

Exploring internationalization of Dutch independent software vendors

MSc Thesis Research Report

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Preface

This thesis is the final part of my Business Informatics Master at Utrecht University.

I would like to express my thanks and gratitude to Dr. Slinger Jansen for providing me with his valuable insights, suggestions and support throughout this thesis project. Dr. Jansen provided the feedback that inspired continuous improvement of this research project. I would like to thank my partner and family for all the support throughout the project. To Kempen Automatisering I would like to express my gratitude for encouraging me to achieve the best feasible results and for providing the time and resources and support to make this research possible. Finally, I would like to thank all the case companies for sharing their thoughts and experiences providing valuable insights for this research.

Abstract

In 2013, it was estimated by IDC that IT spending in emerging markets would account for 8.8% of a growing total market of \$730 billion, representing 51% of all new growth in the IT marketplace. The growth in new markets presents an opportunity for companies currently focused only on the domestic market outside of the emerging markets. This growth challenges companies to explore the possibilities outside the country of origin. This research has found that Dutch product software companies are interested in selling their products beyond the domestic border. More than half of the case companies included in this research actually skipped the domestic market as an intermediate step, continuing directly to sell internationally. Together, almost half of all case companies researched acquired more than 50% of their revenue from customers outside of the domestic markets.

Research estimates that more than 50% of all attempts made by companies to expand their business beyond the domestic market fail, costing valuable resources and time. In contrast to the expectations, almost none of the studied case companies could name the specific country or countries whose markets they would ultimately enter. When decision makers did determine the actual countries, they relied primarily on high-level, generic country statistics – for instance, Internet penetration or number of potential customers. The main challenge facing the CEOs of the software companies was mostly focused on setting up a successful market entry strategy.

Current theory makes no distinction between the infrastructure of the software product and the nature of the business model of the company. This research indicated that product characteristics are one of the key aspects influencing the eventual market entry form chosen. When it comes to targeting foreign markets by Dutch independent software vendors, this research found that companies that sell products with low touch sales tend to use a ‘shotgun’ tactic. They create an initial selection of countries based on the number of potential customers, the level of Internet adoption and a basic competitor analysis. Companies with a high touch sales product tend to use their personal network and personal contacts in order to gain new business, combined with the use of content marketing, trade shows and conferences in order to come into contact with potential customers.

This research identified the level of personal experience of the management team gained in former jobs, life experience and education as an important foundation for both high touch and low touch sales products. In high touch sales products, the international personal network of the company management is a primary way of building a reseller or partnership network as well as a principal means of contacting and creating international business opportunities, thus avoiding making mistakes that decrease the chances of the product appealing to an international market. Management teams with a lack of international business experience serve as a warning signal.

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1. Introduction

No industry has profited more from globalization than the IT industry. International Data Corporation (IDC, a global provider of market intelligence) estimations for 2013 indicate IT spending in emerging markets has grown in excess of 8.8%, growing to a total of \$730 billion and representing 34% of worldwide IT spending. This growth accounts for 51% of all new growth in the IT marketplace, resulting in a rising number of IT companies seeking opportunities outside of their domestic markets.

The phenomenon of companies expanding to markets outside the domestic market is formulated under a wide array of classifications. Research by Moen et al. (2003) described internationalization as an innovation by which companies enter new markets. The research more specifically formulates internationalization as:

*“Internationalization is the process, strategy and decisions of exporting to foreign countries”
Moen et al (2003)*

Other researchers have categorized these activities of internationalization as globalization or simply as company growth strategies. However, the activities performed during internationalization attempts differ from activities undertaken to enable growth in the domestic market.

IT is fuelling the number of internationalization attempts, communication technology is the enabler for internationalization, allowing people to buy and sell without physical meeting. A second enabler is the continuous dismantling of international trade barriers. Moen et al. (2003) indicate incubators also have a more profound impact on the internationalization of the Small and Medium Enterprise (SME) sector. They educate young IT start-ups by developing their knowledge and skills to increase their chance of success outside of the domestic market.

Research most often describes internationalization as a process of continuous expansion to more distant markets and is supported by Welch and Luostarinen (1993). International expansion is described as outward movements and activities to implement international operations (Welch & Luostarinen, 1993). All operations, strategy, relationships and structure are aimed at improving international operations. The advantages of internationalization can also be interpreted as Buckley and Casson (1987) do, as a necessary evil resulting from domestic market imperfections. The theory of Buckley and Casson is directly linked to developing markets such as Brazil. The following actions could indicate an imperfect market: discriminatory pricing is needed to increase market percentage; uncertainties in the process of the transfer of knowledge between companies; government interventions resulting in negative tariffs or taxation; and excessively restrictive laws.

To many independent software vendors, the idea of expanding to markets beyond the border of the company's headquarters seem to have the potential for significant revenue gains. They are impressed by the daunting growth statistics of foreign countries. Many decision makers are impressed with gaining a potential new market size several times larger than their domestic market. To many, the ability to expand from a local, regional or national market to domestic markets seems the ultimate step towards increasing their revenue.

However, the eventual profits envisioned from an internationalization initiative are often uncertain (Moen, Bakas, Anette & Pedersen, 2010). Those who explore the possibilities of internationalization are faced with many new challenges from the domains of information technology, management, culture, marketing and finance. Moen, Gavlen & Endresen (2003) indicate the process becomes more complex due to the nature of software compared to physical products. International operations will also cause stress on all parts of the company. Internationalization can result in an increase of problems encountered compared to doing business locally Roger A. Philips (2014). Software is by nature intangible, contrasting with the business of physical products. Reproduction and distribution costs in software are virtually non-existent. However, the intangible nature also introduces the companies to a far greater set of options of how they choose to implement a successful internationalization.

1.1 Problem statement

The global international market is no longer restricted to large multinationals. More and more, small software companies are engaging in international activities (Oyson, 2004). The increasing success of app stores such as the Apple App Store and the Google Play Store provides a great platform for anyone to start offering apps to a wide range of international customers. Research by Oyson (2004) indicates that small firms differ from larger companies in the implementation of internationalization activities. The research by Oyson indicates small firms are moving away from theories that follow an incremental process as suggested by the current leading internationalization theories. Ruzzier, Hisrich & Antoncic (2006) further indicate early international business literature mostly focuses on mature multinationals.

Smaller companies are only recently a topic of research. This lack of research presents a problem for small software companies in the Netherlands, resulting in uncertainty on how to steer towards a successful internationalization. The proposed research dives deeper into the challenges of internationalization for small software companies and results in the following problem statement for the proposed research:

"It is estimated that more than 50% of all attempts made by companies in expanding their business beyond the domestic market fail, costing valuable resources and time."

Small product software companies lack clear insight on internal factors, characteristics and choices made in practice that lead toward a successful internationalization. Research indicates a strong increase in the number of companies participating on an international level. Companies located in a small domestic market are more driven to think internationally according to Coviello & Jones (2004) and Oviatt & McDougall (2005). Increasing competition in a domestic market and the availability of communication technology causes rapid internationalization.

1.2 Software vs. physical products

When selling physical products, an international company is more or less bound to traditional terms extensively described in the current literature such as “*agents, logistic operators, distributors, licensee, and foreign subsidiary*”. Software is characterized by shorter life cycles and lower distribution costs, meaning it cannot be defined by the traditional terms.

Software companies are faced with a great number of options and opportunities on how they choose to implement internationalization. The available market entry form and the market selection is fuelled by the emergence of the internet, which allows easy distribution and connection to customers and allows supplier, producer and consumer to interact on an unprecedented level through the evolvement of e-commerce platforms (Benjamin and Wigand, 1995). Moen (2002) indicates the presence of the internet can decrease the psychological barrier between regions. The internet simplifies the distribution of documentation, payments and licenses, improving the possibility for companies to perform inexpensive market research and marketing experimentation.

1.3 Market entry timing

Entry timing is an important factor in internationalization. The timing of entry can be made in different phases of the company’s timeline. Recent start-ups tend to start thinking global from Day one, conducting their business across the domestic borders as indicated by Sapienza et al. (2000). Start-up timing is often combined with employee experience in correlation with a successful internationalization. Companies may have made previous attempts at internationalization resulting in a revenue gain and providing valuable experience for the employees and managers. Companies are faced with strategic and technical challenges to create or adapt a software solution for an international context. Disruptive technologies can fuel global changes, causing a so-called levelling of the global playing field – a term coined by Friedman (2006) that refers to “*flatteners*” providing the ability to connect customers and providers of services regardless of geographical boundaries.

Organizations are no longer concerned with geographical distance, and organizational employees and customers are no longer confined to a specific geographical location. The work of Friedman (2006) instigated multiple trends within the Information Systems domain, such as the outsourcing of software development and help desk functionalities.

1.4 Scientific relevance

Studies by Sheng-yue and ru (2005) find a dramatic failure rate; 50% off all internationalization attempts made by companies fail, resulting in a loss of valuable time and resources. Managers in charge of implementing internationalization are challenged with the daunting task of successfully guiding the internationalization process. These managers are faced with a tremendous amount of options and opportunities on deciding how they choose to implement a successful internationalization. Research by Bell (1997) suggests that software companies often experience great difficulties with the export of their products and points out that problems experienced by companies selling domestically amplify with a international exposure.

Explanatory research projects often produce or focus on a model explaining the choices made during an internationalization process. Guo X (2011) suggests researchers should focus more on actual internationalization strategies implemented by software providers and proposed the need for explanatory research focused on experiences in the field. This would illustrate the internationalization process of real companies in order to test whether internationalization theories hold up in practice, providing additional value for software companies. A study including several cases should include companies using the Software-as-a-Service (SAAS) architectures indicated in Guo X. (2011), since SAAS architectures represent a more recent aspect and are profoundly different in nature compared to more traditional client server architectures.

Currently there is no clear study linking internationalization theories to evidence found in the field. This research, however, aims to provide more insight into the use of scientific literature by entrepreneurs and business leaders. It seeks to validate the use of current internationalization theories, allowing for more focused research linking company decisions and achievements to the current body of knowledge. Emerging economies have seen a significant interest from the scientific field, primarily due to the rapid growth and pace of development of the emerging economies. Wright et al. (2005) researched an emerging pattern to better understand the diversity among companies and countries, indicating the growing importance of emerging countries as a research topic.

A strong body of knowledge focuses on the comparison of countries and their Organization for Economic Co-operation and Development (OECD) rankings. The OECD researched the software contribution to the domestic Gross Domestic Product (GDP) of various countries around the world. Finland, Israel and India are countries that have been part of the top 10 for a long time. Therefore, these countries have seen an increase in interest by the scientific community. Research has found a positive correlation between Indian software companies investing in internationalization and the financial performance of these companies. The financial performance of these Indian software companies directly contributes to the GDP of India.

This research provides a validation to test current leading internationalization theories and success factors. It gives key decision-makers in Dutch software companies in the Dutch software market a better insight into which factors contribute to the degree of internationalization, and it provides valuable insight for Dutch decision-makers into which theories and success factor into mapping out a company strategy to obtain growth through internationalization.

1.5 Social impact

IDC indicated the largest market growth occurs in new upcoming markets. The increased potential of markets outside of the domestic market results in a rising number of IT companies seeking opportunities outside of their domestic markets. At the moment of writing, there is an abundance of theory focused on internationalization. After conducting a mapping study, decision-makers are able to obtain a better understanding of existing theories. Most current literature is descriptive in nature, thus not providing CEOs the validation that these theories are supported in practice.

The software sector in the Netherlands has a lower contribution to the GDP compared to the top 10 OECD-rated countries. In total, Dutch software companies made a total of 1.93 billion euro (in 2010) through international sales. The international sales are largely dominated by international product software sales, not custom software, services and consultancy. Te Vekde, Veldkamp & Plomp (2010) indicate that 70% of the total software product is exported to western Europe, and North America is responsible for a total of 20%. An increase in revenue would directly result in a higher GDP for the Netherlands.

In 2006, the Netherlands scored seventh in the OECD ranking, however there is little empirical research focusing on the internationalization of small Dutch software companies. Currently, most of the Dutch research focuses on the market entry strategies and the success factors that are supposed to contribute to a successful internationalization. However, most of the research is confined to the service and production sector without the validation of the software sector. The Dutch software industry lacks strong evidence focused on companies that have made internationalization a successful endeavour.

Research aiding in the process of improving the exports of Dutch software companies could end up lowering the failure rate of internationalization attempts, saving these company's valuable resources and time. This could, in turn, translate into better-performing companies and a higher GDP.

The current state of the Dutch software sector

Software companies remain relative small over time in the Netherlands, although a small group of them do grow into successful large corporations that provide significant economic growth and jobs in the domestic market. In 2010, the software industry provided a total of 210,000 jobs, of which 68,000 are focused on software development and 14,000 are focused

on research and development.

At the moment of writing, evidence suggests that Dutch companies mostly develop custom or tailored software solutions rather than product software (van de Weerd et al., 2007). The Dutch centre for statistics (CBS) in 2014 estimated the amount of total income through the selling of custom software products is €5.5 billion compared to €3.9 billion generated through the selling of product software.

Lu & Beamish (2001) indicate expansion beyond the domestic border is one of the most important paths to increase company growth. Broadening customer bases enables companies to increase production volumes and growth. By investing in different markets, companies capitalize on market imperfections. Barringer and Greening (1998) deem it especially important for SME companies, whose scope of business is often confined geographically.

Independent software vendors develop a software product through internal research and development or by acquiring the intellectual property through mergers and acquisitions. The total amount of software products is estimated to be between 30,000 and 35,000 in the Netherlands. A small percentage is currently offered through the SAAS construction. Some 75% per cent of the products are developed by the company or commissioned by the company directly to subcontractors. The remaining 25% is estimated to be produced by third parties, to be incorporated within the software product, of which 54% of the components come from closed-source licensed software.

Only 7.9% of software products are produced by parties located outside of the Netherlands. The Dutch software industry is characterized by a large majority of small firms; only 95% of the companies employ more than 10 employees (Heliview/Nederland ICT, 2013). By providing the decision makers in these companies with a better understanding of the theories of internationalization, the companies increase their chance of successfully expanding their market. This ultimately results in an increase in income, providing additional jobs and preventing companies from losing valuable resources and time. On a country level, an increase in internationalization of the small software companies results in an overall ability to better compete with software powerhouses such as those in the United States.

2. Research objectives

Internationalization theories introduce a set of ideas, theories or frameworks, describing the process of companies seeking to explore new ways of broadening international business activities. Current research clearly provides a broad collection of methods, techniques, frameworks and strategies for companies to reap significant international revenue. Both technical and operational success factors impact independent software vendors in their quest for internationalization.

2.1 Research gap

While research has described the internationalization theories and success factors to establish a successful presence beyond the borders of the Netherlands, there is a lack of evidence to prove whether these theories hold up in practice. The body of knowledge lacks research that studied Dutch independent software vendors and the choices they made during the implementation of an internationalization process.

Research is often based on assumptions made in:

- (A) different sectors, such as manufacturing or the IT service industry, instead of the product software oriented endeavours.
- (B) different countries of origin, thus tainting the variables in play leading up to internationalization.
- (C) the enterprise sector, focused on a company that operates on a completely different scale than the small or medium enterprise.
- (D) a single case instead of multiple case studies, reducing the ability to generalize the research.
- (E) a body of knowledge not tailored or validated for use with the independent software vendors (ISVs).

Current theories can be improved by validating their use and implementation within the Dutch software industry. Improving the current theories by enhancing prediction and explaining the context of implementation of the theories, combined with company characteristics, could produce new insights and pragmatic support. Thus, the outcome prediction for small software companies selecting a theory for starting or improving internationalization is improved. Current literature focuses strongly on the description of internationalization theories. Together with internationalization theories, research focuses on single companies through case study research. Case studies often describe which internationalization theory is being used within the company, supported by a set of success factors.

Smaller ISVs are not researched sufficiently

Thus, there is insufficient scientific proof in order to link internationalization theories to the actual degree of internationalization. This results in a situation in which decision-makers within ISVs are less supported in making the right decisions in the process of internationalization. The current body of knowledge lacks of clear connections bringing together the activities undertaken and the degree of internationalization, it is unclear if company characteristics suggested by the current literature actually correlate with the resulting degree of internationalization. All together, internationalization is a complex process that requires more research clearly linking the characteristics of a company, the internationalization theory used and the success factors in play to the eventual outcome of the internationalization process.

Researchers have not yet focused on the topic of survival probability in relation to internationalization. To illustrate the example of lack of support, international new ventures (INVs) define three types of liability for companies undertaking internationalization:

- The first relates to their short existence and inexperience, which provides limits on the access of required resources (both tangible and intangible).
- The second relates to a lack of a strong existing network of international relations.
- The last stems from the actual size in employees; many ISVs start small, thus limiting the amount of human resources available.

The size could also provide additional challenges to building up trust with customers and suppliers. The INV theory, however, lacks a study connecting successful internationalization attempts and to the assumptions made in the INV model in order to find the actual fit and conditions of the real world environment suggested by Storey (2006).

2.2 Research Aims

The main research goal is to provide key decision-makers within the Dutch software industry with a better insight concerning factors, company characteristics, market entry strategies and internationalization theories. The research should then relate the current literature to a set of Dutch independent software vendors who have implemented a successful internationalization strategy.

