

KEY FACTORS IN U.S. GOVERNMENT SUPPORT OF BUSINESS INTERNATIONALIZATION IN FINLAND

Case: U.S. Embassy in Helsinki

Master's Thesis
in International Business
Liiketaloustiede, kansainvälisen
liiketoiminnan pro gradu -tutkielma

Author (s)/Laatija(t):
Bernard Garvey

Supervisors/Ohjaajat:
D.sc. Peter Zettinig
D.sc. Valtteri Kaartemo

16.2.2016
Turku

Table of Contents

1	INTRODUCTION.....	7
1.1	Context.....	7
1.2	Purpose.....	8
1.3	Research Questions.....	9
1.4	Structure.....	10
1.5	Scope and Limitations.....	11
2	INTERNATIONALIZATION OF NATIONAL INNOVATION SYSTEMS	12
2.1	An Introduction to National Innovation Systems	12
2.2	Changes in National Innovation Systems	16
2.3	Internationalization of Innovation Systems	20
3	GOVERNMENT INTERVENTION IN INTERNATIONALIZATION.....	25
3.1	Incentives to Internationalization.....	28
3.2	Barriers to Internationalization	30
3.3	Government assistance to incentives and overcome barriers.....	34
3.4	Synthesis – Dimensions of government intervention and support provided by governments.....	37
4	RESEARCH DESIGN	41
4.1	Research approach	41
4.2	Case selection.....	42
4.3	Data collection	43
4.4	Data Analysis.....	48
4.5	Trustworthiness.....	50
5	CASE: U.S. EMBASSY HELSINKI	53
5.1	Introducing the U.S. Embassy	53
5.2	Innovation Center.....	54
5.3	Motivational Factors	58
5.4	Classifying Strategies.....	59
5.5	Activities	59
5.5.1	ConnectUSA	62
5.5.2	SelectUSA.....	62
5.5.3	Access to embassy facilities	63

5.5.4	Commercial Services	63
5.5.5	Networking	64
5.5.6	Youth Outreach.....	64
5.6	Impact Evaluation	65
5.7	The embassy as a facilitator	69
6	CONCLUSIONS	71
6.1	Key Strategies for Internationalization support	71
6.2	Key drivers for service development	72
6.3	Key factors of business support by the embassy.....	73
6.3.1	Disseminating information	73
6.3.2	Creating positive image	74
6.3.3	Fostering networks.....	74
6.3.4	Facilitating internationalization	75
6.4	Effects of the initiatives	75
6.5	Transferability.....	76
6.6	Limitations and suggestions for further studies	77
7	SUMMARY	79
8	REFERENCES	82
	APPENDICES	88
	Appendix 1 Interview Guide	88

List of figures

Figure 1 Scope of Study.....	11
Figure 2 Elements of a National Innovation System adapted from: (APCTT 2015)..	13
Figure 3 National aspirations in NIS adapted from: (APCTT 2015).....	17
Figure 4 Major building blocks of an innovation system Source: (Fischer 2000).....	18
Figure 5 Share of acquired technology obtained through imports (OECD 1997).....	21
Figure 6 Interdependencies of national, regional, and international systems of innovation (Fromhold-Eisebeth 2007)	23
Figure 7 The Innovation Spectrum (Jackson 2011).....	26
Figure 8 Scope of Government Export Promotion (Diamantopolous et al. 1993)	27
Figure 9 Decision to Internationalize (Hutchinson et al. 2007).....	29
Figure 10 Barriers ranked by SMEs (OECD 2009)	31
Figure 11 Trade barriers encountered in the United States by type and sector (Finnish Ministry of Foreign Affairs 2013).....	33
Figure 12 Concepts of governmental support programs in different phases of companies' internationalization (Pietrasienski 2011, 194).....	35
Figure 13 Theoretical framework - Institutional setting for government intervention.....	38
Figure 14 Thematic Interview Guide.....	46
Figure 15 Interviews	47
Figure 16 Events participated	48
Figure 17 Artist concept of the new embassy campus.....	56
Figure 18 Finished consular building and Innovation Center.....	57
Figure 19 Summary of offered products	61

Figure 20 Impact Radar of embassy business services with a hypothetical example of a service.....66

Figure 21 Impact Radar - Core Services.....67

Figure 22 Impact Radar - Generalized Services68

1 INTRODUCTION

1.1 Context

Governments have a vested interest in supporting entrepreneurial actions and seeking to direct investment and business activity to within their nation. The optimal level of government intervention is an ongoing debate. Many governments of the developed world seek to avoid interfering with the free market, but to support business activity in a productive manner. The area of effect which is exclusive to governments includes the implementation of the institutional setting which businesses seeking to do business will act within. Governments can feel political pressure to influence this setting in protective or opening directions.

The concept of a National Innovation System (NIS) has been developing since the 1980s (Freeman 1987, Lundvall 1985) to describe how the firms and institutions of a nation are able to interact with each other to produce new knowledge and technological advancement. Later researchers (Carlsson 1995, Carlsson 2006, Fromhold-Eisebith 2007, Niosi & Bellon 1994, Mowery 1992, Bartholomew 1997) have added additional divisions to NIS theory by exploring the concepts of International Innovation Systems, Regional Innovation Systems, and Sectoral Innovation Systems, which go beyond national borders to explore the interactions between institutions and businesses.

A growing focus of Innovation System studies is on the internationalization which is occurring. The importance of national boundaries is challenged as a factor in the grouping of innovation systems when the growth of sectoral and international systems are seen as essential for companies which rely on multi-cultural input, international collaboration and information exchange. (Fromhold-Eisebith 2007).

Economic Statecraft is a method of conducting diplomatic relations by putting business at the forefront of activities and focus. Economic Statecraft is a key focus for the U.S. government (<http://finland.usembassy.gov/innovationcenter.html>) in their relations with developed countries. Seeking to create new business relations through institutional settings such as embassy action and governmental programs can be seen to create an interesting avenue for the extension of the NIS of a country beyond its borders which is not particularly dependent on individual industry sectors or Multi-National Corporations (MNC), but can act as a support structure to create new relationships, knowledge sharing and business opportunities which are beneficial to the country as a whole.

This paper will seek to explore the factors which influence the support which the United States government provides to Finnish firms that wish to internationalize. The new Innovation Center which has been built as part of the United States Embassy in Finland and opened in February 2013 will be a focal point for exploring government activity in a

foreign country. The innovation center has received a lot of attention since its announcement, and represents an interesting and unique form of government support and the internationalization of innovation systems through government action. Furthermore, the creation of the innovation center has crystalized a group of services which the embassy provides to Finnish firms.

The creation of an Innovation Center by a national government with the aim to increase the cooperation and transfers of knowledge and commerce between two countries is novel and the potential impact and effectiveness of such a center warrants further study.

The new programs and centers of the embassy and the activities which are produced from them and around them create an interesting cross-roads for the embassy. The activities of the embassy are based on U.S. policy decisions at a higher level, and are therefore an extension of policies which seek to effect and enhance the national innovation system of the United States. The new activities are aimed largely at Finnish companies, attempting to make connections to the U.S. and companies involved in trade with the U.S. Therefore, a major focus for the center is to promote incentives to invest in and do business with America, and to reduce the impact of barriers on Finnish companies. This creates an interesting phenomenon of providing services to Finnish companies as part of the national innovation system of the U.S.

In the best case scenario, both the government and businesses will find benefit in these interactions. The U.S. Government views Finland as an important ally and would like to strengthen the relationship. As a way to strengthen the relationship, it can be seen that there is a need to solidify the business connections between the two countries. Finnish firms have markets which are closer and more natural first choices for internationalization in Europe and the east. With support and the right connections however, many Finnish firms would have great potential to expand to the United States.

1.2 Purpose

This study will examine the base intentions and initial impacts, discuss the factors influencing the actions of the embassy and attempt to find implications for the further development of key aspects of the initiative, identify which aspects are country specific, and those which could be transferred to other locations.

The innovation center constructed within the embassy campus is the first of its kind for the United States. An analysis of the impact which has been created and that which is possible in the future is needed. The purpose of this study is to analyze the key factors which impact the innovation center and to find implications about the best concepts and practices which are in action throughout the center.

Economic Statecraft, or the placement of business in the leading role of international relations has been a key focus for the U.S. State Department in recent years, and can be seen to have a growing role in interactions with developed countries and the United States. This focus puts business activities in the spotlight and implies that the creation of innovation and business focused locations and activities within embassies may provide an increased interest in investment in the U.S. and partnerships with U.S. businesses. These activities also serve as a show of commitment to host countries and the business environment in a local context.

In studying the current situation of SMEs in Latvia, Estonia, Finland and Sweden, Baltic Consulting found three main positive effects of internationalization on business performance. These effects include a higher rate of turnover growth, higher employment growth and that the relationship between internationalization and innovation is strong. The report also summarized the international output of Finnish companies as slightly under the EU average. (Baltic Consulting 2013).

Because the innovation center in Finland is the first of its kind, and an experiment in its creation, there are many opportunities to explore the embassy's actions. Through the Innovation Center, the embassy wishes to work with Finnish companies to boost their level of internationalization. A logical method for encouraging internationalization is to provide access to the innovation system of the United States through services. Therefore, this was a logical choice for this type of study.

The purpose of this study is to examine the factors influencing the support which the Innovation Center in the U.S. Helsinki Embassy can provide to Finnish companies as an agent of the national innovation system and in implementing a strategy of Economic Statecraft.

1.3 Research Questions

In order to meet the needs of the research project and fulfill the above stated objectives, it is necessary to crystalize the project into a number of research questions which the project will seek to answer for the reader. The research question is:

How do initiatives of the United States affect Finnish firm internationalization?

Within this research question, there are a number of sub-questions which also need to be answered. These include:

- Which factors are key to producing impact?
- How do home based (U.S.) and host based (Finland) factors interact?

- What are the effects which the initiatives produce?

1.4 Structure

The structure of this study is laid out in the following manner. Following the introduction, the study is divided into six chapters. The first theoretical portion of the study highlights the literature in the theory of National Innovation Systems (NIS). First, it explains the concept of NIS as it has developed through a number of governmental settings. Further, the ways in which NIS is able to absorb inputs and change over time are discussed. The changes which have occurred due to the internationalization of innovation systems are particularly explored.

In chapter three, the theoretical portion is completed with an examination of the relevant literature regarding the incentives and barriers which are present for Finnish companies seeking to internationalize. The government has the ability to influence the decisions which entrepreneurs make, and the environment in which they are made. (Minniti 2008). In addition, the assistance which a government is able to provide, and the possible delivery methods are discussed.

The research design of the study is laid out in chapter four. This thesis is designed as a qualitative case research. The research is based on literature review, semi-structured interviews, event observation and content analysis of media reports and web pages. This chapter explains the methodological choices made by the researcher with a discussion of the research approach and selected methods, followed by an explanation of the reasons for selecting the case study approach for this case. Further, the chapter describes the processes used for data collection and analysis. Finally, the trustworthiness of the study is discussed at the end of the chapter.

Chapter five contains the qualitative research results. The presentation of the results follows the research questions in order. First the chapter introduces the case and institutions involved, setting the stage for the reader to understand the background of the decision to build an innovation center in this particular location. Following the case description, the actions and programs which are involved in the case are explained and contextualized. The methods and ways which internationalization is encourage are explored, followed by a discussion of the internal and external motivating factors for the institution. This discussion is done by examining the challenges and possibilities faced by the embassy which are evident in the empirical data and by reviewing the services which exist and are being developed in the embassy.

Chapter six draws together conclusions based on the findings of the case study and research. The study is further summarized in the final chapter.

1.5 Scope and Limitations

This study seeks to explore the impact of government intervention on company internationalization as an influencing factor to the activities which companies already conduct in order to expand markets and explore new fields. Specifically, the study explores the changing relations in the Finnish market due to the creation of the Innovation Center at the U.S. Embassy in Helsinki.

The current study has the following limitations. The case involved in the study is the U.S. Embassy in Helsinki. There are limitations to access available to the location and information which is openly available to the public. Therefore, information was gathered through a series of interviews with embassy staff and observation of offered events and services.

The amount of research material on innovation systems is vast and expanding. However, the exploration of an initiative such as this case presents an interesting niche to examine the effects of government activity abroad, and the factors which influence such actions. An examination of this case and its actions can add understanding to the study of NIS and government assistance. Below is a representation of the scope which this study seeks to examine.

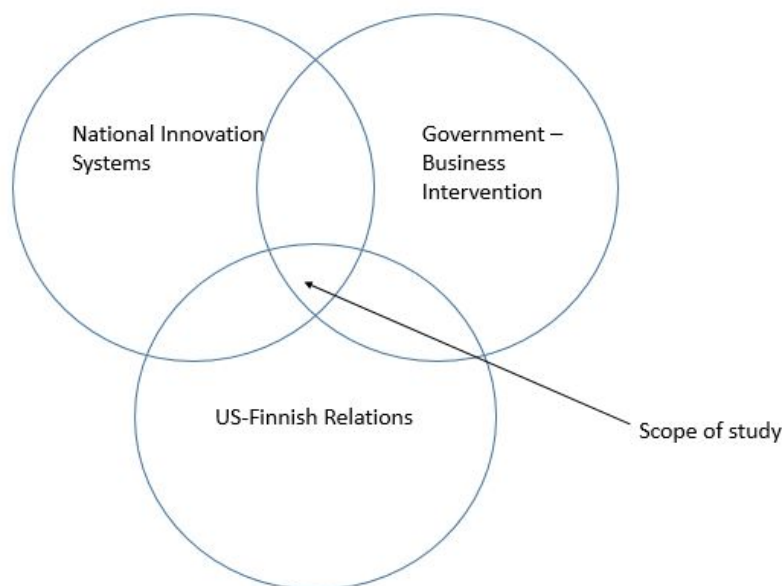


Figure 1 Scope of Study

There are a number of government activities which seek to support business activities and investment to the U.S. Market. The context in which each program is implemented offers challenges and opportunities in integrating with the local conditions and environment.

2 INTERNATIONALIZATION OF NATIONAL INNOVATION SYSTEMS

2.1 An Introduction to National Innovation Systems

The concept of a national innovation system has been developed since the 1980's. There is an array of descriptions about what is actually included in the system, but a consensus has been agreed that the system include the companies, organizations and institutions of a nation-state which create a progression of technological and economic development.

There are many ways that a government can affect business, largely through the creation of incentives or barriers. Government programs are available to assist businesses in a number of ways during their development phases. This study will attempt to examine the practical intersection of government action with the internationalization of a country's innovation system.

Nation-states have a vested interest in developing the interactions and systems through which information and innovations are put into action in the marketplace to stimulate the economy of the country and strengthen the development systems for further growth. In order to discuss these interactions and intersecting organizations, it is helpful to have an agreed upon terminology and definitions regarding the system.

National innovation systems (NIS) have been defined in a number of ways. Nelson (1993) defined NIS as the set of institutions which determine the innovative performance of national firms through their interactions, including institutions in the areas of education, finance and information. Freeman (1987) includes institutions in both the private and public sectors which initiate, import modify and diffuse new technologies. Lundvall (1992) emphasizes the production and diffusion of new, useful knowledge which is created by these institutions and within national borders. Mowery (1991) emphasizes the ability to translate the results of R&D activities into useful innovations and the diffusion of new technologies.

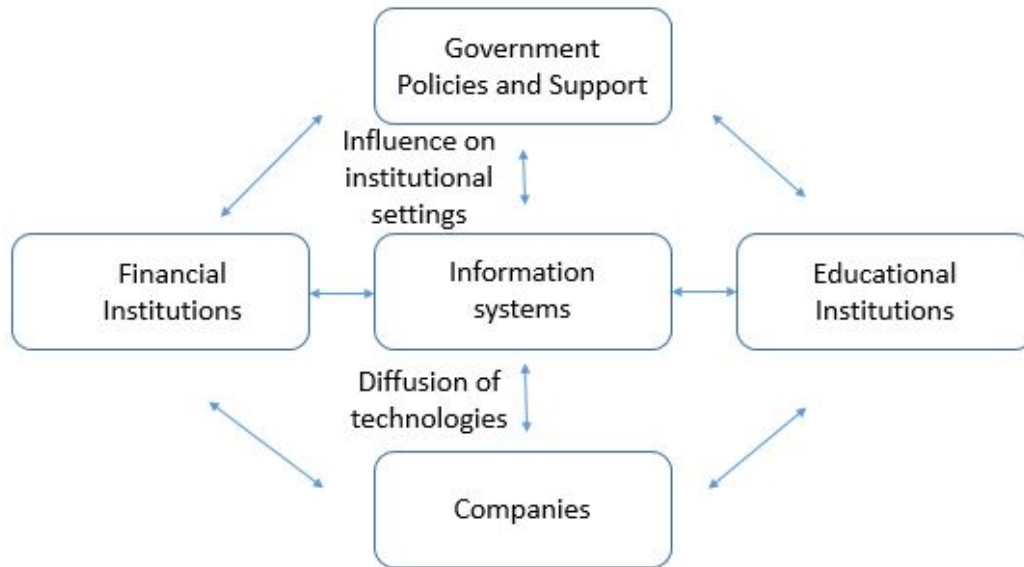


Figure 2 Elements of a National Innovation System adapted from: (APCTT 2015)

The consensus revolves around defining the system as a set of institutions in both the public and private sectors which work to create, import, modify and diffuse knowledge and technologies as products and services. The institutions share a series of influences and connections which are in one form or another dependent on the health of the system as a whole, as can be seen in figure 2.

The arrangement of these institutions and the ways which they interact with each other share many similarities throughout the globe. However, there are many differences due to location, resources, culture and knowledge levels which affect the innovation system not only on the national level but within the regional and sectoral levels as well. Because there is no set prescription for developing a NIS, the tone and standards of the national level interactions are often set by the standards developed on a regional level. “A concept of regional innovation system is a good tool to generate an effective national innovation system, as it can effectively create different sectoral innovation systems in different regions.” (Chung 2002, 485)

In a review of recent trends in NIS research, Balzat and Hanusch (2004) point to the number of policy-oriented studies of innovation systems throughout the world as a signal that the creation of frameworks which enhance innovative activity have become a focal point for policymakers globally, and especially in highly industrialized countries.

Many questions arise when examining the development of innovation systems as to what the key contributing factors are in the best national innovation systems. Is it a function of investment and effort in the right institutional structure? Is the success a result of global conditions and timing?

History plays a great role in the development of a nation's innovation system, being the continuing result of economic development. "A national innovation system can be perceived as a historically grown subsystem of the national economy in which various organizations and institutions interact and influence each other in the carrying out of innovative activity." (Balzat and Hanusch 2004, 197). To understand how the factors influencing the embassy initiatives impact the effectiveness it is able to provide, and the influences the innovation systems of the involved countries have, it is helpful to explore the history of the National Innovation System. This gives us a chance to explore the evolution which has already occurred in the concept, and establish the basis for a further evolving concept into the international realm.

The world is organized by the divisions of nation-states. Therefore, it is quite natural that each nation eventually evolves their own set of practices and capabilities which can largely be called an innovation system. The innovation system of a nation includes many different aspects of the interaction between individuals, companies and governmental agencies. The system of innovation capabilities is affected by the regulatory environment, institutional setting, knowledge base, market conditions and availability and many more. Lundvall (2007) lays out a case that the innovation system concept includes almost everything in a nation. Lundvall himself has proposed that the system includes social capital, welfare systems and the labor market. Therefore, some discussion of the history and evolution of innovation systems to the current state is called for.

Throughout history, technological changes have been attributed as a cause for change and growth, giving advantages to certain nations over others. Discussing the growth of economies in different nations, Freeman (2002, 192) states, "the huge divergence in growth rates which is so obvious a feature of long-term economic growth over the past two centuries must be attributed in large measure to the presence or absence of social capability for institutional change, and especially for those types of institutional change which facilitate and stimulate a high rate of technical change, i.e. innovation systems." In other words, countries which can track a large change in technological development also have seen a large advantage in growth rates as a whole.

Freeman (1997) also explores the change from innovation systems based on the city-state structures, which were the first places where innovation system institutions and interactions can be recognized. These were dominating in Europe, and especially in Italy until change began to lead to a British style system of innovation which is based on industry and the ability to produce. "There was an exceptionally fortunate congruence of science, culture and technology in Britain which made it possible to use science, including Newtonian mechanics, on a significant scale in the invention and design of a wide variety of new instruments, machines, engines, canals, bridges, water wheels and so forth" (Freeman 1997, 115-116).

Freeman (2002) discusses the importance of the convergence of 4 sub-systems in 18th century Britain which can be seen as an explanation for extraordinary growth. The four sub-systems are science, culture, technology and entrepreneurship. There are examples of the opposite phenomena as well, where the failure of connections between these four sub-systems has caused a loss of advantages and growth in comparison with other nations. For example, Needham (1954) lays out a case that this is the reason China lost its technological leadership in the world.

Freeman (1997) further describes how the United States, with a national innovation system similar to that of Great Britain, achieved growth levels which eclipsed other countries. For many reasons, the United States was a melting pot for culture, science and industry. The country also had expanding supplies of natural resources and labor from expansion west and immigration. The United States especially saw spikes in growth rates after the Civil War and the abolishment of slavery (Freeman 1997, 122).

