the right partners as early as possible to guarantee a good start for the product in the market.

"So, in their small worlds everybody knows somebody, and everybody is connected to somebody else and [...] that's good and bad. So if you have a negative problem, no one's going to recommend you. And I think in the early stage start up, you have to over invest in that individual who will be that evangelist for you." (The CEO of Omegawave, 09.11.2017).

After a promising response from the users and the firm's ambitions to expand in the market, the company chose to set up a sales subsidiary in the US relatively quickly after their initial entry to the market. This choice was affected by previous experiences from European markets and the fact that selling the product required in-depth knowledge about a niche market that distributors might not have. In their earlier endeavors in Europe, they tried to find suitable distributors or partners but it turned out to be very difficult and those relationships did not end up working well for the company. Mainly because the product is hard to sell. Lastly, as the business was growing it became hard to manage from Finland so they needed someone to drive the US business.

"We had lots of distributors, lots of people wanting to be distributors, and sales companies but we just felt that time the product was a [...] a market we needed to love, we

needed to invest in and our product was so specialized that if we didn't take that individual who would have the same 100% commitment or more [...] it wouldn't have worked." (The CEO of Omegawave, 09.11.2017).

In their search for that individual, they typically found people who were either good sales persons or good sports scientists, such as strength and conditioning coaches. However, they were looking to partnering up with someone who would have both skillsets, the ability to sell and also respected in the sports science community.

"Then we found a person who actually was selling Polar products before, wanted something new, was quite bored of what they were doing. But also had the contacts to some of the teams and some other pieces, separate from we've already got the customers and had some business." (The CEO of Omegawave, 09.11.2017).

"We found someone that the clubs respected [...] 'What do you think of this person...I never want to talk to that person again, or she is really good or he is really good' (references from other people). When you start to have those background checks basically, and the same names start to merge from the list. That was basically what we did." (The CEO of Omegawave, 09.11.2017).

In addition to the negative experiences with foreign distributors and the complexity of the product, the final decision about setting up a sales subsidiary was influenced by the fact that the company had found what it was looking for in terms of partnership. The individual they found was in a situation where he had a comfortable job at Polar, so Omegawave needed to do something extra in order to get this person on board. Consequently, setting up the sales subsidiary for this individual to run, suited well for both parties. Depending on perspective, one might say that finding the perfect candidate and exactly what the company was looking for was pure luck; however, it can be also argued that without doing their homework properly, going around looking for that person and at the same time knowing exactly what to look for, the company would have unlikely crossed paths with this individual.

An important factor that Omegawave points out in choosing the right partners, especially in the US context, is that people tend to be somewhat pushy; they might promise things they cannot deliver. In other words, they tend to oversell themselves. Especially from a Finnish point of view, it is essential to understand that everything might not be as great as it first sounds. Omegawave's CEO recommends to develop a "bullshit filter" and instead, focus on doing extensive research, including multiple sources as reference, before selecting the partners. Multiple references is advised because the bar to recommend someone seem to be much lower than for example in Finland.

"If somebody in the business, says to you 'I have this guy who I used to work with really good buddy, you got to go hire that person.' I don't take that as a reference. I need to have multiple people and doing my own homework to say okay this is the person who has the skills sets what we are looking for." (The CEO of Omegawave, 09.11.2017).

As discussed earlier, Omegawave also emphasizes the importance of the right angel investors. Previously, the company had made a mistake by selecting investors who were only making financial contributions. However, it is important to find business angels who are willing to take a more active role in developing the business.

4.1.3 Relationship development and changing networks

As was discussed above, the process of finding and selecting the right partners was extensive and resource constraining. However, Omegawave stresses its importance for doing business in the US. Sometimes even over investment is required to lock in the best candidates. After finding the right actor, who then started running the US office, Omegawave focused on building the relationships with the newly formed subsidiary.

"You have to invest [...] have to reach out, contact and work with that person all the time. They haven't got [...] at that time there is two people, they have to feel engaged, they have to feel part of the company, they have to feel they get the support and you have to talk to them as if you were in a normal office environment." (The CEO of Omegawave, 09.11.2017).

The distance between the locations and especially different time zones made the task demanding. In addition to frequent visits to the US, Omegawave utilizes several communication tools for efficient information flow. Efficient communication is vitally important in bringing the people together and in making everyone feel that they are part of the company.

"...one of the beauties of being a real startup, everybody is in the same kitchen, everybody is in the same office. This international expansion is very complicated. Because you lose that getting to look someone in the eye [...] having the right tools in place, and the right communication pieces in place for different levels of people. Even in a small company are really crucial. Without those tools we would pretty much die." (The CEO of Omegawave, 09.11.2017).

After the establishment of their US sales subsidiary, the company has since entered into a growth stage which again required a different set of skills from their partners. Finding the right individual to drive the business in the entry stage required capabilities in business development and sales. However, as soon as they had gained foothold in the market, earned more reputation and legitimacy, Omegawave moved to a growth stage where they needed a partner who could put a structure in place and manage the growing business.

"So, now we get to a point, two years later where actually we have done the change again because that individual was great at that stage but now were at another stage, it is completely the wrong individual [...] So, that early days sales person's skillset became redundant [...] just at the end of last year became mutually agreeable to that it doesn't work anymore." (The CEO of Omegawave, 09.11.2017).

Overall, an important lesson for the company has been that as soon as things are not working the way they should with a partner, the relationship needs to be ended immediately. This is something that company failed to do in the past as they had remained in some relationships longer than they should have, which ended up hurting the company. Ending relationships could be costly in the short term by losing sales and pipeline. However, benefits in the long term will hopefully exceed the immediate losses. Omegawave reminds that new partners should be given appropriate time to prove themselves and show their real value to the company.

"That's probably one of the key learning for us. We should have finished some of the things earlier, stopped doing some stuff. Or stopped working with people, because you put [...] it's priorities [...] so the thing is [...] just keep focused on what is your priority and anything else just start to drop off." (The CEO of Omegawave, 09.11.2017).

Ending an non-functioning relationship should be viewed just as part of the natural course of doing business. Omegawave urges to do it in a professional manner because that partner could become important once more in the future.

"You can do it in a good way. You still need to keep that network because you never know in two years three years, things will change but you got to be really focused on your priority and what you are trying to do and what you are trying to achieve and who can help you do that." (The CEO of Omegawave, 09.11.2017).

Devoting resources into finding and selecting the right partners and then building and maintaining those relationship is crucial for Omegawave. In addition to taking good care of current and closest relationships, it is also important to look beyond them to have a

touch base to the external environment. Therefore, Omegawave also pays interest and invests in maintaining functioning relationships with other relevant actors such as former partners, competitors and potential future partners. Because in the end, it is a matter of evaluation of who they deem to be the right fit, who can become the right fit at some point in time and who are those they will not work with under any circumstances.

4.1.4 The benefits of networks

The ability to combine different physiological measurements is at the core of what Omegawave's performance management solution is all about. The ability to combine these readings is what makes their solution unique and gives them competitive advantage. For safeguarding this advantage, the company has strong patents both in the US and in Europe.

"The core patent we have is the ability to combine these different training methodologies and physiological readings that can then be given as a reading for a result. So, someone can do HRV (Heart Rate Variability), someone can do ECG (Electrocardiography), someone can do algorithm analysis and somebody can do central nervous system analysis and someone can cardiac energy systems. What they can't do is combine two of them. That's was our patent." (The CEO of Omegawave, 09.11.2017).

Despite their unique solution, there were several things that company could not do by themselves in terms of entering and distributing their product to the US market. As discussed above, it was not until the acquired appropriate validation, proof that their solution actually does what it says it does, from respected university in the US. The company also needed influential individuals to evangelize their product in their own small worlds. Lastly, as the business started growing, they needed US based actors to drive, develop and manage the business as it became impossible to do from Finland. Overall, these different network actors provided the company with:

"Respect, competence, contacts to customers, the right people and then vision is the most important piece but in the middle is willingness to learn. Because you are bringing a new technology to the market, and if they are not willing to adapt and change[...] usually if people are willing to learn, their network of people are people who are also willing to learn." (The CEO of Omegawave, 09.11.2017).