This result allows decision-makers to better filter out the key literature that is applicable to their specific company and the situation at hand, selecting only those market entry strategies that have been validated for their company and product characteristics. This avoids a situation where decision-makers have to rely on instincts in order to select the right set of actions when implementing internationalization. This also prevents valuable resources from being spent following theories or implementing factors that are not applicable to the company characteristics, products, planning or strategy. The research will build on the current body of knowledge by creating empirical research beyond the level of a single case study. It will also

attempt to provide an overall picture by aiming to find a correlation in the implementation of a successful internationalization strategy.

2.3 Research questions

The following research questions are used as a point of departure for this study. In order to obtain an essential understanding of the current body of knowledge, the current literature is assessed to find the most influential internationalization theories combined with the shortcomings and the problems of the current literature.

This research then focuses on finding empirical support for the current literature. Are the theories, based on observations made in different sectors and segments, applicable to the Dutch ISVs of today?

Research focuses on the selected actions, success factors and theories that are being implemented by companies. And more importantly, which of the implemented actions, success factors and theories lead to a successful internationalization, thus providing valuable insight for companies in determining which factors and strategies actually provide added value. Thus, this helps key decision-makers to set priorities and determine the right entry planning.

RQ1: Which internationalization methods successfully contribute to the strategy of Dutch micro ISVs?

RQ1.1: What do the findings presented in existing literature indicate for the current state-of-the-art internationalization theories and strategies?

RQ1.2: Which internal company characteristics can be found in Dutch micro ISVs with a high degree of internationalization?

RQ1.3: What is the preferred market entry and selection of Dutch ISVs with a high degree of internationalization?

RQ1.4: To what extent have Dutch ISVs made internationalization of their software products a successful endeavour and what recommendations can be drawn from them?

3. Research approach

In order to illustrate the research process, a meta-model has been constructed. Meta modeling is a technique for representing the activities and deliverables of a method (Weerd & Brinkkemper, 2008). A process-deliverable diagram (PDD) describes the abstract process of the method used in the research. Apart from the process, the diagram describes the deliverables of the research process. For an overview of the entire research, the process-deliverable diagram is added.

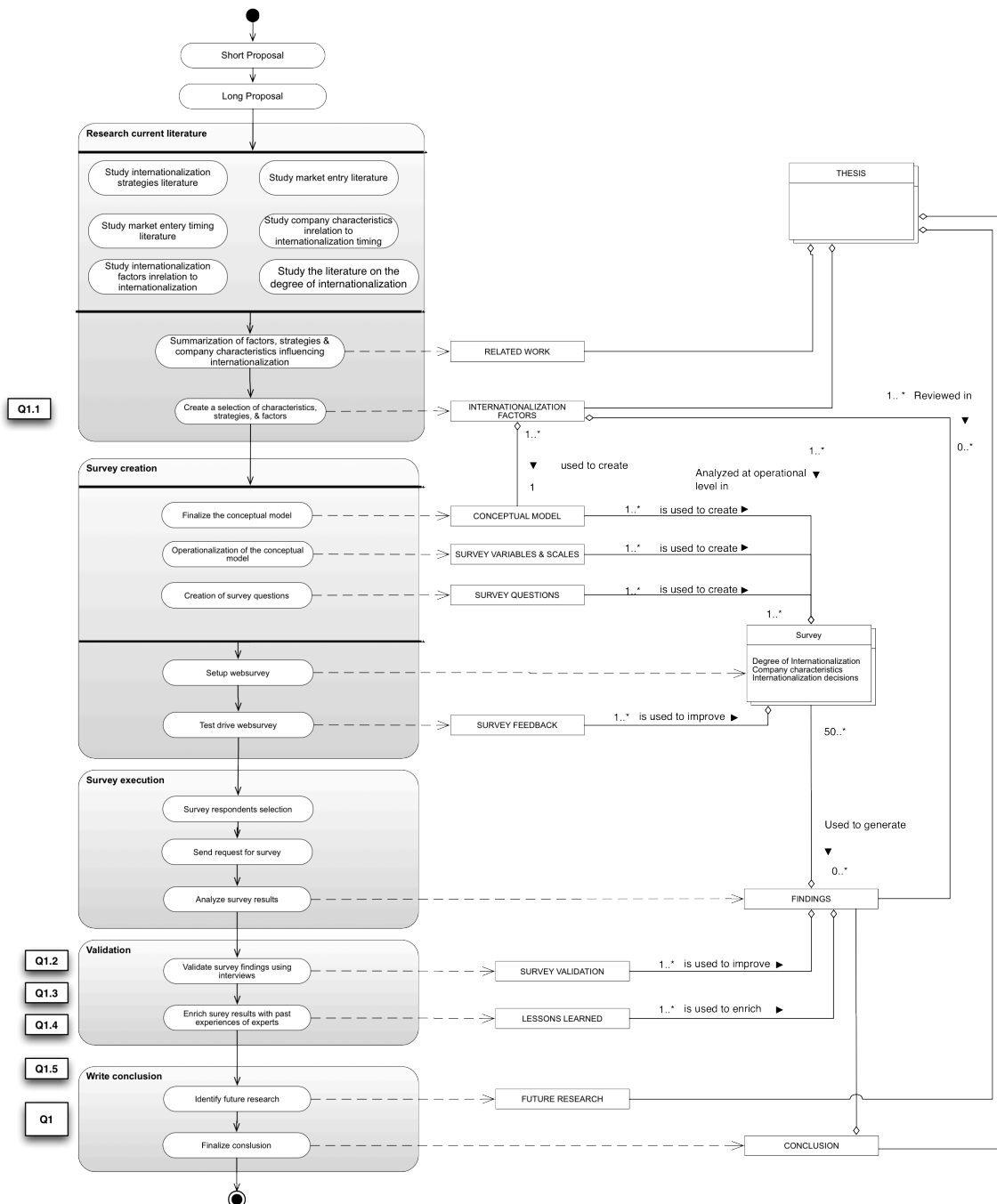


Figure 1. PDD

Systematic mapping study compared to a systematic literature review

The first phase will consist of acquiring an in-depth understanding of internationalization processes and strategies. By conducting a systematic mapping study or SMS introduced by Mosa et al. (2005), the research will start with a solid base by describing internationalization in the current literature. A systematic mapping study is selected due to the exploratory nature of this study. Kitchenham et al. (2004) indicate that the questions asked on a systematic mapping study are much broader. Compared to a systematic literature study, a systematic mapping study is less narrowly focused and in-depth. Currently there is a lack of systematic studies that map out the knowledge area of internationalization.

After combining the factors with internationalization strategies, this researcher was able to conduct a series of interviews. The mapping study was used to recognize, map and categorize which strategies companies use in the Netherlands, together with the specific factors that played an important role in the internationalization. Based on the SMS findings, a conceptual model is created. Each model is used to help depict and understand the subject of internationalization. Each conceptual model depicts the fundamental principles and factors influencing a successful internationalization.

3.1 Systematic mapping study

A systematic mapping study is used to identify and provide an overview of a research area. A systematic mapping study provides a meta study of an area of research, analysing the quantity and type of research and the methods used. A systematic mapping study is used to identify the frequency of publications over time in order to identify trends.

A secondary goal is to identify research gaps in the area of internationalization. The systematic mapping study focuses on identifying, appraising, selecting and synthesizing all high-quality research concerning the internationalization factors and theories, as well as company characteristics.

After systematically selecting and filtering the publications, a final selection of the most influential and important publications remains. The literature is analysed for internationalization factors: activities and decisions influencing the internationalization process of the micro ISV. The factors influencing the degree of internationalization are often not directly measurable, therefore it is necessary to create concepts. Abstract concepts or constructed concepts, however, are less clearly defined concepts and thus more difficult to measure. Abstract concepts are developed by defining a set of ideas that represents the overall constructed concept with the purpose of providing definitions. The constructed concepts are often described in the literature and provide an effective base of knowledge to build upon. They are followed by an analysis of the firm characteristics in relation to the degree of internationalization of the micro ISV.

3.1.1 Search process

The following diagram displays the search process that was followed. The search process begins with a set of keywords to build the search queries. Each search query returns a set of results, which are then filtered based on a set of inclusion and exclusion criteria as described in the following paragraphs.

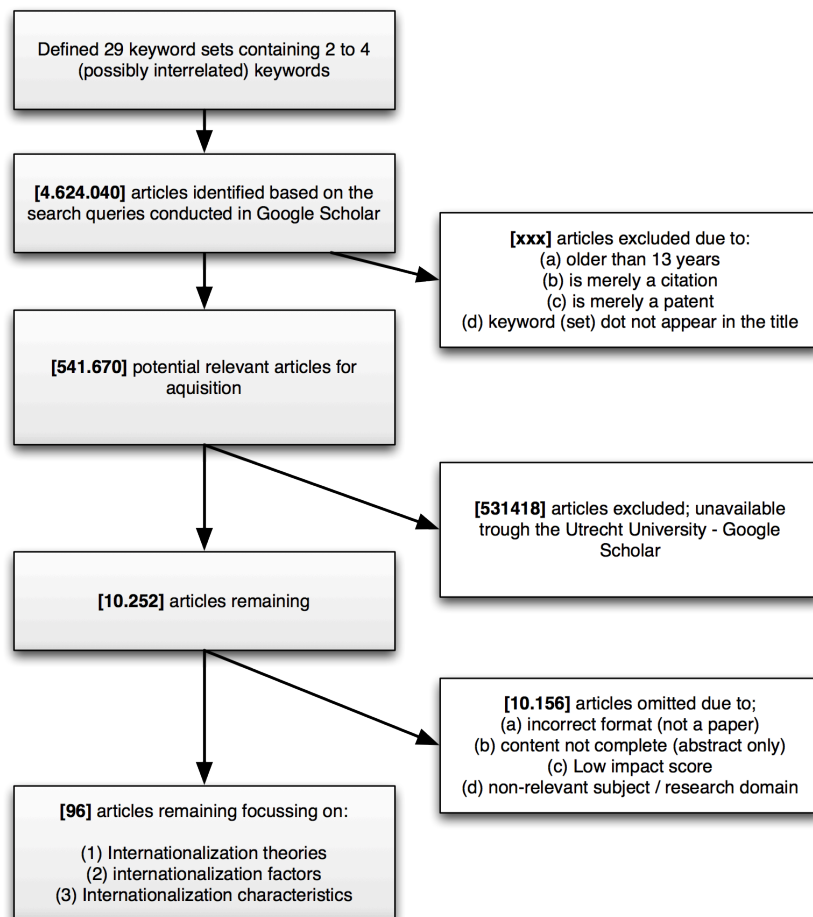


Figure 2. SMS search process

3.1.2 Search queries

To obtain the scientific insight required, scientific articles were selected for use in the systematic mapping study. The study was conducted from August through November 2013 using Google Scholar and complemented by the Association for Computing Machinery (ACM) as the main search engine. The exact search process is described in order to improve the reproducibility of the research and reduce possible bias in the selection of articles used as the foundation of the mapping study. The first selection focused on articles that discussed internationalization theories. The resulting papers must reside within the business or information science community since internationalization theories are also used in the domain

of politics and law. The systematic mapping study focuses on software companies, including technology firms, ISVs, product software companies, software development companies and technology firms.

The following keyword sets were used:

Software internationalization group

Keywords	Results found	Results found after filter #1	In title	Final selection
"internalization, software, company"	39.900	17.800	0	10
"internationalization, technology, firms"	83.600	20.400	48	9
"internationalization, strategies"	95.800	35.400	447	10
"international, software, companies"	2.570.000	17.600	10	9
"international, SAAS, company"	12.400	9.630	0	11
"International, Product software"	4.630	3.310	0	3
"Internationalization, activities, start-ups"	4.910	4.230	0	12
"internationalization, performance"	87.000	16.000	412	12
Total number of articles	2.898.240	124.370	917	76

Table 1. SMS results – Table 1

Software export group

Keywords	Results found	Results found after filter #1	In title	Final selection
"product software, export"	814.000	376.000	1	5
"export, strategies,	887.000	24.900	7	5
"SME, export, software"	24.800	16.400	0	10
Total number of articles	1.725.80	417.300	8	20

Table 2. SMS results – Table 2

3.1.3 Selection criteria and procedure

Google Scholar does not offer the option to limit the search within the abstracts of the articles. An alternative suggested by Mosa et al. (2009) is uses a filter technique based on keywords in title of the article.

After completing a filtering process with the following filters, we are presented with the final selection of the selected publications:

- The search queries were executed between October and December 2013.
- The results found using Google Scholar were archived using a custom build Ruby Anemone spider. The more relevant articles are placed above the articles deemed less relevant.
- Using a cut-off point of 500, the articles after the 500th were omitted from further analysis per keyword.
- Improper sources were filtered out, giving the preference to journal papers over white papers, presentations, proceedings and conference papers.
- In order to obtain only the most influential empirical evidence to be used in this research, a filter based on the article impact was created. The impact is based on the number of citations combined with the source of the article.
- A manual check on the title and the abstract ensured the article focuses on the keyword combination used; this was combined with a check as to whether the format of the article adhered to the inclusion criteria and whether the article is freely available.

Limitations of the literature selection

The research uses only free-to-download literature; literature available from within the Utrecht University proxy, non-legal and non-“citation only” literature, and only recent (from the last 13 years) articles are selected. After selecting the articles, a following analysis step can be performed, resulting in a total of 97 articles to be used in order to assess the current state of literature. The literature found on internationalization theories mentioned specific theories. However, due to the selection based on keyword, the most influential articles introducing the specific internationalization theories were missed. Therefore, these most influential articles have been added in order to improve the in-depth analysis.

3.1.4 Evaluation of relevance

The results of the search process are filtered based on the following parameters:

- A result must be an article containing scientific literature, thus not merely a citation or a patent;
- It must be relevant within the research domain; and
- The research must not be older than 13 years.

After excluding the false results, a set of 284 articles remained. Of this number, research papers that were not publicly available were excluded, in order to improve the possible replication of the research; this resulted in a set of 96 papers. From this total, papers were excluded due to the following factors:

- Incomplete publication, for instance providing only a part of the research;
- Formats consisting of presentations, since the focus is on scientific research papers;
- White papers aimed at promoting products or services used as marketing material, which tend to have a low scientific impact due to the unavoidable bias;
- Publications consisting of anything other than books, book chapters or journal papers and highly-cited conference papers; and
- Research or grant proposals;
- For a clear overview of the entire research flow, see Figure 2.

3.2 Grounded theory

The idea of grounded theory was introduced by Glasser & Strauss (2009). This method was originally developed within the medical domain and later published as the Grounded Theory Method. This method is a systematic methodology focused on discovering theory through data analysis. The grounded theory for this research relies on semi-structured interviews of the Dutch independent software vendors. Grounded Theory Study focuses on deriving theory from collected data, creating a theory that is “grounded” in the data. Grounded theory consists of comparing units and categorizing units and properties resulting in hypotheses that state relations among these categories and properties. These hypotheses are mainly suggestive and are not statistically falsified nor tested in the study.

Stage	Description
Codes	Identify key points from the data gathered using semi-structured interviews
Concepts	Collection of similar or related codes.
Categories	Group of similar concepts to build a theory.
Theory	A collection of explanations explaining factors influencing internationalization.

Table 3. Grounded theory

Semi-structured interviews are often used in the social sciences. In comparison with structured interviews, semi-structured interviews have a less rigorous set of questions and allow the researcher and the subject to divert from the interview protocol; a semi-structured interview is more set up more loosely. A semi-structured interview allows for new ideas, stories, examples and recollections to be discussed. Prior to the interviews, the researcher develops an interview protocol to describe the main points of conversation to be discussed during the interview, thus increasing its effectiveness.

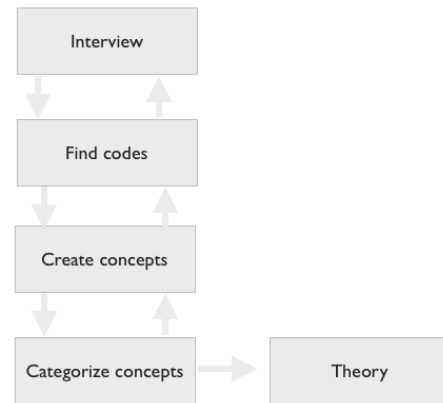


Figure 3. Coding process

These interviews are recorded throughout the session and are translated into transcripts. From these transcripts, key points are extracted; these key points are called codes. The codes are grouped with similar codes in order to form categories, which form the basis for the creation of the theory and provide a validation of the theories formed during the systematic mapping study review. During the systematic mapping study, the conclusion forms a set of conceptual ideas. Ideas which provide a better insight in the internationalization theories implemented in practice by Dutch independent software vendors.

The primary focus during the interviews is centred on the internationalization attempts made by Dutch independent software vendors. It is likely that companies that have been in business for more than 10 years have attempted many internationalization steps. Therefore, the research strongly focuses on the internationalization attempts.

By conducting interviews with CEOs and product managers, the research identifies the various internationalization attempts undertaken by the independent software vendors. By performing in-depth interviews, the research aimed to identify:

- The motivation for the company to start with the process of internationalization;
- The internationalization planning: at what point did the company perform which internationalization steps;
- The selection criteria leading up to the country's entry;
- The market entry form;
- The activities conducted to improve the expansion beyond the domestic market;
- Problems and challenges encountered during the process to internationalization; and
- Success factors and tips encountered during the process of internationalization.