In its World Development Report, the World Bank (1991) concluded that when considering the development of nations since World War II, investment in intangible knowledge accumulation which was the critical factor instead of physical capital investment, which had been believed to be the leading factor. Developed countries have an obvious advantage when considering this. The investment in knowledge acquisition and university systems are usually much higher in these countries, and can be seen as a great advantage in the race for innovation.

A national innovation system is the collective whole of nation-state systems. However, there are usually a great variety of differences in how the innovations systems on the regional or sectoral level act. Lundvall (2007) states that comparing sectoral, regional and technological systems between different nations can be an interesting way to understand the dynamics which exist within the national level. He further states that it is important to analyze the openness to the national systems.

Analysis has shown that capitalist economies which perform better in innovation do so because they have organized markets which are characterized by “untraded interdependencies” and a focus on long-term relationships. (Lundvall et al. 2011)

The focus on the nation is somewhat natural, but there are interesting changes occurring with the increases in communication technology which shrink the impact of borders. Multi-national corporations for one example are increasingly diminishing the importance of national boundaries. In addition, with companies able to work within a wide variety of different cultures and backgrounds within their own ranks, the amount of perspectives and background knowledge can be combined in new and interesting ways.

There is a natural competition between nations and their innovation systems. Every country is of course seeking to maximize the impact that they can make for their own people and constituents. Competition is not exclusive to the international level though. Different regions and sectors within the same country can be seen as competing with each

other for resources and the attention of governmental institutions. Specialization of a region can account for growth in knowledge resources concentrated there and university focuses in the area.

The rich history of NIS shows that nations are able to create great impact through the management and organization of their institutions. This ability to adapt to changing times and conditions makes changing the way in which a NIS works possible. With a concentration of innovation system development within national borders, it can be seen that a country could gain benefit by creating bridging mechanisms which create access points to acquire knowledge and diffuse technology through. While innovation systems naturally concentrated within national borders, the expansion of globalization necessitate changes which allow the institutions within an innovation system to evolve and survive.

2.2 Changes in National Innovation Systems

There are two perspectives which innovation system research can be seen from. The first is a narrow perspective which consists mostly of technology and science. The broader view includes learning, innovation and competence building on a number of levels. (Lundvall et al. 2011). Taking the broader view allows us to take a more holistic approach to the creation and organization of innovation systems, and understand how acquired knowledge can be combined with changing national aspirations to review and modify the structures and institutions having an effect on the NIS as a whole.

The NIS is an evolving entity with many players and institutions involved. Therefore, it is difficult to take an exact picture of a particular NIS at any given time. The evolving nature also means that the system is able to process changing conditions and adapt to the growing demands of a nation as it grows and expands international business operations. The below illustration shows the cycle through which the aspirations of a nation are able to grow with the changing system as knowledge is gained and absorbed. This illustrates how the expansion and internationalization of institutions and businesses within an NIS allow for new interactions and inputs from outer sources and can increase the knowledge and capabilities which exist within the system. Therefore, increasing the number of interactions which occur within an NIS and its outlying connections has a positive affect of growth and knowledge gain.

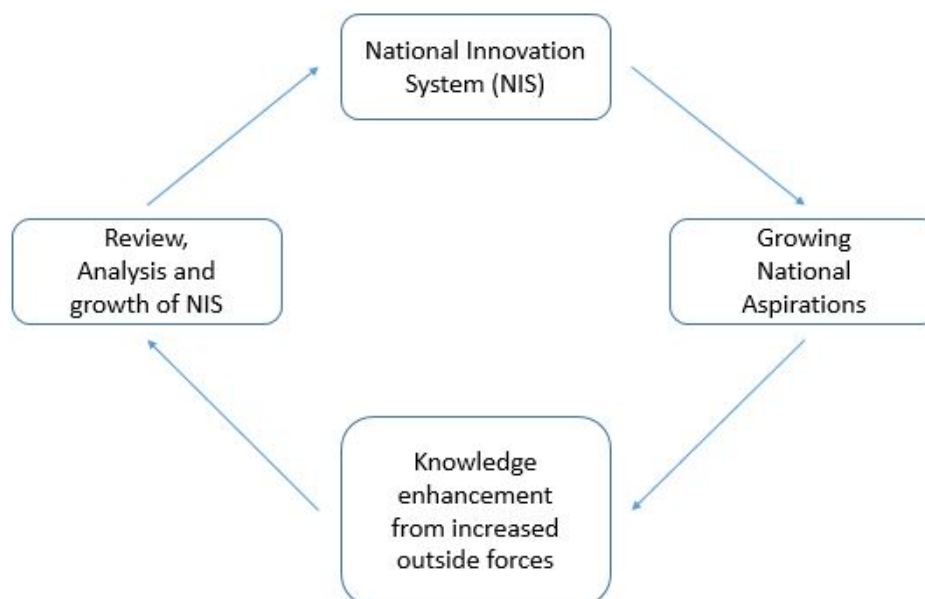


Figure 3 National aspirations in NIS adapted from: (APCTT 2015)

Malecki (1983) discusses the changes which occur in regional and national development, pointing out that the technology and innovation are not black boxes which spread through regions, nations and globally. Rather they are the result of explicit decisions made by firms, institutions and governments concerning the types of products and the processes employed in the region. Locational elements are usually secondary to strategic priorities, but should flow to the most effective regions which are able to take advantage of specific qualities they own to effectively commercialize products and technology. (Malecki 1983).

A large part of how the system is able to change is dependent on the outlook and willingness to implement change. In his 1998 article, Mowery laid out a case that the end of the cold war and decreases in defense spending would necessitate a change in the outlook of policy makers and industry heads. During this time, the structural base of the United States NIS was already shifting with two phenomena occurring at the same time. Industrial R&D was starting to be externalized to a great degree, which also led to a greater level of R&D internationalization. There were also increases in the levels of R&D conducted in the United States by companies from other countries. (Mowery 1998.)

The growth and development of innovation systems is a self-organizing structure that is dependent on many institutions and individuals. Because of the role which individuals play in system development, connections play a key role. This is a natural flow developing from the ecologies of regions, states and nations. (Metcalf and Ramlogan 2008.)

The self-organizing nature of an innovation system also means that when there are deficiencies in the system, those issues are reflected within the complimentary institutions which depend on it. In this way, the ups and downs of the system are reflected throughout,

and can be affected by change in one or multiple components of the system. (Negro, Alkemade and Hekkert 2012.)

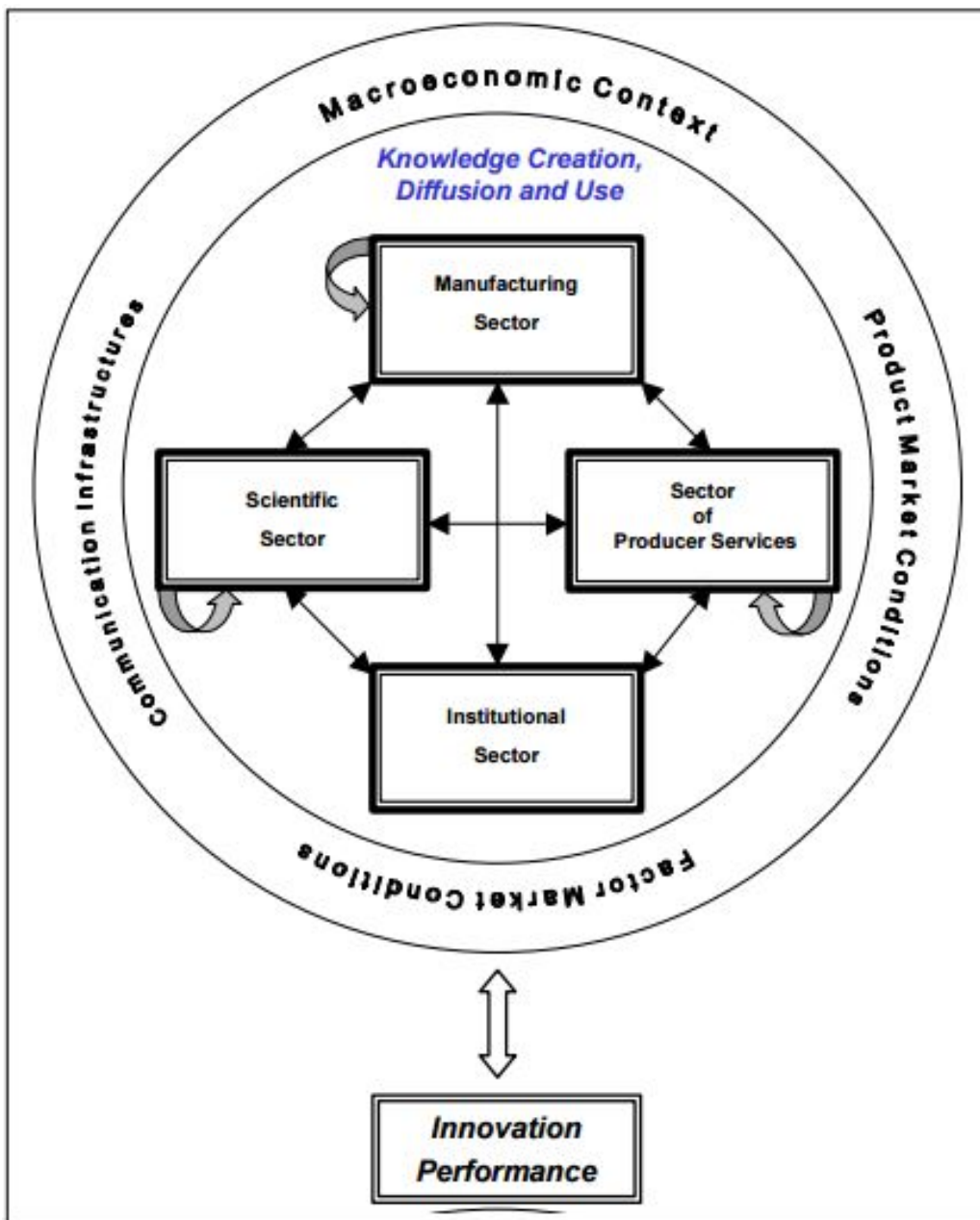


Figure 4 Major building blocks of an innovation system Source: (Fischer 2000)

As can be seen in the above illustration, the performance levels of the innovation system are a product of the interaction of all relevant sectors. Beyond those interactions are a number of forces which affect the creation and diffusion of knowledge, all acting within the larger context of the economic situation.

Discussing the changes occurring in NIS research and policy, Lundvall stresses that modern NIS thinking should have even more emphasis on human resources. *“While an aspect of globalization is that codified knowledge moves quickly across borders, the most*

localized resource remains people, their tacit knowledge, their relationships and their accumulated organizational experiences. Therefore, all parts of the innovation system that contribute to competence building are becoming increasingly important for national performance.” (Lundvall 2007, 42).

Jacobsson and Bergek (2011) analyzed the creation and systemic structure of emerging innovation systems. They laid out a series of steps which are included in the formation of a new innovation system.

- Entry of firms and other organizations along the supply chain
- Formation of social, political and learning networks
- Alignment of institutions
- Accumulation of knowledge

The component processes are all interdependent and interlocked. The changes made in one stage will affect the development of all other stages. Therefore, the creation of an innovation system is a co-evolution process characterized by great uncertainty (Jacobsson and Bergek 2011.)

In summarizing the changing field of innovation systems at the end of the 20th century, Mowery (1998) laid out a set of characteristics which were predicted to define the changing NIS of the United States. The characteristics include:

- Lower levels of federal funding for R&D
- Lower defense related R&D and procurement
- More focus on development of new products rather than pure research activities
- Higher levels of internationalization, including ingoing and outgoing investments in R&D
- Higher levels of IPR protection, domestically and internationally
- Higher levels of cross-company collaboration and university industry collaboration
- More university claimed IPR protection

A natural motion for the development of national innovation systems is to move toward international sources of collaboration and development. Policies and initiatives implemented by governments often have a motive to protect the national system however, which can lead to policies which have, despite best intentions, the unintended consequence of producing roadblocks to internationalization. Therefore, convergence between the structures of various national innovation systems is halted, unplanned and sometimes slow to develop. (Mowery 1992).

There are points of view about NIS which either focus on the increase in knowledge which is circulating and accumulating within the system or on the diffusion of technology through innovations in products or services. The move toward internationalizing innovation systems serves both aspects of the system. Encouraging outer investment in the country draws knowledge and innovations developed elsewhere into a nation's system and allows the firms and institutions inside that system to learn and incorporate knowledge into new innovations.

2.3 Internationalization of Innovation Systems

The focus on the national level is natural because of the structures which have been established to organize the world. However, the focus on the national level when discussing innovation systems has been criticized for pushing policy makers to look toward protectionist or "beggar-thy-neighbor" policies, which can be counteractive to the development of quality innovation policy. (Lundvall 1997).

The expansion of digital technology, and the networking of the world are decreasing the effects of geography more and more each year. There are few sustainable systems which can be insulated only within the borders of a single country. Expansion and sharing of knowledge seems to be a natural progression in the development of innovation systems.

There is growing evidence of an interdependence of innovation systems between countries which cannot be denied. In the late 1980's, Swedish researchers began exploring innovation systems outside of national borders. The idea of technological systems which focus more on technical innovation production. In addition, definitions of supra-national level systems of innovation began appearing in the 1990's. Currently, there are four separate accepted ways to describe innovation systems, including national, regional, sectoral, and technological. (Carlsson 2006).

Summarizing the leading research into internationalizing innovation systems, a common statement which is found in most studies shows that corporate innovation exists in an increasingly globalizing economic context and depends highly on international collaboration and information exchange (Fromhold-Eisebith 2007).

The amount of innovation which is created within national borders, and the amount which is imported from outside varies greatly by country. The below graph details the OECD's data showing over time the amount of technology access which has been taken into countries from abroad.

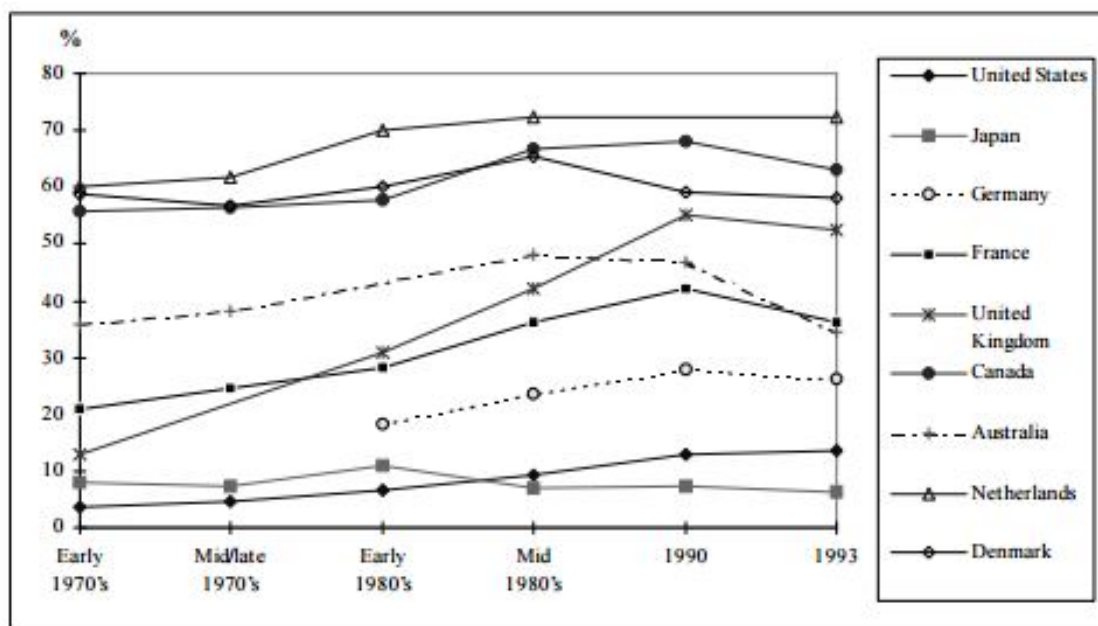


Figure 5 Share of acquired technology obtained through imports (OECD 1997)

This figure illustrates that overall, the United States has traditionally imported a smaller percentage of technology than other developed countries (OECD 1997). This demonstrates that the U.S. has had a superior technological position during this period, with a sufficient amount of technology developed internally. However, it also shows that there is potential to increase the input of technology acquired from abroad to enhance the NIS as a whole.

In reviewing international innovation systems, Niosi and Bellon (1994) found that smaller countries tend to have a larger flow of technology and knowledge back and forth over borders more than larger countries which tend to be more self-sufficient. In addition, they found that the EU is the most realized form of a supranational system in action and that the impact of national policy plays a key role in the filtering of potential entries into a nation's innovation system. So, while the interconnected systems become increasingly intertwined, the role of the local and national networks still carry an overwhelming influence. (Niosi and Bellon 1996).

It can therefore be implied that actions taken in the local and national realms of innovations systems can carry an influence which have the potential to impact the development of international innovation system structures.

The opening of global opportunities for small companies has an impact on many industries in that the acquisition of start-up companies by larger firms is increasing and means that industries such biotechnology, companies rarely grow into mature enterprises on their own, but are more commonly acquired by firms with an established foothold in the industry. (Mowery 1992). In essence, this means that technology in a developmental

stage has more mobility on a global stage and is able to jump over national boundaries in the process of development.

Foray (1995) presents an interesting conundrum in that in order to create a globally matching innovation system, it would require a reduction in the diversity of the elements such as IPR management and protection, education and technology development which are conducted in individual countries. However, the diversity present in each system is what makes them unique compared to other systems and is a central feature of national innovation identity. It is therefore important for systems seeking to interact on an ongoing basis to find entry points in which the institutional settings are favorable to trade and development on a mutual level.

Bartholomew (1997) studied the biotechnology industry and concluded that mixing local R&D with the resources and solutions of foreign innovation systems gave firms a competitive boost. She concluded that the most important way that companies could boost their innovative capability was through cross-border alliances. Geography is less of an obstacle for all sized companies, opening opportunities to increase the variety of inputs from international sources which go into development of products and services at an earlier stage than previously possible.

In industries which count heavily on tacit knowledge, which are naturally clustered near educational institutions that support them and are hard to transfer, the nature of the knowledge can act as a barrier to internationalization and participatory collaboration with other innovation systems (Carlsson 2006).

The impact of international input to a national system has the potential to create a great deal of value. For instance, Sweden in the 1980's was lauded as a world leader in factory automation. During this time, they were able to move quickly and keep on top of the game by relying on foreign suppliers and networks for up to three quarters of technology employed. (Carlsson 1995).

The international level of innovation systems is impacting national level systems in interesting ways, which have not been thoroughly studied. *“Such shifts in the preferred analytical level are likely if international intrasectoral ties in the generations of innovations will continue to intensify while domestic ties lose importance, and if the significance of national institutional framework conditions should descend at the expense of regional or sectoral framework conditions.”* (Balzat and Hanusch 2004, 208)

The interactions between various levels of innovation systems do not need to be at odds with one another. In the best case, there is great potential in bridging the institutions and activities of each level together. The national level holds the most superior position in terms of regulation and the establishment of institutional frameworks because of the influence that national policies carry in business activities. However, it can be seen that innovative interaction is not produced by political directives or from formal institutions. Interactions emerge from social processes, and the need to integrate new sources of

knowledge and technology. In this sense, the emergence of international innovation systems affects business and innovative activity more directly at a sectoral or regional level. (Fromhold-Eisebeth 2007).

As can be seen below, it is possible for International Innovation Systems to work in tandem with NIS and Regional systems (Fromhold-Eisebeth 2007). In the best case scenario, all levels of the system would be able to benefit from the efficient flow of inputs across borders. In the United States, the NIS is well developed, and could potential absorb influence from international innovation system influences. However, it is also a challenge for the government to open channels for absorption.

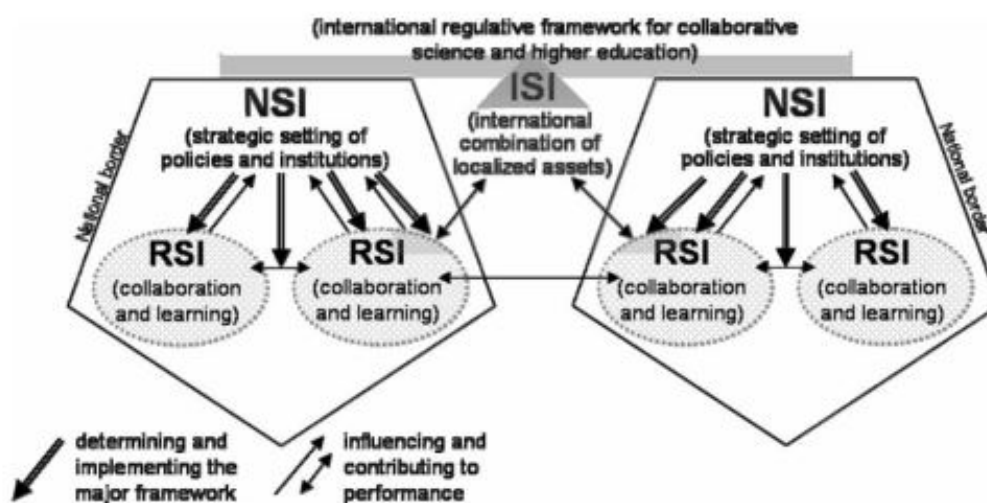


Figure 6 Interdependencies of national, regional, and international systems of innovation (Fromhold-Eisebeth 2007)

The ability for individual firms or industry organizations to connect and acquire knowledge internationally allows for more specialization at the regional level, thereby increasing the diversity, and overall health of the NIS as a whole. Learning is a strategic element in all innovative processes. Learning gained from international interactions can be filtered through specific and local characteristics at the regional level, offering a chance for the NIS to absorb institutional changes and review desired policy structure. (Cooke Uranga and Etxebarria 1997).