In addition, these actors became critical source of information about the market. However, the first-hand information coming from US tends to be very high level, so in order to turn that information into real market knowledge, the company needed either the CEO or the founder to physically be there. Basically, they were vehicles for transferring knowledge back and forth between the two locations.

"We need the feedback from sales people to make the product relevant for the US market, which is different [...] But there is a better fit of having a founder or a person who understands the big picture in the US." (The CEO of Omegawave, 09.11.2017).

Also as discussed in the previous section, Omegawave had learned to appreciate the business angels' non-monetary investments over the financial contribution. Money is of course essential but the young company also needed the investors' networks, their experience and know-how to help drive the business forward. Omegawave also recommends looking for thought leaders and other advisors within the industry to help young businesses as early as possible. Looking back, Omegawave realizes that they would have needed a better support structure earlier to avoid some of the mistakes they made along the way.

4.2 SportIQ

The Helsinki based sports technology firm, SportIQ, was founded in 2008. SportIQ strives for making sports more intelligent by collecting and analyzing data through their player and sports equipment tracking solution and then providing useful information for the users. SportIQ started off as a company offering video analysis as a service for teams and manually tagging players and targeted events for later viewing. The founder of the company had the idea for business after spending a lot of time in film room watching clips of his basketball teams' game tapes. The meetings tend to go on longer than they should have because they involved constant forwarding and rewinding the video tape to find the right play. At that time, Finnish sports teams could not afford to employ personnel dedicated to doing video analysis, especially because tagging certain points of time in the game tape or following a specific player throughout the game had to be done manually. For SportIQ the idea all along was to automatize the tagging process. It became reality when Nokia based technology, used in consumer tracking in shopping centres, was introduced to the company. SportIQ integrated this technology into their service enabling them for more efficient player tracking and thus, a more scalable business model. The next step for the company was that in addition to tracking the players' movements, they wanted to the track the ball as well, which however turned out to be a bit trickier as the technology had to be inserted inside the ball.

Today, through a licensing agreement with one of the world's largest basketball brands and manufacturers, Wilson, the company has sold tens of thousands of basketballs to consumers equipped with their technology. In addition, SportIQ sells their player and sports equipment tracking solutions to professional organizations in different sports, almost exclusively in the US. These organizations include the major leagues, individual sports franchises as well as broadcasting companies competing for media rights. For both of SportIQ's business lines, the US is the main target simply because it is so massive compared to any other developed market. The funds and investment going into sports teams as well as media rights is by far larger than anywhere else. In addition, media networks compete to bring the best experience following the sports by incorporating player tracking and other visual aids to make the game more interesting for the viewers. Also, the US market for the consumer basketball is substantial compared to, for example, Finland. There are less than 20 000 registered basketball players in Finland, while there are around 10 million in the US.

For a player and sports equipment tracking business, the competition in the United States is fierce. There are a number of companies offering similar solutions but with different technologies. For example, the players and the ball could be tracked with multiple cameras for producing the same information. Also relating to the competition, one of the major challenges for SportIQ in the US market is that the competitors tend to be US based and a lot bigger. The clientele is in the US, and the majority of the potential customers tend favour US based players who are larger and better known in the market. Even though SportIQ has gained access to these clients and had the opportunity to show and give their solution for trial, more established US-based systems are often selected instead.

"Politicians never get put down for purchasing from Tieto or IBM even though there might be more innovative and more cost-effective solution available from a startup. The politicians will be put down however if they choose the startup and it fails." (The CEO of SportIQ, 09.11.2017)

So, SportIQ as a small firm from Finland suffers mainly from lack of legitimacy in selling their tracking solution under their own brand. The geographic distance to their main market, customers and partners is also problematic to the company. Even though there is communication via email and phone is almost daily, the distance requires frequent visits to the US because certain matters cannot be disclosed over the phone. In addition, for potential customers their lack of physical presence in the market creates an image of a start-up company somewhere far away, which again relates to the liabilities of the young, small foreign firm.

For the consumer segment, SportIQ sees that the traditional sporting goods market, basketballs for instance, is still very old and the equipment is purchased as it is needed.

The logic currently follows a product-based view, while SportIQ sees the future as a service-based approach, similar to the development of services in other sectors. So, instead of selling rubber basketballs with some technology in them, they would sell the information and data to improve the players. This would be a total change in their business model as well as a totally new approach to selling sporting goods. According to the founder of SportIQ, the way these products are viewed will eventually change but it is hard to say when this happens.

4.2.1 Key network actors in the internationalization process

As discussed above, soon after SportIQ was introduced to the tracking technology, the company wanted to start tracking both players and sport equipment which was in this case a basketball. Since the company did not manufacture basketballs themselves, in fact there are no Finnish basketball manufacturing companies at all, they had to reach out to an international partner.

"In March 2012, we ended up at Wilson presenting our player tracking solution. But we also wanted to do equipment tracking [...] Wilson had their own needs regarding to their consumer business and we were able to find a way to go forward together." (The CEO of SportIQ, 09.11.2017)

Their partnership with Wilson provided the vehicle for integrating the technology inside the ball enabling SportIQ to do equipment tracking. Also, this partnership was the way for SportIQ to enter the US market. Wilson sells the consumer ball, which the companies have developed together, through its own channels mostly in the US. As was discussed earlier, basketball is very popular in the US and it is one of the largest sports in the country. However, SportIQ's business did not limit to only basketball. SportIQ has been able to expand its tracking technology to equipment used in other sports such as American football and ice hockey.

In terms of consumer business, the nature of this partnership was mutually beneficial for both parties. SportIQ was able to utilize Wilson's distribution channels and brand name to get their product out there, while Wilson was able to provide "smarter" products and boost an image as a very innovative and forward thinking sporting goods brand, even though the "smart" aspect came from SportIQ's technology. Regarding to SportIQ's main business, which is to do player tracking and sports equipment tracking, the relationship with Wilson and other key actors provide limited help.

"Collaboration with Wilson works partially well. We have to remember that their business is to sell basketballs, not player or equipment tracking. So the overlap between these businesses is not very beneficial when we want to sell player tracking. Okay, Wilson is the official equipment provider for the NFL and it helps us a little bit in certain things [...] Or that we have implemented Nokia based technology, but Nokia does not have any business ambitions in player tracking so they are not really into it." (The CEO of SportIQ, 09.11.2017).

Even though the tracking technology originally came from Nokia and Wilson is the official partner of NFL supplying them with balls, these connections help SportIQ only to a certain point regarding to their tracking business. Wilson is primarily interested in selling their own products. Nokia does not have any strategies regarding to player tracking business, so in that sense even if these relationships bring legitimacy to SportIQ and opens up certain doors, in the end it is alone trying to convince multibillion businesses to adopt their system.

To illustrate this, SportIQ gives an example of how they are looking at the task of selling their sport equipment tracking system to the International Basketball Federation (FIBA), an organization responsible for selecting the official ball for the Olympic games.

"FIBA decides which ball they will use in the competition. We need to be able to convince them and demonstrate the added value our ball could bring. With this kind of addedvalue service that smart ball would bring for FIBA they might get new people interested in the sport and perhaps get them to watch in the Olympics." (The CEO of SportIQ, 09.11.2017).

SportIQ would not be able to offer their solution for FIBA if it was not collaborating with Wilson or any other major basketball brand. However, as their perspectives differ: Wilson wants to be the basketball provider while SportIQ wishes add-value to FIBA, the teams and the viewers by providing useful information which comes from the ability to track the movements of the ball. This approach gives SportIQ a better chance for securing the deal.