Interviews are used to determine how many Dutch independent software vendors have succeeded at their internationalization attempts. The interviews are undertaken to identify the characteristics of the company and determine which factors (found in the SMS) contributed to the successful internationalization. The interviews are used to distil the path taken towards internationalization and the eventual outcome of the internationalization strategy. The interviews are conducted with executive level management, focusing on CEOs, founders and managing partners, with the only exemption being a senior consultant.

The degree of internationalization

Wright and Ricks (1994) see internationalization as the collection of entrepreneurial activities performed at the company level that cross the international borders. Entrepreneurial activities are combined with a strong focus on the relationships among businesses and focusing less on the age of the company or the timing of market entry as sole criteria. The timing of market entry focuses on the planning of internationalization. Johanson and Vahlne (1990) acknowledge that the amount of experience of the company management is developed over time – a phenomenon also known as the export development "learning curve".

In practice, the process of internationalization can be influenced and fuelled by external "attention-evoking" stimuli consisting of "unsolicited orders, enquiries or managerial ambitions and excess capacity". The number of employees is an operationalization of the company size. However, there is a chance of error in the number of employees, since it could be seen as a result of the internationalization activity.

The degree of internationalization of companies will be measured using basic financial indices focusing on the companies' financial performance. As suggested by Ruigrok, Amann & Wagner (1997) and Ahn, Fukaob & Kwon (2004), the foreign sales-to-total sales (FSTS) ratio is used, resulting in a percentage indicating the dependency on foreign markets.

The degree of internationalization can also be measured using dimensions of internationalization, resulting in the amount of activities taken place combined with the geographic dimensions. Indices are the number and size of foreign customers, and international sales. Apart from the degree of internationalization, Ruigrok, Amann & Wagner (1997) introduced the dimension of internationalization, describing the term "abroad" or "foreign presence" has multiple degrees.

For instance, is a company active in one foreign country or in 50? The number of foreign countries in which activities occur should be taken into account. A large number of countries could indicate a great amount of diversity, reflecting the significant cultural and technological differences between the target countries, markets, and segments. Ruigrok, Amann & Wagner (1997) indicate that diversity consists of five factors:

1. the number of countries in which a company conducts its business (Tallman & Li, 1996);
2. the technological diversity of the foreign markets entered (Kidd & Teramoto, 1995);
3. the number of social cultures;
4. the geographic diversity of the foreign markets (Sambharya, 1995); and
5. the number of segments targeted in the foreign markets (Morrison & Roth, 1992).

The percentage of revenue obtained by the company from abroad is used in this research. Due to the fact that many interviewees do not have a clear picture of the actual number of their customers and users in relation to their geographical location, the operationalization of

internationalization experience is discovered through interviews, questioning whether or not employees and management have lived abroad, followed international studies or have previously undertaken successful internationalization. Internationalization is measured by the degree of internationalization. Conceptually, internationalization can be seen in terms of “activities” outside of the domestic market. Sanders and Carpenter (1998) choose not to use the direct number of countries, instead they developed a normalizer, resulting in the number of countries in which the company has activities as a percentage of the highest number of countries scored by an individual company.

3.2.1 Operationalization

By reducing the units of study to an abstract concept, we can render them measurable in a tangible way. The operationalization is performed by fitting the results of the systematic literature review into a conceptual model. Each constructed concept is built using a set of underlying concepts. The main constructed concepts cannot directly be accurately measured, due to their abstract and subjective nature. The underlying constructs can be translated into observable and measurable elements and properties, a format that can be obtained using a range of survey questions. The following tables display a breakdown of the constructed concepts into sub-concepts, followed by the corresponding survey questions used for the data gathering.

3.2.2 Sampling strategy

The selected companies will be selected due to the following criteria:

- The headquarters are located in the Netherlands.
- The company is active in the field of software.
- The company sells software produced by the company or developed by a subcontractor.
- The company has a maximum of 100 employees worldwide.

In order to collect the company data, the following business functions will be interviewed: product manager, project manager involved with the internationalization, member of the board of directors, executive director and top-level manager.

The location of the Netherlands was chosen due to its accessibility to the researcher, who was required to visit and interview the case companies. The companies selected are located only in the Netherlands. The sample can only be generalized with caution, taking into account the characteristics of the Dutch market and companies within it. However, software firms generally are more inclined to use global industry standards and platforms for their business (Gawer & Cusumano, 2002; Hoch et al., 2000).

The software industry was selected as the main sector due to the nature of software. Moen, Gavlen & Endresen (2003) indicate the process becomes more complex due to the very nature of software compared to physical products. Software is by nature an intangible product differing from the business of physical products. Reproduction and distribution costs are virtually non-existent.

When selling physical products internationally, a company is more or less limited in their options due to the physical nature of the products, compared to software companies. Focusing on the specific vertical sector helps the completion of current research. Internationalization theories and research are currently not specifically designed for the software domain. Thus reducing the applicability through the inclusion of domain-specific variables, since the software domain differs from traditional domains such as manufacturing.

Selecting independent software vendors

The population of companies consists of a total of 2,705. The primary sampling is based on convenience sampling using the Deloitte Technology Fast 500 Awards. The Fast 500 offers a yearly insight into the fastest growing companies in a specific region, rewarding companies that have accomplished relative growth in revenue over a five-year period. The Fast 500 offers a valuable insight, since the research is primarily focused on successful companies, preventing the research from interviewing only companies that have a low or non-existent degree of internationalization. Using the Fast 500 winners from the years 2008-2012 as a sampling frame, the list provides an insight into successful Dutch software companies. Each annual list is manually scanned for the correct sector. After filtering out any non-product software-related sectors, the research requires companies to produce product software that is built and implemented as a product. Secondly, the companies must have customers abroad, since the research is focused on internationalization.

Software development is categorized by the Dutch government as an SBI 6201 (software development) business category: companies focused on the development, production and sales of software. This includes the development, customization and support of tailor-made software, application management. The problem with the SBI categorization is that companies are themselves responsible for the categorization of their company. Thus, there is a problem of data quality which is often incomplete or inaccurate when, for instance, companies change from a consultancy firm to a software development firm and are then required to change their SBI category; however, in practice this is often overlooked. So the number of software companies is actually different from the reality but, at the moment of writing, the CBS is the safest data source.

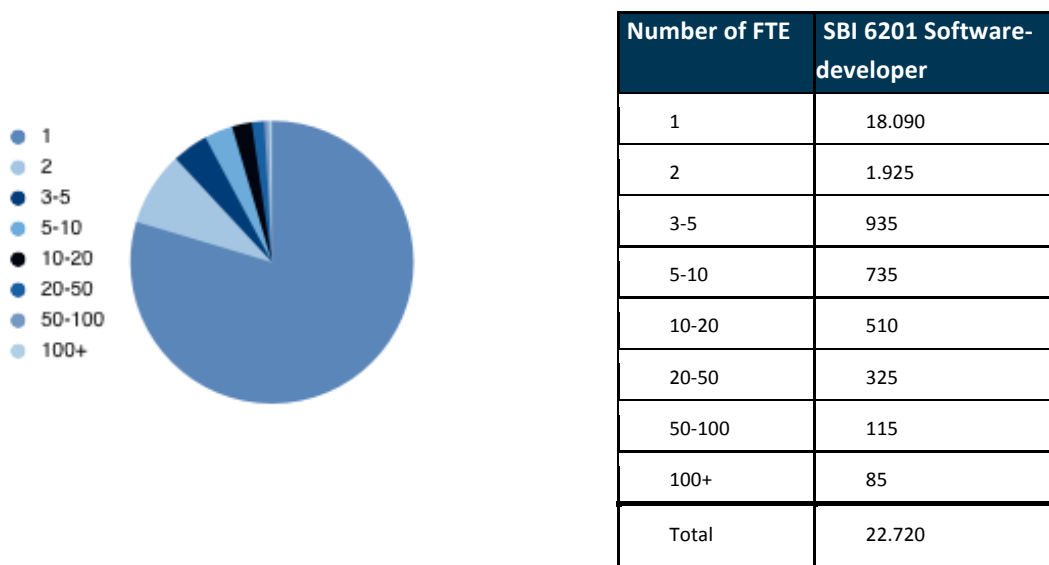


Figure 4. Distribution of companies by number of employees

4. Theoretical background

Since the early 1990s, the international software industry has gone through a period of immense growth. The rapid growth of the industry has been followed by the dominance of large US software companies, such as Microsoft and Oracle. However, the continual growth of the global market share of European software vendors, growing on average 20% a year (Kimmo et al., 2000), should not be underestimated.

4.1 The Dutch software sector

The Dutch software sector accounted for €25 billion in sales in 2010, contributing 3.9 percent to the gross domestic product of the Netherlands. It was also one of the largest contributors to the innovation sectors. In 2008 the OECD ranked the Dutch software industry contribution to GDP as the 13th largest in Europe. Of the total €25 billion market, €10.2 billion is attributed to independent software vendors. International sales are largely dominated by product software sales as compared to custom software, services and the income generated through consultancy. Of the total export, 70% goes to Western Europe and North America is responsible for a total of 20%.

Independent software vendors are software companies that have developed a software product through internal research and development or by acquiring intellectual property through mergers and acquisitions. They provide more than 192,000 jobs within the Netherlands. At the moment of writing, there is a strong belief that Dutch companies primarily develop custom or tailored software solutions instead of product software (van de Weerd et al., 2007).

The total estimated income through the selling of custom software products is €5.5 billion, compared to €3.9 billion generated through the sale of product software. The total number of software products is estimated to be between 30,000 and 35,000 in the Netherlands. A small percentage is currently offered via Software-As-A-Service architecture. A full 75% percent of the products are developed by the company or commissioned directly to subcontractors. The remaining 25% is estimated to be produced by third parties incorporating software products to their suite of products, where 54% of the components come from closed-source licensed software. Only 7.9% of software products are produced by parties located outside of the Netherlands. The Dutch software industry is currently characterized by a large majority of small firms; only 5% of the companies employ more than 10 employees; Nederland ICT (2013).

4.2 Independent software vendors

The term 'independent software vendor' is an acronym that is mainly used within the Microsoft ecosystem. Although the term itself is not part of the definition, Sink (2006) states that the term 'independent software vendor' still carries some of the Windows/Microsoft connection. European software companies are highly focused on tailored software development for the domestic market. However, many software companies aim to enter the

international product software market, where the required process differs from the familiar domestic business context.

4.3 Project business versus the product business

Table 4 indicates the differences between “project business” and “product business”; both terms can be seen as extreme opposites on the software scale. Small and locally focused software companies tend to follow a relational business strategy. Project business develops mainly customer-specific deliverables that sporadically result in project software serving additional customers. However, this is seen as paradoxical from a business perspective since tailor-made systems are labour-intensive. Alajoutsijärvi, Mannermaa & Tikkanen (1998) point out that Bill Gates did not make his fortune with tailor-made software systems. Therefore, software companies should focus on turning their knowledge and expertise to products that have a world-wide impact.

	Project business: tailored systems	Product business: product software
Primary focus of the company	Project management Marketing Management	Product management Channel management Alliance, partner building
Company deliverables	Customer-specific products; Designed for specific needs & environments	Standard or modular products designed for several implementation scenarios
Company production	Customer specific planning phases; development, after sales; High variation in capacity	Duplication, product releases; versions & updates
Customer base	Narrow, well-known, personal relations	Broad, faceless end-customers
Nature of markets	Familiar; same region and culture or close by	Distant international, open, competitive
Company branding	Less important, market assets are concentrated in a small group of individuals	Area of main concern
Nature of customer relation	Interactive, mutual, long-term, project-related	Opportunistic, simple, short-term, product-related

Table 4. Project vs. product business

5. Results - Systematic mapping study

A systematic mapping study is used to provide an overview of a research area. A systematic mapping study identifies the various research subjects covered in the research field of internationalization. A systematic mapping study provides a meta study of an area of research, analysing the quantity and type of research and the methods used. A systematic mapping study is used to identify the frequency of publications over time in order to identify trends. A secondary goal is to identify the research gaps in the area of internationalization.

5.1 Publication distribution

The resulting papers used in the results are focused primarily between the years 2000 and 2007, as given in Figure 5. The most influential papers or most cited publications are from 2000 through 2005.

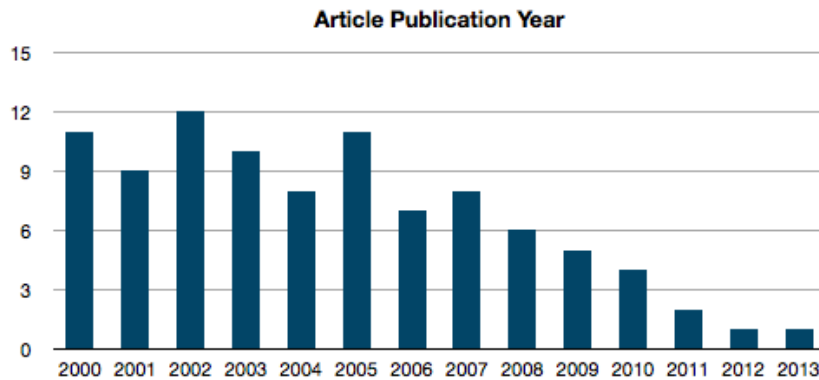


Figure 5. Publications per year

Wright and Ricks (1994) initiated a movement in international entrepreneurship by presenting it as a new, emerging area of research. Indicated by most papers as one of the reasons for initiating researching. Comparing international entrepreneurial behaviour in several countries combined with the organizational behaviour crossing the domestic market.

5.2 Cites distribution

After executing the systematic mapping study as described in Paragraph 3.1.1, the research proceeded with a total of 96 academic journals and publications. The resulting publications are then categorized, consolidated, analysed and discussed. Most of the resulting publications have been published between 2000 and 2007, as illustrated in Figure 6. This is also supported by Figure 3, which indicates that the most cited papers were published in 2006.

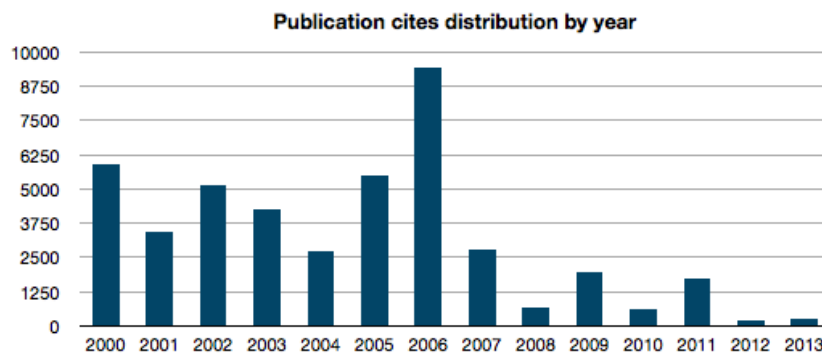


Figure 6. Citations by year

A growing interest in subject-related papers during the years leading up to 2006 results in a large set of popular papers from 2007. This result could be caused by the submission process required for a paper, since it takes a considerable amount of time for the finished paper to be admitted to a journal and gather citations. There are some limitations on the citation distribution, since less recently published papers have accumulated more citations over time than recent papers.

Internationalization theories have a history, and important internationalization theories have a long lifetime. For instance, one of the most cited and discussed papers is the Upsalla model (Andall & Fischer, 2005). The Upsalla model was created in 1977 and for a long time it was the most used internationalization reference process. As recently as 2009, the original authors chose to revise the original model. Acknowledging the change in the way business is conducted, their business in 1977 was compared to 2009. Since 1977, there have been only a handful of competing models that point out the shortcomings of the original Upsalla model.

5.3 Geographical distribution

After an inspection of the full text of the publications, research finds a somewhat concentrated distribution centred on the “Western world”. It became clear that the US is the dominant region of choice for researchers, caused by the fact that most of the publications are performed by US research institutions, which have better access to companies within the domestic market. The geographic distribution focuses on the actual nationality of firms used as a unit of study in the research, for example, a study focusing on Korean companies. Within the European countries, we see the UK and Germany sharing the second position. Following the same OECD ranking in which countries are ordered based on the degree in which their software companies conduct international business; countries with high rankings are targeted more often by researchers. This is a logical process since countries housing companies who succeed in internationalization are interesting units of studies for the research community.