Many firms find entry barriers in the form of costs of product introduction and marketing related barriers, leading to an increase in collaborative ventures between startups and established firms interested in their technological assets. This form of collaboration allows both sized firms to gain knowledge and market advantage across borders. (Mowery 1992). This is another way for firms to externalize their own R&D functions, by acquiring the best technology which emerges from the startup scene. It additionally facilitates the internationalization of technology diffusion in an accelerated form.

The internationalization of national innovation systems requires a good deal of structural change, which progress slowly over time. Mowery (1998) finishes his summation of the status of the United States NIS by stating that such structural changes will lead companies from the United States to increase the links they have with foreign firms as well as government-supported program.

Other institutions which play a role in the NIS face pressures which lead them to a natural internationalization. Universities especially fall into this camp. Universities not only produce a supply of qualified individuals to fill the workforce, but also play a key role in knowledge creation, business-university collaboration and business creation through spinoff processes. (Mowery and Sampat 2004.)

Bartell lays out the case for increased university internationalization, stating universities should become institutions without boundaries to create individuals who are able to prosper in the environment which is prevalent in the new century. Universities without boundaries should be better equipped to deal programmatically with transnational connections which occur on all societal levels. It is a necessity to educate individuals for global functioning, thereby strengthening the functioning of the innovation system which they will eventually become a part of. (Bartell 2003).

In summation, there are a number of factors which are attractive about breaking out of thinking about innovation systems purely from a national level. They include:

- 1) Places innovation and knowledge creation in focus, emphasizing interactivity and dynamic innovation,
- 2) Shifts thinking from the knowledge creating firm to a concept of knowledge creating territory,
- 3) Innovation is viewed as a social process, placing emphasis on institutional context and the process of knowledge creation and dissemination. (Fischer 2000).

Encouraging the internationalization of the nation's innovation system can encourage firms and organizations globally to seek involvement within the system because there are available entry opportunities which offer the chance to tap into the national potential and become a part of the operational system. This is especially pertinent when discussing Finnish firms which wish to internationalize to the United States. The technological and contextual similarities between the two countries make business relations possible in most cases. However, the disconnect between institutions and foreign businesses causes a need for government intervention. The lack of information about market possibilities can be a strong barrier to the decision to approach the U.S. market. The need for informational and networking building have created a fertile field for the embassy in Helsinki to create new services and programs to assist Finnish firms.

3 GOVERNMENT INTERVENTION IN INTERNATIONALIZATION

In the process of internationalization of innovation systems, many institutions and organizations take a broader international approach. In particular, it is seen that businesses need to adapt an international approach and be willing and ready to collaborate with organizations outside of its home country. There are many factors which can influence, encourage or discourage businesses from doing this. For the purposes of this study, we will primarily discuss the incentives and barriers which face companies that are internationalizing, and what the role of government should be in influencing decisions.

The role of government in businesses and in interactions with entrepreneurs can be debated in many ways. However, it is agreed that entrepreneurship is an important engine of growth for nations and government policy helps to shape the institutional environment in which decisions are made by entrepreneurs. (Minniti 2008).

The government can do little to affect the supply levels of entrepreneurship, but can create policies which influence the allocation and choice of individuals to engage in entrepreneurship (Baumol 1990).

Governments are able to set the rules of the game by setting the institutional environment in which businesses work. In the setting of institutional rules, the government can constrain human action, encouraging some activities, discouraging others, and possibly reducing uncertainty in the environment. (Minniti 2008).

The role of government in business is normally the most active and effective in the discovery stage, supporting research processes. The figure below explores the spectrum of innovation from a business point of view and the roles of individual actors in the development process. From this figure, it can be seen that the government is most able to influence business creation during the first stages of development, after which industry interaction and investment capital take over a larger role in taking a product or service to commercialization. (Jackson 2011).

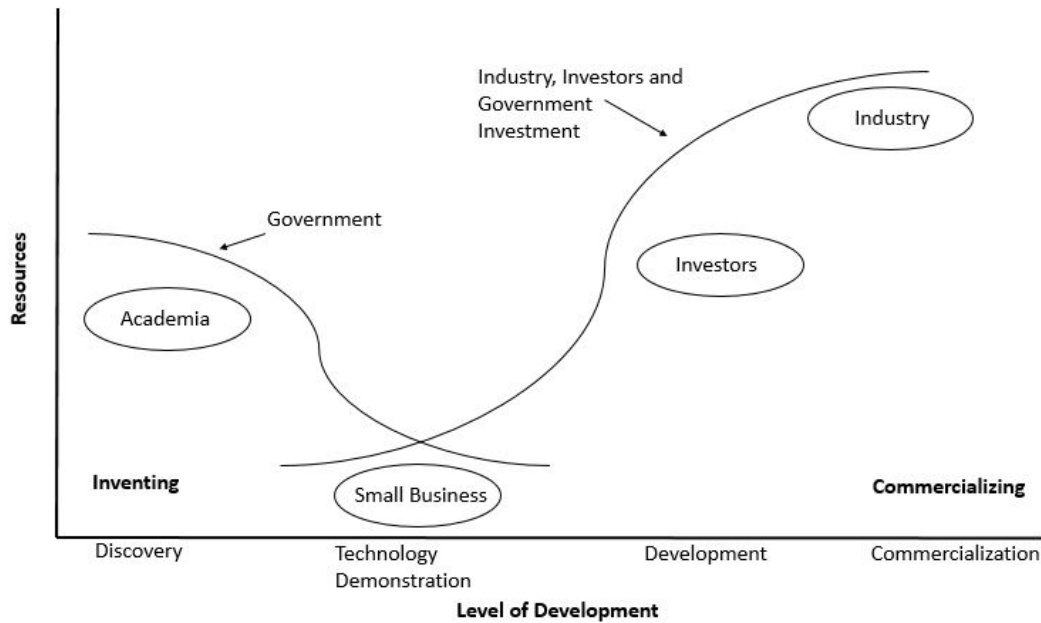


Figure 7 The Innovation Spectrum (Jackson 2011)

Lee and Park (2006) explored the linkages within an NIS and found that government support of early stage R&D makes success much more likely, incentivizing collaboration with basic research institutes contributes to the success of early R&D and that forming networks which include downstream sectors public and private R&D projects succeed. (Lee and Park 2006).

There is also the question of which avenues are the most appropriate for government to intervene in. There are sources of direct support, such as agencies and programs designed to take direct action in influencing the companies involved in commerce. The other side is indirect programs actions which seek to develop the institutional setting in which entrepreneurs act.

In indirect action, the government is seeking to create optimal conditions for success, and allowing entrepreneurs to interact with the environment as they are able. The figure below lays out the scope of government involvement in export promotion, which is an optimal area for intervention because it is one of the most common methods of first internationalization and can occur in all stages of a company's lifespan. (Diamantopolous et al. 1993).

The Scope of Government Export Promotion
 (Source: Understanding the Role of Export Marketing Assistance: Empirical Evidence and Research Needs, Diamantopolous, et al. 1993)

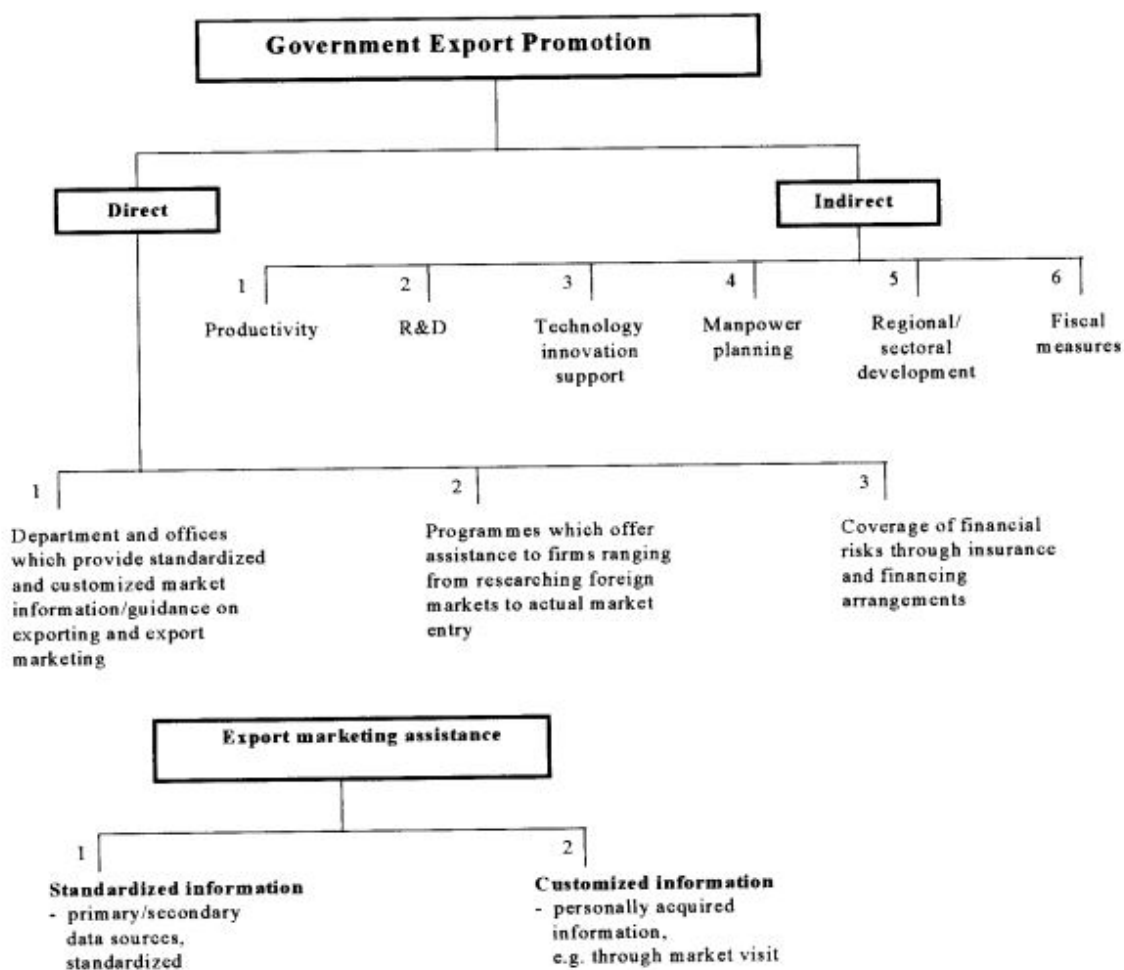


Figure 8 Scope of Government Export Promotion (Diamantopolous et al. 1993)

Criticism of government action can come when policy is not focused enough. Wagner & Sternberg state that in order to best support entrepreneurial activity, enacted policy should be tailored around the economic region and specific institutional context. (Wagner & Sternberg 2004).

In summarizing the role governments should play, Minniti states that “government should endeavor to create enabling environments conducive to the division of labor, the commercialization of invention, and exchange.” She continues, emphasizing that the rewards of productive innovation are preserved through the protection of property rights, enforceable contract and commercial freedom. (Minniti 2008).

3.1 Incentives to Internationalization

There are a number of reasons that companies desire to internationalize operations. These can include gaining access to new markets and securing competitive advantages which cannot be reached while operating solely within national borders. The decision to attempt internationalization is usually made when weighing the barriers which are opposing the operations and the incentives which present themselves as positive attributes of the choice (Hutchinson et al. 2007).

The decisions which are made in the process of internationalizing a company are not solely a rational decision between pluses and minuses, but hold a very human factor at the core. Recent literature has found that for SMEs, the role of the founder or entrepreneur in the decision to internationalize is a determining factor for the company. Research has highlighted managerial factors such as competence, international orientation and global mind-set of the managers as a driving force in the decision to start international activities. (Hutchinson et al. 2007).

The below figure explores the factors which influence the internationalization decision. It is a complicated decision made in an environment where there are a number of uncertainties. Internal and External forces both have their own priorities. The company is also subject to the facilitating factors created from these forces, along with the motives and goals of various parties. This shows that the influences for an internationalization decision can come from many sources and are linked to each other in various degrees. (Hutchinson et al. 2007).

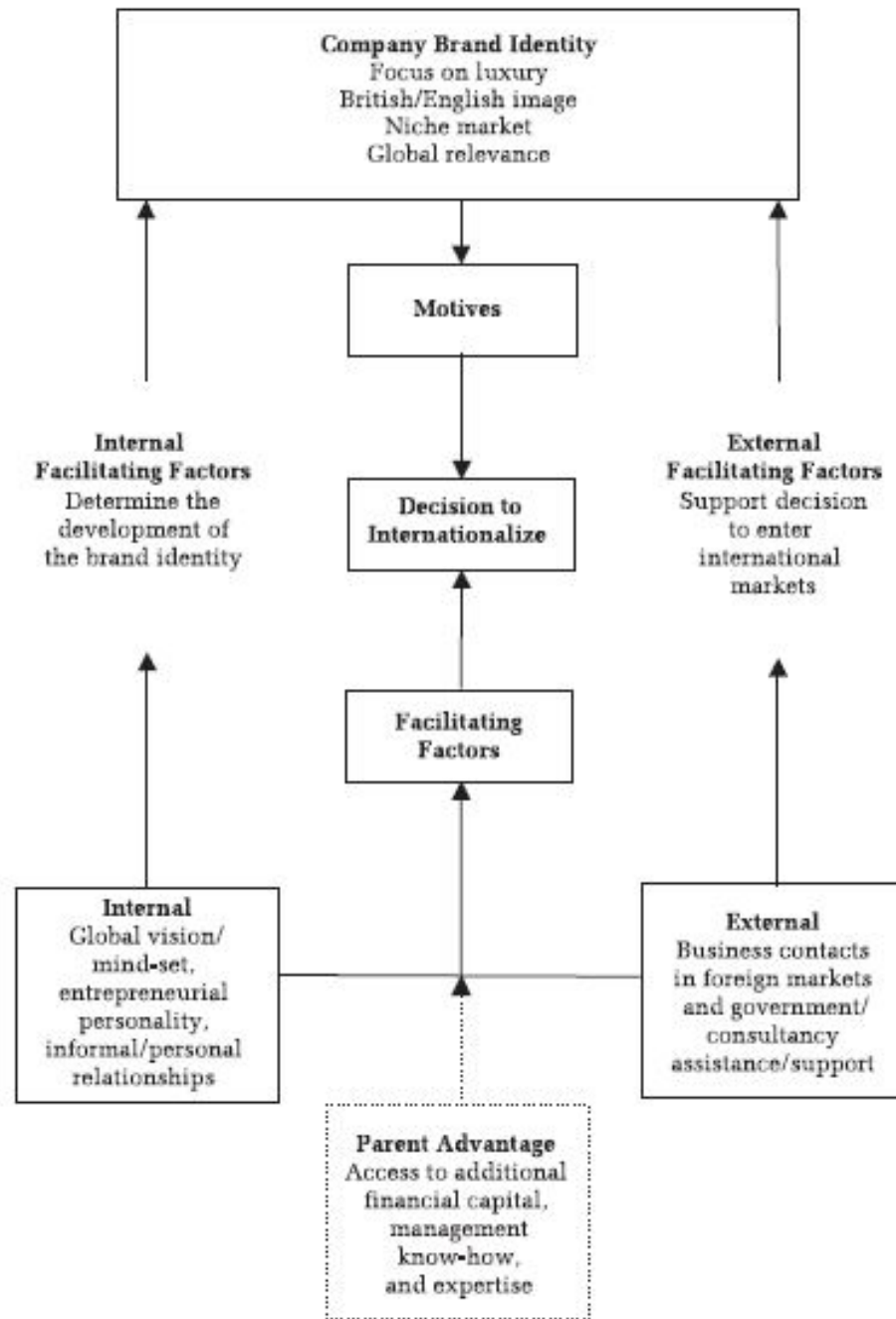


Figure 9 Decision to Internationalize (Hutchinson et al. 2007)

In their 2007 report, the OECD showed that growth and knowledge related motives are leading factors for the internationalization of firms. In addition, a number of “soft” factors which led to increased internationalization such as “network and supply chain links, social ties, immigrant links, improved global trade infrastructure, and sector and region-of-origin factors.” (OECD 2007).

The OECD (2007) also highlights the importance of organized private sector-led support structures such as Chamber of Commerce Networks. Finland is elevated as a partic-

ular success story in this regard. Another successful example of public-private organization supporting internationalization in Finland is Finpro, which has 53 trade centers in more than 40 countries to provide consulting, advice, research assistance, trade fair support, etc. (OECD 2007).

Beginning international activity with exports registers highly on the likely mode of entry for a majority of businesses. In a 1996 study, Korhonen, Luostarinen and Welch examined the inward and outward patterns of Finnish business and the government policy which impacted them. The study showed that a greater number of companies began international operations through inward activities, importing products, services licenses, etc. In a high number of cases, this initial inward movement created the opportunities which led to outward international activity as well, either with the initial partner, or with organizations which were involved in the supply chain. (Korhonen et al. 1996).

In studying the combined effects of incentives and barriers on export decisions, Ramaseshan and Soutar summarized the leading research on incentives to internationalization and listed the following as the most noted reasons for companies choosing to internationalize themselves. Factors for companies were both internal and external and included adverse conditions in home market, recession or saturation in domestic markets, domestic competitive rivalry, competitive pressure, profit and sales opportunities in overseas markets, excess production capacity, idle production or administrative resources, differential firm advantages, technology advantages, marketing advantages, technological intensity of the product, age of the firm, firm size, international horizon of managers and institutional assistance and promotional programs. (Ramaseshan and Soutar 1996).

3.2 Barriers to Internationalization

The number of influences to internationalization are great. However, not all firms decide to internationalize even when they could gain advantages from it. There may be a number of reasons for the decision to not internationalize. The factors considered to be barring entry to foreign markets or participation in international trade are barriers (OECD 2009).

In an extensive survey, the OECD studied the barriers to internationalization which are faced by SMEs throughout the globe. The following table summarizes the top 10 barriers described by SMEs engaged in international activity (OECD 2009).

Rank- Weighted factor	Description of barrier
1	Shortage of working capital to finance exports
2	Identifying foreign business opportunities
3	Limited information to locate/analyze markets
4	Inability to contact potential overseas customers
5	Obtaining reliable foreign representation
6	Lack of managerial time to deal with internationalization
7	Inadequate quantity of and/or untrained personnel for internationalization
8	Difficulty in matching competitor's prices
9	Lack of home government assistance/incentives
10	Excessive transportation costs

Figure 10 Barriers ranked by SMEs (OECD 2009)

Individual barriers help to understand the specific forces that face companies and discourage them from internationalizing. However, it is more helpful to understand the overall forces at play to categorize these barriers into groupings which make understanding the larger impact of barrier existence clearer. Morgan & Katsikeas (1997) summarize the findings of many researchers on the impediments to internationalization and lay out four categories of challenges and obstacles which firms face when attempting to export or internationalize their operations.

Strategic obstacles

A lack of resources available to a firm can harm the adaptive capacity and impose strategic limitations. Government and regulatory export policies can also lead to strategic obstacles. Strategic impediments can change the playing field so that it appears foreign competitors hold an advantage which may be insurmountable and lead firms to choose other avenues to utilize resources. (Morgan & Katsikeas 1997).

Operational obstacles

Operational obstacles reflect a mismatch in the marketing mix decisions and functional level marketing considerations. Especially in product based businesses, exporters have found issues meeting the target market design, style, quality and regulatory needs. If the

operational obstacles cause the firm to lose the ability to produce and distribute products at a competitive price, they may be unable to compete with local alternatives. (Morgan & Katsikeas 1997).

Informational obstacles

A firm needs to be able to identify, analyze and evaluate information about the target market on an organizational level to be able to find the organizational fit between strategy and environment. Lack of information can hold a firm back from forming a proper strategy or finding needed partnerships. Marketing research activities can be seen as a measure to tackle informational obstacles, but is often cost prohibitive. (Morgan & Katsikeas 1997).

Process-based obstacles

International operations often involve interactions between a number of players in the distribution channel, with service providers and governmental bodies. Slowdowns in the process chain can cause major difficulties for the internationalizing firm. Firms are often unfamiliar with government regulations and assistance programs, which can create drag on initial international business processes. (Morgan & Katsikeas 1997).