Following the initial entry to the US market through the partnership with Wilson, the most important actors in SportIQ's network are the major leagues, top organizations such as FIBA in the above example, sporting goods manufacturers as well as competitors. The company deem these very important because the contracts between different sporting goods manufacturers and franchises are always for a fixed term and thus, it is vital to maintain up to date knowledge on the opportunities. Also, SportIQ maintains close relationship with their competitors because in certain projects these competitors can be partners.

"For us it is important to know everything that is going at the Major Leagues, what they are doing and what do they want to do. Mainly because for example all the player tracking deals they make are only for a certain period." (The CEO of SportIQ, 09.11.2017).

In Finland, Tekes has funded the beginning of SportIQ's operations, mainly for market research which was conducted mostly in Europe. However, it quickly became clear that all the large sporting goods manufactures and most promising customers and partners are in the US. Even European sporting goods manufacturers such as Adidas have their relevant product development functions in Portland, Oregon. Also, even though there are large leagues and organisations in Europe, the financial side is always an issue for them whereas in the US, it is not and they are eager to test and implement new technologies.

4.2.2 Finding and selecting the right partners

As discussed above, SportIQ's internationalization to the US started after forming a partnership with Wilson. The original contact with Wilson came from SportIQ's founder's personal contacts which helped the company to start discussions with Wilson.

"In the late 90s and early 2000, I played basketball in team called Pussihukat. The club's president's son also played for the same team. About ten years later he went on to work for Amer Sports and Amer owns Wilson. So, I just asked my former teammate if he could help us out to put our tracking technology inside a basketball. He introduced us to Wilson and they welcomed us to tell more about the ideas we had." (The CEO of SportIQ, 09.11.2017).

At the same time, Wilson had just appointed a new VP of R&D who had been given goals for digitalization of Wilson's products. All in all, SportIQ had capabilities regarding to technology which were aligned with what Wilson was looking for. So getting that preliminary contact with the firm was not the only thing, but also, Wilson's own ambitions in digitalisation of the equipment helped SportIQ to form this partnership. Thus, it can said that it was a perfect match since these two parties happen to have similar goals and were able to help one another. From the viewpoint of Finnish sport technology companies, it is an advantage that one of the largest sporting goods firms, Amer Sports, is in Finland. They own wide range of different brands around the world in different sports.

The partnership with Wilson has, again, helped SportIQ to start discussions with other potential customers such as the major leagues in the US. Or at least, it would have been

a lot harder for a small Finnish start-up to be taken seriously or even get to be heard by the larger organizations. Nevertheless, the partnership only helped to a certain point, the company had to invest in finding additional partners for their B2B business, player and equipment tracking.

For maintaining, finding and creating important relationships, SportIQ sees MIT Sloan Sports Analytic Conference the best place for doing that. Essentially, it brings all the relevant people together from the target market. This event is more for the b2b service, but also beneficial for consumer segment, since the technology and idea is similar for both channels. In addition to this event, other similar conferences provide good opportunities to form important relationships.

"In MIT Sloan, there are representatives of teams, competitors, professional franchises and leagues. Basically, it is a convenient two day event to discuss with all the relevant people. It is also a good opportunity to see what's going on and what is interesting in the field. There are also other events like MIT Sloan. For example, we are in talks with another basketball manufacturer who we met at ISPO in Munich Germany. ISPO is a sourcing exhibition for sporting goods manufacturers." (The CEO of SportIQ, 09.11.2017).

The company sees that attending these types of events is essential for finding the right partners. In practice, it requires hard work, travelling and actually meeting people to discuss potential opportunities. It is vital to go out there and mingle and get acquainted with the relevant people.

"They usually give a list of participants and just look through who's there and identify the most interesting representatives. Then just approach them in different ways... 'Hey, I would like to meet, I've got an interesting thing for you'. Then you meet up and chat for like 15 minutes and show what you've got." (The CEO of SportIQ, 09.11.2017).

By doing this, SportIQ has been able to reach out to all the relevant actors in the industry. However, as the company is primarily targeting the larger organizations, the target group is surprisingly small even in the US. Still, SportIQ reminds that it is important to recognize and select those partners that could be of value for the company. For instance, the founder of SportIQ explains that especially Americans tend to talk and be very convincing that they are willing to talk and meet, but in reality they are not interested.

"We might agree to talk about certain things with the Americans. Then we see face to face at a conference for example and we send email afterwards and cannot get an answer. You might call and still no answer. Then next year you see them again and you're like

'what happened?' and then they say 'Yeah sorry send it to me again. I promise to respond.' But again nothing happens [...] It's like the Californian maybe 'absolutely awesome, let's do it!'" (The CEO of SportIQ, 09.11.2017).

In a way, people are somewhat unreliable. It is a rat race type of situation where people are willing to throw you under the bus to get ahead in their own agenda. From a Finnish perspective, this is something that should be taken in to serious consideration when selecting partners and forming relationships with those actors. They might appear to be promising but in reality the other party may not be interested.

4.2.3 Relationship development and changing networks

In the US context, finding the right actors might be difficult due to reasons discussed above. However, after attending networking events and getting to know a number of interesting people in the industry, SportIQ's network base and relationships with certain individuals began to tighten up. Once the relationships developed deeper than just a formal business relationship, even the strictly business-oriented Americans tend to relax and open up more.

"It is funny though that if you manage to find someone trustworthy and somehow manage to build relationships that is on a more personal level and not just business, people might start saying things that they shouldn't and those are things which are beneficial for you [...] It feels like the Americans, once you have gone out with them for beers enough times, they somehow soften up a bit. It might be difficult to get them to go out with a business friend in the first place, but when you do, make sure you're not the first one to go home." (The CEO of SportIQ, 09.11.2017).

Another important aspect of developing relationships for SportIQ has been different projects in collaboration with other companies. These are perfect opportunities to showcase their capabilities and also, a good performance in these projects increases trust between the organizations involved.

"We were doing project in collaboration with a major league to install our tracking system in the ESPN Wide World of Sports in Orlando and it is important to make it count by showing that your team is dedicated and tries really hard to make them look good because you are doing it together. Make them understand that you are not in it just for the money but you actually want the system to work. In these types of projects there are always

something that doesn't go as planned and when you are able to solve those problems [...] It helps you to gain their trust." (The CEO of SportIQ, 09.11.2017).

SportIQ also states that it is important to maintain close relationships with people you meet along the way. For example, in different projects like portrayed above. Furthermore, it seems that maintaining especially those informal or casual relationships, exceeding the formal business relationships, is critical for SportIQ in America. Mainly because, as discussed earlier, the sports world is surprisingly small and people change jobs within that small world which then might open up new opportunities for the company.

"Usually if I'm in the States, I try to have some time just to catch up with people and it doesn't have to be about business at all. It requires that in the relationship you have managed to reach a certain point, where you could just pick up the phone and ask them out for a drink. Like for example, I was on a holiday in New York and just called a friend who works for Major League Baseball if he wanted to meet up. Then we met and discussed a little bit about business but in a very informal and casual manner." (The CEO of SportIQ, 09.11.2017).

Overall, important relationships for SportIQ since entering the US have undergone a change. Early on, they were able to reach out to most of the relevant people in the industry. Moving forward, from that original bundle of relationships, some have been dropped but relatively few new important relationships have been made. In other words, in the beginning they had a large pool of network actors to whom they could reach out about business related matters and over time that pool has shrunk into the current core relationships. The end of the funnel now consists of people who they trust, who can help them in the current stage and who might be able to help them in the next stage as well. More importantly, these people have gained certain status in their own networks which then gives the company more opportunities and legitimacy to go on and talk to them.

"Then there is the core group who you can trust to help you with something, that is probably out of your reach. If we draw a darts board (tikkataulu), you have the core, who can help you with people in the next rim, because those people are in their network in which they have influence. In the outer rim, these people have developed a certain status where they are not considered someone who is only looking sell something but instead they are more advisor type of guys, who can really put a good word for you. They might also have some big picture insights and they can facilitate connections between the different networks [...] But yeah, in addition to the group we first introduced our system, there has not been many new entrants. So for us, the original has pretty much squeezed into what it is today." (The CEO of SportIQ, 09.11.2017).