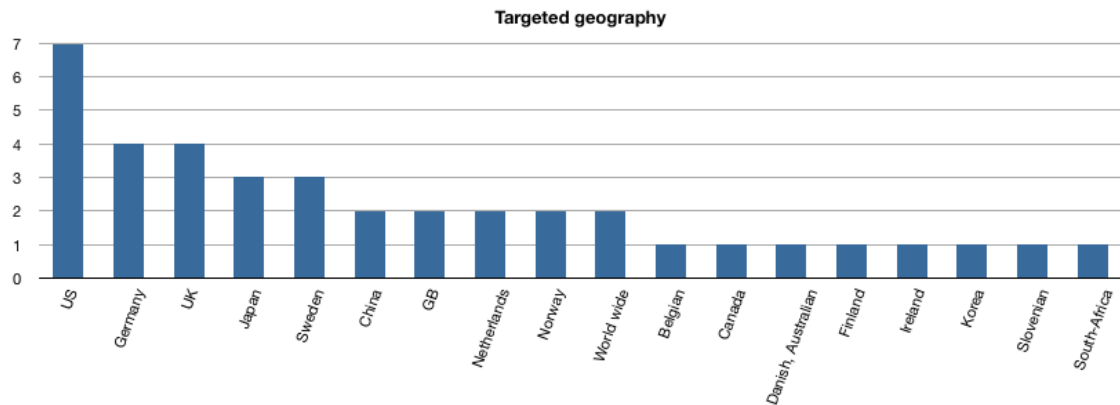


Figure 7. Geographical distribution of publications

5.4 Subject distribution

Using a hierarchical tree map, the definitions are shown in Figure 8. The hierarchical tree map illustrates the definitions and their encapsulations. For instance, the internationalization process is part of an internationalization strategy. And the speed of internationalization is a more specific research topic within the process of internationalization, since it describes the speed at which companies can progress through the process of internationalization.

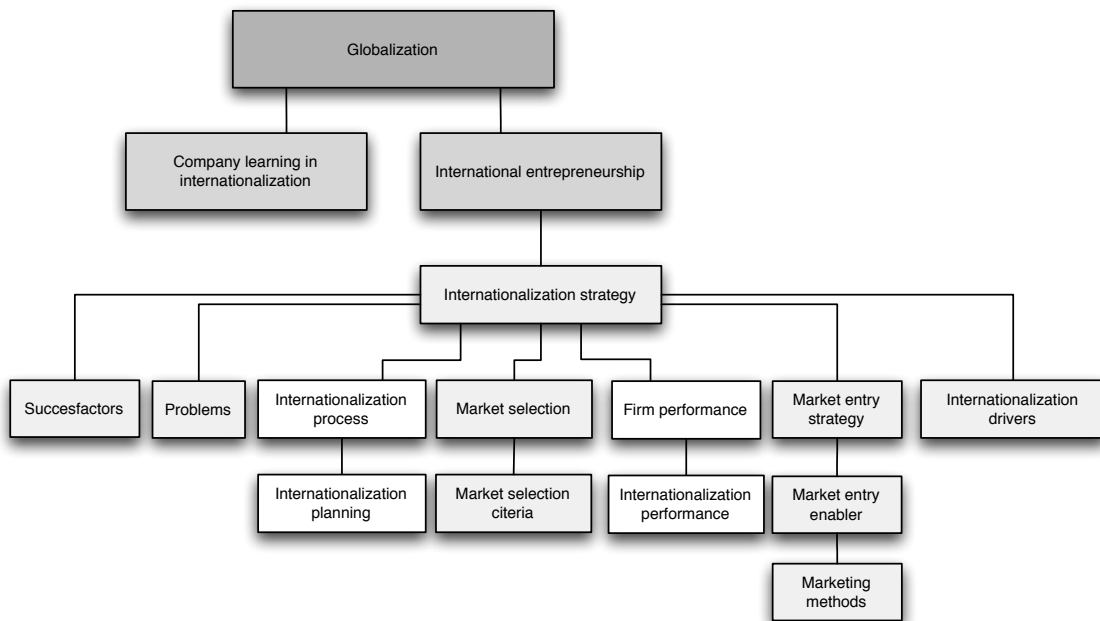


Figure 8. Distribution of research topics

The categorization of topics provides a clear insight into the number of topics in the research area of internationalization. Current literature largely focuses on the process and success factors of internationalization. The various topics address a specific subject that focuses on an area of internationalization.



Figure 9. Distribution of research subjects

5.5 Research distribution goals

After performing the systematic mapping study, the research identified six research goals in the publications. The first research goal is definition building based on real phenomena. The second goal is descriptive, or to describe a phenomena, meaning to produce a model to explain the construction and complexity of a research topic. The third goal focuses on building a theory, for instance, an internationalization theory. Lastly, a goal to validate or extend existing models was identified.

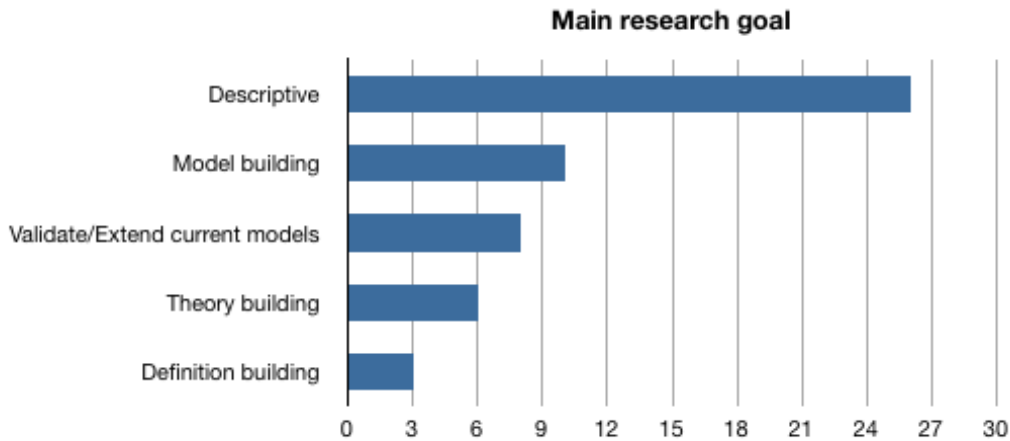


Figure 10. Distribution of research goals

5.6 Research methods distribution

The primary method of data collection used in the studied publications is primarily concentrated on literature study, survey and database research. Database research consists of the use of existing databases containing company performance, financial statements or results of surveys previously performed.

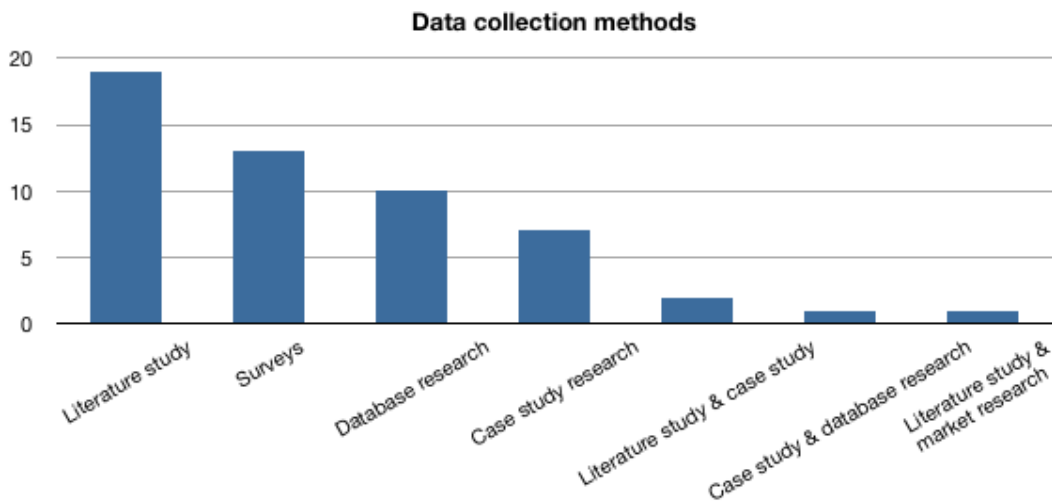


Figure 10. Data collection methods

The final selection of publications found through the SMS process was categorized using the research types defined by Merriam et al. (2002):

- **Interpretive Qualitative Study:** Using an inductive strategy, data is collected from observations for analysis of patterns or common themes resulting in an outcome that links the descriptive result to references in the literature.
- **Phenomenological Study:** This type of research focuses on finding the essence or structure of a complex phenomena in order to build a better understanding of a

certain topic. Collected data is categorized and examined in order to develop a description of the phenomena and how they are constructed.

- **Narrative Analysis:** This research type uses stories and first-person accounts of experiences as research data, using the perspective of the storyteller as opposed to a larger sample of data to derive meaning from the stories.
- **Explanatory study:** This research focuses on a topic that is clearly defined. Exploratory research is often used before creating and selecting a research design for future research. Explanatory research is often used as the first step in building on existing research, focusing mostly on the description or definition building.

5.7 Research type distribution

After analysing the entire selection of publications, the following frequencies in research types were discovered. Most literature focuses on the explanation of a certain topic connected to internationalization. Interpretive research is the second most dominant form of research, providing added value by trying to explain which factors contribute to a successful internationalization.

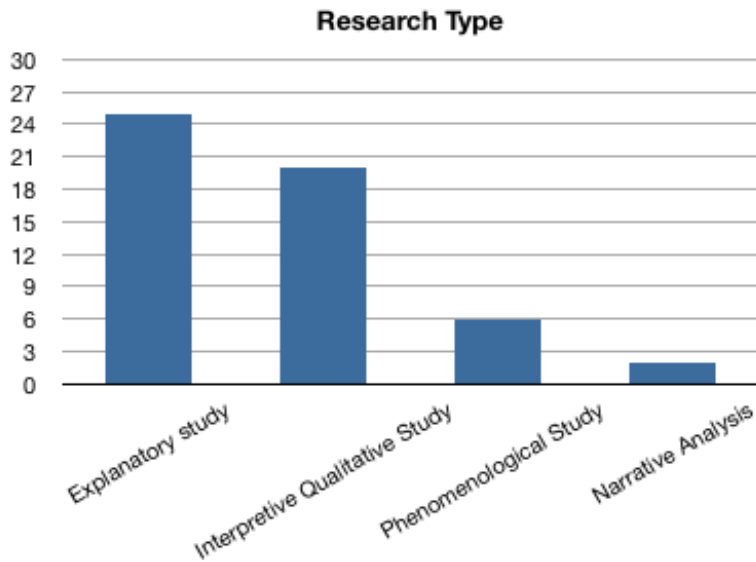


Figure 11. Research types

6. State-of-the-art internationalization literature

By conducting research into the internationalization theories, this research tries to assess the current state of the literature, forming the foundation for further research steps. Researching the extent of which internationalization theories have successfully contributed to a high degree of internationalization. It is to understand the different theories used on a basic level in order to recognize the key points during the interviews.

6.1 Internationalization theories

Since the mid 1900s, there have been many approaches to explain the expansion of businesses through international activities. Different theories focus on various aspects of the phenomena of internationalization. The manner in which companies conduct their business is constantly evolving: they are implementing new business models and strategies, thus changing the way they implement internationalization. The focus of recent theories has shifted from the enterprise view towards the SME-oriented view that focuses on small and medium-sized companies.

6.1.1 Uppsala model 1.0

The Uppsala model, also known as the U-model or the stage model, is the most influential internationalization theory, and it was created in 1975. This model is a product from an international B2B marketing research program started in Uppsala, Sweden, in order to improve the understanding of marketing in international markets. The Uppsala model is used throughout the literature as a reference model in order to explain the internationalization processes performed by companies. Furthermore, the Uppsala model is most often used as a reference model against which more recent internationalization theories compare themselves.

The Stage model serves as a component of the Uppsala model, proposing an incremental approach defined in multiple stages. A firm starts the internationalization process in markets with the lowest uncertainty after careful calculations for the lowest cost and smallest economical and physical distance. Therefore, the level of internationalization increases with the age of the company (Moreira, 2009), increasing dependency on export over time as the commitment to foreign markets grows. Initiated by the Uppsala School of Business, the theory is also known as the Uppsala internationalization theory.

The first building blocks of the Stage model were developed in 1975 by Jan Johanson and Finn Wiedersheim-Paul. Two years later, Jan Johanson and Jan-Eric Vahlne built further upon the foundation of the Uppsala model, resulting in what has become the other part of the Uppsala model, the internationalization Process model. The two resemble each other, however the Stage Model differs from the Internationalization Process Model on several points. The Stage Model stresses the importance of physical distance whereas the Internationalization Process Model focuses more on the importance of commitment, knowledge and experience within the

company and the employees (Feldhusen, 2009).

The Uppsala model (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975) views the process of internationalization as a division of certain stages (as depicted in Figure 11). The model begins with a stage of no regular export followed by export via independent representatives, after which a company is expected to start a fully owned foreign establishment in the exporting country and then exportation of the production as well. The model introduces the concept of international commitment based on the fundament of Penrose (1959). The theory of Penrose focuses on the fact that objective knowledge can be taught, however experiential knowledge is only acquired through the act of experiencing international business activities. The risks involved with foreign markets are managed by acquiring knowledge about these markets through practice and incremental change in the commitment to these markets. With each increase in the four steps, there is an increase in international commitment. Moen (2004) indicates this process moves slowly since each step requires considerable amount of additional learning.

6.1.2 Uppsala model 2.0

In the years after the Uppsala model was published, there was an increasing amount of critique due to the fact that the Uppsala model did not place any importance on the company network in the process of internationalization. The critique stated that times have changed, and it introduced new insights and concepts that did not exist at the time the model was first created. One of the most important conceptual changes had to do with the view of the business environment. The business environment can be seen as a web of personal relationships instead of the classical customer and supplier market.

The authors of the Uppsala model recognized the critique, since Johanson & Vahlne found clear evidence supporting the importance of networks in the internationalization companies, and the Uppsala model was revised in 2009. The new model reflected the importance of company networks. Seeing the company embedded in a larger business network, a business network where the company is engaged in a set of relationships. Internationalization is seen as an end result of strong company relations.

Johanson & Vahlne admit that they believe that the order of internationalization and the value of physical distance have diminished. They admit the physical distance is not unimportant, however the relationship between market entry and physical distance applies mainly on a personal level with the decision-makers and not the actual company (Johanson & Vahlne, 2003; Sousa & Bradley, 2006).

Most of the critique on the Uppsala model claims that not all companies follow a strict internationalization path, that companies tend to skip certain steps in practice (Hedlund & Kverneland, 1985). Some companies even skip the entire process; Oviatt & McDougall (1994)

introduce a scenario where companies begin with internationalization from Day One instead of after a gradual process.

Moen (2004) indicates this process is a time-consuming one, estimating that an internationalization process can take as long as five years. Much time will go into the creation of working relationships, even if most of them will fail, according to Hohenthal (2001), who also stated that the relationships are a difficult but essential asset for the company. The risk of missing out on these important network connections is also known as 'outsidership', caused by the liability of foreignness. Partnerships share a mutual interest supported by a degree of influential power and knowledge, or trust in the absence of knowledge. This occurs, for instance, in the situation where a company relies on a middleman to conduct international business since the company itself lacks the necessary knowledge to sell abroad (Arenius, 2005). In the Upsalla 1.0 model, company activities were inclined to occur in physically close markets and started out with a less committed mode of entry. The new model recognizes the personal factors addressing the importance of prior working experiences of key decision-makers and employees.

6.1.3 Opportunity development

Ardichvili, Cardozo, and Ray (2003) introduce the idea of opportunity development. The initiation of internationalization must have a strong focus on the entrepreneurial opportunities at hand, which should be the primary focus. This is supported by the research done by Bjerre and Sharma (2003), who conclude in their internationalization research that the major proportion of a company's knowledge is local. In order to properly detect the opportunities that drive the internationalization, a presence is already required. Pointing out the importance of the view of the subsidiary, which is engaged in entrepreneurial initiatives aimed at the discovery and creation of opportunities.

6.1.4 Born globals

The 'born global' label was first introduced by Michael Rennie (1993), who studied the capability to compete internationally (Jones et al., 2011). Sharma (2003) developed the concept into a new internationalization theory, describing the process of the Born Globals. Born Globals are known for possessing internationalization knowledge & capabilities before entering their first market. The entry mode of choice is based on existing personal knowledge and the network ties of the decision-makers within the company. The definition of a 'born global' is a company that is engaged in international operation from the first day they are founded.

Earlier literature referred to these companies as 'global start-ups' (Oviatt and McDougall, 1995) and 'instant internationals' (Fillis, 2001). These companies often focus on a specific niche without country restrictions, developing an instant global presence over the course of one to two years since being founded (Autio et al., 2000; McDougall and Oviatt, 2000; Rennie, 1993). The definition of 'born global' is very strict, indicating the company must focus internationally

from Day One in order to be classified as a born global. A company which is later concerned with the process of internationalization is defined as a 'late global' or 'born-again global'. Research in France by Moen 2002 combined with research in Sweden and Finland by (Gabrielsson and Pelkonen, 2008) indicate the founder's vision is the key factor for the firm's early internationalization pattern.

Born Globals are characterized by eight main factors:

- Large number of activities in international markets;
- Limited financial resources;
- Market presence across industries, not only technology-focused companies;
- Managers are strongly international focused and internationally oriented;
- Companies often make significant use of the differentiation strategy;
- Provide superior product quality;
- Extensive use of "advanced" ICT; and
- Make use of external, independent intermediates for distribution to foreign markets.

Managers do not see the international market only as an addition to the domestic market but are willing to compete aggressively in international markets and take risks, developing products that are highly distinctive from the competing products. These products result in customer demands that are met in a unique way, which in turn results in a high set of customer loyalty. Most Born Globals expand internationally through direct export or leveraging local intermediaries. More experienced companies engage in strategies such as joint ventures and foreign investments (Cavusgil and Knight, 2009).