The perception of obstacles can be different between geographic regions. Sullivan and Bauerschmidt found that while American firms were likely to perceive obstacles as country specific, European firms were more likely to perceive barriers as challenges which arose from firm-specific conditions. (Sullivan & Bauerschmidt 1989).

A survey of Midwestern business executives found that businesses were hesitant to begin export operations due to a lack of experience in exporting and a number of informational concerns about foreign demand, regulations and financial implications. The prime benefits from exporting appear to be in the area of competitiveness as well as profitability, which can be seen as a partial justification for government involvement in stimulating the creation of export activities. (Kotabe and Czinkota 1992.)

Because exporting is the most common form of initial stage internationalization, it is important to recognize the roadblocks which can affect this decision. Kotabe and Czinkota (1992) summarized the export related problems faced by companies in the following categories.

- Logistics (Transportation, documentation, financial information, distribution, packaging and insurance)
- Legal procedures (government red tape, product liability, licensing, customs)

- Servicing exports (parts availability, repair service, technical advice, warehousing)
- Sales promotion (advertising, sales effort, marketing information)
- Foreign market intelligence (locating markets, trade restrictions, competition overseas). (Kotabe and Czinkota 1992).

In summarizing the combined effects of incentives and barriers, Ramaseshan and Soutar found that firms may choose to internationalize even with significant barriers if they perceive that the incentives are strong enough to warrant the investment and effort required to overcome them. In contrast, some firms chose not to internationalize even in conditions of low barriers if the perceived advantages are not enticing enough. (Ramaseshan and Soutar 1996).

Leonidou studied the organizational effects of barriers to internationalization and found that the most serious barriers to internationalization were those associated with the foreign environment. These geography-based barriers included finding opportunities, locating proper representation and competition forces. (Leonidou 2000).

Of course there are different barriers encountered depending on the region being explored and the region that the company is residing in. The Finnish Ministry of Foreign Affairs conducted a survey to identify the barriers faced by Finnish companies in foreign markets. In regards to the United States, the trade barriers were reported as follows (Finnish Ministry of Foreign Affairs 2013).

#	Type of barrier	%
1	Discriminatory product specifications	31.5
2	Other barriers	13.0
3	Movement of persons	11.1
4	Customs tariffs levels	9.3
5	Intellectual property rights	7.4
6	Movement of Capital	5.6
7	Customs procedures	5.6
8	Public procurement	3.7
9	Competition conditions	3.7
10	Quantitative restrictions and licensing	3.7
11	Business environment	3.7
12	Tax problems	1.9

Figure 11 Trade barriers encountered in the United States by type and sector (Finnish Ministry of Foreign Affairs 2013)

In addition, the 2013 survey by the Ministry identified the top markets of interest for Finnish companies as Russia, Sweden and China, followed by Germany and the United States. When questioned what would be most needed from public internationalization services, the respondents stressed the need for good preconditions in a market to ease the transition to international activities. The activities of local government services such as ELY (Centre for Economic Development, Transport, and the Environment) centers were highlighted as valuable, but it was stressed that companies desired Finnish diplomatic missions abroad to act as door-openers and promote networking activities. (Finnish Ministry of Foreign Affairs 2013).

There is also considerable evidence that a major weakness in international competitiveness for both the U.S. and the EU doesn't stem from the production of R&D, but the translation of those advances into viable commercial products which are deliverable to the market (Mowery 1998). The OECD listed the 3 major ways which home governments can support the overcoming of barrier into export markets. They are in International Negotiations, Legal Proceedings and Trade Advocacy (Fliess and Busquets 2006).

3.3 Government assistance to incentives and overcome barriers

Governments have a role in encouraging SMEs to move to higher levels of competence and therefore gain a competitive advantage in a growing global environment (Hashim 2012).

There are a number of tools which can be used to exert the influence of a government towards the goals they have defined, but a growing base of research suggests that some of the most effective and meaningful tools which governments employ are informational. (John 2013).

The OECD summarized findings from a number of business surveys which suggest that a number of barriers faced by companies such as documentation overload, insufficient information about requirements, lack of information on laws and administrative needs, transparency and bureaucratic delays would benefit from an increase of informational resources and contacts (Fliess 2006).

The government's dilemma is in figuring out the right level of involvement in the economy and within the business environment. This is normally cast as a choice between free market ideology and interventionism. However, as the government can be seen to have a renewed role as the economy approaches technological frontiers, when technological innovation involves spillovers which are facilitated by networks. (Mahmood and Rufin 2005). In discussing the decisions facing government's role, Mahmood and Rufin

(2005) summarize, “Economic and political centralization have to give way to a more market-oriented and democratic role if innovation is to thrive.”

In the below figure, Pietrasienski lays out a picture of the different phases of SMEs seeking to internationalize, and the kinds of governmental support which fit for each phase. From this, it can be seen that there are levels of individualization in service which make sense only after a company has taken steps forward in internationalization. Prior to this, a governments resources are better spent on generalized services designed to encourage initial explorations. (Pietrasienski 2011).

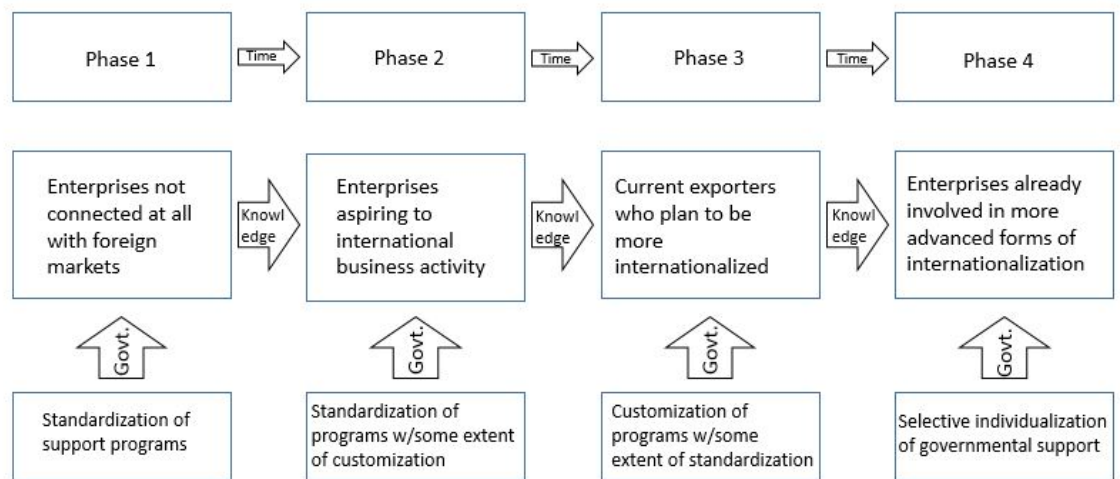


Figure 12 Concepts of governmental support programs in different phases of companies' internationalization (Pietrasienski 2011, 194)

As an example of the services which a government is able to offer, Hashim lays out the case of the Malaysian government which has six key roles of long term strategic planning, export agent, financial agent, negotiator, taxes and incentives, and regional cooperation. (Hashim 2012).

The government of Slovenia in its Programme for Stimulation the Internationalisation of Companies for the Period 2010-2014 (Republic of Slovenia 2010), laid out the activities which would be the focus of its support programs. They include:

1. Information and support activities
2. Market opportunities analysis and consultancy
3. Promotional activities
4. Education for international business
5. Internationalization financing

Many governments provide forms of assistance to help companies connect with foreign markets and potential partners. However, Okoroafo found that the percentage of

small companies which are aware of government assistance services is low, and the actual usage rate is even lower. He also noted that the key reasons stated by non-exporting companies for not internationalizing are areas which have government support services available. (Okoroafo 1999).

This implies a mismatch in the communication of available government services to those companies which would best be able to take advantage of them. Torres, Varum and Banno found that “*firms’ competencies positively affect awareness and negatively affect the use of public support.*” (Torres, Varum & Banno 2012). This indicates that there is a threshold of competency in internationalization past which companies feel that government assistance is not helpful.

From the mismatch of awareness and usage of services, we can surmise that promotion of broad government assistance opportunities would be better focused on companies which are in the early stages of internationalization. “*The promotion of internationalization specifically through non-financial measures seeks to alleviate any shortfalls in competencies when a company embraces internationalization, entering environments that are often quite distant in geographical, cultural and institutional terms.*” (Torres et al. 2012).

Government agencies can best attract firms to governmental programs by showing the potential tangible benefits which can be gained from using various assistance programs (Mahajar and Yunus 2006).

Hutchinson, et. al., found that facilitating agencies such as business networks and government agencies such as the Department of Trade and Industry had a great impact on the ability to manage international operations in action. In particular, they found that “the ability of management to network more formally with agents, designers and business contacts proved significant in the development and support of overseas operations.” (Hutchinson et al. 2007, 108)

The connection to suppliers and other established contacts in a foreign country being a strong leader in the choice to internationalize backs up the idea of government involvement in networking activities, establishing connection between players in other countries as a kick-start to internationalization (Pietrasienski 2011).

An interesting change is facing government programs in that a number of small firms are of the nature that they are acting internationally from the outset of operations. These “born-global” companies, usually knowledge-based companies offering value-added products and service, do not fit the usual assumption behind government support that companies with incrementally grow in the domestic market and expand internationally online when a suitable advantage is found. For these companies, the value of stimulation programs is limited, generalized export market information is of limited value, they demand a much faster response than traditional companies and demand greater support in developing international network relationships. (Bell and McNaughton 2000).

The need for international networks is further laid out by Zhou, Wu and Luo, finding three main benefits from social networks. They are knowledge of foreign market opportunities, advice and experiential learning and referral trust. The strength of personal networks can benefit both outward internationalizations which stimulate the firms by learning new technologies and having the chance to test the needs of foreign markets, as well as inward internationalizations which give the firms a chance to tap foreign technologies, gain management skills and receive capital investment. (Zhou et al. 2007).

Kotabe and Czinkota found that for early stage companies, the government was best able to help with filling informational gaps about foreign regulations and restrictions. Networking and informational programs are designed to fill these gaps for participants and provide feedback about the needs in the environment. Governmental red tape was also listed as a problem for early stage companies looking to export. (Kotabe & Czinkota 1992).

Kotabe and Czinkota then go further to find that competitiveness over profitability was a key benefit of internationalization, which can be seen as a justification for government intervention in the internationalization process, encouraging the long-term health of firms. They also imply that more resources should be placed on firms in the early stages of internationalization and away from those in later stages. (Kotabe & Czinkota 1992).

These findings back up the need for government support for companies that are seeking to internationalize. However, a growing challenge for countries is figuring out how to support companies in a changing international environment and maintain the focus on goals and aspiration that the country holds for its own NIS.

To summarize, the areas where government agencies are best able to reduce the impact of barriers to internationalization for a large number of companies is in reducing the information gaps which exist for SMEs and facilitating the creation and maintenance of networks supporting internationalization. Many incentives exist to assist internationalization, but require promotion to ensure that the right audiences are made aware of their existence and benefits. The theoretical background of this chapters allows us to later draw insights into the most relevant actions the embassy can take to effect the internationalization of Finnish firms. As well, the principals of government intervention allow us to evaluate the key factors which influence the actions of the embassy.

3.4 Synthesis – Dimensions of government intervention and support provided by governments

The above sections laid out the theoretical background used to develop the synthesis of this study presented in Figure 13. This synthesis summarizes the concepts discovered in

the literature review and serves as the guiding theoretical framework for the empirical portion of the study.

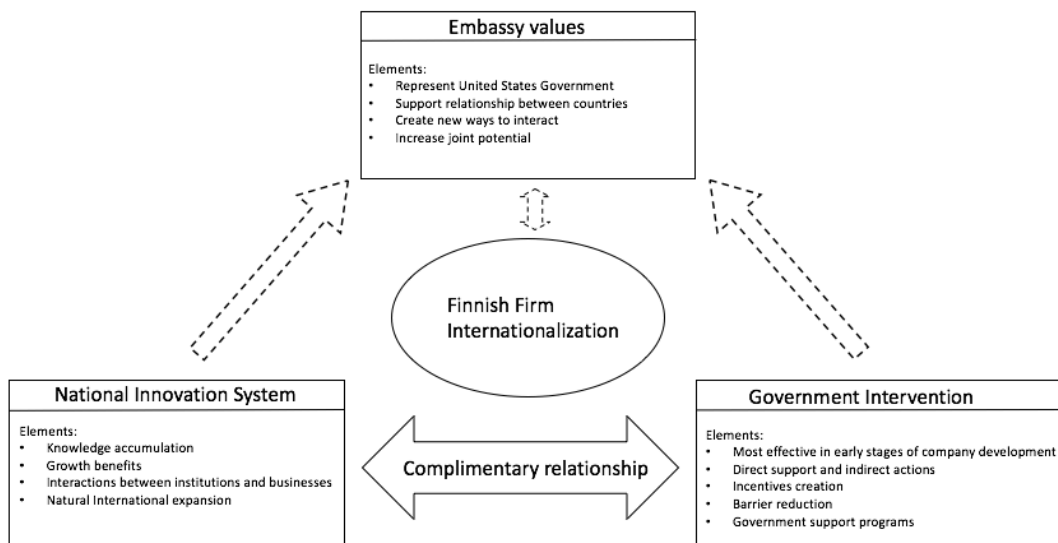


Figure 13 Theoretical framework - Institutional setting for government intervention

The environment influencing the services which the embassy is able to provide to Finnish firms interested in internationalizing to the United States is represented in the above figure. The setting is represented by three boxes. Each component includes a listing of the key elements.

In this context, the embassy is attempting to act as filter for the larger NIS of the United States while interacting with Finnish firms utilizing methods of government intervention. The embassy is a natural go between in this case because it is able to take influences from both components, represented by dotted arrows in figure 13, and utilizing the values which are present in the mission and goals of the embassy create new programs and services which seek to provide value for Finnish firms as well as enhancing the components of the U.S. national innovation system.

Representing the government of the United States and the institutions from the U.S. which act internationally is the strongest tool the embassy has in influencing Finnish firms in internationalization. The elements of NIS make it an especially valuable tool for the embassy. Lundvall (1992) showed that NIS is a powerful tool for production and diffusion of new knowledge, while Mowery (1991) focused on the ability to take R&D results and create useful innovations and new technologies. Mowery (1998) later showed that the levels of R&D in the United States conducted by companies from other countries was increasing. Metcalf and Ramlogan (2008) also showed that the growth of interactions

between institutions and individuals is a natural development when connections between regions, states and nations are opened.

The internationalization of innovation systems is also a natural progression in development. Fromhold-Eisebith (2007) showed that this internationalization of innovation systems is a result of corporate globalization, but that it relies heavily on information exchange and collaboration.

The expansion of innovation systems to the international level means that more companies, and at earlier stages have a chance to access the institutions which may have been previously reserved for companies within national borders. Because of the nature of the innovation system and the information sharing and knowledge growth which results, the players on both sides of the international connection have a chance to benefit from the increase in interactions.

In a country like Finland, which is well matched with the United States but has a large physical distance from markets, there is a clear need for institutions to intervene in creating bridging mechanisms between countries. As can be seen in Figure 7 (Jackson 2011), the government is best suited to assist the development of innovations in the early stages when companies are open to new inputs of knowledge.

There are many types of government assistance possible, but as Diamantopolous, et.al., (1993) showed, services can be divided between direct support and indirect action. In this case, the embassy is best suited to provide indirect support which create environments which Minniti (2008) described as conducive to the division of labor, invention commercialization and exchange.

The government has the possibility of affecting businesses by creating incentives and reducing existing barriers. The obstacles companies faced are categorized and summarized by Morgan and Katsikeas (1997) as strategic, operational, informational and process based obstacles.

Incentive creation is a more difficult proposition for the embassy to accomplish in the Finnish environment. With a focus on indirect support actions, the embassy is best able to create facilitating factors which are laid out by Hutchinson (2007) in Figure 9. The strongest tools which governments possess in this area are in filling information gaps (Kotabe and Czinkota 1992) and in creating and support networking opportunities (Hutchinson et al. 2007).

With this setting, the embassy is able to test the creation of new services which are designed to support the internationalization of Finnish firms. The creation of these services is novel compared with usual government programs because they are aimed at foreign companies. An ideal outcome of services is to support the companies which are internationalizing while creating connections that can have meaningful impact to the national innovation system in the United States. The complimentary relationship between the theories of NIS and governmental intervention provide a chance for the embassy to

create a positive institutional setting which is supportive of business exchanges between the United States and Finland which benefit both countries and create new chance for the development of new interactions and increasing the joint potential which the two countries share.

The setting provided by the strong position of the U.S. national innovation system which is able to follow the natural progression towards internationalization combined with an embassy which is willing to take action to provide services to companies in a foreign setting makes the U.S. Embassy in Helsinki a unique case which warrants study. This mix provides a chances to explore the interaction between these two concepts and the application in a real-world setting.

Chapter 2 and 3 provided the theoretical framework which the empirical portion of this study was based upon. The next chapter will describe the design and methodological approaches which were used when conducting the empirical portion of the study.

4 RESEARCH DESIGN

4.1 Research approach

Any research study which seeks to contain an empirical study element must make the choice between using qualitative or quantitative methods of research, or a combination of mixed methods. The researcher should choose a method which best suits the needs of the project and are best able to answer the proposed research question. The choice of method is based on the research questions presented in chapter 1.3.

A qualitative approach has been chosen for this research. Qualitative research is able to focus on the processes which underlie the actions and programs which an organization undertakes. Qualitative research is common in cases which the researcher wants to understand human behavior and functions, especially in studying organizations, groups and individuals. Qualitative data has a particular benefit in preserving chronological flow and suffer minimal effects from retrospective distortion. (Ghauri and Gronhaug 2002).

Qualitative research consists of three major components:

- *Data: often collected through interviews and observations.*
- *Interpretive or analytical procedure: the techniques to conceptualize and analyze the data to arrive at findings or theories.*
- *Report: written or verbal. In case of students, the report is written in the form of a thesis or project.*

(Ghauri and Gronhaug 2002, 87)

The research question here is: *How do initiatives of the United States affect Finnish firm internationalization?* Therefore, the study is trying to answer the question of what forces are at play in the innovation center, and how those factors can impact both the embassy operations and Finnish businesses. It was determined that a case study approach would allow the research to progress in the most natural way, through collecting data from a number of different sources and methods.

The case study approach employs a number of data collection techniques, from interviews, to observations and documentary analysis. Case studies should seek to use a variety of sources in order to triangulate data and ensure a balanced data set. The case study strategy is very appropriate when asking the question “why”, but also in “what” and “how”. (Saunders and Lewis 2012, 116; Yin 1989). In addition, Ghauri and Gronhaug specify that the case study is a good method when studying a situation or an organization which has rarely been studied and has unique elements in its nature (Ghauri and Gronhaug

2002). This phenomenon is a very contemporary issue, therefore lacking previous empirical study.

Two important qualifications for considering a study qualitative in nature are the choice of data collection method and the selection of informants. Interviews are the chosen form of data collection for this study due to the nature of restricted data in the case study. Independent observation of events plays a large role in context understanding and analysis. Document and was used in the examination of written materials such and articles and web pages. The variety of methods serves as triangulation of data collection. Triangulation is the use of multiple methods of data collection. The main advantage of utilizing triangulation is that is can help to produce a more complete, holistic and contextual portrait of the case which is being studied (Ghauri & Gronhaug 2002).

In addition, the individuals selected for interview constitute the individuals in the organization who have dealt the most with the creation of and operational running of the studied phenomena. As well, effort has been made to find outside organizations which have a relevant point of view to counter balance the interviews. Through this careful selection of interviewees, it is hoped to get an in depth picture of the case being studied with minimal static.

This study seeks to make implications based on the theory and practical qualities of the case study. However, the study does not suggest that the findings in the Finnish environment can be generalized. Rather it should be emphasized that future study and discussion related to this topic would be beneficial.

4.2 Case selection

A case study research has the ultimate purpose of defining, analyzing and solving one or more cases. A case is a system, such as a group, program or business which can be separated from other contexts. This study seeks to explore the factors which have an influence on the Innovation Center located in the U.S. Embassy Helsinki, which is a new concept without previous research. In order to meet the needs of the study, a holistic outlook has been taken on the theoretical concepts which affect the central case.

A case study is a great way to study a contemporary phenomenon in a real-life context empirically. The case study is a good choice when the boundaries of the phenomenon and context are unclear and need to be studied. (Yin 1989). The case selected must be able to stand on its own and offer an in depth and comprehensive understanding of the phenomenon (Easton 2010).

Because the phenomenon is a unique context, a singular case study has been chosen. The case was selected because of practical and methodological reasons, but also fulfills conceptual motives as well. As this phenomenon has not been thoroughly studied as yet,

it follows that that this case is largely illustrative and exploratory in nature. Following this illustrative focus, the study seeks to describe the main characteristics in a real world example in order to clarify the idea of business internationalization support by a government institution. The goal after illustrating the case is to connect the activities as they are conducted in the natural context with the interests of academic study and research (Stake 2005). The embassy as a partner for this study is practical because they are in early stages of changing operating methods which makes the environment open for analysis.