4.2.4 The benefits of networks

For a long time, SportIQ was the only provider of such tracking systems for consumer sporting goods that could be scaled into professional sports. Even today, at least to their knowledge, no one has tried to do player and equipment tracking the way they do it. The company has multiple patents protecting their technology as well. Another thing that gives the company competitive advantage is their extensive experience from both playing basketball professionally and after that, analysing the movements of the ball by first using videos and later on with their own technology. Essentially, they provide smart basketballs developed by basketball players. Even though the technology can be implemented into different sporting equipment, the company sees basketball as their main sport.

However, it was not until the collaboration with Wilson that the company was able to enter the US market. An obvious benefit of this relationship was that it enabled SportIQ to spread their technology quickly into the US utilizing Wilson's distribution channels and thus, generate sales from each ball sold according to their licensing agreement. In addition and perhaps more importantly, the relationship with Wilson brings legitimacy and credibility to SportIQ trying to sell their tracking system to larger organizations. The company especially values the fact that their partnership with Wilson allows them to develop things together rather than being merely listed as a supplier.

"It has brought us business and in our case where we have an established business partner [...] If we think about NFL for example, if we would have gone up to them 'hey, we are a Finnish company and we track things' they probably would have been like 'okay, great' [...] But now having Wilson as our business partner, we make trackable basket-balls, we could also do it for the American football. It is a good reference." (The CEO of SportIQ, 09.11.2017).

In the process of developing their smart basketball, Wilson X, the company has also gained access to Wilson's manufacturing and product development facilities to make the end product even better. Overall, the whole process has been extremely helpful for SportIQ to understand the logic of how the dominant sporting goods manufacturers work and how the retail business works in the US.

"For example, through Wilson we now understand how the traditional sporting goods companies think." (The CEO of SportIQ, 09.11.2017).

This knowledge has also influenced the thought process of the people at SportIQ and helped to imagine potential future business opportunities. Even to the extent that they

might be able to challenge the prevailing business logic of the industry and start selling their own line of basketballs to consumers, cutting out the middle man.

"We understand how they view their ball business and how it works. If you wanted to replace the currently operating larger players, you would have to revolutionize the whole business model." (The CEO of SportIQ, 09.11.2017).

Currently, the problem with WilsonX is that it costs twice as much as a regular basketball without the technology. According to SportsIQ's CEO, it is vital in a new product commercialization that it reaches wide audience and that the audience is able to test the product. So, the problem arises as the cost of manufacturing the ball increases with the instalment of the technology which itself is not that expensive, but after the product reaches the customer, the initial cost of the sensor has been multiplied by each distributor and retailer getting a piece. Therefore, the high purchasing price to the consumer is an obstacle that prevents it from being tested by wider audience.

Gaining more detailed knowledge about this, the CEO has started to play with the idea of a total business model change. Moving away from the traditional product based thinking to a more service business model. Instead of selling the rubber ball with a piece of integrated technology, the company would sell the information and data produced by the usage of the ball and that way make the athlete better. The CEO also recognizes that if they ever choose to pursue this totally new business model, their network would consist of very different actors compared to the current situation.

"Considering networks, if we wanted to do stuff under our own brand, it would look a lot different as it is today because now we have a business partner and certain organizations that purchase our services. In that case we would need actors in our network who would have access to a larger group of end users and access especially to those individuals who are making decisions." (The CEO of SportIQ, 09.11.2017).

5 CONCLUSION

In order to study how networks facilitate the internationalization of young Finnish sport tech companies to the US, two companies fitting this context, Omegawave and SportIQ were interviewed. The two companies share a number of similar characteristics. They are both approximately the same size, they see the US as their primary market and operate partially in the same market segment which is performance analysis. In terms of internationalization, there is however two completely different stories about how they managed to enter the US market. These dissimilarities are strongly related to the different strategies and business models they have implemented. Omegawave has decided to enter the market under its own brand while SportIQ is piggybacking a larger sporting goods manufacturer under a licensing agreement. Evidently, these two different paths have also affected their networking activities. Interestingly though, some similarities can be found in each of the themes drawn from the conversations and literature.

Next, the empirical findings from both case companies are condensed into answers to the research questions introduced in the first chapter. Starting with the first sub-question: Which partners are most valuable in the early stage of market entrance and why?

For Omegawave, the successful entry to the US market involved two important contributors: the scientific validation of their technology by University of Kentucky and the to-be opinion leaders who adopted the product early on. After the initial attempt to enter the market, the company learned that the solution could not be sold without a proper validation. After an extensive research process the necessary validation was acquired, making it easier to sell to a wider audience. During their initial attempt at the market, Omegawave found emerging stars in the physical training field, such as the strength and condition coach for Seattle Sounders, who then adopted the solution into his work becoming an evangelists for the new product commercialization.

SportIQ's entered the market with the help of their partnership with Wilson. Together they developed a smart basketball, integrated with SportIQ's tracking technology, which was mainly targeted at consumers. Compared to Omegawave's journey, SportIQ's licensing agreement with Wilson seemed to be a more painless option as it did not require much effort from SportIQ to sell and distribute the product. Despite a steady cash flow from royalties, the consumer business is still only a small part of what the company actually wants to do. Thus, excluding SportIQ's collaboration with Wilson in consumer business, both of the case companies are mainly targeting professional sports organizations and franchises. Consequently, having good relationships with actors within or close to these organizations is crucial for business opportunities and information.

Both companies also recognize that even though the US market is the largest in the world in terms of number of athletes and form a financial point of view, there is a relatively small group of actors that are relevant for these companies. Therefore, it is important for them to have actors in their networks who are able to make an impact within their own "small worlds". Whether it is the strength and conditioning coach of Seattle Sounders evangelizing Omegawave's products or a legitimate US business partner opening doors for SportIQ, without these key actors they would have not been able to establish themselves in the market. The foundation of these important relationships is based on mutual benefit. Omegawave's evangelists were able to use the product to do their job better and advance in their career while Omegawave gained positive reputation and hype around their solution. SportIQ on the other hand was able to utilize Wilson's extensive distribution channels while Wilson added a new smart basketball in their portfolio giving the company a more innovative outlook.

It is also worth mentioning that having essential relationships for entering and succeeding in the US market is not limited only to US based actors. Both companies indicate that especially intermediary organizations, mainly Tekes the innovation funding agency, play in an important role in the beginning of the internationalization process.

After identifying the most important relationships for these companies, the discussion turns to the process of finding these relevant actors and how the network base has evolved since entering the US. These matter are the focus of the next sub-research question: *How are these network relationships created and developed?*

The process of creating a new relationship begins by finding a suitable partner. Both case companies recognize the importance of this task. Thus, adequate investment is required for finding these actors. The message is clear that in practice it is hard work and the key is to physically be in the US, attending conferences and reaching out to relevant people. It became evident in both cases, that the geographical distance between Finland and the US was a major obstacle for doing business. Therefore, frequent visits to the US are necessary for finding and creating meaningful relationships with the US based actors. In addition to conferences and networking events, another important source for new relationships is the existing network. Both companies utilize their current network extensively for seeking references, opinions about potential new actors as well as information about and access to new potential customers.

As indicated by both cases, finding the right partners in the US is sometimes very difficult. First of all, the company needs to be aware about the stage that they are in and what exactly do they need from the relationship. After identifying the needs, a profile for the candidate can be constructed accordingly. For example, Omegawave stresses the importance of forming relationships with actors, who share their vision and ambitions. Early on they focused on forming relationships with individuals and organizations who were enthusiastic, self-promoting and able to evangelize Omegawave's message to their own

networks. The choice to set up their own sales subsidiary was also influenced by the fact that the company did not want use external distributors or agents who would have not been able to infiltrate the hard-to-reach niche markets. Instead, they needed individuals who would be fully committed and dedicated to drive the US business.