Research done by Kudina et al. (2008) in the analysis of 12 technology companies in England concluded that there are a number of drivers behind the Born Globals' internationalization initiatives:

- The domestic market is not large enough to support the scale of the company.
- Companies are already operating in a network of partners that operate internationally, thus presenting an advantage in the process of internationalization (Majkgård and Sharma, 1998 and Bell, 1995).
- Potential customers have overseas operations.
- The companies operate in a knowledge-intensive high-tech sector.
- The companies are supplying the most technically advanced offering in the world compared to competitors, in order to achieve an advantage.
- The products and services face few trade barriers.
- The products have a high value compared to the transport cost.
- Customer needs are fairly standard throughout the various customer countries.
- The firm has a first mover advantage; however, they indicate that major competition has already internationalized.
- The key managers are experienced in conducting business internationally.

- Personal network; Sharma (2003) indicates Born Globals start out with many “weak ties” or personal connections. This may seem like a negative situation, however Sharma indicates weak ties are less complicated and cost fewer resources to maintain and allows the companies to develop international knowledge and capacity in different foreign markets.
- Sharmas concludes that the internationalization process of Born Globals is a reactive process.

6.1.5 Born-again global

Research performed by Bell (2003) compares incremental internationalization processes, processes where companies follow a step-by-step approach to increase international commitment. Bell (2003) continues by introducing a concept that is placed between the born globals and the incremental internationalization processes, thus introducing the concept of born-again global companies. The definition ‘born global’ can only be given to companies that went global since the very beginning of the company start-up. Bell (2001) introduced the concept of ‘born-again’ global companies, companies that are strongly focused on the domestic market before going abroad.

6.1.6 International new venture theory

An alternative coined by Oviatt & McDougall (1994) is the INV theory or international new venture theory. INV mainly ignores the fixed stages suggested by the Uppsala model, indicating the valuable contributions of SMEs to international business. Oviatt and McDougall focused on creating a theory that matches the distinguishing characteristics of young and fast growing companies, focusing more on the companies’ entrepreneurial characteristics. INV identifies four types of start-ups: the coordination of international value chain activities (few vs. many) and the total number of countries involved (few vs. many), resulting in four archetypes:

- export/import start-ups,
- multinational traders,
- geographically focused start-ups, and
- global start-ups.

The INV theory has received an increase in support due to the fact that empirical studies have shown that SMEs do not follow a strict set of steps or stages in their internationalization process (Crick & Spence, 2005; Moen et al., 2004). INV focuses more on the question of why companies exist and why they are able to perform internationalization activities compared to the stage models. However, INV ignores the fundamental questions concerning how companies are able to internationalize their business, focusing more on categorizing the archetypes of international companies.

6.1.7 Resource-based approach

The resource-based view focuses on the intensity of export sales. Businesses controlled by older principal founders combined with more resources, personal networks and considerable management experience are more likely to conduct international business (Westhead, Wright & Ucbasaran, 2001).

Strategic entrepreneurship in internationalization is seen by Hitt (2001) as an important concept. Hitt (2001) suggests that new ventures and older existing companies need to combine entrepreneurial and strategic processes. The research by Hitt indicates that internationalization is primarily focused on the company's acquisition, requiring certain types of critical resources. Companies should be more focused on identifying and exploiting entrepreneurial opportunities. This requires a specific set of capabilities for managers to be able to: "develop a global mind-set in order to manage the complex interactions and transactions required in global markets" (Hitt, Ricart, Costa & Nixon, 1998).

Together with the network model, the theory receives support from studies conducted by (Coviello, 2006; Coviello & Munro, 1995, 1997; Crick & Spence, 2005; Loane & Bell, 2006; Moen et al., 2004; Zain & Ng, 2006). The network model focuses less on the internal process influencing the internationalization. The network model takes a holistic approach, researching companies combined with the influence of the relationships network surrounding the company. Relationships in the form of partnerships or existing customers can act as a bridge to new countries and markets (Johanson & Vahlne, 1990), which immediately deem the theory less useful for companies without an extensive international network. This makes the network model hard to predict and more ad hoc compared to the traditional Uppsala theory.

Lastly, the resource-based approach view (RBV) is based on Penrose's idea that a company is made up of a collection of assets (Rugman, 2004). Rugman, 2004 argued that the performance of a company is connected to the collection of internal assets of the company. Resources consist of both physical resources and intangible resources. The cost of internationalization is intertwined with the deployment of resources, knowledge and capabilities facilitating the internationalization of a company. Companies with more and specific resources are more likely to have a successful internationalization.

Zahra et al. (2000) emphasize the importance of technological knowledge, skills, and resources as key drivers of the international expansion of new ventures. However, the research is limited to how these firms use the technological learning. Zahra describes a circle where new ventures can achieve growth through learning, thereby allowing new ventures to both create and exploit knowledge. McGrath, MacMillan, & Venkataraman (1995) relate that even when a company has a superior product; a new venture must learn the necessary skills and competences to achieve superior performance. Zahra et al. (2000) base their findings on a

series of case studies that suggest ventures gain more and more knowledge as they diversify further in foreign markets. The research is, however, limited to actual details of how the learning occurs or is obtained. Zahara defines a set of dimensions by which the extent of internationalization can be measured, namely: market segment breadth, depth, and speed of company learning.

Breadth is described as simultaneous entering several foreign countries at once, which likely forces the management to gain experience more quickly (Hofstede, 1980) compared to companies that focus on a single or select group of countries (Hitt, Dacin, Tyler, & Park, 1997). A breadth international undertaking can also increase the valuable establishment of networks with potential customers or partners.

Depth involves learning a set of concepts and skills amounting to a deep understanding of a foreign market. This is done in order to obtain a deep understanding of business settings that are country-specific.

Speed is possibly influencing the breadth and depth of international diversity. Early exposure to international markets tends to speed up learning. However, the speed of internationalization can also result in an unmanageable amount of information for management to process, leading to an increase in transaction costs.

New ventures use the learning experience to gain knowledge on conducting international business, which in turn produces a great collection of new products – products that suit the specific needs of a foreign market. After this process, new ventures can have a shorter and better product-to-market cycle, leading ultimately to an increase in financial performance.

6.1.8 International entrepreneurship theory

International entrepreneurship is defined by McDougall & Oviatt (2000) as all innovative proactive and risk-seeking behaviour that crosses domestic borders with the intent to create value in organizations. International entrepreneurship tends to focus on individual and company behaviour in its foundation instead of focusing on company characteristics like the number of employees in the company; Zahra and George (2002).

International entrepreneurship focuses on the behaviour and actions performed that cross the domestic border. The focus is on how companies and managers and employees move through the so-called four key steps of opportunities, where they:

- discover opportunities,
- act upon opportunities,
- analyse the opportunities, and
- exploit opportunities.

Internationalization of companies calls for internationalization entrepreneurship of the entrepreneurs running the companies, emphasizing the act of opportunity recognition. The international entrepreneurship theory is comprised of two parts:

- opportunities at hand, and
- Individuals who want to take advantage of these opportunities.

The model of Oviatt & McDougall is one of the only proposed models that try to explain the speed of internationalization. It describes four types of influential forces guiding the research on speed of international entrepreneurship. Kropp, Lindsay, Shoham (2008) indicate an important positive relation between the start-up decisions and the level of risk-taking related to:

- Entrepreneurial orientation,
- The age of the main founder or entrepreneur, and
- The educational history of the lead entrepreneur.

Entrepreneurs are perceived as the initiator of the internationalization of the company; the entrepreneur is the initiator and the main factor in working towards a sustained competitive advantage.

Han & Celly (2008) introduce the definition of ambidextrous organizations in the context of international new ventures. Organizational ambidexterity is defined as the ability to align and assure efficient management of modern businesses, increasing the level to which companies can adapt to changes in the environment. International new ventures can implement multiple strategies. The main two strategies introduced by Han & Celly (2008) are defined as:

- (a) "few investments and many countries"; and
- (b) "standardization and innovation, a select number of countries with a larger investment".

The findings of Han & Celly's study suggest that INVs' strategies can achieve superior performance compared to those lacking such capability. They can avoid strategic inertia by developing clear objectives and focus on undertaking offensive moves rather than acting reactively. Han & Celly emphasized INV's should exercise few investments in the first year divided over many dispersed countries. This way, INVs minimize their initial investments with a low level of commitment strategies, such as licensing, partnership and international joint ventures. Companies should focus on the most productive and cost-effective countries. The "Few investments in many countries" strategy is implemented as a paced investment strategy aiming to manage resources effectively. Hitt, Ireland, & Hoskisson (2007) conclude that "many countries" can help firms achieve scalability. The second strategy is the act of standardization as an exploitation strategy (March 1991). Standardization is characterized by refinement, implementation, and efficiency (He & Wong, 2004). Standardization includes products, services, and processes, thus enabling INVs to achieve a competitive advantage.

5.1.9 Network theory

Ritter (2003) indicates companies with a close relationship to customers, suppliers, research institutions and competitors have a higher internationalization success and are faster to innovate. The network theory is a theory of internationalization used in the renewal of the Upsalla 2.0 model. The network perspective addresses the role of external resources to a company. The network perspective focuses on a company as a part of an intertwined network, consisting of direct relationships that provide control, ownership or knowledge. (Dana et al., 2004; Jones, 1999) expand the network perspective to outside of the company. Judging that the owner and/or management team may be the source of knowledge, sources can be a prerequisite to a successful export strategy. The network theory does not provide a set of steps or guideline in how to achieve a successful personal network. Instead, the theory provides an insight into the value of social capital that may become or already is the most valuable asset of a company willing to undertake international expansion.

Traditionally, Upsalla and Stage models focus largely on overcoming barriers. The network theory focuses on the strength of the position of the company within the network (Johanson & Vahlne, 2003). Johanson & Vahlne (2003) introduce the terms of outsiders and insiders, describing whether or not the necessary knowledge is accessible to people or restricted. Network theory focuses on the utilization of relationships largely based on informal agreements. Faems (2005) analysed and discovered a positive relationship between collaboration among companies and innovative performance, impacting the innovative performance depending on the nature of the company partners involved.

Zhou, Wu & Luo (2007) have found support that the social connections can be supported through the use of social networks. The research indicates the importance of personal networks. Especially in China, social contacts are the main way of conducting business: customers or suppliers favour personal relations, a phenomena known in China as guanxi. The research produced by Zhou, Wu & Luo (2007) indicates that international business managers should take into account the value of social media to increase the level of connections with partners. Helping companies to create relationships increases the rate of internationalization.

6.2 Internationalization theories compared

Research suggest that the Stage theories leading a company through a set of establishment steps written by Uppsala give a clear insight into the possible stages of incremental commitment. This provides a waterfall that leads incrementally from little to no commitment, to a high degree of international commitment. However, Uppsala does not adequately reflect the complexity and reasons and decisions in the process. Above all, the internationalization theory of Uppsala does not provide any insight in how certain stages can be overcome.

	Uppsala 1.0	Uppsala 2.0	Stage theorie	Network theory	INV	IET	Born globals
Internationalization process	No regular export activities	No regular export activities	No managerial interest for exporting	Use personal networks in exploring network ties	No regular export activities	Discover opportunities	founders prior knowledge and networks determines focus
	Export via agents (low foreign commitment methods) & psychically close	Export via agents (low foreign commitment methods) pending on personal networks	Willing to fill unsolicited orders	Form weak ties with potential partners/ customers	Export via agents (low foreign commitment methods)	Enact upon the oportunities	Form weak ties with potential partners/ customers
	Establishment of overseas subsidiary (medium foreign commitment methods)	Establishment of overseas subsidiary (medium foreign commitment methods)	Explores feasibility of active exporting	learn from the ties made in the network	Establishment of overseas subsidiary (medium foreign commitment methods)		Strong ties with partners/ customers
	Overseas production/ manufacturing (high level of foreign commitment) & psychically further	Overseas production/ manufacturing (high level of foreign commitment)	Expoerimental exporting to physiological close countries	Companies position in the network betters	Overseas production/ manufacturing (high level of foreign commitment)	Analyze opportunities	Gain market intelligence
		Experienced exporter	Increase in received resources from others within the network		Exploit oportunities	Allocate resources & pending on the gained insight	
		Export to more distant markets					

Figure 11. Internationalization theories

Figure 11 illustrates a collection of internationalization theories discovered by this research after performing the systematic mapping study. Each internationalization theory presents a collection of phases building up to a high degree of internationalization. Six out of the seven internationalization theories describe the first phase as a situation where a company has no regular export activities. The theories build up to the next phase implementing the first form of steady international activities. These theories start out with a low level of risk and commitment method using Agents to serve international customers. Three of the seven theories continue with a high level commitment method of conducting international business. The high level of commitment method of choice introduced by the three theories is a foreign establishment, setting up fully owned office in a country outside of the domestic market.

The third phase characterize the individual theories, indicating the main focus the researcher that created the theory. For instance the Network theory places emphasis on the learning from the companies personnel network connections and ties. A second example is the International entrepreneurship theory focuses on enacting upon the oportunities encountered.

When focusing on the internationalization theories this research identified two types of end goals. The end phase of the internationalization theory either focuses on the allocating of the manufacturing to foreign countries, on the further exploitation of the internationalization and, third the increasing of the amount of countries the company can export to.

Research indicates the network of the company plays an important role, not only those of networked partners but especially the network of domestic customers with internationalization plans or current presence. However, the fact remains that the market entry forms all lead up to a higher level of international commitment. Currently, the theory offers no further explanation for companies that do not own a large international network, stating simply that companies with a small international network are dependent upon unsolicited requests in order to set up an international base. In particular, Born Globals are dependent on the requests of unsolicited customers. Rugman & Verbeke (2007) indicate Born Globals are actually 'born regionals', since these companies tend not to span their business over the entire globe from Day One.

The most frequently mentioned enabling factor is that of physical distance, as illustrated in Table 5. The company characteristics and specific advantages are only mentioned implicitly. Oviatt and McDougall focus more on the specific factors enabling internationalization. Most research by Sapienza (2006) finds that markets entered that are cognitively or culturally distant from the company's home market have a larger chance of failure. Physical geographical distance is mentioned as an important factor. Compared to entering nearby countries, entering distant foreign markets is more likely to increase the needed resources and coordination.

Moen & Servais (2002) place great emphasis on the fact that companies consist of people, thus the decision-makers are an important topic of research as in, for instance, the "decision-making boldness". The differences among the internationalization theories mainly reflect semantic differences. Cannon and Willis (1989) continue to challenge the stage progression and forward motion, arguing that companies could be seen as passive exporters, deeming stage models too strict since these companies do not follow the stages. Reid (1981) continues in saying that the internationalization characteristics of companies are unique and highly situational, questioning the value of theories categorizing and describing the process of internationalization.

Internationalization characteristics	Uppsala 1.0	Uppsala 2.0	Network theory	INV theory	Born globals	Resource view
Psychological distance is a part of the theory	+	+	+	+	++	-
The theory process consist of fixed steps	++	++	+	-	-	-
The theory includes market selection	-	-	-	+	+	-
The theory emphasis the importance of relationships	-	+	++	+	++	+
The theory emphasis the importance resource	++	++	-	+	-	++

Table 5. Characteristics of internationalization theories

One reason for foreign expansion is the likelihood of finding opportunities. Internationalization can also be a way to create new opportunities, an example is client followership; when a customer is going abroad and the locally preferred supplier is asked to follow the internationalization steps of the customer. The general answer to the market selection is wherever companies and/or their partners see opportunities. When a company does not possess a foreign network, the company may go where it is easy to connect with a new firm. Therefore, companies should pay attention to relation and/or network shortcomings.

The Johanson, Vahlne (2009) research is focused on the knowledge discovery and learning theory. The first Uppsalla model viewed the lack of foreign market knowledge as international expansion, since companies are inclined to confine their ideas and activities to the geographical vicinity of their knowledge. Companies can stay domestic until they are pulled internationally by an unsolicited export order, climbing to further stages of internationalization as the company accumulates foreign market knowledge.

Company age is seen by international entrepreneurship theories as a process in which an increase in knowledge is developed. Increase in knowledge results in a continuation of foreign growth. Compared to the Born Global theory the international entrepreneurship theory describes a situation where new firms from having more flexibility, allowing them to rapidly acquire the necessary knowledge and competencies necessary to pursue foreign market growth; Reuwer (2009). Only by doing business internationally is it possible to learn how customers, partners and other actors

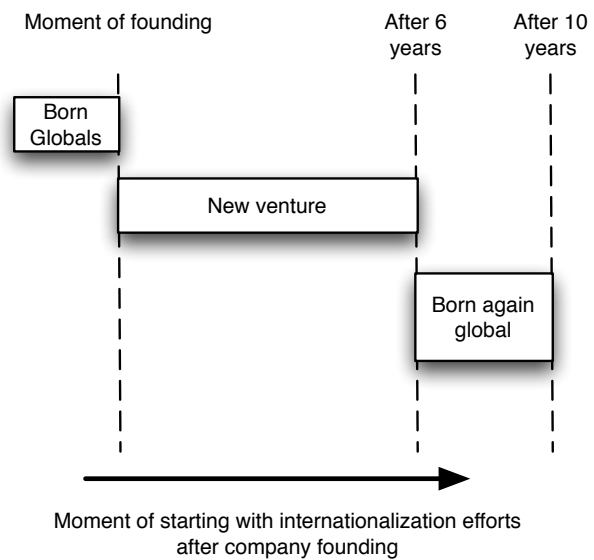


Figure 12. Internationalization planning

act in certain situations, leading up to a better understanding of the market. However, managers who have a long history of international business can start a Born Global, beginning on Day One with a set of international capabilities.