The study seeks to examine the factors influencing the Innovation Center and the operations around it. Therefore, the study seeks to scrutinize the interactions which happen within it and the factors which influence those interactions. The determination of factors is largely based on collected data, observed experiences and interpretation. The case of the U.S. Embassy in Helsinki and the new innovation center there is an examination of the phenomenon from a broad view and on the institutional level.

The case study does not produce results which can be immediately generalized. The study seeks to present results which make the reader interested in further study and experimentation. The case uses research questions as a starting point, but seeks to utilize the empirical research to generate new theory and understanding. (Eriksson & Kovalainen 2008).

4.3 Data collection

The choice of data collection method is a result of previous decisions about topic, focus, research methods and the availability of data (Myers 2013). Because the subject of the research is a new phenomenon, and within a protected community, a suitable set of quantitative data was not available. By utilizing qualitative methods for the research, this study seeks to utilize the expertise of the experts involved in the planning and running of the Innovation Center as well as individuals and organizations which have interacted with the center to the fullest. The initial contacts with the embassy occurred during the course of the researcher's employment and cooperation with a number of events.

The participants of interviews are targeted for the quality of their involvement in the case rather than a quantity of peripherally involved individuals. In addition to interviews, the case lends itself to many opportunities for observation. A number of events have been selected for the researcher to attend, observe, and interact with attendees.

The most popular ways of conducting a qualitative research project include historical review, focus groups, case studies, observations, surveys and interviews (Ghauri and Gronhaug 2002). Because this study wishes to engage with the leading personnel involved in the embassy and innovation center and engage their expertise, knowledge, perceptions and experiences, a strategy of interviews is well suited. Interviews also give the

researcher a flexibility over other methods which is preferable in this case, allowing the conversation and areas of exploration to shift and change as the conversation develops.

“Treating interviewing as a social encounter in which knowledge is constructed suggests the possibility that the interview is not merely a neutral conduit or source of distortion, but is instead a site of, and occasion for, producing reportable knowledge itself.” (Holstein & Gubrium 2002, 112).

The decision was made to use a series of semi-structured interviews with key staff members of the embassy in order to allow for evolving inquiries as new information was gathered. The best time to use semi-structured or unstructured interviews is when you are unsure of the answers which the respondents will give, or if the questions examined are complicated and need to be varied.

In a semi-structured interview, the questions are asked around a set of themes, which can be varied in order as need demands. Topics can be omitted or altered as necessary depending on the individual being interviewed. (Saunders & Lewis 2012). In this form, the interviewees are guided towards the desired topic areas rather than open-ended conversation. Carefully planning the interview themes and structure allows for a manageable set of data for analysis. In a face to face interview situation, the interviewer has a chance to control the amount of structure which is used in the discussion.

A variety of departments within the embassy are involved in the innovation center initiative. Therefore, the interview process began by identifying respondents with sufficient knowledge and interest. Individuals from the public affairs, commerce and building operations sections of the embassy were selected first to provide a wide variety of perspectives to the background and activities of the innovation center. A representative of the League of Green Embassies was further selected to provide information about the relations between other embassies and the appeal to public opinion. The choices of interview subjects followed principle of purposeful sampling, which helps the research focus on the settings, persons and events which lead to information which cannot be obtained from other choices (Maxwell 1996).

Because of the interaction with universities, which is a focus of the embassy, an interview was conducted with the American Resource Center, which is the outreach library and resource center for universities in Finland. Finally, an interview was conducted with TeamUp, Ltd. CEO Donna Kivirauma, who has utilized the services of the innovation center for business purposes.

Five of the interviews were conducted inside the U.S. embassy campus in the innovation center building in a controlled and relaxed environment. One interview was conducted in the American Resource center in downtown Helsinki. Finally, the interview with TeamUp, Ltd., was conducted in a quiet office in their headquarters. All interviews were conducted without disturbances and took from 35 to 90 minutes, which was found

to be enough time to cover all relevant issues. A recording was made of all interviews and notes taken separately.

To give some structure to the interviews for this research, an interview guide which is structured by individual themes was created (appendix 1). The themes are not designed to be rigid sets of questions, but a guide to start conversation in the key areas of study, to restart the talks if the conversation naturally stalls, and to serve as a checklist for the most important factors. Figure 14 represents the operationalization of the key questions from the theme guide. The operationalization of the concepts is based on the theoretical aims of this study presented in figure 13. All interviews were transcribed and used as a source of reference to compare with event outcomes and goals.

During the process of conducting interviews and observing events conducted by the embassy, the thematic focuses shifted to reflect a more rounded view of the actions taken in the embassy.

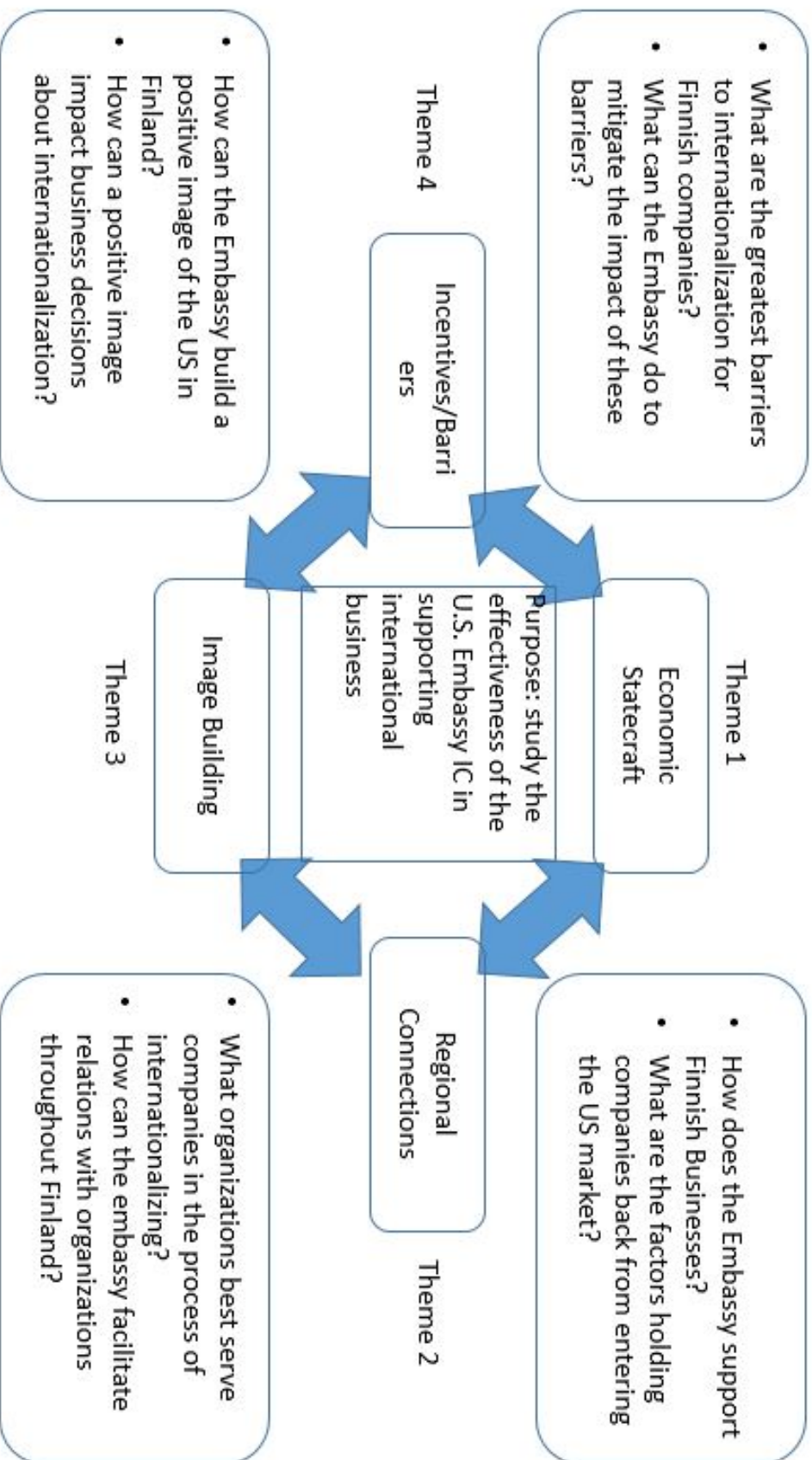


Figure 14 Thematic Interview Guide

	Interviewee			Interview	
	Name	Organization	Position and Role in study	Date and Place	Length
US. Embassy Staff	Jeffrey Reneau	U.S. Embassy Helsinki	Public Affairs	17.2.2015, U.S. Embassy	60 mins
	Thomas Fitzpatrick	OBO	Building Operations	10.2.2015, U.S. Embassy	90 mins
	Rick DeLambert	U.S. Embassy Helsinki	Commerce	24.3.2015, U.S. Embassy	84 mins
	Mia Mäki	U.S. Embassy Helsinki	Commerce	24.3.2015, U.S. Embassy	73 mins
	John David Molesky	U.S. Department of State	League of Green Embassies	24.3.2015, U.S. Embassy	27 mins
	Related Organizations	Taina Indouzee	American Resource Center	Head of Center	15.12.2014, American Resource Center Office
Donna Kivirauma		TeamUp Oy	CEO	26.2.2015, TeamUp Offices	35 mins

Figure 15 Interviews

A large number of the interactions which occur as part of the embassy's activities occur in large events with a wide variety of individuals and organizations participating. Therefore, a rich source of observation and learning was to attend a variety of events, interacting with individuals and observing the interaction that occurs between them and the embassy.

The researcher was able to observe the events as a neutral party and record notes and observations during the proceedings. Effort was especially made to observe how the events related to and impacted the desired effects which were discussed in the interviews. Brief notes were taken during the events followed by more thorough notation immediately following the events completion. The most relevant events are listed below.

Event	Date	Location	Purpose
ConnectUSA Tampere	7.3.2014	Tampere Talo/New Factory, Tampere	Promoting embassy services, networking with local startups
Independence Day Celebration	18.6.2014	U.S. Embassy	Celebration/Networking Event
Fall Networking Evening	30.9.2014	U.S. Embassy	Networking Event
Ambassador's Entrepreneurial Challenge	21.10.2014	New Factory, Tampere	Pitching competition for young Finnish entrepreneurs.
SelectUSA Nordic Tour	18.9.2015	FINPRO Headquarters, Helsinki	Event for businesses interested in entering the U.S. market.

Figure 16 Events participated

4.4 Data Analysis

For this study, the aim of data analysis is to simplify the gathered information and generate new knowledge about the actions that the U.S. Embassy in Helsinki takes to support Finnish companies and the effects it has on the internationalization of them. The qualitative research process can be understood as a series of dialogues. Dialogues with data, with

ideas, with informants, and colleagues, and with oneself. Those interactions should lead to reflections and decisions (Coffey & Atkinson 1996, 191). Data analysis should consist of examining, categorizing and tabulating empirical data (Yin 1989). Data analysis should be systematic in nature, combining analysis and synthesis.

A number of problems with qualitative research can arise in the analysis phase. On one hand, the number of observations is low, causing concern for the legitimacy of the data, and furthermore the researcher can be drawn into the volume of cases available. This qualitative methods, the data collection and analysis are often done simultaneously with the research problem and questions confronting need for change during the process. (Ghauri & Gronhaug 2002).

For this study, the data collection and analysis occurred somewhat simultaneously. This led to the reformulation of some interview questions and the led the decisions of who to interview. Some occurrences became clear in the interview portion, and led to the search for supporting data via secondary sources. Following the completion of data collection, the systematic data analysis was begun by transcribing interview tapes into text form for analysis which could be combined with already gathered secondary sources. A database of material was created including transcripts documents, articles, web material and notes.

A common technique for making qualitative data analyzable is to code, cluster and create themes in the data. In other words, to make the data usable, we break it down, conceptualize it, and put it back together in a manner which is understandable and presentable (Ghauri & Gronhaug 2002).

Three steps are taken to achieve this goal. First, the researcher develops meaningful categories or codes to describe the data. Second, the researcher decides on the units of data that are appropriate for analysis and attaches relevant categories to them. Finally, those categories are applied to the set of data as a whole for analysis (Saunders & Lewis 2012).

Following the coding scheme, the next stage of analysis involved scrutinizing and re-organizing the data into themes and categories. Organizing the data into themes facilitated the examination of data from multiple respondents in a more orderly manner. The themes were formed around the theoretical framework of the study and the sub-research questions to be answered. The sub-questions here are:

Which factors are key to producing impact?

How do home based (U.S.) and host based (Finland) factors interact?

What are the effects which the initiatives produce?

Following this analysis, the broader themes developed were support activities, outside factors, and drivers and motivation.

Creating themes for the data was a mid-phase for the building of analysis. Once the data was organized in themes, it was possible to compare different parts of the data in new ways and compare the similarities and difference between different data sources. Because the main purpose of the study is to discover the key factors affecting the support the U.S. Embassy is able to provide Finnish companies in internationalization, the analysis concentrated on finding patterns which would explain the internationalization of Finnish companies to the United States.

The data was largely categorized by its effect on the production of incentives or the reduction of barriers in specific areas. Each section of the embassy and event has its own focus area such as information sharing, program promotion, networking, etc. This focus led to the ability to categorize programs by the impact towards incentives and/or barriers.

A risk is present in the categorization of data that the researcher may force the evidence to fit into predetermined categories. This could discourage the creation of new categories and possible interpretations. It is important for the researcher to allow categories and themes to die away or merge and grow as necessary. This is a result of ensuring that the preconceived notions of data are interpreted against gathered information in as accurate way as possible. (Seidman 2006).

4.5 Trustworthiness

Validity and trustworthiness must be demonstrated, it is not enough to only talk about validity (Ghuri & Gronhaug 2002). It is necessary to review the research evaluation to show that the researcher has understood and upheld the scientific nature of the study.

Proving trustworthiness in qualitative research has some unique issues when compared with quantitative studies. The trustworthiness of qualitative research has been evaluated by Lincoln and Guba (1985) who found that beyond the traditional criteria of reliability and validity, qualitative research can better be analyzed based on the four criteria of credibility, transferability, dependability and conformability.

Credibility, or the faith in the truthfulness of the findings evaluates how well the constructions of the research match those of the real world is the first criteria (Lincoln & Guba 1985). The credibility factor relies on the conducting of activities which increase the probability of obtaining credible findings. These activities can include prolonged engagement, persistent observation, triangulation, peer debriefing referential adequacy and member checks.

In this study, the research familiarized himself with the subject long before beginning the research process. This was done through contact occurring during the course of employment during the year leading up to this thesis project. Due to this early engagement,

the researcher had a good understanding of the context when beginning the research project. This familiarity should help lead to correct interpretation of data and findings during analysis. Primary and secondary data were used to diversify the empirical material.

The next criterion laid out is transferability, which indicates the usefulness of the data by analyzing the applicability of the data to other contexts and with other individual respondents (Lincoln & Guba 1985). The description of the case setting, circumstances and data acquired help to orient the reader and help them to understand the context of the research. The case was selected because of the unique nature of innovation center, and the lack of similar initiatives.

The choice of theoretical research material was designed to examine the applicability of the initiative in a global setting, thereby helping to examine the transferability of results to other settings in the future. Due to the similar focus and goals of the U.S. government in all embassies and foreign missions, the results could be transferrable to other country contexts. However, being a single case study in a single country context, there could be elements which are unique to the Finnish environment. Further studies of business and innovation support structures in the embassy setting are need to make generalizations.

The third criterion is dependability which shows the consistency of the findings, and that they could be repeated. This criterion is concerned with proving the process undertaken in the research has been logical, traceable and documented (Lincoln & Guba 1985). This criterion is fulfilled in the interview guidelines and case study process are described in the research. The recorded nature of the interview and translation to transcript allow the analysis to be repeated. Some issues of dependability arise when considering the observations of public events. These events were not recorded and are not repeatable. However, effort has been made to counter this fact by processing the delivered information of the events in a consistent manner.

The final criterion, conformability refers to the neutrality of the findings, ensuring that the results are based on data, and not biases (Lincoln & Guba 1985). There is a risk of bias due to the fact that the Innovation Center is a new initiative, and therefore the number of outside parties which have been able to access the center is limited. Previous studies and documentation of the creation process for the new construction and initiatives is very limited. Therefore, discussions with embassy staff about the concepts and intentions surrounding the creation of the center are relied on for sources of information.

Effort has been taken to examine outside opinions on every possible topic and observe events independently. In addition, properly describing the research process and stating the individuals interviewed are an attempt to make the research conformable. The interviewees can be contacted to verify information after the fact. The researcher has worked with the embassy in a professional capacity, which possibly makes him too close to the subject. The researcher has attempted to be aware of these biases and has tried to be open to all things when selecting respondents, collecting and analyzing data.

Through the research methods described in this chapter, a thorough understanding of the operations of the U.S. Embassy in Helsinki towards Finnish businesses emerged. Both the interviews with embassy staff and participation in a wide variety of event allowed for enough to information and observation to be gathered to analyze how the embassy is employing a series of events and services to help Finnish companies internationalize and interact with the national innovation system of the United States.

5 CASE: U.S. EMBASSY HELSINKI

This section analyzes and presents the results of the empirical data collected. The purpose of the analysis in this section is to provide a comprehensive understanding of the key factors which affect how the U.S. Embassy is able to provide support to companies which wish to internationalize from Finland. In order to complete this analysis, motivational factors, support activities and direct services are investigated.

Examining the past relations of the two countries and current offerings, as well as the strategies employed by the embassy are important to define the possibilities and context for support activities. For the embassy to support internationalization, different levels of interaction with the local community are necessary. The question is how well these activities connect with each other and what challenges the Finnish operational environment impose of the further development of offerings.

5.1 Introducing the U.S. Embassy

Diplomatic relations between the United States and Finland date to the year 1850, when the first U.S. consuls were assigned to the Finnish region. The two countries have maintained a mutually beneficial relationship throughout the years, only being broken by the diplomatic crises around World War II. During the latter half of the 20th century, the Helsinki Embassy served as a gateway for discussions and diplomatic relations with Russia and Eastern Europe during the cold war. The most prominent example of this is Helsinki Embassy being used as the location to start the Strategic Arms Limitation Treaty discussions.

Because of the size and population of Finland, it has not been an important market for the United States in terms of volume. However, traditionally Finland has been seen as a stable gateway to many other markets including Eastern Europe and Russia. In addition, Finland has a highly educated population and strong industry influence. Collaboration between innovative companies in Finland and the United States is not a rare occurrence.

Finland is an important strategic partner for the United States in a number of ways. In the past, the focus of much activity has leaned towards political engagement with the East. With the end of the Cold War, the emphasis has shifted towards business interests and supporting quality interactions between Finland and the United States. Ambassador Oreck has stated that one of the missions of 21st century diplomacy is a move towards “economic statecraft.” The term was initially used by Hillary Clinton in her role as Secretary of State to describe the policies which place business at the heart of U.S. foreign policy.

As can be seen in the Mission statement of the embassy, the embassy assumes the role of advocate for the positions of the U.S. government.

“The American Embassy in Helsinki protects and promotes American interests and develops relations with Finland through contacts with Finnish government, business, labor, agriculture, media and education leaders. Led by the United States Ambassador, the embassy team explains and advocates the position of the United States Government on bilateral and multi-lateral political, economic, social, and scientific issues.” (Finland.embassy.gov)

The advocacy role and strong position of Finland in Europe made it a prime location for building infrastructure. This positioning led to the proposal of an Innovation Center project to provide a place for interaction with the business community.

5.2 Innovation Center

A focus of the foreign services of the U.S. government in recent years has been a move towards economic statecraft. Finland is a ripe field to implement a number of initiatives in this regard. Finland represents a country with relatively few security threats compared to other locations and has a high level of industry and innovation. Finland is also a country of small population, so a natural expansion technique for many businesses is international expansion. From the American perspective, Finland can also be seen as a gateway to the East.

To meet this focus on economic statecraft and desire to strengthen business relations between the United States and Finland, a major change has occurred in the physical campus of the U.S. Embassy in Helsinki. The campus has been almost completely renewed with the focus being on a new Innovation Center which is open to the needs of Finnish companies and organizations.

In recent years, the embassy has been more and more focused on business issues. However, with the condition of the campus before 2009, there were inadequate spaces and services to host the diverse types of events that would have been wished. There was only one conference room which could house up to 40 people. Events were limited to the morning hours, so that very few social events or afternoon/evening events could be held on the campus. Therefore, it was necessary to produce events outside of the embassy campus in downtown locations, increasing costs and because of security concerns, limiting the type of events that were possible.

The Helsinki Embassy had been on the roster for needed improvements since 1998, but was not a priority location. The situation became critical in 2008 and the building was condemned by Ambassador Bruce Oreck and the majority of embassy staff was moved to temporary locations in downtown Helsinki, providing an opportunity to introduce new operational capacities for the embassy through the reconstruction.

The innovation center was a key component of the reconstruction plan. The term “Innovation Center” can be defined in a number of ways. The range of programs and locations which use the title of innovation center range from technology showcases, business incubation programs, university/business collaboration programs and networking institutions. This range of possible definitions for an innovation center lend many possibilities, but can also cloud the image of the center which is desired by the embassy.