However, both companies advice caution when talking to potential individuals, especially those in the US, because people there tend to be dishonest and over-confident about their capabilities and prone to giving empty promises. Therefore, it is important to have a thorough scanning process for the candidates. As mentioned earlier, existing relationships become important for checking the reliability of the candidate.

After finding the right actors, it becomes crucial to invest in the development of these relationships. Again, the distance puts certain limitations to this task. In the relationship development with external partners, especially in the new market and in different continent, it should be taken into serious consideration that it requires more than just monetary investments and it is hard to work to build trust and get everyone on the same page. Both interviewees deem it very important in the relationship development to allocate sufficient time for face to face meetings that are not only strictly business meetings but for casual get-togethers as well. For example, SportIQ has found great benefit in building business relationships towards more like friendships. In a casual setting, the relationships deepen through increased trust and become more fruitful for the companies. Both companies also maintain relationships with currently non-essential actors as they might become relevant in the future. Overall, it seems that maintaining informal or casual relationships, exceeding the formal business issues, is very important in America.

Since entering the US, both of the companies' networks have undergone changes. As these companies have moved from establishing themselves in the market into a more growth stage, the business needs have changed along with the needs from the network. In other words, the networks evolve over time. Some contacts who were involved in the beginning have dropped out while the relationships with more important actors have deepened through time. For businesses, it is also important to recognize when a certain relationship has reached a point when it is no longer beneficial. In the long run, nonfunctioning relationships will become costly and prevent the business for reaching its goals. Therefore, it is vital to terminate these relationships as early as possible in a professional manner.

The last sub-question, *How do they help the IBV/BG overcome major challenges?*, concentrates on the benefits that the companies have gained from their networks throughout the internationalization process. As mentioned earlier, resource-constrained young firms entering new markets are faced with several obstacles. For Omegawave and SportIQ these obstacles strongly related to selecting the right channels to distribute the products, finding a way to make them interesting to wider audience and taking steps towards a sustainable business model enabling future growth in the US, as it was deemed to be

the primary market for their products by both companies. Needless to say, both of the case companies have had tremendous help in every step on their way from the complementary relationships with different network actors. More specifically, first getting a proof of concept and validation for their products, finding partners to disseminate and distribute them. Also, working with one of the largest sporting goods manufacturers and opinion leaders gave these companies legitimacy, a crucial element for bringing new technology to the market. For Omegawave, the distribution was internalized, but still, their networks became an important source for finding the right actors to drive the US business. Moreover, moving towards growth phase, both of these companies utilizes their developed networks as a source for potential partners, business opportunities and knowledge.

Both case companies indicate that networks are a critical source of market information, which has helped these companies make their products better for the users. In addition, SportIQ has also been able to utilize their partners' manufacturing facilitates and knowhow for this task. In SportIQ's case, the information and learning from their relationship with Wilson, including the process of co-developing a new product, has steered their thinking towards revolutionizing their whole business model, disrupting the traditional product-based logic of the sporting goods industry.

With the help of these sub-questions, the main research question, *How do networks* facilitate young Finnish sports tech companies' expansion to the US markets, can be answered. As evident in both stories, it can be concluded that neither of these two companies would have entered the US market, if it wasn't for the help of their networks. Both have unique solutions and patent protected technologies, giving them competitive advantage, as is typical for born globals or International new ventures (Oviatt and McDougall 1994). However, being part of a relevant network has been crucial for them to become notable players in the industry.

These important relationships did not emerge out of nothing. Instead, in both cases it was a combination persistence and hard work, with a hint of luck. After identifying the current state and needs of the company, sufficient resources should be allocated to first, finding a good fit among different candidates and second, committing and developing these relationships further. As indicated by both cases, if these business relationships developed into a more casual form, they could become even more beneficial. Furthermore, along with increased trust, it is possible to gain deeper insights beneficial to the business otherwise unattainable to others. It is then up to the businesses how these opportunities are utilized. Overall, both Omegawave and SportIQ have demonstrated outstanding network utilization and networking capability, enabling them to succeed in the US market.

5.1 Theoretical implication

From a theoretical perspective, this research was conducted to build comprehensive understanding of the facilitating role that networks play in the internationalization process of young Finnish sports technology companies to the US. Even though networks in general have received a lot of attention over the past few decades in international business research, a relatively small proportion of that research concentrates on small and medium enterprises. In order to achieve the purpose of this research and answer the research questions discussed in the previous section, a conceptual framework was constructed from various streams of literature. These are namely, the network perspective to internationalization, the dynamic capabilities view and the International Entrepreneurship theory, incorporating both born global and International new ventures as sub-streams. In this section, the theoretical implications of this research to each of these literature streams will be discussed.

The network approach to internationalization emerged from the traditional stage model to reflect the increasing importance of networks in the process. According to Ojala (2009, 53), a firm's position in a network and other network actors determines the outcome of the internationalization process. Furthermore, these factors do not determine but have strong influence on the firm's foreign market selection as well as the entry mode (Johanson and Vahlne 2009, 1418). For SportIQ, both foreign market selection and the entry mode were indeed orchestrated by their partnership with Wilson. However, in Omegawave's case, their network did not play a significant role determining the target market; even though, the company has US origins in their DNA. Instead, the decision to enter the market under its own brand came from internal motive for market seeking behavior. One of the criticisms aimed towards the networking model is that it fails to recognize internal or external stimuli as drivers for internationalization (Chetty and Blankenburg Holm 2000, 89-90).

Overall, this research supports the notion that the network approach to internationalization of knowledge-intensive small firms is more suitable explanation of the process over the traditional stage theories (Coviello 2006; Ojala 2009, 53). Both firms expanded rapidly after inception to a psychically distant market. This was achieved by gaining an "insider status" in a relevant network. According to Johanson and Vahlne (2009, 1415), the insider status is a precondition for successful internationalization and it provides the company with knowledge of opportunities which in turn are crucial for learning, trust building and commitment decisions. For instance, Omegawave's decision to increase its commitment by setting up a subsidiary happened only after they had accumulated enough knowledge through learning and building trust with the US network actor.

In terms of key partnerships, earlier research has discovered that early adopters of internationalization reach out to established organizations to leverage from their resources, and to share costs and risks in internationalization. The most relevant resources are distribution and sales channels, reputation and brand name (Gabrielsson 2005, 207). Moreover, the network approach specifies the complementary nature of these relationships calling them exchange relationships (Johanson and Mattsson 1987, 36). Similar, mutually beneficial partnerships were found to be the key for successful internationalization for both of the case companies. The findings of this research also reveal that intermediary organizations, such as governmental non-profit consulting agencies play an important role, especially at the beginning of the internationalization process for young Finnish sport technology companies.

In addition to the mutually beneficial nature of the key relationships, the network theory also suggests that the network is reconfigured as firms are seeking to gain position in new networks (Johanson and Mattsson 1987; Johanson and Vahlne 2009). This was also true for the case companies and especially, since the initial entry to the market, new relationships have been made and old ones terminated. As indicated by both companies, the number of relevant actors in the field of sport technology is relatively small. The findings also indicate that since it is relatively small, there are relatively few new potential entrants to the networks. Entering the market increases the number of ties; however, many of these are terminated relatively quickly and stronger ties are only developed with a handful network actors. In this context, the social aspect of these ties is also important as indicated by both case companies, the ties become more beneficial when the relationships strengthen and become more casual.

Following the dynamic capability view of the firm, previous research indicates that networking capability becomes fundamental for young entrepreneurial firms' successful internationalization (Fernhaber and McDougall 2005; Mort and Weerawardena 2006) and especially in the Nordic context (Torkkeli et al 2016, 208). Networking capability refers to a firm's ability to build and maintain relationships. Both firms demonstrate the ability to select partners and build fruitful relationships very quickly after entering the market, relationships which have had substantial impact in their success in the market and thus, given them competitive advantage. Contributing to the dynamic capability view, this research confirms that networking capability is indeed one of the most important contributors for successful internationalization of the young firm in this context.