Etemad, Wright & Dana (2001) indicate that stage models pose a problem since they are assumed to pan out over the length of time. By panning out a company can gain knowledge, resources and capabilities required to succeed in international markets. Stage models represent a more controlled process of internationalization. However, rapid expansion can decrease the length of the internationalization process, reducing the strain on development and resources by skipping unnecessary steps. Etemad, Wright & Dana (2001) provide the example of required size of scale.

The Uppsala model focuses on describing and recognizing the different stages of internationalization. How these stages should best be taken is not advised. Uppsala does not focus on the speed or entrepreneurial behaviour of the company in the process of internationalization, while IVN & Born Globals focus more on the entrepreneurial behaviour. The networked approach is also a good way to identify opportunities through the linked connections, which can lead to alliances or cooperative situations. The setup of alliances can be aided by brokers who can help bring companies together.

Child & Rodrigues (2005) indicate that external acquisitions are a fast way of gaining knowledge development. However, they state that a company cannot solely rely on the purchasing of external knowledge through mergers and acquisitions. They indicate that especially Chinese firms are generally inclined to select inward internationalization, collaborating with local OEM partners that own an international network, thus presenting an outward internationalization by local acquisition.

Tom Elfring and Willem Hulsink (2003) explain the value of networks as an important part of entrepreneurial success. However, the network perspective does not explain the actual growth of a venture. The authors have found three entrepreneurial processes in new venture development:

- Discovery of opportunities,
- Securing of resources, and
- Obtaining legitimacy.

The researchers discovered that companies who are developing radical innovative products or services benefit from a mix of strong and weak ties. During the opportunity discovery process, weak ties play the most important role. Stronger ties result in the valuable exchange of knowledge between partners, for instance the viability of certain opportunities.

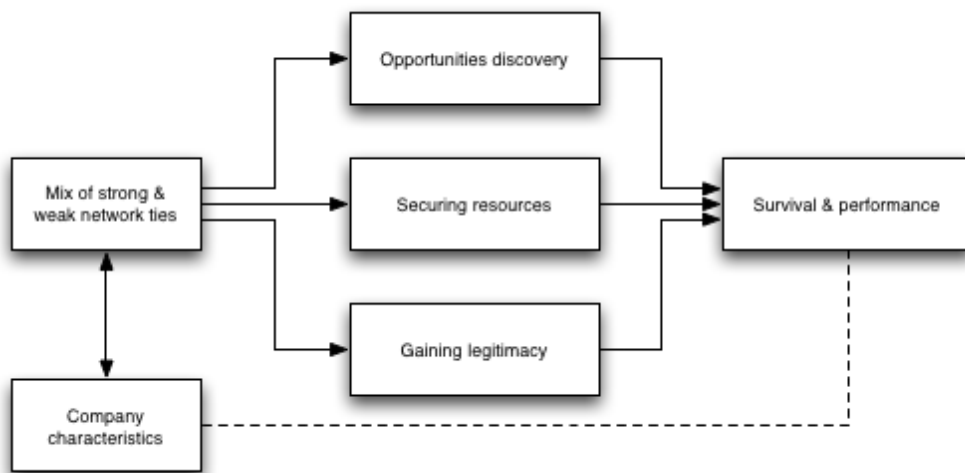


Figure 13. Hulsink & Elfring perspectives (2003)

6.3 Market orientation, selection and market entry

Market orientation consists of all activities aimed towards acquisition, dissemination and application of market information. John, Diamantopoulos & Siguaw (2013) point out domestically focused companies are more likely less developed in a international context compared to companies with a high degree of internationalization.

John, Diamantopoulos & Siguaw (2013) describe export market orientation as:

- Generating market intelligence;
- Destinations of the market intelligence to decision-markers; and
- The design and implementation of a strategy towards export.

A market selection is the planned process of selecting a market in which a company wants to deliver a product. Market entry is the process by which a company can actually deliver products to the market.

Market entry: "the optimal mode for entering a market by analysing their costs and risks based on market characteristics and taking company resources into account." (Hood & Young, 1979)

By Hood & Young's definition, companies should choose the optimal mode for entering a market by analysing their costs and risks based on market characteristics and taking into consideration their own resources.

Vahlne & Wiedersheim-Paul, the authors of the Uppsala model, on the other hand, found in their empirical study of the Swedish software market that companies began the process of internationalization with ad-hoc exporting. Subsequently, they will formalize these entries based on ad-hoc events, starting out with local intermediaries – agents who often represent multiple companies in the foreign market. When sales produced by these agents grow, they switched from agents representing the company to self-owned local sales offices.

Following the four steps of the Uppsala model, Vahlne, & Wiedersheim-Paul describe the market selection as a pattern by which the internationalization starts out with markets close to the domestic markets in terms of psychic physical distance. Psychic Physical distance is defined as a collection of factors that make it difficult to understand foreign markets.

“The closer the psychic physical distance to a country the lower the amount of barriers encountered by the exporting company.” Vahlne, & Wiedersheim-Paul (2003)

After analysing all publications found through the systematic mapping study, the research found the market entry techniques shown below. Each of the market entry strategies has their own level of commitment, based on the perceived amount of commitment stated in the literature required to implement an entry strategy. The market entry strategies are sorted low to high, since companies tend to start out with a low level of commitment and continue to a high degree of commitment.

Market entry strategy	Level of commitment
Direct export	Low
Indirect exports	Low
Licensees	Low
Unsolicited orders	Low
Export sales staff	Low/Medium
Joint ventures & strategic alliances	Medium/High
Client follower ship	Medium/High
Piggyback method	Medium
Agent/distributor	Medium
Industry trends	High
Subsidiary abroad	High
Sectorial targeting	High

Table 6. Market entry strategies and commitment

Hybrid market entry strategies

In the case study done by Moen (2004), the researcher provides a new perspective of market entries in practice and describes a company producing e-commerce solutions targeting the small medium business segment. The company chose to implement a hybrid solution, indicating that a combination of entry forms is perfectly possible. The company has an online presence in 14 countries combined with a local telephone number, which is routed to the company’s headquarters, where representatives are available to answer their calls in 12 different languages. This provides the impression of a physical local presence while keeping their resources in one place and facilitates communications and knowledge transfer throughout the company. Using virtual offices to penetrate foreign markets is regarded as a new type of foreign entry form.

Market entry strategy based on company characteristics

Born Globals tend to have a different type of market entry (Sharma, 2003). The knowledge at the beginning of the company determines the market entry mode and the choice of foreign markets. Market selection begins with the establishment of a number of weak ties abroad. These weak ties are the starting point for the creation of knowledge abroad. Born Globals are characterized by a lack of fixed processes, a phenomena that also holds true for the selection and entry of foreign markets. The decisions are based more often on the evaluation of the individual opportunities and propositions. Opportunities determine whether to enter into an alliance or to focus on specific markets.

Entry into a market may open a window for further internationalization. A large difference compared to companies following the Uppsala theory of internationalization is the fact that Born Globals lack previous successes at the company level. At the moment of founding the company and starting internationally, there is no known process or routine that can be repeated. March (1991) indicates that this can be overcome by the creation of partnerships with companies that do have the necessary experience.

Market entry strategy selection

The market entry of Born Globals is depicted as a process of exploration and learning. Born Globals spend little time in collecting and analysing specific country knowledge, focusing more on specific client opportunities (Shuma, 2003). Born globals gather information about potential customers and factors influencing the client's decision to make a purchase. Gradually changing their weak ties into strong ties as the commitment and resource allocations increases. After forming the first weak ties abroad, Born Globals try to accumulate knowledge through these ties as a reference, thus implementing a more agile approach compared to the Uppsala model in adapting their internationalization strategy to the specific customer needs and those of the specific market. Shuma (2003) indicates that changing the strategy towards the internationalization is harder for domestic firms with many domestic relationships due to the large change in processes, and mental models as compared with Born Globals.

The cross-country industry survey performed by Bell (1995) challenges the traditional stage models. The survey was conducted within the software sector of Finland, Ireland and Norway. The survey data support the concept of physical distance as a key factor for companies to base their selection of export markets. Bell (1995) indicates in-depth interviews provide a great opportunity to discover factors influencing selection decisions. Bell's research finds the following targeting methods: Followership, section targeting, and industry trends. Internationalization is not always the main objective in the founding process. Companies were mainly focused on being self-employed, executing a good product or other factors except for the founders who decide to focus on the degree of internationalization.

6.3.1 Client followership

Client followership consists of software companies following domestic customers who are commencing international business. Client followership can also be a driver starting internationalization with strong ties abroad through a strong domestic customer network. Giving the company the advantage of starting out with a launching customer with strong ties. The market selection is done by the customer, who could be both physically and psychologically close or not. Domestic customers can be part of a larger international chain or can choose to expand to more countries.

6.3.2 Piggyback method

The piggyback method first mentioned by Hollensen, (1998) explores the same tactic, however it chooses larger domestic partners instead of customers. This way, a software company exports indirectly and makes effective use of the distribution channel of the larger domestic partner. Etemad, Wright & Dana (2001) describe 'piggy-backing' as a strategy where smaller companies rely on larger companies for the introduction to foreign markets. Although reliance on one or a small set of companies can introduce a large dependence. Large companies can profit through the partnerships, since smaller companies can become highly specialized and efficient.

Piggybacking is described by Albaum et al. (1995) as an easy low-risk way for companies to start export-marketing operations. It is seen as a well-suited strategy, especially for small companies, since it requires a small initial investment in foreign markets or knowledge about internationalization. The process of piggy backing consists of finding a company willing to partner in existing export initiatives. The strategy assumes the 'rider' is in an early stage of internationalization, offering an opportunity for the rider to learn by observing the international marketing, transactions and activities, as pointed out by Terpstra and Yu, (1990). The partner can take advantage of added value in promotions or associations with well-established brands without having to invest in the development of a new product. Partners offer minimal investment and maximum speed to obtain a product or services that adds value to the proposition of the partner.

At the same time, the company is building their internationalization process by collaborating with large enterprise partners such as Microsoft – a method known as piggybacking. The case-study company admitted it limited their flexibility and restricted the company to delivering solutions only on the Microsoft platform, now and in the future. However, the collaboration worked in a way such that Microsoft promoted their products, recommending the company as a reliable partner. Apart from the initial collaboration the partnering company has the psychological added value described as "Giving the potential clients a strong sense of security due to the partnership with Microsoft"

6.3.3 Unsolicited orders and/or requests for information

Although unsolicited orders do not qualify on their own as a market entry, the start of an internationalization process can be initiated by an unsolicited order or inquiry from a country outside the domestic market. Unsolicited orders can give the key decision maker enough confidence to start formalizing an international strategy. These circumstances can, for instance, be caused by a multilingual company website founded by an overseas potential customer.

Industry surveys conducted by Moen et al. (2003) indicate that around 16% of companies start internationalization after receiving unplanned inquiries. These first contacts can provide a foothold in a domestic market, providing valuable knowledge concerning the market characteristics and processes. Research revealed, little evidence is focused on companies' decisions on these unsolicited customer requests depend on the psychological distance.

6.3.4 Sectorial focus

Sectorial focus is a strategy in which a company targets new markets based on a specific niche. Companies that are highly focused on a small niche have to take less notice of the country borders. The nearby country markets are often determined by sectorial considerations. The industry surveys of Bell (1995) indicate that specific vertical sector knowledge is valuable to the degree that there is an independent of the country of origin.

Lloyd-Reason et al. (2007) performed a study toward international entrepreneurial motivations and activities. Indicating companies from different countries each have a strong focus on a specific sector. The study found some countries have as strong presence in a specific niche, independent of the country of the location of the niche. The study of Bell et al. (2003) performed on SME companies in the UK explains software companies create a software product focused on solving a specific problem. The study provides an example where a software product is built to manage a marketing company. When the software vendor starts implementing the solution at customer companies the vendor will gain more and more knowledge on the marketing sector independent of the country location of the marketing sector.

6.3.6 Joint ventures and strategic alliances

Joint ventures present a collection of strategies in which two or more parties choose to partner up. This results in a business agreement in which two or more parties agree to come together for a period of time, consisting of a set of new combined assets or resources. The level of control often corresponds to the level of shared revenue, expenses and financial assets.

The industry surveys by Bell (1995) indicate licensing and joint ventures were scarcely used; however, Bell's interviews also indicate they do initiate general site licenses sold to current

clients. However, the joint ventures are mostly used in the marketing stage instead of a technical collaboration (Bell, 1995). The survey indicates that countries with a small domestic market, such as Ireland, are more inclined to focus internationally before they can conduct any domestic sales. The industry survey by Grant & Baden-Fuller (2004) indicates North America dominates the world of R&D partnering. Almost 70% of the R&D partnerships registered in the CATI database, a database recording company-to-company partnerships found for the past four decades, has at least one North American R&D partner. The CATI database contains information on thousands of technology related business-to-business partnerships from 1960 to 1998.

Hagendoorn (2001); Hagendoorn et al., (2000) show that alliances are primarily concentrated in the computer sector, communications equipment field, consumer electronics market, market for medicines and the pharmaceutical industry. Hoskisson (2001) studied companies with a low level of uncertainty and high level of learning distance and found companies in these situations tend to choose acquisitions instead of joint ventures. Joint ventures may be more suited when some uncertainty exists but the market opportunity is closely related to the company's capabilities.

6.3.7 Indirect exports

Indirect export is selling through an intermediate party that continues to sell the software products their customers. The intermediary can even be in the same domestic country as the ISV trying to sell the software products abroad. One of the advantages for the vendor could be the mediation of the responsibility for the payment collection. However, different constructions may exist and a company responsible for getting the software product to the customers is also called an export management company (EMC). And EMC is a company which acts on the behalf of the ISV to sell but also service the product. Most of these EMCs have a strong customer base in a specific region or country. An EMC is highly market-driven and sometimes represents multiple products by different venders. Generally, the EMC buys the product from the ISV and marks up the price in order to make a profit, however business models are not confined to commission-based contracts.

6.3.8 Agent/distributor

Roger A. Philips (2014) suggests a set of topics that should be assessed when selecting an agent:

- The partner should be experienced and have a profound interest in the products and market targeted by the company.
- The partner should be willing to commit technical and sales resources.
- The partner should be able to provide a marketing plan for the software products.
- The partner should have extensive technical knowledge of the product.
- The company should be financially stable.

- The partner company should be successful and profitable for some years. Placing trust in a start-up is obviously more risky.
- The partner should have a good customer base of active customers within the target product market.
- The partner should have a good reputation. By checking references, it can quickly become clear if the partner company is reliable.
- Low amount of conflict with comparable products within the partner portfolio
- Choosing a partner company that only represents a limited number of products. This prevents the product from being overshadowed by many other products.
- The partner should be non-litigious or have a lack of suing history that indicates a history of vendor conflicts.
- Above all, the partner should be willing to buy initial products to build up stock.

In order for ISVs to sell their product, they can contract with agents and distributors to sell their products and services. The difference between a distributor and an agent is in the definition. A distributor acts as a direct salesperson, whereas an agent focuses more on the campaigning of the product, bringing together local market knowledge and in-depth product knowledge. Distributors also provide after-sales services since they buy the product directly from the company and distribute it to the customers. An agent is more of an external representative of the company, although agents can be self-employed or direct employees.

6.3.9 Export sales staff

Companies can enable direct sales by directing employees to target a specific region in order to sell services and target potential new customers. Export sales staff consist of a centralized sales force located in the same country in which the company was founded. By having all the staff in a central place, the knowledge sharing and collaboration is easier compared to the situation where employees work in separate locations.

Research performed by Moen (2004) described the situation of export sales staff as employees working from a centralized position to service customers and potential customers. Using a centralized sales force the company's customers are serviced by a native speakers. However the research indicates this will depend from company to company. Since some can be serviced in a different language than their native language. A case company researched by Moen (2004) combined a centralized sales force with the perception of a local presence. The case company used 12 country specific phone numbers and marketing websites presenting the optic of a local presence combined with a centralized work in located in the domestic market

6.3.10 Licensees

By granting a licensee a license, the licensee is entitled to a specific set of rights and restrictions, for instance, the right to use a software product but also to resell a specific product range. It is a term widely used in the software industry and often used in collaboration with a market entry strategy.

The most used license is the EULA or end-user license providing the owner of the software to partially giving users the use the software. Moen (2004) indicates a software licensee is often combined with a specific market entry strategy. For instance a foreign agent could be given a license to sell a subscription or a copy of the vendors software. The license structure often operates based on a commission giving the agents a percentage of the order send to the customer.

6.3.11 Foreign establishment

Beamish & lu (2006) tested the effectiveness of internationalization strategies, exports and foreign direct investments on the growth of an SME company. Direct international exports and direct foreign investments both contribute to company performance. Beamish & lu (2006) indicate SMEs should explore the possibility of making direct foreign investments. However, companies should be aware of the dangers of foreign investments, as companies gradually accumulate knowledge and develop capabilities through their mistakes.