In a survey of incubators and innovation centers, Thierstein and Wilhelm (1999) found that innovation centers claimed to have at least one of the following objectives.

- Increase and promote regional development
- Increase the rate of high innovation potential startup development
- Contribute to structural change in the local and regional economy
- Create new jobs

To clarify the goals of the innovation center, the embassy published a vision statement which gives a view to the larger goals which could be met by the center. The vision for the U.S. Embassy Innovation Center is stated as the following:

“The Innovation Center is a model for 21st century diplomacy. It is a space to address progressive “economic statecraft” goals, by bringing trade, investment and commercial diplomacy to the forefront. This isn’t limited to a “dollars and cents” vision, as the embassy looks to partner to find creative approaches to important social issues. Work in this first-of-its-kind diplomatic structure is aimed at further strengthening overall U.S.-Finnish relations, increasing our joint potential, and opening regional opportunities.” (<http://finland.usembassy.gov/innovationcenter.html>)

The concept of the Innovation Center began in 2009 with the decision to increase the annual budget of the embassy by \$90M. There was a necessity to replace the crumbling structures which were inside the embassy compound.

More importantly the center seeks to be open to Finnish businesses, offering the ability to host events and conduct new activities within the embassy premises. This is a key leading step in the movement for economic statecraft.



Figure 17 Artist concept of the new embassy campus

The new buildings and structures are a chance for Finnish institutions outside of the capital city region to interact with the region in a new way. For instance, through the ConnectUSA program which was implemented recently, the embassy toured the country to the most important cities and presented the services and programs available throughout the country. An invitation was also presented during this tour to bring business events to the embassy, giving companies a prime location to do business in the capital region with the backing of the embassy. For regions outside Helsinki, the ability to easily arrange events in the capital can mean the difference between meeting potential partners and investors, and never getting the opportunity.

The new construction of the innovation center was announced in 2011 by Ambassador Bruce Oreck. In his remarks, it was stressed that the center would be an energy efficient building, utilizing a number of new technologies to make the embassy as efficient as possible and leading to certification as a LEED platinum location.

The focus on environmental efficiency of the buildings led to Helsinki being the leading partner and new headquarters for the League of Green Embassies. The League consists of around 50 U.S. Embassies attempting to lead by example in the green building movement. This membership offers the Helsinki Embassy a chance to present their new initiatives and programs to other embassies in an attempt to spread best practices.

The league is a collection of diplomatic missions which are seeking to formulate a common agenda for energy efficiency. “Member embassies aspire to introduce innovative solutions, influence individuals and institutions in host countries and to play an important role in mobilizing public action.” (YLE uutiset 2011).

The implementation of American made energy efficient technologies allows the Innovation Center to be a showcase for technology and a platform to initiate conversations revolving around business and political topics.

The status of headquarters for the league of green embassies is seen as a great benefit by the embassy staff.

It acts as an attractive element for gathering positive attention from the outside. We have received a lot of positive press because of the LEED platinum status of the buildings, and people want to visit us to see what it is all about. The green elements of the building also have given us the opportunity to interact with a number of Finnish companies involved in environment friendly technologies and smart technologies. (John David Molesky 2015)



Figure 18 Finished consular building and Innovation Center

Finland is a good location for an Innovation Center which promotes American technology because it is seen as a gateway to the Nordics, Baltics and Russian markets (Forbes 2014). An early example of success created by the center includes the hosting of events which led to the signing of agreements between U.S. based aviation firm GA Telesis and a Russian-based company worth nearly \$500 million and will create around 120 jobs in

the U.S. As well, Honeywell was able to sign a deal expected to bring \$10-20 million with new Russian partners (Hunter 2013).

5.3 Motivational Factors

The mission statement of the embassy lays out the target organizations of operations as government, business, labor, agriculture, media and education leaders. The governments of the United States and Finland are friendly allies on a wide spectrum of international measures. That familiarity allows the embassy to focus a greater amount of resources to business, which is the core focus of economic statecraft.

The embassy is designed to promote the interests of the U.S. government and its positions and policies in the world. In this vein, the focus of internationalization services in the past have been built around helping U.S. companies to begin and expand export operations.

We have also now taken on a new responsibility in the last 4 or 5 years for foreign direct investment into the United States. Before it was always about bringing products or services into foreign markets, like Finland. Now we are spending quite a bit of time working with foreign companies that want to enter the U.S. market in the sense of investing... the reason why we do that is trying to create and sustain economic growth in the United States. (Rick DeLambert 2015)

By definition, the embassy is a representative organization. The innovation center and related constructions are designed to be an extension of that purpose. They should therefore allow the embassy to better interact within the Finnish environment and support services which attract businesses and individuals to the United States. Beyond that, the embassy realizes that the greatest tool they possess is in representation and providing informational resources to individuals and organization which need them.

The mandate of economic statecraft mean that the embassy should show how they are enabling foreign businesses to better understand and access the U.S. market. The efforts to engage with the business community and provide valuable services crosses over many sections of the embassy. For the public affairs section, it is desired to create attention to the embassy actions and create a positive image of the United States and its opportunities. The commercial section seeks to engage businesses in meaningful business interactions with U.S. companies and support market entry wherever possible. As well, the consular

services have shifted to a service oriented approach to the complicated task of visa regulations, providing consultation at early phases of business involvement to reduce time wasted on bureaucracy.

5.4 Classifying Strategies

The above description of motivations and changes in the embassy has developed over the last few years. To further analyze the results, it is important to look at the action based approaches that the embassy is using to support Finnish businesses. Being a representative organization of the government, all activities have the intention of connecting businesses and individuals with or directing them towards institutions of the U.S. National Innovation System which can best answer the needs. To systematically analyze the results, the strategies have been broken into categories introduced in the theoretical section of this study.

All actions which the embassy take towards Finnish businesses should have the effect of either increasing the incentives which they perceive for internationalization, or reducing the barriers which may impede progress. The barrier reduction can be broken into 4 sub-categories of strategic, operational, informational or process-based obstacles.

The resources and goals of operation limit the actions which can be taken. For example, many barriers to entry are normally sought to be overcome by provide direct financial incentives to companies in order to break the roadblock. This type of assistance is not in the purview of the embassy, and would not be feasible to attempt. Therefore, there are naturally some types of barriers which are not directly addressed by embassy action. The strategy to address these types of barriers largely rely on informational services and networking interested parties with existing programs which can more efficiently handle those concerns. Other organizations involved in these services can range from U.S. government services, chamber of commerce programs, local and national Finnish export promotion programs, and many more.

With these concerns and limitations in mind, the embassy has concentrated on a strategy which focuses on event based informational sessions, generalized and individualized networking activities and opinion building activities.

5.5 Activities

There are a number of limitations which affect the type and breadth of activities which the embassy can produce. Security is a natural concern for an embassy, even in a stable country such as Finland. As well, naturally the embassy is focused on activities which

have an impact on the United States economy as well as helping Finnish companies. Therefore, the direction of business interest which becomes the focus of more targeted services should be related to the United States in some way.

According to Jeffrey Reneau, there are a number of services and products which have been developed to foster relations between the United States and Finland on a number of different levels. The products and service can be divided into two subcategories for the purposes of this analysis. The first category is business outreach, and includes the services designed for businesses which wish to interact with the U.S. market and information dissemination. The second category, opinion outreach, includes activities which are aimed at influencing and interacting with the public and local organizations on a larger scale in order to form positive images of the United States and disseminate information about opportunities.

The audiences for the products which the embassy provides varies widely, especially when examining the opinion outreach events. The embassy wishes to reach political figures in Finland, social organization leaders, young individuals, students and many others in order to create a positive image of the United States and to create a network of individuals and organizations which are interested in interacting with U.S. institutions.

The audience for business outreach programs is more focused. The key demographic the events are aimed at are business professionals which have an interest in conducting business in the United States or with U.S. companies. In addition, these events are also aimed at Finnish organizations which are able to assist in this type of expansion as well as U.S. organizations which have a reach to international operations.

The below chart is a summary of the core product offerings which the embassy produces to meet the goals of economic statecraft. A more detailed description of some events follows.

Product	Description	Offering
ConnectUSA	Working with local regional development agencies throughout Finland, the embassy seeks to engage and network with a variety of entities throughout the country. The program presents the wide variety of services offered by the embassy and offers participants that chance to discuss issues with experts from a variety of departments.	<ul style="list-style-type: none"> • Seminars • Lectures • Regional networking • Expert consultation • Entrepreneur services
SelectUSA	Showcase for investment opportunities in the United States. The program is designed to bring together parties interested in expanding business opportunities to the U.S. with local representatives and experts from across the United States.	<ul style="list-style-type: none"> • Seminars • Industry specific advice • Informational services • Ombudsman services • Networking with U.S. regions
Commercial Services	Services from the commerce section of the embassy designed to offer personalized service for companies seeking to enter the U.S. market.	<ul style="list-style-type: none"> • Partner finding • Market entry consulting
Facilities	The embassy offers the chance for businesses to utilize the campus facilities, especially the new innovation center for events, seminars, conferences and meetings.	<ul style="list-style-type: none"> • Event services • Media support • Speakers
Networking	The embassy arranges a series of networking events designed to engage a wide variety of governmental, business and society representatives.	<ul style="list-style-type: none"> • Networking services • Sponsorship opportunities
Youth Outreach	A core audience of the embassy are future entrepreneurs and parties interested in interacting with the US. Contests and school/university outreach programs are arranged.	<ul style="list-style-type: none"> • Idea competitions • Scholarships • University support • Lectures
Green Embassy	Incorporating a series of green technologies and creating a network of environmentally minded contributors. The league of green embassies seeks to enhance the environmental impact of diplomacy and create green business opportunities.	<ul style="list-style-type: none"> • Networking services • Technology showcase • Public outreach

Figure 19 Summary of offered products

5.5.1 *ConnectUSA*

Beginning in 2014, the embassy began conducting regional visits under the ConnectUSA program. The connectUSA program is designed to create an interface for two-way dialogue between the embassy and local businesses. The end goal of these dialogues is to create networks, develop connections and promote cooperation between the Finnish and U.S. markets. (<http://finland.usembassy.gov/connectusa.html> 2015).

The program consists of a tour of visits to major Finnish cities where local businesses and organizations can gather to learn about opportunities to connect with U.S. businesses and programs. This tour is organized in conjunction with organizations such as AmCham Finland and Tekes, which have a more thorough understanding of the local business environments throughout the country.

The embassy is able to present the programs and support opportunities which they have available for Finnish companies in internationalization. The target attendees invited to the events range from the owners of startups and SMEs to representatives of large corporations and public officials from the region. Representatives from a number of embassy departments are on-hand to discuss the services which they are able to offer individual companies and to talk one-on-one about opportunities for working with and expanding to the United States.

The ConnectUSA event is also a chance for the embassy to create a dialogue which they can use to listen to the concerns of business owners throughout the country who want to internationalize in the United States, and the successes and roadblocks they have encountered in trying. The other services of the embassy, including facility use are promoted during these events. The information and knowledge gathered during the events helps the embassy to further develop offerings and to understand the market needs of Finnish entrepreneurs.

5.5.2 *SelectUSA*

The SelectUSA program is designed for companies that wish to invest in the United States. Acting as a mediator and ombudsman, the program offers opportunities for representatives of U.S. regions and cities to be introduced to foreign businesses which are interested in opportunities to expand operations to the United States or partner with U.S. businesses.

The SelectUSA program is an opportunity for the embassy to employ the networks which they have built to facilitate face-to-face meetings for Finnish businesses with organizations which can directly assist them in overcoming obstacles and partner finding in a desired location.

Included in the program is a series of discussions presenting common issues for entrepreneurs entering the U.S. market, and the ways which they can be overcome. This gives the embassy the chance to highlight known issues while setting the stage for more fruitful discussion of issues.

5.5.3 Access to embassy facilities

The innovation center building in the embassy compound gives the embassy a unique opportunity to offer meeting and conference facilities for Finnish companies. The innovation center facilities are available to individual meetings, group sessions, launch events, conferences, etc.

The embassy offers this opportunity for facility use in order to provide Finnish companies the chance to interact with potential partners and organizations from the United States, as well as offering a platform which can serve to highlight the Finnish companies in a way that would not be possible on their own.

Donna Kivirauma from TeamUp Oy, a small startup operating in the Tampere area, summed up her experience utilizing the Innovation Center facilities for a launch event for their Windows phone application.

We worked together with the embassy and we got a joint press release put out. It turned out to be a great event. We had representatives from 7 or 8 media outlets there. We were expanding to the United States, so the timing was perfect. The Innovation Center gave us a platform and exposure that we would never have had trying to hold a press conference in Tampere. When you are trying to get people to attend an event, you have to have something they are excited about, and people were very interested in visiting the embassy. (Donna Kivirauma 2015)

5.5.4 Commercial Services

The commercial services section of the embassy offers service packages which can be bought by companies wishing to find avenues of investment and business expansion in the United States. In this service, the embassy works with a company to explore the best options for market entry in the United States and conducts targeted partner finding operations to assist in the internationalization process.

The commercial services section and the customized services they offer give the chance for companies which have participated in other events to put the information and

findings into action. The service is designed to break down the roadblocks which can occur when expanding internationally, especially assisting in finding locations for entry and partner organizations to facilitate the entry.

5.5.5 *Networking*

The embassy holds a number of networking events throughout the year. The guests invited to the networking events include representatives from Finnish governmental organizations, business owners, civic representatives, and partners from events throughout the year. The size and function of networking events varies from gatherings of 50 individuals for a gathering targeting specific cooperation to the annual Independence Day gathering which opens the doors of the embassy to thousands of individuals to celebrate the collaboration which has been done during the past year.

Networking events are designed to link organizations which have mutual interest in cooperation and to hopefully spur further collaboration in the future.

5.5.6 *Youth Outreach*

With a key target audience of the embassy being students both in secondary education and universities, the embassy has a number of programs to reach this audience. The embassy sees the introduction of opportunities in the United States as a crucial step in reaching the youth audience of Finland.

A key audience for us is students and young professionals. It's an important group from a cultural and diplomatic perspective, but it is important to reach them also because they are the future business leaders that we want to attract and make interested in America as a viable option for their future businesses. (Taina Indouzee 2014)

Because of this focus, the embassy has developed programs such as the Ambassador's Entrepreneurial Challenge which is a nation-wide contest which invites high school students to present and pitch their business ideas to a panel of entrepreneurs and regional representatives in the hopes of winning seed funding and a training program in the United States to kick start their business.

As well, there is a lot of collaboration between universities in the Helsinki area and the embassy. In particular, the embassy has hosted and supported a number of events with the Startup Sauna program which is part of Aalto University.

Well what we have done is to invite large groups of students here to discuss innovation, the environment, entrepreneurship, etc. Which I think is valuable because they get an out of classroom experience at the innovation center and we are able to pull them into the U.S. for a little while. Because of the priorities in my section in particular, our target audience is 16-35 year olds, so we are always looking for more opportunities to go speak or interact. Having the opportunity to have the students here means that we don't always have to go out and try to draw them in all the time. We have expanded that outreach. I don't have to go to their class, they can come here, and they are very interested in that. (Jeffrey Reneau 2015)

Another way that the embassy supports university students is through the creation of the American Resource Center. The center is housed in the University of Helsinki, and is a resource center for individuals interested in topics related to the United States. Topics covered range from culture and society to business practices and regulatory material. The resource center also arranges events designed to explore individual topics related to American life and business.

Services aimed at a youthful audience are seen as an early step in attracting businesses and individuals to the United States. The embassy is very interested in attracting individuals to study in the United States and to encourage entrepreneurialism in those individuals.

5.6 Impact Evaluation

In order to conduct an analysis of the services which the embassy is offering, the use of an impact radar is employed. As can be seen in Figure 20, the radar lays out a spectrum of incentives and categorized barriers which are seen as the primary targets of the embassy services. There are three circles in the radar. The outer circle represents the most successful impact of service. The inner circle marks an aspect that is not well covered by the service or product.

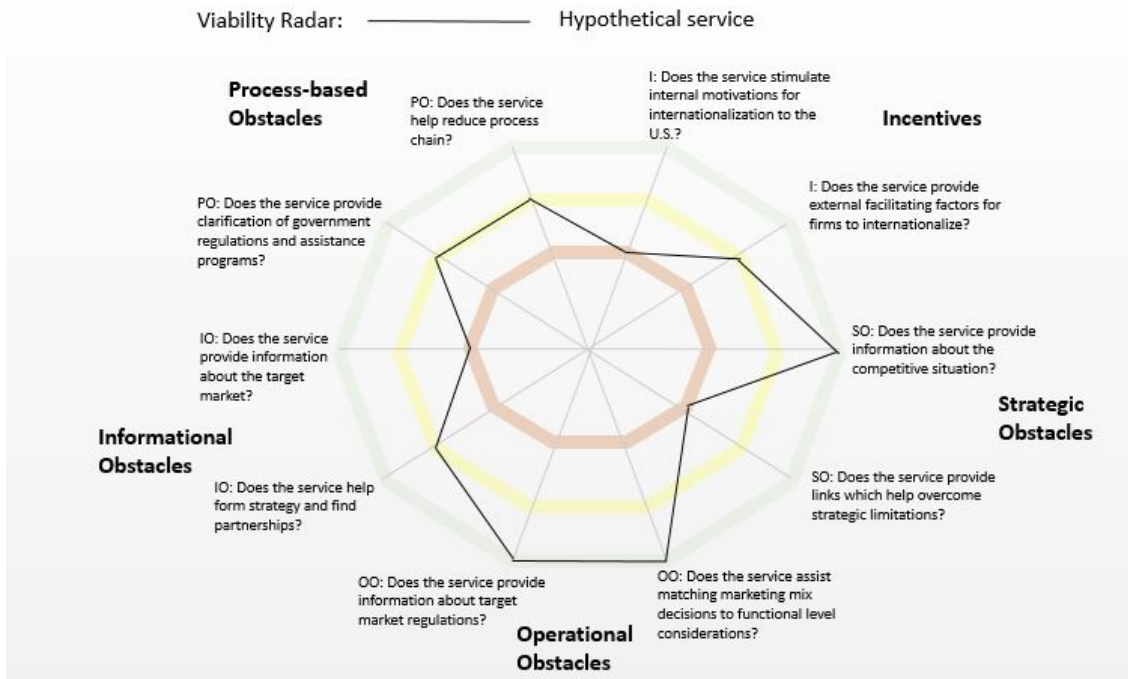


Figure 20 Impact Radar of embassy business services with a hypothetical example of a service.

Figure 21 shows an analysis of the core business services that are offered by the embassy. These services largely cover the informational event and networking strategies of the embassy. From the design of the services, none serve to completely meet the need of answering to all of the incentive or obstacle categories. However, when they are compared in the same radar, it can be seen that each event seeks to answer to the different needs of businesses.

ConnectUSA is designed to be an event which appeals to the broadest of audiences which have some interest in the United States. SelectUSA has a more specific audience of those businesses which are in, or soon to be in the first phase of internationalization. The Commercial Services product is designed to be of use to companies which are in more progressed states of internationalization. As can be seen below, the progression from services for early stage companies to more advanced offerings have more impact on reducing barriers to entry.

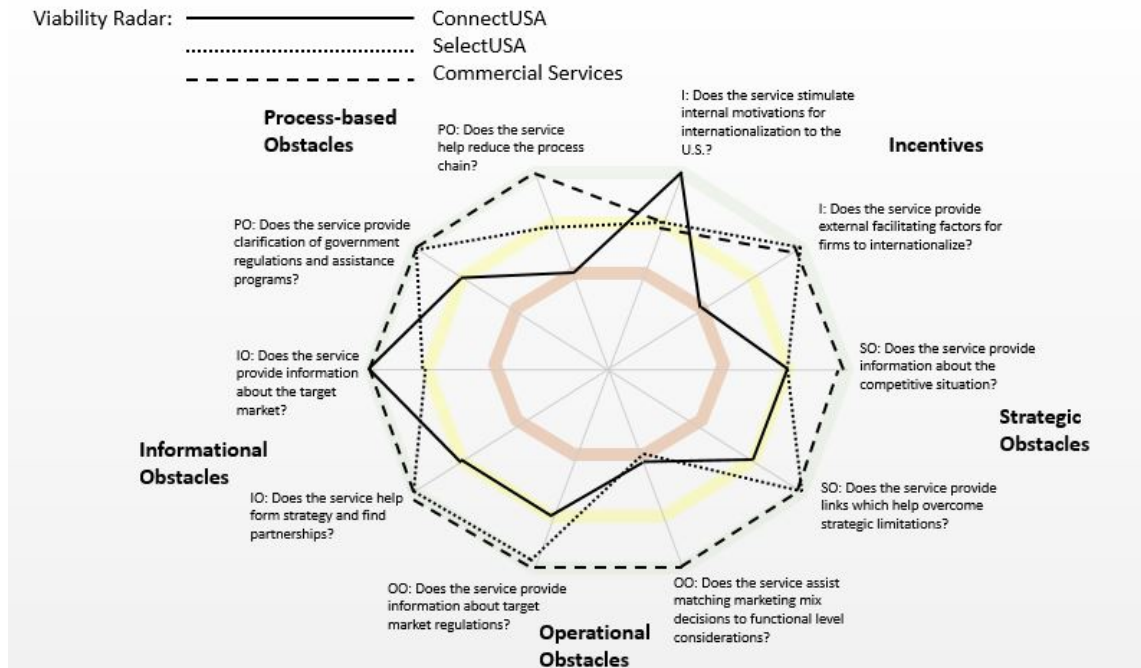


Figure 21 Impact Radar - Core Services

The Connect USA service is able to impact the most through increasing individual internal motivations and providing generalized information about the target market and regulations pertaining to market entry. The most important impact for the embassy is the increase in internal motivations which would ideally lead to a further exploration of services offered in the future and engagement from individuals.