Similar to the networking approach to internationalization, International Entrepreneurship theory stresses the importance of opportunity recognition and knowledge as a resource that can accessed via relationships with network actors (Mainela, Puhakka and Servais 2014, 109). Furthermore, this knowledge in addition to control over other resources or assets becomes crucial for overcoming distinct liabilities of the new internationalizing firm. This research contributes to the International Entrepreneurship literature

in two ways. First, all the pieces of Oviatt and McDougall's (1994, 54) "Necessary Elements for Sustainable International New Ventures" can be found in both case companies. Both case companies have unique patent protected technology from which they have developed solutions attractive to the US market especially. They utilize alternative governance structures by relying on their relationships for accessing distribution channels, product development facilities, brand name and reputation, just to name a few. In addition and as previously indicated, knowledge acquired from various network actors has been crucial for both companies in terms of recognizing business opportunities, finding new potential partners, making their products better for the market, and even creating a totally new business model.

Second, this research contributes to the IE literature by confirming the knowledge intensive strategies for born globals enabling successful internationalization presented in Knight and Cavusgil (2004). Both case companies follow one of the four strategies introduced in their research. Omegawave's business strategy clearly relies on *unique product development*. They have had success in the foreign market by being able to differentiate themselves from competitors in a niche markets with their patented, innovative solution. Even though SportIQ shares similar elements in unique product development, their success has mainly come from *leveraging foreign distributor competences*. In other words, they have taken advantage of the localised market knowledge and the distribution capabilities of their US based partner to promote their product.

5.2 Managerial implications

One of the objectives of this study is to provide information about how networks have facilitated the internationalization of the two case companies to the US. Thus, exploring the stories of these two successfully internationalized firms could provide valuable insights for other companies, especially in this industry, looking to enter the US market.

As indicated by both firms, the geographical distance is a major challenge. Even though developments in technology have made communication much easier, physical presence in the market is still required for gaining first-hand and market knowledge, especially if a firm is building a brand or selling products under their own brand. Therefore, frequent visits to the US are advisable. The distance, or more specifically the time difference between the US and Finland, needs to be also taken under consideration in human resources management. Businesses may find it difficult to employ people who are willing to work in outside the traditional office hours. This aspect might first appear irrelevant with regards to the market entry but it can become a major obstacle once the business gets going.

In terms of finding and creating important relationships, both firms found that an existing network is an important source for new acquaintances. Also, industry specific conferences provide great opportunities to meet most of the relatively small group of relevant actors. Young firms should also consult with governmental agencies who are dedicated to helping Finnish firms' international expansion. These organizations have wide global networks which could provide interesting opportunities. In addition, as Finnish sports tech companies are attracting an increasing interest and investment, firms with the intention to sell their offerings abroad should take this into account when selecting investor: the investors' network equity and sweat equity become more valuable to the firm in the long run rather than purely monetary investments (Etula 2017).

Before finding the right partners, firms have to be able to recognize the needs of the business, which depend on the strategy, business model, the stage in which the business currently is and where is it heading, Only after that, the criteria for what the firm is looking for can be established. Also, as the needs and goals change along the way, the criteria should be adjusted accordingly. Furthermore, stagnating and clinging on to relationships which are not the right fit for that particular stage may do harm and prevent the firm from succeeding in that stage to reach their goals.

Utilizing the sources discussed above, the process of scanning and selecting the right candidates takes a lot of effort and deserves a great amount of investment as it is seen critical for successfully entering the US market. Therefore, instead of proceeding with the first willing candidate, extensive research and referrals are recommended. In the US especially, firms should be cautious in the selection process because people there are known to sometimes bend the truth. Typically, it is recommended to search for candidates who already have connections and have gained a status in a relevant network, where he or she can influence decision making.

Once a fitting candidate has been located and locked in, the investment does not stop. On the contrary, relationship development is an essential step and should be treated as such. Developing relationships takes time and as stated earlier, actions should be taken in order to develop the business relationship into a more casual relationship as it becomes more beneficial to the firm that way. Relationship development should be given sufficient time but as soon as there are indications that it will not work for the business; the relationship should be terminated immediately. It is advisable to do the termination in a professional manner because these actors might become beneficial in a different situation or another stage as the business develops. Therefore, a certain level of connection should be maintained with the terminated actors.

Overall, based on the findings of this research, managers need to be networkers. Also, identifying what is needed, finding fitting candidates to those needs, selecting the ones to proceed with, relationship building and development are vital stages in successfully entering the US market. This research indicates that succeeding in these different

elements of networking requires hard work and firms need to put in the necessary investment to get the full benefits from the relationships.

5.3 Limitations of the study and suggestions for further research

This research was conducted as qualitative case study including two case companies operating in the sports technology industry. The results of this study provide very contextually rich information about network utilization of these two companies. The context specificity and case sensitivity sets limitations for the application of the results for larger population. An additional case could have been added for reaching stronger conclusions. However, due to the specific context, there are only limited amount of organizations that fall into this category.

The scope of this research could be broadened by including the views of other members from the case companies. This study offers a relatively narrow perspective as only two people, the CEO's of the companies, were interviewed. For example, in Omegawave's case, it would have been beneficial to add views from their US sales subsidiary to supplement the empirical data. On the other hand, including additional interviews, especially in the US, would have required more time and the researcher's personal monetary investment, since there was no external funding for this research. Thus, scarce time and funding add yet another limitation for this study.

In terms of future research objectives, this research provides interesting avenues for further investigation. For instance, it would be interesting to see whether the key network actors, the process of finding and developing relationships and the benefits gained from these relationships differ in another contextual setting. Also, both of the case companies indicated that the US is their primary target market. It would be interesting to see how the process is different for firms who do not deem US as their primary market.

Another prominent avenue would be to expand the scope of this research to include firms from other small open economy countries similar to Finland, such as the Nordic countries. The findings of this research indicate certain challenges regarding the US market for Finnish firms and both of the case companies had different methods for overcoming them, mostly with the help of their networks. It can be assumed that similar problems exist in other Nordic countries as well but whether the issues are perceived as strongly and how they are handled, could provide an interesting research topic for crossnational networks utilization study.

This research concentrates on business relationships and the network as a whole. It was indicated by both companies that informal or casual relationships are very important in the US context. Further research could focus on these specific relationships. Perhaps a more detailed description of the process of developing these relationships and

deeper insights of the benefits that parties have gained as a result of these casual relationships could provide valuable information.

Lastly, further research could focus on specific actors in the companies' networks and their influence in the internationalization process. For example, it would be interesting to find out more, from the company's perspective, about their relationships with the non-profit governmental agencies, namely Tekes and Finpro, or angel investors. These relationships were deemed important by both case companies, but the dynamics these relationships were only scratched on the surface and thus, further examination is needed for more comprehensive understanding.

6 SUMMARY

The purpose of the study was to analyze how young Finnish sports technology companies utilize networks in their attempts to enter the US market. Therefore, the information this research provides could be beneficial for young sports technology companies seeking opportunities abroad, especially in the US. The following questions were used to help answering the main research question and achieving the purpose of the study:

- Which partners are most valuable in the early stage of market entrance and why?
- How are these network relationships created and developed?
- How do they help the young internationalizing firm overcome major challenges?

The research was conducted as qualitative case study with a critical realist philosophical position. Two case companies, SportIQ and Omegawave, were selected as they have already entered the US market and therefore, they were able to provide valuable information on the process from viewpoint of networks. The data was collected through semi-structured interviews with the CEOs of the companies, since they were the best equipped answering the predetermined themes introduced in section three.

Above described strategy allowed the research to obtain contextually rich information about network utilization in these two specific cases. Simultaneously, the context specificity and small sample size limits the generalizability of the study and thus, transferability of the findings to different contexts relies solely on the readers' discretion.