Direct foreign investments have been proven to have a positive relationship with growth; however, the Beamish & lu's research does not provide a relation with profitability. Having a foreign establishment is seen as the highest degree of commitment to a specific market. A foreign establishment goes beyond the setup of a mailbox company. A foreign establishment consists of opening a branch within a country, hiring foreign employees or moving domestic employees to the foreign branch. Depending on the company strategy, a foreign establishment can have a high or a low degree of autonomy.

6.3.12 Direct export

Each method of selling software has a lower limit in terms of profitability. Geoffrey a. Moore put the figure at \$50,000 while others put the limit at \$10,000, meaning a sale lower than the lower limit would make a face-to-face not profitable. Alternatives to the face-to-face are customers buying directly via telesales or via online commerce solutions.

However, each sales method in an international context should be chosen carefully. For instance, the selling of software via the telephone is not accepted in all countries and could be seen offensive in some cultures. Roger A. Philips (2014) indicates that Latin America and Japan are examples of markets that require personal contact.

6.4 Speed of internationalization

Thus far, only internationalization theories have been discussed, however the aspect of speed is only implicitly mentioned by the internationalization theories. Oviatt & McDougall (2005) are some of the few people that have researched the aspect of internationalization speed. The factors mentioned are split into four types:

- Enabling,
- Motivating,
- Mediating, and
- Moderating.

Oviatt & McDougall introduced a model that referred to company market knowledge and the product knowledge. The model by Oviatt & McDougall initiates and moderates the speed at which international opportunities are utilized and exploited. The model discusses three factors influencing internationalization speed. The first factor is the reaction time between opportunity discovery and the reaction that followed which resulted in the first market entry outside the domestic market. Second is the speed by which the internationalization scope is widened. The final factor is the speed by which the international commitment is increased, as measured by the increase in foreign revenue.

An entrepreneurial opportunity can come in many different shapes, and the writers of the article give an example in which an entrepreneur discovers a new article describing a new medical procedure that supersedes a current method. Oviatt & McDougall (2005) explain that the speed of internationalization is enabled by technology, competition, knowledge and networks. The new method of implementation differs from traditionally well-understood technologies that are internationalized incrementally. The response time can be linked to the competitive advantage. Companies with a high degree of competitive advantage usually have a faster internationalization process. The competitive advantage is formulated as the degree in which a company is dependent on some novel or complex amount of knowledge, especially when the novel knowledge is in high demand.

When Oviatt & McDougall (2005) actually indicate that the observed activities and opportunities are linked, they provide a definition of international entrepreneurship, or IE. The researchers developed a model explaining the speed of entrepreneurial internationalization and concluded that the speed of internationalization is influenced by four forces moderating the speed of internationalization:

- Technology, which enabling internationalization;
- Competition, providing motivation;
- Market knowledge, and
- Personal network.

Oviatt & McDougall (2005) suggest that the process of internationalization is initiated by an entrepreneurial opportunity. The mediating forces are largely focused on the personal characteristics:

- Educational background;
- Years of international experience;
- Risk-taking propensity;
- The ability to recognize; and
- The size of the entrepreneurial manager's network.

An example of enabling technology is the possibility of more efficient transportation, thus bringing down the cost to trade abroad. The second motivation force is competition. Competitors can encourage and force internationalization.

6.5 Internationalization barriers

An industry survey performed by the European council in 2007 ranks a set of barriers encountered by companies during the process of internationalization. Apart from the barriers encountered, the systematic mapping study identified two opposites focused on the attitude of customers preferring domestic or foreign vendors.

Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975 state customers are inclined to local vendors, thus foreign vendors should build towards a local physical presence. Literature based on industry surveys performed by Bell (1995) indicates that local suppliers were faced with customers claiming imported foreign software packages are more versatile and less expensive compared to those locally-developed. This indicates that not all software companies enjoy a better reputation domestically rather than abroad.

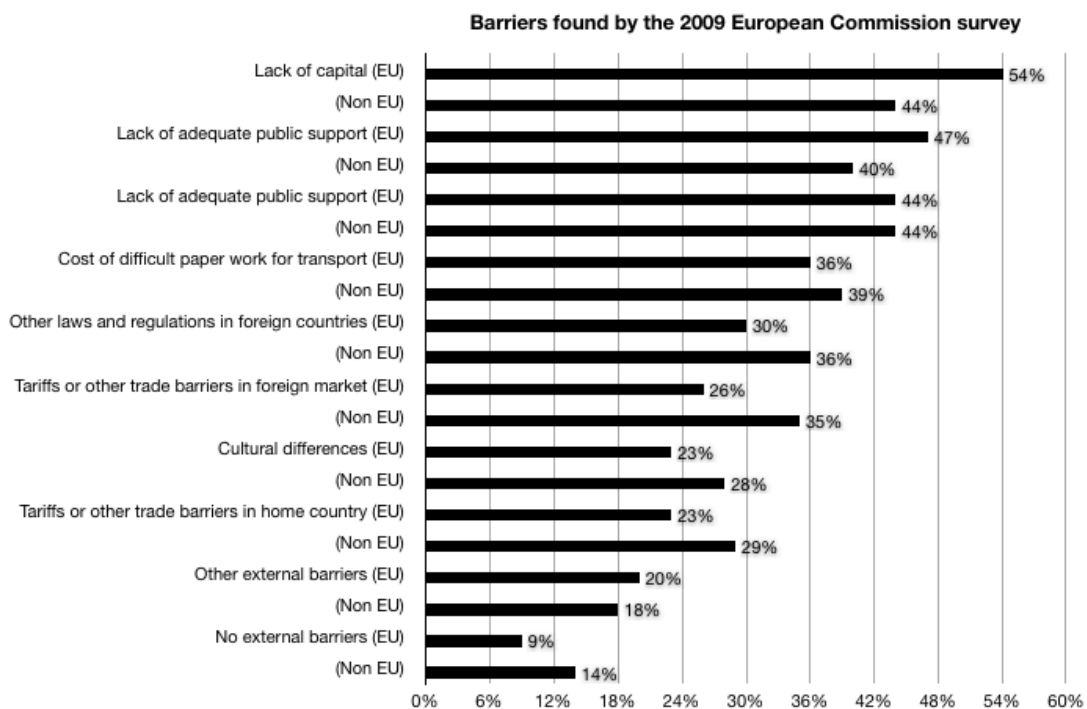


Figure 14. Internationalization barriers; European Commission survey (2003)

Luo and Rosalie (2009) found a difference in the chosen path of internationalization of multinationals compared with companies located in emerging economy enterprises. Emerging market economy enterprises utilize international expansion as a springboard to gather resources to compete with strong global competitors in the domestic market. As indicated by Luo and Rosalie (2009), companies do not always have a ‘home court’ advantage in preventing companies from capitalizing on the domestic markets.

6.6 Internationalization performance

Zahra & Garvis (2000) were some of the first to examine the relationship between international entrepreneurship and company performance in software companies. Their research states that software companies are driven by innovation, which in turn develops a set of key capabilities in overcoming external forces, thus improving the company performance. These external forces are defined as “environmental hostilities”, representing, for instance, regulatory burdens posted by a foreign government. Zahra & Garvis (2000) suggest companies should actively focus on the international context for the entrepreneurial activities, emphasizing these activities should be planned in moderation.

Ruigrok & Wagner (2003) performed research that focused on the link between the performance of a company and the degree of internationalization. The research found a strong relationship between the degree of internationalization and performance. The relationship of degree of internationalization and financial performance, however, has a non-linear curve shape. Companies first undergo a phase of learning combined with initial investments, after which the internationalization process is refined, which results in improved exploitation. However, the research indicates that a high degree of internationalization eventually outweighs the benefits of the internationalization process. Ruigrok & Wagner presented a period of performance deterioration explaining why some firms eventually resign and proceed to initiate a de-internationalize processes.

Ruigrok & Wagner (2003) found that German and US firms differ in terms of internationalization strategy. The difference boils down to whether or not companies are culturally related or unrelated to the foreign markets. The research found all US companies at the beginning phase of internationalization are expanding to countries are more or less culturally related. The researchers indicate that German companies are more likely to target companies that are culture similar to the domestic market, such as Switzerland and Austria. Although these they are closely culturally related, these countries are small in market size. Unlike US firms, German companies are limited in pursuing culturally unrelated markets further removed from foreign expansion.

Knight (2001) found that SMEs that prepare the internationalization to enter foreign markets tend have greater success and a better performance gain. Knight indicates the importance of performing market research, the commitment of resources to international operations and the customization of products and services tailored to specific conditions of the foreign markets. However, international market research almost never guarantees correct decisions; it usually improved the company’s chance at successful internationalization by a small degree. The failed internationalization attempts are mostly a result produced by the lack of knowledge or experience in the field of internationalization. Knight (2001) indicates that successful software products require little adjustments or investments before implementing them in an international context.

6.7 Internationalization limits

After performing the SMS, the success factors encountered are summarized in order to validate the factors in the empirical phase of the research. The SMS was used to research to what extent Dutch software companies with a successful internationalization strategy took the selected success factors into account. Validating the value of the mentioned critical success factors within Dutch software companies, in correlation with the companies characteristics, such as company age.

Selling in new markets adds additional challenges to the sales process. The most common issues found by Moen et al. (2004) consist of:

- Lack of international experience and competence; to what extent do employees have international work experience;
- Do they speak the local language or do they have a physical presence through a third-party representing the company or is there a store location at the international locations?
- Is there an international orientation from Day One?

Decision-makers within a company should encourage and support international activities, even if these activities pose many new challenges and require extra time to start the knowledge development that eventually leads to rewarding financial opportunities. Thus nurturing and supporting international activities remain one of the top priorities of key decision-makers within a company, even if these activities pose many risks and threats. At the same time, executives need to identify the upper limits of the financial gains of internationalization. Risk-taking behaviour should be encouraged up to a certain point, until the costs are excessive and employees have to overextend themselves, resulting in a degradation of the company's performance.

6.7.2 Psychic distance

The research performed by Crick, Dave, Marian & Jones (2000) focused on foreign market entry of UK companies, indicating a low psychic distance was deemed less important compared to the global trends in technology. The researchers noted the importance of unsolicited orders, since these can form an initial starting point for companies to engage in internationalization activities. However, previous employment is judged more important since it offered employees a way to implement knowledge acquired earlier. Crick et al. (2000) indicated market entry modes, types, and speed vary significantly among firms.

One means by which a firm learns is to move into new foreign markets, exposing itself to a different environment, after which they assimilate the different types of knowledge. The higher the diversity of foreign markets entered, the greater the opportunity for organizational learning. However, a greater diversity of the markets can reduce the speed of technological

learning. The results partially support the hypothesized curved linear relationship between international diversity and the speed of learning. In particular, they indicate that the effect of diversity on the speed of technological learning can be negative. New ventures that diversify internationally, therefore, may have to trade off speed against the breadth and depth of technological learning.

Ojala & Tyrväinen (2007) further researched the influence of cultural and geographical distance between the customer and the vendor. Their empirical findings suggest that 70% of the internationalization and market selection choices can be explained by the size of the foreign market and geographical distance. Their findings suggest companies are shifting away from geographical distance as a primary parameter towards the actual market size of a country combined with the degree of purchasing power. Ojala & Tyrväinen (2007) based their research on secondary data gathered by the Finish software industry survey. The survey consisted of 165 company responses, of which 53 indicated that they operate in at least three foreign markets. Based on these results, Ojala & Tyrväinen (2007) provided the following model used in the research to add these factors to our collection of potential factors that influence a successful internationalization.

6.8 Localization

Localization consists of all adoptions to make a product usable and suitable for a specific country or region. In product software, localization largely consists of local specific standards, accounting standards and professional practices. By examining the requirements of each market requirements, the deviations can be found.

The fact that a product is not localized does not mean that the market is unattainable. Some products even perform well without localization, especially users that are accustomed to reading in English and using English products. National language support can influence the following aspects within the company:

- User manuals,
- Packages,
- Install instructions,
- Help functions,
- Reports,
- Support instructions,
- Marketing material, and
- Advertisement copy.

The impact of localization on the software products can present itself in the following challenges:

- Different countries have different standards in punctuation: comma vs. period.

- Currency: using different currency symbols.
- Date and times: different notations of date and time.
- Measurement metrics: some countries use meters and some use yards.
- Screen design: Some interface elements should be redesigned for different regions. As an example, Philips (2003) indicates that in Asia the colour for emergencies is green.
- Icons: A mailbox icon designed by US designers might not have any meaning in Asia, since they use a different type of box.
- Larger interface elements: English is seen as a compact language; many languages are seen as less compact – for instance, Spanish requires roughly 40 percent more characters to communicate the same message.
- Rounding financial figures is done differently in different countries. For instance, in Switzerland there are strict rules for rounding.
- Sorting lists of data: 25 percent of the world market uses more than 255 characters, sequences in Germany å sorts after a, and in Sweden the letter sorts after z.

7. Theoretical model

Concepts that have been developed over time through shared usage examples are: weight, height, distance, and velocity; these are concepts that are fairly straight forward and more easily measurable. Abstract concepts or constructed concepts, however, are less clearly defined and thus harder to measure. Abstract concepts are build up through defining a set of concepts that represent the overall constructed concept with the purpose of defining concepts.

Independent variables (IV): describe direct influencing factors.

Dependent (DV): describes what is investigated.

Moderating (MV): a variable affecting the relationship between IV and DV. This research uses grounded theory as a method of validating the theoretical model. A concept is a collection of generally accepted properties or characteristics associated with:

- Events,
- Objects,
- People,
- Conditions,
- Situations, or
- Behaviours.

Figure 15 depicts the interactions and connections of independent variables and dependent variables, specifying the company characteristics that positively influence the degree of internationalization of a software company. Company characteristics in turn are influenced by the product software they produce and sell. Internationalization can be a costly process; in order to fund the process, some companies tend to use several forms of venture capital. The use of venture capital introduces a strong focus on company growth – growth that can only be obtained by increasing the customer market. Lastly, the employee experience and the personal network of company management are two of the most important company characteristics influencing the degree of internationalization. Companies or CEOs formally living abroad could provide an advantage over companies founded and managers born in the Netherlands.

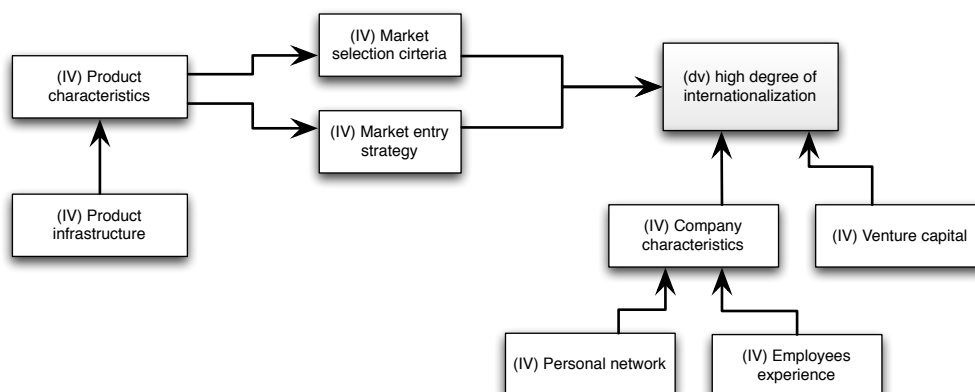


Figure 15. Theoretical model

8. Internationalization in practice

In this chapter, the companies used in this research as cases are introduced. Due to the sensitive nature of the research, most cases are presented anonymously; the research company names have been replaced by a nickname. Each company was asked to focus on current and historic affairs only; therefore, the discussed situations mainly describe the “as-is situation”. Future plans and ideas are not included in the results, focusing on the actual activities only. Table #7 presents an overview of all case companies sorted in descending order based on degree of internationalization.

Company	% income received from abroad	Direct / Indirect	# FTE	# FTE international	Year founded	Foreign customers since	Internationalization attitude	Application distribution type	Present in #countries
ResearchComp	95%	Indirect	12	12	2007	Day one	Active	Install based	50+
HealthComp	81%	Indirect	12	0	2009	Day one	Active	SAAS	11
BiComp	81%	Indirect	15	0	2005	Day one	Active	SAAS	12
MediComp	80%	Indirect & Direct	35	2	2006	Day one	Active	On Premise	11
BackupComp	77%	Direct	30	0	2005	Day one	Active	SAAS	50+
ImageComp	50%	Direct	7	0	2009	Day one	Active	SAAS	16+
AppComp	40%	Indirect	7	1	2009	Day one	Passive	Install based	7+
IdenComp	30%	Indirect & Direct	32	2	2005	>1-2 years	Active	SAAS	5
MochaDocs	20%	Direct	3	0	2012	Day one	Active	SAAS	52
BpmComp	20%	Direct	>150	6	2006	>3 years	Active	On Premise	8
PurchaseComp	10%	Direct	25	15	2000	>10 years	Passive	SAAS	4
PersoComp	8%	Direct	40	0	2007	+/- 1 year	Passive	SAAS	5
IntraComp	4%	Direct	150+	5	1996	>10 years	Passive	On Premise	10+
FinanComp	2%	Direct	10	1	2008	>4 years	Passive	SAAS	3

Table 7. Degree of internationalization in case companies

After completing the process of grounded theory, the results are categorized and presented in separate categories. The categories are ordered according to their logical place in the process of internationalization:

- Beginning with the drivers for companies to start internationalization activities and the attitude towards internationalization;
- The selection criteria used in order to determine a market selection;
- The selected market entry strategy used in practice and enablers that thrive on the market entry selection; and
- Findings that relate to the product software characteristics.