SelectUSA service is designed to meet the need of information dissemination to those companies in the early stages of internationalization. Because of the variety of topics covered and the chance to discuss specific concerns with experts, the impact from the event has higher potential to induce action in internationalization. The biggest gap impact from the event is in matching specific marketing mix decisions with action. However, companies needing such specific assistance in this area can engage with the commercial services product.

The commercial services have the most potential for impact because they are custom tailored to the needs of the customer company. The embassy is able to build a working solution with companies to make the right connections and plans for market entry into the United States.

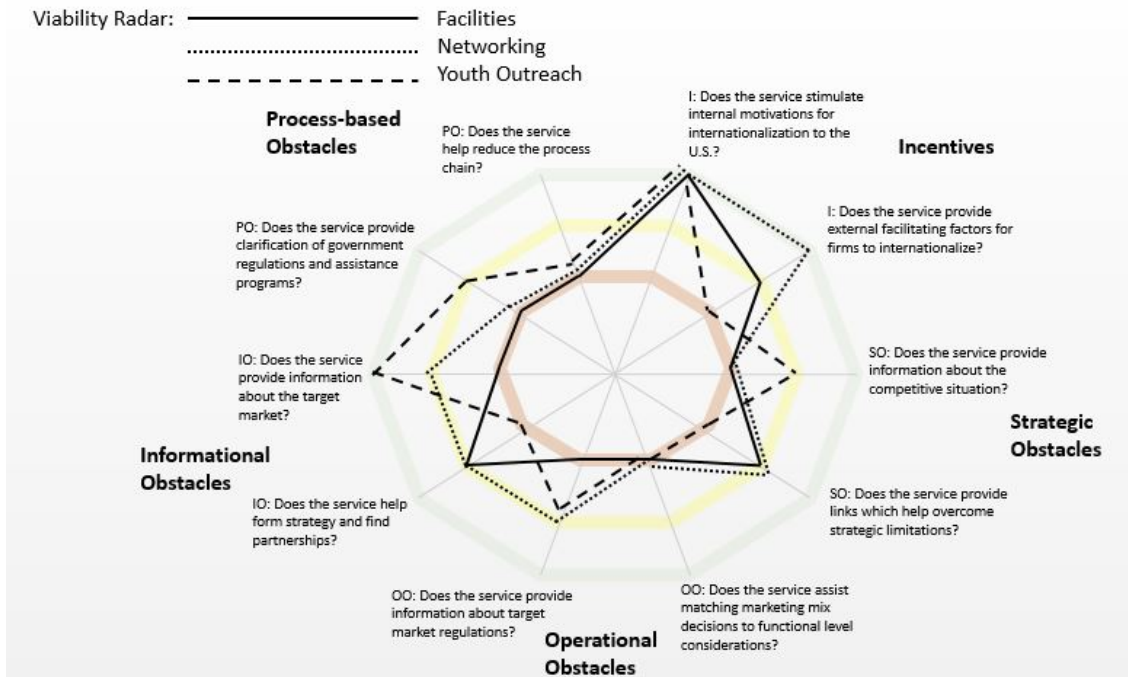


Figure 22 Impact Radar - Generalized Services

Figure 22 lays out the potential impact of the services which have less specific targets. Because they are not as focused on the encouragement of business internationalization, they fall into the strategy categories of networking and opinion outreach. Because of this, the immediate impact to business internationalization is much lower than the core services. The lower impact on business is not necessarily a downside, as these services are designed to further engage individuals and entice them to use more advanced embassy services at the appropriate time.

The use of facilities is most effective in stimulating the internal motivations of individuals to internationalize. In addition, the facilities provide the great opportunities of networking and partner finding either for current or future enterprises.

Facilitation of networking is a key function of the embassy, and of great importance to fulfilling its mission. The immediate impact of networking function is very difficult to measure. However, the potential impact for business internationalization is great when considering that a large number of decisions to internationalize are realized through partnerships and established relationships.

The services which the embassy provides for youth outreach are perhaps the furthest from impacting business internationalization. However, the youth target group is seen as very important to creating a positive mindset about the United States in future leaders and entrepreneurs. Therefore, the increase in personal motivations, familiarity and base information is seen as important for future international business relations.

Combined together, the three additional services analyzed in figure 22 are important for realizing the mission of the embassy. In the best cases, they can lay the groundwork for further engagement with the embassy and the United States.

5.7 The embassy as a facilitator

The embassy has an interesting possibility facing it when trying to affect the internationalization of Finnish firms. As explored in figure 13, the embassy is uniquely positioned to act as a filter and agent for the NIS of the United States and create programs which match the values and goals set out for the embassy through government intervention actions. The embassy has chosen to approach this possibility by creating a series of services and events which focus on the dual goals of business outreach and opinion outreach. Reviewing the activities and status of the embassy can give us insight into answering the research questions presented in chapter 1.3.

The factors which are key to producing impact are dependent upon the resources which are available to the embassy. When considering the best possible conditions for governments when intervening with companies, it is clear that the most effect which can be produced is in creating incentives and reducing barriers. Such efforts in the Finnish context are best aimed at early stage companies which are open to internationalizing towards the United States. The embassy is most capable of providing services through indirect support programs. Therefore, a set of factors arise which can be seen to produce impact for companies. These factors include the ability to disseminate information through the proper channels to appropriate targets, the ability to build a positive image of the United States and conducting business there, the ability to create meaningful networks capable of connecting interested parties, and the ability to facilitate companies to utilize those resources to create international business opportunities. These factors will be explored further in chapter 6.

The next question which arises is how the factors involved which are home based in the United States and those which are host based in Finland interact with each other. The largest home based factor is the national innovation system of the U.S. The NIS provides the possibility for the embassy to represent possibilities in conducting business in the U.S. The NIS as an entity is growing through knowledge accumulation. Interactions with foreign companies and institutions provide inputs for the entire system to grow. The system also provides connections to the institutions and organizations which the embassy can utilize as a source of information dissemination and indirect support programs.

The renewed embassy campus and a growing focus on innovation and interaction with business creates a fertile ground in the host environment. The renewed focus has drawn connections to a number of Finnish organizations, companies and individuals interested

in interacting with the United States. The campus is a connecting factor which draws home and host environments together, acting as a showcase for American innovations and a platform for facilitating Finnish companies to interact with the appropriate parties in the United States.

The effects which are produced by these initiatives are difficult to measure at this early stage. However, reviewing the results of the impact analysis allows us to conclude that the embassy is providing services which match the full spectrum of company needs described in figure 12. The generalized services examined in figure 22 are working to improve the image of the United States for parties which are open to influence. These parties include young people, university students and young entrepreneurs. The biggest effect of these services however is to create meaningful networks which support relations between the two countries with action oriented connections. These networks bolster the embassy values of creating new interactions, supporting relations and increasing the joint potential of all parties.

The core services analyzed in figure 21 are focused on business interactions. The companies which participate in the more advanced service are often found from networks and services produced from the generalized services portfolio. The core services are designed to create action oriented connections which will lead Finnish firms further down the line of international cooperation with the United States. The services range from solving the earliest stage information gaps with ConnectUSA to providing a meeting platform for location and partner finding in SelectUSA and individualized services provided by the Commercial Services department. These services have the effect of engaging businesses and creating meaningful connections while easing processes necessary to engage in business in the United States.

Having discussed the activities of the embassy and the impact they can have on the Finnish environment, the next chapter will draw conclusions from the empirical research and theoretical framework. Key strategies and factors are presented as well as further research opportunities.

6 CONCLUSIONS

6.1 Key Strategies for Internationalization support

In this study, support for companies seeking to internationalize was understood as the promotion of incentives for companies, and the reduction of barriers for those wishing to extend operations towards the U.S. market. The embassy is limited in its activities by the fact that they are charged with being a representative of the policies and activities of the larger government. In that capacity, they are not able to provide direct monetary incentives or directly change policy to reduce barriers.

The strongest areas where governments can assist companies is in the filling of informational gaps (Kotabe and Czinkota 1992) and supporting networking opportunities (Hutchinson et al. 2007). These aspects are present in the activities which are conducted by the U.S. Embassy in Helsinki. The embassy has integrated the desire to promote business opportunities into its mission statements and through the focus on economic statecraft.

According to the current literature on NIS and government intervention, the government has a strong role to play in encouraging internationalization (Hashim 2012). The most efficient ways which a government can support business internationalization outside of direct financial support is in informational representation (John 2013). Through this type of representation, the government is able to reduce barrier to entry and barriers to interacting with the NIS of a foreign country. There are a number of means for interacting with businesses and the public, with a need to further individualize services as the firm proceeds further and further with internationalization (Pietrasienski 2011).

The key strategies which have arisen from the production of services to businesses are a) event based informational sessions; b) networking activities and c) opinion building activities. These strategies are designed to answer to a number of target groups including business professionals, political actors, the public and youths.

In order to make the strategies work together, it is necessary that activities work in a complementary manner to each other. It can be seen from the impact radar analysis that each event seeks to meet the needs of businesses in a different way. In addition, it is hoped that the events will work in conjunction with each other to increase the engagement of individuals and organizations with each participation. No single event or service is meant to meet the needs of all businesses, but to increase interest and engagement, thereby increasing the likelihood of internationalization towards the United States. The activities of the Commercial Section go beyond these strategies to produced personalized services that fit the needs of businesses that are ready to engage with the United States and need specific assistance.

The showcase elements of the embassy and innovation center seek to make the embassy a topic of discussion and a desirable place to conduct business activities. The openness which the embassy wishes to portray is a key element in creating an impression that the embassy is a place which is open to business opportunities and willing to create connections to the institutions in the United States which are necessary to facilitate business relations. Creating partnerships with key organizations both in Finland and the United States through networking activities enhances the ability to create those connections.

6.2 Key drivers for service development

The changes which have been implemented in the Helsinki Embassy of the United States have many motivation drivers. There is a need for cost efficient diplomacy in developed countries which can create valuable connections between economies and help support stable relations between countries. The embassy staff in Helsinki reported this as one of the key motivators to the services and activities which they are developing.

In the same vein, the desire to modify security procedures to the appropriate level for a country in order to open the embassy to the local population while maintaining safety for all is a leading motivation. This kind of modification allows the embassy to create a showcase for American innovation and a platform for interaction with the national innovation system. This type of interaction with the NIS from outside sources serves to strengthen the internationalization of the United States National Innovation System.

The desire to create impactful services which differentiate the Helsinki Embassy from others is a key factor led by management focus. The services which have been created around the opening of the innovation center in the embassy have been the first steps to creating a fertile field for business internationalization support. Now that a base has been created with a group of individuals and organizations which are engaged with the embassy, the opportunity exists to create more advanced services which further support business interaction with the United States. The creation of further services is also facilitated by the knowledge of needs and issues of Finnish businesses which have been accrued by embassy staff through these activities.

The biggest driver of service development is national policy of the United States, and an increasing focus on economic statecraft as a way of managing relations with other developed nations.

6.3 Key factors of business support by the embassy

The creation of business interaction between the United States and other countries has been supported by the government in many ways over time. However, placing it as a leading strategy in the interaction between embassies and foreign countries. Research has shown that the government has a role in helping companies find a competitive edge in internationalization and tap foreign technology through importation (Kotabe and Czinkota 1992, Zhou et al. 2007).

The main finding of this study is that the United States Embassy in Helsinki can best provide support for businesses wishing to internationalize to the United States by creating effective networks and disseminating information through them.

The embassy is limited in the direct action which it is able to take in interacting with Finnish companies. Many of the most effective incentives to internationalization which a country can employ to encourage companies to expand internationally include direct financial benefits. This type of direct support is not appropriate for the embassy in the Finnish context.

During the process of interviewing and interacting with embassy staff members and businesses which have had the opportunity to utilize the innovation center, a number of key elements were identified which stood out as facilitating elements and attractors business support. For the embassy, the key factors include *a) the ability to disseminate information b) the ability to create a positive image of the United States and conducting business there c) the ability to foster networks which benefit participants d) the ability to facilitate Finnish businesses entering the United States.*

6.3.1 Disseminating information

The first factor, *the ability to disseminate information*, is a leading need for the embassy. A growing base of research suggests that some of the most effective and meaningful tools which governments employ are informational (John 2013). Fliess (2006) summarized the results of business surveys which stated lack of information about a variety of subjects caused delays and affect business decisions. As a representative organization of the government, the main mission of the embassy is to represent the positions and interests of the government as a whole. An effective manner to promote these goals is by providing information to a wide network of targeted individuals and organizations.

Information is a key factor in both incentivizing international expansion and in breaking down barriers. Information plays a role in weakening all four types of obstacles laid out by Morgan and Katsikeas (1997) which include strategic, operational, informational and process-based obstacles. The Finnish Ministry of Foreign Affairs (2013) examined

the trade barriers found by Finnish companies entering the U.S. market. The study found 12 barriers, of which 8 can be seen to hold information dissemination as a partial remedy. The market and NIS of a country are always shifting, and information is a key tool to informing of businesses about changes and creating a stable and secure mind-set.

6.3.2 *Creating positive image*

The second factor, *the ability to create a positive image of the United States and conducting business there*, is the factor which most affects individuals. In order for the embassy to be able to disseminate information and draw organizations into networks, they must influence individual opinions of managers and thought leaders. In order to create a positive image of the United States, the embassy includes inspirational and informational presentations in the beginning of each event. The embassy also tries to provide value for network participants by including them in events with visiting guests from the U.S. Increase in traffic seen as way to gain attention to the area and increase activities.

Governments have the largest role in setting the institutional environment in which entrepreneurs work (Minniti 2008). By setting a positive image, the government is creating a stage for interaction which entrepreneurs can use as they are able (Diamantopolous et al. 1993). The outlook for managers and the mind-set they hold towards a location play a large role in starting international activities (Hutchinson et al. 2007). For the services the embassy provides, individual mind-set can be seen as the gateway to participation in events and programs. The embassy has worked with the Finnish startup scene and with business organizations to present an image of openness. The innovation center and the spotlighting possibilities which it provides are a powerful tool in creating this positive image.

6.3.3 *Fostering networks*

The third factor, *the ability to foster networks which benefit participants*, is about the effectiveness of delivering services. Networks are important for businesses to find opportunities. The three main benefits of networks for SME companies are knowledge of foreign market opportunities, advice and experiential learning and referral trust (Zhou et al. 2007).

The embassy represents the institutions which constitute the national innovation system of the United States. The elements of the NIS which are interested in internationalizing. Metcalf and Ramlogan (2008) describe how important individual connections are to

the development of new growth and opportunities. Hutchinson et al. (2007) reinforce the importance of connections and facilitating factors on the decision to internationalize.

Hutchinson et al. (2007) found that networks had great impact on the ability of businesses to manage international operations in action. Mahmood and Rufin (2005) describe how the government has a great role to play in facilitating the acceptance of technological innovation through networks.

6.3.4 Facilitating internationalization

The fourth factor, *the ability to facilitate Finnish businesses entering the United States*, is perhaps the most novel for an embassy. The Innovation Center was built in the embassy campus in order to support Finnish businesses that wish to internationalize and work with U.S. companies. The support it is able to provide is in providing a showcase for the companies, and opportunities to utilize the facilities of the embassy and to integrate companies into networks.

There is a lot of potential in connecting businesses between two countries, both for the businesses involved and the institutions which comprise the NIS of each country, creating long term relationships (Lundvall et al. 2011). Especially in high tech industries, mixing local R&D with foreign innovations systems can provide a competitive boost (Bartholomew 1997). Direct export assistance opportunities are limited, which can lead to the conclusion that the indirect promotion options are the most effective means for facilitating internationalization (Diamantopolous et al. 1993).

Pietrasinski (2011) defined a series of stages which companies go through in the internationalization process, and what kind of services the government is able to provide in each. The U.S. Embassy in Helsinki has created a series of events and programs which cover the spectrum of these stages. They are able provide generalized informational services in the beginning with the possibility of progressing to more individualized facilitation services for companies. The individualized services can help with both finding partners and assistance with eliminating bureaucracy concerns.

6.4 Effects of the initiatives

We have seen in this conclusions chapter that the areas which the embassy is able to have the most impact is in filling information gaps and acting as an informational representative. The embassy has adapted a strategy of addressing these needs by developing initiatives in the areas of informational sessions, networking activities and opinion building activities.

These strategies align well with motivations which have driven the embassy in the past few years. The motivations have been driven by management focus to rejuvenate the embassy campus into a platform for the delivery of cost effective diplomacy through economic statecraft. The embassy has acknowledged the above discussed critical factors in the planning of programs and events.

There is a need to fill information gaps and create connections which can be seen in the poll of Finnish companies encountering barriers when entering the United States shown in figure 11. Partially because of distance and market size, there is a lack of information which is needed to make informed decisions about market entry into the United States. By creating effective networks and disseminating information through them, the embassy is able to attract a group of companies which are pre-disposed to conducting business in the United States, and provide them with needed information and assistance in the process.

The effects of the generalized services provided by the embassy are harder to measure. However, measuring the increased number of contacts and visits to the embassy campus shows a demonstrable growth in networks. These increased numbers of contacts give the embassy the chance to engage network members in the core business services which they provide.

The core services have the effect of engaging companies which are both pre-disposed to conducting business in the United States, and those which need an increase in incentives or reduction of barriers to consider expansion there. For those companies, the embassy is able to answer questions from a variety of area in order to ease processes and reduce time wasted in bureaucratic struggles. The embassy is also able to connect companies with representatives of areas in the United States which can offer incentives and enticements to enter the market. With the most advanced companies, the embassy is able to take an active hand in creating action oriented connections to establish business relations.

Through these services, the embassy has the ability to engage or assist companies interested in international expansion to the United States regardless of the development stage of the company.

6.5 Transferability

A positive side effect of the U.S. government creating programs and services in an embassy location is that there is a good possibility that those same services can be transferred to other embassies with a similar relationship to the host country. While many of the institutions and the environmental setting which are present for an embassy may be

unique to its host country, there are many basic actions which could be thought to have similar impacts.

A good deal of the changes and focus of the embassy are the result of leadership focus. Leadership in the embassy plays a huge role in deciding development priorities. Therefore, the willingness of leadership in a given location to shift focus to business priorities is a key first step to implementing similar activities. This is largely related to the importance which interviewees placed on both the physical openness of the embassy campus and the willingness of staff to extend themselves beyond the usual set of diplomatic and governmental contact networks which exist in an embassy's environment.

Security is a necessary component of embassy operations. Therefore, opening the campus to business activities and events requires that the country hosting the embassy is stable enough to make the changes in security procedures and technology available and allowed on the campus possible.

In order to have similar impact on the local environment, the country needs to have the above conditions settled, but must also be in the right business environment that the United States government can have a positive influence. The major purpose of these activities is to disseminate information about the United States and the institutions which make up its business environment and national innovation system. Therefore, in order to see the impact of these activities, there should be enough distance that a disparity in information and opportunities can be observed and challenged.

With these given conditions, it is very likely that another embassy would be able to have similar successes and positive reaction as the Helsinki Embassy. When considering that the embassy is a representative organization for the United States, the approaches and selection of service types are possible to be similarly implemented.

6.6 Limitations and suggestions for further studies

The aim of this study has not been to form a new theoretical framework on the internationalization of national innovation systems, but rather to foster understanding of the phenomenon of an embassy providing focused services for companies wishing to internationalize towards its country.

The study is focused on contemporary issues, which are in the process of development and are constantly evolving. Therefore, the choice to make an illustrative case study was found to be the best option to find and analyze the key factors behind embassy support of internationalization. Because of the concentration on a single case institution with a limited set of empirical data, the study has limitations regarding theoretical contribution and draws generalizations. Because the setting of the study is in the Finnish environment of

the U.S. Embassy, the findings are limited to that context, but does offer some opportunities to draw transferrable recommendations for embassies in a similar institutional setting.

In future research it would be interesting to explore the impact which an embassy conducting internationalization support activities has on the political and economic relations with a country. Additionally, a comparison of the effectiveness of generalized internationalization support versus activities directed at particular industries or sectors would be valuable to explore.

Due to the limited scope and data present in this study, the issues related to the development of new government services were superficially covered in this study. The productization of services is a broad concept which would require more thorough analysis. Therefore, further research could be conducted on the productizing of internationalization services and how those products could serve the mandates which the embassy must answer. Furthermore, it would be interesting to analyze the role of government agencies in early stage company and startup firm internationalization both in the home country environment and in a foreign context.