Theoretical background for this study is drawn from various streams of literature. The review begins by looking into the classical internationalization models such as the Uppsala model and other learning experiential learning models. Following these, also referred as the stage models, the network model is introduced as it seen a better fit explaining internationalization in this specific context. The last part of the literature review analyzes the newly emerged International Entrepreneurship studies which explain how young firms are able to overcome various liabilities in the internationalization process. Together with the network approach to internationalization, elements from dynamic capabilities view and International Entrepreneurship research forms the theoretical background for this study.

The empirical data collected from the case companies provided two interesting stories of how young and resource scarce sports technology companies from Finland are able to get foothold in the US market with the help of various network actors. Even though, the paths and strategies these companies have chosen are different, the conclusion

is that neither of them would have been able to make it without the help of their networks. Moreover, establishing a position in a relevant network requires hard work and capability to identify, create and maintain relationships with the right network actors despite the strategy that has been chosen.

This research contributes towards the various streams of literature laid out in the conceptual framework. In addition and perhaps more importantly, this research contributes towards the relatively scarce body of knowledge about the SME's network driven internationalization. In the Finnish context especially, where networks become even more crucial for successfully internationalization, the small size of the domestic market pushes firms to aboard markets and the nation's economy is largely dependent on international trade, all pieces of information aiding the internationalization process are welcomed.

REFERENCES

- Aarikka-Stenroos, L. Sandberg, B. Lehtimäki, T. (2014) Networks for the commercialization of innovations: A review of how divergent network actors contribute. *Industrial Marketing Management*, Vol. 43 (3), 365-381.
- Aharoni, Y. (1966) The foreign investment decision process. *International Executive*, 8 (4), 13-14.
- Alahuhta, P. (2016) Will sports technology replace the coach?. VTT Blog. < https://vtt-blog.com/tag/sports-technology/>, retrieved on 29.08.2017
- Aldrich, H. Auster, E.R. (1986) Even dwarfs started small: Liabilities of age and size and their strategic implications. *Research in organizational behavior*, Vol. 8, 165-186.
- Anzaldo, D. (2015) Wearable sports technology-Market landscape and compute SoC trends. SoC Design Conference (ISOCC), 2015 InternationalIEEE. 217.
- Barney, J. (1991) Firm Resources and Sustained Competitive Advantage. *Journal of Management*, Vol. 17 (1), 99-120.
- Bell, J. (1995) The internationalization of small computer software firms: A further challenge to "stage" theories. *European journal of marketing*, Vol. 29 (8), 60-75.
- Bilkey, W.J. Tesar, G. (1977) The export behavior of smaller-sized Wisconsin manufacturing firms. *Journal of International Business Studies*, Vol. 8 (1), 93-98.
- Brass, D.J. Galaskiewicz, J. Greve, H.R. Tsai, W. (2004) Taking Stock of Networks and Organizations: a Multilevel Perspective. *Academy of Management Journal*, Vol. 47 (6), 795-817.
- Cavusgil, S.T. (1980) On the internationalization process of firms. *European research*, Vol. 8 (6), 273-281.
- Chetty, S. Holm, D.B. (2000) Internationalisation of small to medium-sized manufacturing firms: a network approach. *International business review*, Vol. 9 (1), 77-93.
- Coviello, N.E. (2006) The network dynamics of international new ventures. *Journal of International Business Studies*, Vol. 37 (5), 713-731.
- Creswell, J.W. Poth, C.N. (2017) *Qualitative inquiry and research design: Choosing among five approaches.* Sage publications.
- Deloitte Sports' Starting Lineup: Sports Trends that will Disrupt and Dominate 2016 < https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/us-sports-business-trends-disruption-2016.pdf>, retrieved 18.05.2017

- DOING BUSINESS: Economy Rankings. 2017, The World Bank, < http://www.doingbusiness.org/rankings>, retrieved on 29.08.2017
- Dubois, A., Gadde, L. E. (2002) Systematic combining: an abductive approach to case research. *Journal of business research*, Vol. 55 (7), 553-560.
- Eisenhardt, K. M. (1989) Building theories from case study research. *Academy of management review*, Vol. 14 (4), 532-550.
- Ellis, P.D. (2011) Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies*, Vol. 42 (1), 99-127.
- Eriksson, P. Kovalainen, A. (2015) *Qualitative Methods in Business Research: A Practical Guide to Social Research*. Sage publications.
- Etula, S. (2017) NORDIC GUIDE TO FINDING AN ANGEL INVESTMENT. FiBAN Finnish Business Angels Network, Helsinki Finland.
- Eurostat (2016) ANNUAL REPORT ON EUROPEAN SMEs 2015/2016. European Union.
- Fernhaber, S.A. McDougall, P.P. (2005) New venture growth in international markets: the role of strategic adaptation and networking capabilities. *International entrepreneurship Emerald Group Publishing Limited*, 111-136.
- Freeman, S. Edwards, R. Schroder, B. (2006) How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, Vol. 14 (3), 33-63.
- Gabrielsson, M. (2005) Branding strategies of born globals. *Journal of International Entrepreneurship*, Vol. 3 (3), 199-222.
- Gabrielsson, M. Kirpalani, V. (2012) Overview, background and historical origin of born globals; development of theoretical and empirical research. *Handbook of Research on born globals*, 1-15.
- Ghauri, P. N., Grønhaug, K. (2005) Research methods in business studies: A practical guide. Pearson Education.
- Ghauri, P. (2004) Designing and conducting case studies in international business research. *Handbook of Qualitative Research Methods for International Business*, 109-124.
- Holstein, J. A., Gubrium, J. F. (2004) The active interview. *Qualitative research: Theory, method and practice*, Vol. 2, 140-161.
- How the U.S. became a sporting culture (2016) Sporting News. http://www.sporting-news.com/other-sports/news/how-the-us-became-a-sporting-culture/1vgv4kx12459w116dvrbhev2er, retrieved on 29.08.2017

- Johanson, J. Vahlne, J. (1977) The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, Vol. 8 (1), 23-32.
- Johanson, J. Wiedersheim-Paul, F. (1975) The internationalization of the firm four Swedish cases. *Journal of management studies*, Vol. 12 (3), 305-323.
- Johanson, J. Mattsson, L. (1987) Interorganizational Relations in Industrial Systems: A Network Approach Compared with the Transaction-Cost Approach. *International Studies of Management & Organization*, Vol. 17 (1), 34-48.
- Johanson, J. Vahlne, J. (2009) The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, Vol. 40 (9), 1411-1431.
- Johnson, W.H. Piccolotto, Z. Filippini, R. (2009) The impacts of time performance and market knowledge competence on new product success: an international study. *IEEE Transactions on Engineering Management*, Vol. 56 (2), 219-228.
- Knight, G. Koed Madsen, T. Servais, P. (2004) An inquiry into born-global firms in Europe and the USA. *International Marketing Review*, Vol. 21 (6), 645-665.
- Knight, G.A. Cavusgil, S.T. (2004) Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, Vol. 35 (2), 124-141.
- Korsakienė, R. Tvaronavičienė, M. (2012) The internationalization of SMEs: an integrative approach. Journal of business economics and management, Vol. 13 (2), 294-307.
- Laitinen, E. K. (1992) Prediction of failure of a newly founded firm. *Journal of Business Venturing*, Vol. 7 (4), 323-340.
- Laurell, H. Achtenhagen, L. Andersson, S. (2015) The changing role of network ties and critical capabilities in an international new venture's early development. *International Entrepreneurship and Management Journal*, 1-28.
- Lavie, D. (2006) The competitive advantage of interconnected firms: An extension of the resource-based view. *The Academy of Management Review*, Vol. 31 (3), 638-658.
- Leonidou, L.C. Samiee S. (2012) Born global or simply rapidly internationalizing? Review, critique, and future prospects. *Handbook of Research on born globals*, 16-35.
- LeCompte, M. Preissle.(1993) *Ethnography and qualitative design in educational research*. San Diego, California: Academic Press. Leech, G and Svartvik, 1, 1989.
- Li, L. Qian, G. (2007) Partnership or self-reliance: prescriptions for small and mediumsized enterprises. *Journal of business strategy*, Vol. 28 (6), 29-33.