7 SUMMARY

The market landscape for companies in almost all sectors has changed dramatically in the last few decades. Because of globalization and the growth of knowledge-society, the lines of a nation's interests and its innovation system influence have expanded to the point that national borders are not always the natural borderline between systems. This change can be seen most in multi-national corporations which often extend their influence globally. It is not exclusive to businesses though, with other actors in the NIS mix pressurized to develop new approaches to the interconnected world.

The pressures of supporting national interests in an interconnected world are especially felt by the federal government of the US. These forces have urged the government to focus intensions on initiatives like economic statecraft, in which the promotion of business interests and mutually beneficial growth become a focal point for embassies abroad. The possibilities which the global market offer have been acknowledged by the government and many embassies as well.

The ever increasing demands of globalization and the desire of the U.S. Embassy to lead through economic statecraft in Finland create an interesting setting for analyzing the possibilities of a foreign government assisting in the internationalization of businesses. Therefore, the research question of the study is: *How do initiatives of the United States affect Finnish firm internationalization?*

In connection with this question, the problem is studied by exploring three sub-questions:

- Which factors are key to producing impact?
- How do home based (U.S.) and host based (Finland) factors interact?
- What are the effects which the initiatives produce?

The theoretical portion of the study is constructed around the themes which are raised in the sub-questions. First, the theory presents the concept of a national innovation system, how it has developed and how it is spreading to the international level. These entities are mapped out to explore their interactions and the facilitating factors at play. The theory continues by describing the incentives and barriers which are faced by companies desiring to internationalize operations. Because the embassy seeks to increase incentives and reduce barriers to entry to the U.S. market, this is used to analyze the actions which take place in and around the embassy ecosystem. Barrier reduction is divided into four categories of strategic obstacles, operational obstacles, informational obstacles and process-based obstacles.

The research was conducted as a single case study of the U.S. Embassy in Helsinki, Finland. Data was collected through a series of semi-structured interviews, participation

in and observation of events, and from secondary sources such as web pages, resources sites and articles. The empirical data was deconstructed, organized into themes and analyzed in order to reach an answer to the research questions. The themes for analysis were motivations, activities and incentives and barriers. The trustworthiness of the study has also been evaluated in order to ensure credibility for the research.

The results of the empirical study provide explanation for the sub-questions through the case embassy. The embassy is best able to support the internationalizing of companies by acting as a representative of the NIS of the United States. Acting as a representative gives the embassy the chance to act as a provider of information and networking agent.

The embassy is based in Finland, and therefore conducts its events and networking activities in the local environment. In addition, there are a number of home based elements which factor into the activities of the embassy including U.S. business and organizations active in Finland, U.S. governmental policy and focus. Because of this situation, the four key factors listed are all affected by a combination of host country and home country influence. Largely, the ability to disseminate information and the ability to create a positive image of conducting business in the U.S. are home based factors. The ability to foster effective networks and facilitate Finnish businesses are host country based.

The embassy has devised a number of strategies to support business internationalization in Finland. The key strategies and activities include event based informational sessions, generalized and individualized networking activities and opinion building activities.

The results show that the embassy has created a series of events and programs which are designed to meet the needs of Finnish businesses which can have active interaction with the market of the United States. The embassy events and programs are designed to provide information and create networks to help facilitate the expansion of businesses internationally. These measures can be seen to be transferrable to other embassy locations which have a similar setup and appropriate host country.

Finally, the study concludes that the embassy is able to create a good deal of activity and support for Finnish businesses. While they are limited in the type of support which they are able to provide, and cannot transform into a dedicated export support office, there are many positive actions which can help connect the U.S. national innovation system to Finland while creating incentives and reducing barriers for Finnish companies to internationalize. It is a symbiotic relationship, relying on the companies to participate in networking activities and seeking information.

The embassy staff also need to be open and willing to create new avenues of interaction as the programs continue to develop in the future. The key factors affecting the support which the embassy provides Finnish companies include *1) the ability to disseminate information 2) the ability to create a positive image of the United States and conducting business there 3) the ability to foster networks which benefit participants 4) the ability to*

facilitate Finnish businesses entering the United States. By ensuring that the embassy is answering each of these factors, the embassy is able to create positive effects for Finnish companies seeking to internationalize by creating effective networks and disseminating information through them.

8 REFERENCES

- APCTT (2015) Asian and Pacific Centre for Transfer of Technology Online Resource Center. <Apctt.org>, retrieved 01.06.2015.
- Baltic Consulting (2013) Barriers for international cooperation for SMEs in Latvia, Estonia, Finland and Sweden. Report for the Central Baltic Interreg IV A Programme. Riga, Latvia.
- Balzat, Markus and Hanusch, Horst (2004) Recent Trends in the Research on National Innovation Systems. *Journal of Evolutionary Economics*, Vol. 14 (2), 197-210.
- Bartell, Marvin (2003) Internationalization of universities: A university culture-based framework. *Higher Education* Vol. 45, 43-70.
- Bartholomew, S. (1997). National systems of biotechnology innovation: complex interdependence in the global system. *Journal of International Business Studies* Vol. 2 (2), 241-266.
- Baumol, W.J. (1990) Entrepreneurship: Productive, unproductive and destructive. *The Journal of Political Economy*, Vol. 98 (5), 893-921.
- Bell, Jim - McNaughton, Rod (2000) "Born Global" Firms: A challenge to public policy in support of internationalization. *Marketing in a Global Economy Proceedings*. University of Ulster, Londonderry.
- Carlsson, Bo (1995) *Technological Systems and Economic Performance: The Case of Factory Automation*. Kluwer Academic Publishers, Boston.
- Carlsson, Bo. (2006). Internationalization of Innovation Systems: A survey of the literature. *Research Policy*, Vol. 35, 56-67.
- Chung, S. (2002) Building a national innovation system through regional innovation systems. *Technovation*, Vol. 22, 485-491.
- Coffey, Amanda - Atkinson, Paul (1996) *Making Sense of Qualitative Data: Complementary Research Strategies*. Sage Publications, Thousand Oaks, CA.
- Cohen, W.M. – Nelson, R.R. – Walsh, J.P. (2002) Links and Impacts: The influence of Public Research on Industrial R&D. *Management Science* Vol. 48 (1), 1-23.
- Cooke, Philip - Uranga, Mikel Gomez - Etxebarria, Goio (1997) Regional innovation systems: Institutional and organizational dimensions. *Research Policy* Vol. 26 (1997), 475-491.
- DeLambert, Rick (2015) Senior Commercial Officer, U.S. Embassy. Interview 24.03.2015.

- Diamantopoulos, A. – Schlegelmilch, B.B. – Katy, Tse K.Y. (1993) Understanding the Role of Export Marketing Assistance: Empirical Evidence and Research Needs. *European Journal of Marketing*, Vol.27, 5-18.
- Easton, G. (2010) Critical Realism in Case Study Research. *Industrial Marketing Management*, Vol. 39 (1), 118-128.
- Eriksson, P. - Kovalainen, A. (2008) *Qualitative methods in business research*. Sage, London.
- Finnish Ministry of Foreign Affairs (2013) Internationalization and barriers to trade in 2013. <www.teamfinland.fi> Helsinki, retrieved 23.5.2015.
- Fischer, Manfred (2000) Innovation, Knowledge Creation and Systems of Innovation. *The Annals of Regional Science* (2000).
- Fitzpatrick, Thomas (2015) Overseas Building Operations. Interview 10.02.2015.
- Fliess, Barbara - Busquets, Carlos (2006) “The Role of Trade Barriers in SME Internationalisation”, *OECD Trade Policy Papers*, No. 45, OECD Publishing.
- Foray, D. (1995) The economics of intellectual property rights and systems of innovation: the persistence of national practices versus the new global model of innovation. In: Hagedoorn, J. (Ed.), *Technical Change and the World Economy: Convergence and Divergence in Technology Strategies*. E. Elgar, 109-133 (Chapter 5) Aldershot, England.
- Freeman, C. (1987) *Technology and Economic Performance: Lessons from Japan*. Pinter, London.
- Freeman, C. (1997) *Innovation systems: city-state, national, continental and sub-national*. Paper presented at Montevideo Conference, University of Sussex.
- Freeman, C. (2002) Continental, national and sub-national innovation systems-complementarity and economic growth. *Research Policy*, Vol. 31 (2), 191-211.
- Fromhold-Eisebith, Martina (2007) Bridging Scales in Innovation Policies: How to Link Regional, National and International Innovation Systems. *European Planning Studies*. Vol. 15 (2), 217-233.
- Ghauri, Pervez - Gronhaug, Kjell (2002) *Research Methods in Business Studies*, 2nd edition. Pearson Education Limited. Essex.
- Ham, Peter van (2001) The Rise of the Brand State: The postmodern politics of image and reputation. *Foreign Affairs*, Sept/October, 2001.
- Hashim, Fariza (2012) Challenges for the Internationalization of SMEs and the Role of Government: The Case of Malaysia. *Journal of International Business and Economy*, Vol. 13 (1), 97-122.
- Holstein, James - Gubrium, Jaber (2002) Chapter 6: Active Interviewing. In *Qualitative Research Methods*, edited by Darin Weinberg. 2001. Blackwell Publishers Inc. Malden, Massachusetts

- Hunter, Rodney (2013) Economic Statecraft: Helsinki's Innovation Center means business. *State Magazine*, Sept. 2013.
- Hutchinson, Karise, et. al. (2007) Internationalization Motives and Facilitating Factors: Qualitative Evidence from Smaller Specialist Retailers. *Journal of International Marketing*. Vol. 13 (3), 96-122.
- Indouzee, Taina (2014) Information Resource Center Director, American Resource Center. Interview 15.12.2014.
- Jackson, Deborah J. (2011) *What is an Innovation Ecosystem?* National Science Foundation. Arlington, VA.
- Jacobsson, Staffan - Bergek, Anna (2011) Innovation system analyses and sustainability transitions: Contributions and suggestions for research. *Environmental Innovation and Societal Transitions*, Vol. 1 (2011), 41-57.
- John, Peter (2013) All tools are informational now: how information and persuasion define the tools of government. *Policy & Politics*, Vol. 41 (4), 605-620.
- Kivirauma, Donna (2015) CEO, TeamUp Oy. Interview 26.02.15.
- Kotabe, Masaaki - Czinkota, Michael (1992) State government promotion of manufacturing exports: a gap analysis. *Journal of International Business Studies*, Vol. 23 (4), 637-658.
- Korhonen, Heli - Luostarinen, Reijo - Welch, Lawrence (1996) Internationalization of SMEs: Inward – Outward Patterns and Government Policy. *Management International Review*, Vol. 36 (4), 315 – 328.
- Lee, Jeong-dong - Park, Chansoo (2006) Research and development linkages in a national innovation system: Factors affecting success and failure in Korea. *Technovation*, Vol. 26 (2006), 1045-1054.
- Leonidou, Leonidas C. (2000) Barriers to export management: an organizational and internationalization analysis. *Journal of International Management*, Vol. 6 (2000), 121-148.
- Lincoln, YS. - Guba, EG. (1985) *Naturalistic Inquiry*. Sage Publications, Newbury Park, CA.
- Lundvall, B.-Å. (1985) *Product Innovation and User-Producer Interaction*. Aalborg University Press, Aalborg.
- Lundvall, B.-Å. (1992). *National Innovation Systems: Towards a Theory of Innovation and Interactive Learning*, Pinter, London.
- Lundvall, B.-Å. (1997) National Systems and National Styles of Innovation. Paper presented as the 4th International ASEAT Conference “Differences in styles of technological innovation.” Manchester, 1997.
- Lundvall, B.-Å. (2007) National Innovation Systems – Analytical Concept and Development Tool. *Industry and Innovation*, Vol. 14 (1), 95-119.

- Lundvall, Bengt-Åke. (2007) Innovation System Research: Where it came from and where it might go. *Globelics Working Paper Series*, No. 2007-01.
- Lundvall, Bengt-Åke - Gregersen, Birgitte - Johnson, Björn - Lorenz, Edward (2011) Innovation Systems and Economic Development. Aalborg University. June 2011.
- Mahajar, Abdul Jumaat - Yunus, Jasmani Binti Mohd (2006) The Effectiveness of Government Export Assistance Programs on Malaysia Small and Medium Enterprises (SMEs). *Problems and Perspectives in Management*, Vol. 2006 (1), 58-71.
- Mahmood, Ishtiaq - Rufin, Carlos (2005) Government's Dilemma: The Role of Government in Imitation and Innovation. *Academy of Management Review*, Vol. 30 (2), 338-360.
- Malecki, Edward. J. (1983). Technology and Regional Development: A Survey. *International Regional Science Review*, Vol. 8 (2), 89-125.
- Maxwell, J.A. (1996). *Qualitative Research Design. An Interactive Approach*. SAGE publications, Thousand Oaks.
- Metcalfé, Stan - Ramlogan, Ronnie (2008) Innovation systems and the competitive process in developing economies. *The Quarterly Review of Economics and Finance*, Vol. 48 (2008), 433-446.
- Minniti, Maria (2008) The Role of Government Policy on Entrepreneurial Activity: Productive, Unproductive, or Destructive? Entrepreneurship Theory and Practice. 2008. Baylor University.
- Molesky, John David (2015) League of Green Embassies, U.S. Embassy. Interview 24.03.2015.
- Morgan, Robert - Katsikeas, Constantine (1997) Obstacles to Export Initiation and Expansion. *International Journal of Management Science*, Vol. 25 (6), 677-690.
- Mowery, David C. (1992) The U.S. national innovation system: Origins and prospects for change. *Research Policy* Vol. 21 (1992), 125-144.
- Mowery, David C. (1998) The changing structure of the U.S. national innovation system: implications for international conflict and cooperation in R&D policy. *Research Policy*, Vol. 27 (1998), 639-654.
- Mowery, David - Sampat, Bhaven (2004) Universities in national innovation systems. In: *Proceedings of the first Globelics Academy*. Portugal, 2004.
- Myers, M.D. (2013) *Qualitative Research in Business and Management*. SAGE publications, Los Angeles.
- Mäki, Mia (2015) Senior Commercial Specialist, U.S. Embassy. Interview 24.03.2015.

- Needham, J. (1954) *Science and Civilization in China*. Cambridge University Press, Cambridge.
- Negro, Simona - Alkemade, Floortje - Hekkert, Marko (2012) Why does renewable energy diffuse so slowly? A review of innovation system problems. *Renewable and Sustainable Energy Reviews*, Vol. 16 (2012), 3836-3846.
- Nelson, R. (1993) *National Innovation Systems. A Comparative Analysis*. Oxford University Press, New York/Oxford.
- Niosi, J. - Bellon, B. (1994) The global interdependence of national innovation systems – evidence, limits, and implications. *Technology in Society* Vol. 16 (2), 173-197.
- Niosi, J. - Bellon, B. (1996) *The globalization of national innovation systems. New York, Evolutionary Economics and the New International Political Economy*. Pinter, New York.
- OECD (1997) *National Innovation Systems*. OECD Publications, Paris.
- OECD (2009) Top Barriers and Drivers to SME Internationalization. Report by the OECD Working Party on SMEs and Entrepreneurship, OECD.
- Okoroafo, Sam C. (1999) Internationalization of Family Businesses: Evidence from Northwest Ohio, U.S.A. *Family Business Review*, Vol. 12 (2), 147-158.
- Olins, Wally (2002) Branding the nation -- the historical context. *Journal of Brand Management*, Vol. 9 (4-5), 241-248.
- Pietrasiencki, Pawel (2011) The Evolutionary Character of Supporting the Internationalisation Processes – Recommended System Solutions. *Polish Journal of Management Studies*, Vol. 2011 (4), 193-199.
- Ramaseshan, B. - Soutar, Geoffrey (1996) Combined Effects of Incentives and Barriers on Firms' Export Decisions. *International Business Review*, Vol. 5 (1), 53-65.
- Reneau, Jeffrey (2015) Counselor for Press and Cultural Affairs, U.S. Embassy. Interview 17.2.2015.
- Republic of Slovenia (2010) Programme for Stimulating the Internationalization of Companies for the Period 2010-2014. http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/DEOT/Internacionalizacija_TNI/programme_101012.doc, retrieved 05.11.2015.
- Saunders, M. - Lewis, P. (2012) *Doing Research in Business and Management*. FT Prentice Hall, Harlow, England.
- Seidman, I. (2006) *Interviewing as Qualitative Research. A Guide for Researchers in Education and the Social Sciences*. New York: Teachers College Press.

- Srikatanyoo, Natthawut and Gnoth, Juergen. (2002). Nation Branding: Country image and international tertiary education. *Brand Management*. Vol. 10 (2), 139-146.
- Stake, R. (2005) *Qualitative Case Studies*. In N. Denzin & Y. Lincoln, *Handbook of Qualitative Research*. Sage Publications, Thousand Oaks.
- Sullivan, D. - Bauerschmidt, A. (1989) Common Factors Underlying Barriers to Export: A Comparative Study in the European and U.S. Paper Industry. *Management International Review*. Vol. 29 (2), 17-32.
- Thierstein, Alain - Wilhelm, Beate (1999) Incubator, technology, and innovation centers in Switzerland: features and policy implications. Institute for Public Services and Tourism IDT-HSG. 1999.
- Torres, Miguel M. - Varum, Celeste A. - Banno, Mariasole (2012) Competencies, Requirements of Internationalization and Use of Non-Financial Public Supports. *International Journal of Innovation, Management and Technology* Vol. 3 (3), 295-299.
- United States Embassy Helsinki, Finland. (1999). *U.S. Finnish Diplomatic Relations*. Gummerus Kirjapaino Oy, Jyväskylä.
- United States Embassy Helsinki (2015) What is ConnectUSA? <<http://finland.usembassy.gov/connectusa.html>>, retrieved 10.9.2015.
- Wagner, J. - Sternberg, R. (2004) Start-up activities, individual characteristics, and the regional milieu: Lessons for entrepreneurship support policies from German micro data. *The Annals of Regional Science*, Vol. 38 (2), 219-240.
- Wirthman, Lisa (2014) American 'Innovation Center' A Model For Green Technology And Diplomacy. Forbes <http://www.forbes.com/sites/citi/2014/03/07/american-innovation-center-a-model-for-green-technology-and-diplomacy/>, retrieved 24.5.2015.
- World Bank (1991) *World Development Report 1991*. Oxford University Press, New York.
- Yin, R. (1989) *Case Study Research. Designs and Methods*. Sage Publications, Newbury Park.
- YLE uutiset (2011) U.S. to open innovation centre in Helsinki. http://yle.fi/uutiset/us_to_open_innovation_centre_in_helsinki/5431430, 1.10.2011, retrieved 21.05.2015.
- Zhou, Lianxi - Wu, Wei-ping - Luo, Xueming (2007) Internationalization and the Performance of Born-Global SMEs: The Mediating Role of Social Networks. *Journal of International Business Studies*, Vol. 38 (4), 673-690.

APPENDICES

Appendix 1 Interview Guide

The following was used as a guide for the interview conversation with most interviewees. The format of the discussion was structured but informal, giving the opportunity to divert into related topics and ideas throughout the conversation.

- Name
- Position
- Time working in embassy

Theme 1 The Innovation Center building/environment

- How important is the innovation center to the embassy operations?
 - How does the importance show?
- How does the building design reflect the operational wishes?
- How does the environment differ from other embassies?
- How does the building change the atmosphere of the embassy and operations?
- What further changes or additions would you like to see in the Innovation Center?
- Why was Finland the right choice for this kind of initiative?
- How is the Innovation Center perceived in the US?

Theme 2 Openness

- Has the number of visitors/businesses visiting the embassy increased?
- Have the types of events which are possible changed?
- What communication channels are in place to communicate with interest groups around the center?
- Has the number of visitors from the U.S. changed since the center was built?
- Has the center affected the interactions with other embassies/regions?
- Has the center show an effect on policy creation?
- Has the interaction with universities changed?
- Is the knowledge gained through building the Innovation Center in Helsinki transferrable to other countries?

Theme 3 Business/Social Activity in the embassy

- How has the Innovation Center changed the way the embassy interacts with the business community?
- Are there some examples of successful connections made through the center?
- What kind of networks and organizations are able to interact with the Innovation Center?
- What do you see as the main benefits of the Innovation Center?
- How can the embassy best utilize the knowledge present in the Finnish business community?
- What kind of impact can the Center have for U.S. businesses?

Theme 4 Barriers and Incentives.

- What steps are you able to take in order to reduce barriers for Finnish companies to do business in the U.S.?
- Where do you see the Innovation Center having the greatest impact?
- Has the center helped with building connections in Finnish regions?
- How can the best elements of the Innovation Center be transferred to other suitable embassy locations?
- How can the U.S. Embassy help companies internationalize through the Innovation Center?
- What are the effects of the activities of the U.S. Embassy Innovation Center and how can it have impact as a linking agent between other actors in the Finnish and U.S. environments?
- What is the relationship between the Innovation Center and the National/International Innovation System of the United States?