- Li, L. Li, D. Dalgic, T. (2004) Internationalization process of small and medium-sized enterprises: Toward a hybrid model of experiential learning and planning. *MIR: Management International Review*, 93-116.
- Lincoln, Y.S. Guba, E.G. (1985) Establishing Trustworthiness. In *Naturalistic inquiry*, Sage, 289-331.
- Luostarinen, R. Gabrielsson, M. (2004) 22 Finnish perspectives of international entrepreneurship. *Handbook of research on international entrepreneurship*, 383.
- Madsen, T.K. (1997) The internationalization of born globals: An evolutionary process?. *International business review*, Vol. 6 (6), 561-583.
- Mainela, T. Puhakka, V. Servais, P. (2014) The concept of international opportunity in international entrepreneurship: a review and a research agenda. *International Journal of Management Reviews*, 16 (1), 105-129.
- Marvel, M.R. Patel, P.C. (2017) Self-Leadership and Overcoming the Time Resource Constraint: Accelerating Innovation for New Products. *IEEE Transactions on Engineering Management*.
- Melin, L. (1992) Internationalization as a strategy process. *Strategic Management Journal*, Vol. 13 (2), 99-118.
- Merriam, S.B. (2014) *Qualitative Research: A Guide to Design and Implementation*, Jossey-Bass, Hoboken.
- Mort, G.S. Weerawardena, J. (2006) Networking capability and international entrepreneurship. International Marketing Review, Vol. 23 (5), 549-572.
- Nummela, N. (2004) Is the globe becoming small or is the small becoming global? Globalization and internationalizing SMEs. *Handbook of research on international entrepreneurship*, 128-151.
- Nummela, N. Puumalainen, K. Saarenketo, S. (2005) International growth orientation of knowledge-intensive SMEs. *Journal of International Entrepreneurship*, Vol. 3 (1), 5-18.
- Nummela, N. Nummela, N. (2011) *International growth of small and medium enter- prises*, 1st ed edn, Routledge, New York, NY.
- Ojala, A. (2009) Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychically distant market. *International business review*, Vol. 18 (1), 50-59.
- Oviatt, B.M. McDougall, P.P. (1994) Toward a Theory of International New Ventures. *Journal of International Business Studies*, Vol. 25 (1), 45-64.
- Oviatt, B.M. McDougall, P. (1995) Global start-ups: Entrepreneurs on a worldwide stage. *Academy of Management Executive*, Vol. 9 (2), 30-43.

- Oviatt, B. M., McDougall, P. P. (2005) Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship theory and practice*, 29 (5), 537-553.
- Peiris, I. Akoorie, M. Sinha, P. (2012) International entrepreneurship: A critical analysis of studies in the past two decades and future directions for research. *Journal of International Entrepreneurship*, Vol. 10 (4), 279-324.
- PESTLE Country Analysis Report: United States (2017). Marketline.
- Ruzzier, M. Hisrich, R.D. Antoncic, B. (2006) SME internationalization research: past, present, and future. *Journal of small business and enterprise development*, Vol. 13 (4), 476-497.
- Sasi, V. Arenius, P. (2008) International new ventures and social networks: Advantage or liability?. *European Management Journal*, Vol. 26 (6), 400-411.
- Shenton, A.K. (2004) Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, Vol. 22 (2), 63-75.
- Shepherd, D.A. Douglas, E.J. Shanley, M. (2000) New venture survival: Ignorance, external shocks, and risk reduction strategies. *Journal of Business Venturing*, Vol. 15 (5–6), 393-410.
- Sinkovics, R.R. Penz, E. Ghauri, P.N. (2008) Enhancing the trustworthiness of qualitative research in international business. *Management International Review*, Vol. 48 (6), 689-714.
- Sports tech firms finding more love in the US than at home (2017). The Australian Financial Review. < https://www.afr.com/business/sport/sports-tech-firms-finding-more-love-in-the-us-than-at-home-20170302-gup1k5>, retrieved on 30.8.2018
- Sports and tech: How athletes make use of the latest inventions. 2016, Technologist. < http://www.technologist.eu/the-sports-revolution/> , retrieved on 30.08.2017
- Stinchcombe, A.L. March, J. (1965) *Social structure and organizations*. Handbook of organizations, 142-193.
- Sullivan, D. Bauerschmidt, A. (1990) Incremental internationalization: a test of Johanson and Vahlne's thesis. *MIR: Management International Review*, 19-30.
- Torkkeli, L. (2013), *The Influence of Network Competence on Internationalization of SMEs*. Acta Universitatis Lappeenrantaensis.
- Torkkeli, L. Kuivalainen, O. Saarenketo, S. Puumalainen, K. (2016) Network competence in Finnish SMEs: implications for growth. *Baltic Journal of Management*, Vol. 11 (2), 207-230.

- Wearable Tech Market To Be Worth \$34 Billion By 2020. 2016, Forbes, FEB 17, 2016 https://www.forbes.com/sites/paullamkin/2016/02/17/wearable-tech-market-to-be-worth-34-billion-by-2020/#7ce461e63cb5, retrieved on 29.08.2017
- Wearable Technology Market worth 51.60 Billion USD by 2022. 2016, Markets and Markets < http://www.marketsandmarkets.com/PressReleases/wearable-electronics.asp>, retrieved on 31.08.2017
- Welch, C. Piekkari, R. Plakoyiannaki, E. Paavilainen-Mäntymäki, E. (2011) Theorising from case studies: Towards a pluralist future for international business research. *Journal of International Business Studies*, Vol. 42 (5), 740-762.
- Welch, L.S. Luostarinen, R. (1988) Internationalization: Evolution of a concept. *The Internationalization of the firm*, Vol. 14, 83-98.
- Yip, G.S. Biscarri, J.G. Monti, J.A. (2000) The role of the internationalization process in the performance of newly internationalizing firms. *Journal of international marketing*, Vol. 8 (3), 10-35.

APPENDICES

Appendix 1 – Interview Schedule

Company

- 1. Basic info of the company/key personnel?
- 2. What is it that you do and why?
- 3. More detailed explanation of the company's history / beginning of international operations?

US

- 4. Why internationalization and the US?
- 5. What makes the US market unique?
- 6. What are the biggest challenges/opportunities?
- 7. Cultural insights?

Industry

- 8. The main competitors?
- 9. Characteristics? Short product life cycle, fierce competition etc.
- 10. Future outlook? What is happening, growing potential?

Networks

Key network actors

- 11. What constitutes a network for your business?
- 12. Identify key actors within your network? Are they part of the current value chain? Intermediaries (Government entities) / Formal, informal
- 13. How have they influenced your decision to pursue US markets? What about entry mode? Commercialization of the product?

Complementary relationships

- 14. Please describe the nature of these relationships? What is in it for them/you?
- 15. Specifically, what can be obtained through these relationships which are not already possessed?

Finding the right partners/ optimization

- 16. Regarding your current key network actors, how did those relationships begin? Where did you find them?
- 17. Please explain the process of selecting business partners? Especially in America
- 18. What are the elements influencing the decision? Why are they relevant in American context?
- 19. How do you control the amount of valuable relationships?
- 20. How have the network base evolved between establishment of the firm and now?
- 21. Since/upon entering the US, have you established new relationships? If yes, who and why? If not, why?

Assets / comp advantage

- 22. In your opinion, where does the competitive advantage of your company originate? What makes you different from the competitors?
- 23. What is unique about your product/ service? Unique features, brand collabo etc?
- 24. How are the resources of your network involved in your operations? How do those resources add value to your product/service?

Knowledge

- 25. How is knowledge of key partners utilized?
- 26. How important is knowledge and learning from the US partners regarding the target market?
- 27. Describe how business opportunities are identified?
- 28. How is this knowledge incorporated to current operations (product development, customization etc.)