Each company case presents the biggest challenges, success factors, golden tips, problems and horror stories encountered by the company during the process of internationalization.

Generalizability of the case companies

During the selection of the cases only business to business companies were chosen. In order to increase the generalizability this research tries to focus on a broad spectrum of case companies. The case companies developed products used by customers in the media, medical, education, science, financial and many more niches. The diverse array of case company increases the generalizability, preventing this research from being only applicable in a certain set of companies. The set of case companies consisted of younger start-ups not older than a year and companies who are in business for more than 20 years. The selected companies will be selected due to the following criteria:

- The headquarters are located in the Netherlands.
- The company is active in the field of software.
- The company sells software produced by the company or developed by a subcontractor.
- The company has a maximum of 100 employees worldwide.

In order to collect the company data, the following business functions will be interviewed: product manager, project manager involved with the internationalization, member of the board of directors, executive director and top-level manager.

8.1 International cases

8.1.1 Case 1 – ImageComp

Company name	ImageComp	Personnel outside the Dutch market	0
Company start year	2009	Function interviewee	Product Manager
Customers in number of countries	16	Number of employees	7
Total percentage of income received abroad	50%	Active or passive internationalization	Active
Market entry strategy	Direct export Partnership		

ImageComp is currently part of a larger organization that gained its own identity in 2009. The holding company started out as an internet/media company, developing apps and custom project-based software products. Since the project-based business was highly volatile, the company started out committing idle manpower to the creation of product software, resulting in a series of five spin-off companies, each with its own separate product and strategy.



The interviewed company focuses on creating a software product that is used by organizations to manage their brand images and media files, functioning as a repository to fuel the various media campaigns and platforms. The product started out as a custom development project, after which the product underwent three years of development while gaining five customers. For the company, this was a large mental change: from doing a small number of projects that were highly paid upfront to a situation in which it acquired a large number of customers for a

symbolic amount.

“The paradigm switch from project-based software development to standard based product software was a massive overhaul, requiring an entire new set of skills.” Product manager, ImageComp

The product manager stated that selling software should be “just shipping products” and explained that ImageComp had invested in creating a scalable marketing operation starting out with a marketing website in six languages. After a half year, the company was highly focused on getting its first company since the overall product still operated with a negative cash flow in the first three years. However, after obtaining a Swedish customer without human intervention, it was a sign of good faith for the decision-makers. It provided the management with a massive energy boost in taking the product international, since the sale proved the product could be sold without physical human intervention.

The market selection started out as a passive process targeting a wide audience, providing marketing material in six different languages. After identifying the leads produced by the online marketing campaigns, the company selected five countries using a sales force based in the Netherlands consisting of native speakers, for instance a German sales manager living in the Netherlands.

“By centralizing the sales force in the same place, we are able to more easily support the personal providing necessary steering and stimulate knowledge sharing.” Product manager, ImageComp

Essential tips

The product manager of ImageComp strongly believes in hiring expats in the Netherlands, thus removing the language and cultural barriers. The ImageComp market entry strategy revolves largely around individual persons. Stating the company “Hires when it hurts” (based on the successful strategy of 37Signals (a successful web development company that turned to product software only), we refuse to grow incrementally by investing profits in the hiring of new personnel. By hiring employees without having the profit base to afford it, we force ourselves to grow in number of customers as well.

The company strongly believes in the concept of SAAS and cloud computing, resisting any incentives to deliver an on-premise solution. Using Amzone EC2, the company can activate instances that are located within the customer borders. Through the use of a scalable platform, the company is able to let the entire customer group profit from a single bug fix. Since the product is built around image material, the product uses a content delivery network (CDN) to provide fast delivery of content to the customers' users, preventing a substandard performance for companies located abroad.

8.1.2 Case 2 - AppComp

Company name	AppComp	Personnel outside the Dutch market	0
Company start year	2009	Function interviewee	Founder & CEO
Customers in number of countries	7+	Number of employees	7+
Total percentage of income received abroad	40%	Active or passive internationalization	Passive
Market entry strategy	Direct export Client followership		

AppComp produces medical software resulting in applications (apps), platforms and web applications. The company was developed initially for the Dutch market but has since then received international attention. The product that has gained the most international attention focuses on the monitoring of patient information, increasing the quality of the general practitioners' diagnoses. The product is released via the app store for Android, iPhone and iPad.



The first version was released in Dutch and English, after which the company received much positive feedback. The company then continued to translate the product into German, French and two Chinese dialects. The CEO indicated that translation posed a minimal effort since the product was easily translatable and lacked country-specific features, thus avoiding extensive localization. The localization posed no further strain on reaching their customers, indicating that the company profits from releasing via the app store. There was no further impact on the functionality with the creation of an international version. The interviewee indicated the massive positive influence of the app eco systems such as the Apple App Store and the Google Play Store. Both allowed AppComp to instantly reach an international audience.

The company was founded and from the beginning, the company viewed the global market as their podium. The CEO indicated that the management team had gained extensive experience through previous jobs with conducting international business, resulting in the necessary experience to conduct sales operations beyond national borders. AppComp indicated it is important to get accustomed to the foreign customs. The interviewee indicated geographical distance did not influence their choice of market selection. Cultural distance did factor into account on different levels, adding complexity to the way of doing business and indicating Scandinavian countries were easier for conducting business than African countries, since Scandinavian culture is more similar to Dutch culture.

Currently, AppComp sees internationalization as an attempt with a passive attitude. The self-proclaimed passive attitude results in a set of activities and strategies in order to gain international business. The process begins with a set of activities aimed to put AppComp on the map from a marketing perspective, such as using conferences and trade shows to gain the interest of potential customers, producing unsolicited requests mostly focused on the sharing of knowledge within the medical software domain.

By performing a large number of presentations, AppComp became internationally recognized by those visiting the conference. AppComp also performs a set of activities focused on content marketing: creating high-quality content such as videos, demonstrations and blog postings illustrating the various uses of medical apps and software.

Essential tips

Surprisingly, the product with the most international customers and attention provided only a marginal level of income. After trying out many business models for the product, it had not made the company financial independent of performing other services or selling other software products. However, their main innovative product provides a tremendous amount of marketing attention to a level where this prominent way of reaching new prospects. AppComp demonstrated the innovative usage of medical applications and demonstrating the quality the company stands for. Resulting in inquiries from all over the globe, resulting in new business

opportunities for project based development business. The CEO described the project-based software development projects which were, at the moment of the interview, more profitable, providing the company with an income which in turn can be used to develop and expand the product portfolio.

The CEO mentioned two preferred strategies of entering the international business market. Client followership was mentioned in multiple examples in which the company connected to customers in foreign countries, such as when AppComp is contacted by a multinational company through their local branch office in the Netherlands, who is already a customer of AppComp. The customers serve as a valuable reference, providing a gateway to other countries. The second market entry strategy is direct export resulting from unsolicited inquiries which originate from content marketing and existing products.

Horror story

The company indicated that hiring the right staff is critical. The CEO gave an example where the company had not correctly selected the right staff, which resulted in hiring personnel that had not adequately mastered the English language. The CEO indicated that the mastering of the English language is an important foundation from which people can master the cultural skills required to manoeuvre through international sales processes.

Apart from hiring the right employees, the CEO indicated the importance of preparing for the process of international business. The company indicated it also tried to work with international development teams, resulting in a negative outcome due to many factors, cultural differences, and the way the structure was set up. This provided an important lesson, which was to start reading before diving head first into the process of internationalization, preventing from having to manage the same obvious pitfalls that have already been discovered by other companies.

8.1.3 Case 3 - FinanComp

Company name	FinanComp	Personnel outside the Dutch market	1
Company start year	2008	Function interviewee	Founder & CEO
Customers in number of countries	1	Number of employees	10
Total percentage of income received abroad	1%	Active or passive internationalization	Active
Market entry strategy	Direct export Partnership		

FinanComp was founded in 2008 by three people. Subsequently, their first international steps were taken via a 'pioneer' sales agent located in Germany. This person is not a native speaker but a Dutchman working in Germany on his own initiative. After following several German courses, he now represents the company in Germany. FinanComp's CEO admits the primary focus is still the Dutch market: "FinanComp is still a Dutch product. Most of all, because the Dutch market is and always has been good for us, enabling us to look further." However, the company was always aware that:

"What you're building for the domestic market solves a problem that is not only a problem in the Netherlands." FinanComp



Therefore, they decided they did not want to exclude the domestic markets. From the moment

of founding, the company has always developed the product in English in addition to the Dutch language, taking future international ventures into account. In the beginning the company focused on the English language as well, largely due to the number of expats in the Netherlands, which now could also become a user group. The company supports users in any possible language in which they choose to do business, allowing customers to easily serve their customers abroad, which results in an application suited for international use outside of the Netherlands. The CEO stated: “For us it is much easier to get feedback from Dutch customers and demands than you do in other countries. Plus, we don't have an extensive network outside of the Netherlands.” Most of the foreign customers are located in Germany and Belgium, countries automatically caught by the Dutch marketing campaigns. In principle, their customers are primarily Dutch customers.

The translation into German was not really necessary because many customers in Germany speak English well and often use many English tools. For instance, customers already use Basecamp as their project management tool and are quite used to it. The CEO indicated this was one of the main reasons the company chose to wait with translating the interface. However, the company did note the feedback from the current German customers and prospects, that it would be a definite plus to have a German interface, which indicates some users prefer to use a German interface. Stating this is mainly mental, since countries like Germany and France see themselves as world orders.

The English language is a different story, and they chose this because of the large target audience. The choice to expand to Germany was not a conclusion based on a thorough analysis. The choice was based on an opportunity encountered. The CEO indicated “Germany is geographically close to the company, why should I choose Spain or France when Germany is next door?” In addition, the company performed a market analysis of the German market based on the level of competition, stating: “If the market is tapped, there is competition, so there is money to be earned.”

Essential tips

The foundation remains a single product with a single codebase. The CEO stated: “In a country like Germany, you will get differences and similarities compared to the Netherlands. To see how we can take on the differences, we have to try it out. After which, at one point the company will find the common denominators to implement our product in all countries.” For the company, this means that there is strong evidence that the software can be used abroad, small adjustments aside. The CEO indicated: “An invoice will be always there, maybe with a somewhat different look. Through testing you find out what these functions are.” For the company, the different customer countries presented challenges focused on connections with service providers and other ecosystems, for instance, differences in payment providers.

8.1.4 Case 4 - IntraComp

Company name	IntraComp	Personnel outside the Dutch market	5
Company start year	1996	Function interviewee	Consultant
Customers in number of countries	10+	Number of employees	150+
Total percentage of income received abroad	1-9%	Active or passive internationalization	Active
Market entry strategy	Direct export Partnership		

IntraComp provides enterprise content management software together with implementation services aimed at large enterprises. In 2012, IntraComp had built up an active presence in Turkey, which began with two Turkish colleagues who moved to Turkey in order to open a local office for IntraComp. This move started out as an individual ambition but it turned into an opportunity for IntraComp. Currently, IntraComp has strong ambitions for its future vision, and it is planning for significant international growth, presenting it as one of its main strategic goals in its current plans.



Currently, the process of internationalization is largely opportunity-based. For instance, the expansion to Turkey was largely initiated by the personal ambition of the employees, after their research showed a significant opportunity for IntraComp. They stated: "There is a lot of potential for ECM projects there." The secondary driver behind the internationalization is largely due to a growing domestic market imperfection, or the saturation of the Dutch Enterprise Content Management market. IntraComp provides large-scale content management

solutions for companies of a certain size, and the Netherlands houses only a relatively small number of companies with more than 1,000 employees.

Essential tips

IntraComp is largely focused on Dutch customers, consisting of a combination of those in the public and private sectors. Their customers are mostly multinationals, where IntraComp serves the Dutch offices or units. However, these Dutch units provide a helpful reference or way into countries outside of the domestic market.

Client followership plays an important role in providing references for new customers. Combined with the extensive personal network of the management team or their family, this creates a strong connection.

“Current customers, satisfied with the way we do business, refer us to a daughter or a holding company that operates abroad; this way we get a head start in the sales process.” IntraComp Consultant

IntraComp is an ‘on premise’ company, meaning that the software they deliver is often run within the confines of the customer company. The projects performed by IntraComp are performed on location: “We have to get into the minds of our customers and employees. Since the impact of the products delivered often changes the entire way a large company is used to working, it is necessary to have consultants on the ground providing training and further customizing installations to suite the customer’s every need.” The main challenges and differences between the Netherlands and Turkey are primarily focused on the implementation of the product. In general, culture is an important component in the IntraComp sales process.

The challenge also lies in change management, sales and implementation. On the one hand, there is a strong demand for expertise in the solutions the company offers. Often customers have already made a choice for a particular ecosystem or software solution, after which they need a reliable partner. The customers’ products cannot be implemented without close collaboration, customization and change management. A consultant within the company related, “We do not deliver a simple SAAS solution; our sales process goes way beyond the closing of a subscription or account. For every product that we implement, we have to have a strong local presence at the customer’s company.”

Horror story

IntraComp also had negative experiences with internationalization and stated that the market entry in Germany had to be stopped. The main reason was due to the financial crisis in

Germany in 2005; this was the exact time IntraComp began setting up an office in Germany. Because of the crisis, the company faced a difficult timing to start. Mostly to a declining number of customers, it was decided not to go through with the plan. The internationalization was done in the same way the company entered the market in Turkey. IntraComp implements the cell model, which means that if a business unit grows larger than 50 people, it is divided into two new units, to stimulate growth and keep the production teams small.

8.1.5 Case 5 - MediComp

Company name	MediComp	Personnel outside the Dutch market	2
Company start year	2006	Function interviewee	Founder, CEO & Product manager
Customers in number of countries	11	Number of employees	35+
Total percentage of income received abroad	80%	Active or passive internationalization	Active
Market entry strategy	Partnership		

MediComp started in 2006 with three founders, all of whom had distinguished backgrounds and extensive track records through previous working experience in the medical sector. MediComp focuses on providing interoperability for large medical institutions. Interoperability ensures that products from different vendors communicate correctly with each other.



Internationalization was implemented by MediComp from Day One, and during the interview the product manager even indicated that the first invoice mailed was sent abroad. For MediComp, the partnership model was the most important strategy, starting out with the search for partners and approaching partners from the beginning. MediComp actively promotes the use of certain standards, which began taking off simultaneously with the introduction of the product MediComp developed, resulting in a growing interest among partners and their customers.

Essential tips

The product manager of MediComp indicated that the entire board had a strong international

network. For instance, some of the founders hold board level positions in other organizations, thus ensuring the viability of the open standards. The company relies significantly on technology and integration partners for delivering and implementing MediComp products. The company partners are the main strategy for market entry, and the company has formed formal partnerships based on personal ties with large implementation companies. The product manager stressed the importance of these partners: “Our integration and technical partners are companies that integrate our products in their software suites, performing the entire implementation process without intervention of MediComp.”

“The implementation partners have a strong local network, providing in-depth knowledge on legislation, implementation, sales processes and culture.” Product manager, MediComp

This allows MediComp to be a product company without the need for an extensive consultancy branch. They are constantly working with the product to connect continuous information systems together. Products are white-labelled by partners or implemented after applying a skin before shipping the software to their customers.

Eventually, the opening of a domestic branch was a pragmatic choice due to the acquisition of large customer contracts, allowing the company to better serve the partners and customers on site. Their current presence in the selection of companies is mostly due to unsolicited inquiries made by customers, and those inquiries are primarily from partners. Since most technical and implementation partners are large multinationals with a global network, MediComp is introduced and implemented through a large networked market.

8.1.6 Case 6 – PersoComp

Company name	PersoComp	Personnel outside the Dutch market	0
Company start year	2007	Function interviewee	CEO
Customers in number of countries	5	Number of employees	40
Total percentage of income received abroad	8%	Active or passive internationalization	Passive
Market entry strategy	Direct export		

Founded in 2007 by two founders formerly active in the HRM business, the company began with a clear vision. After many years' experience in the payroll industry, the founders were convinced that customers should be able receive payroll services faster and more cheaply.



International pay rolling focuses on companies outside of the Netherlands who want to directly hire employees in the Netherlands. Pay rolling provides a more flexible way for both employee and contractor to handle these contracts, through an intermediate party acting on behalf of the contractor. This entire process can be done using the PersoComp's software. PersoComp currently does not have a physical presence abroad, however foreign customers have often found the company to use their products and services.

Since its founding, the company has received a boost and a certain momentum through the winning of the Gazelle Fast 50 and the Deloitte Fast 500 and Fast 50 awards. The current CEO states: "Foreign customers find us mainly because we are hot and in the news, together with a strong online presence, which is very important. In addition, the company has done a series of

publications asserting our expertise on the topic of pay rolling.

The employees do not physically travel abroad so most of the customer interaction happens over the phone, since the company's products do not have a massive margin to justify an expensive sales machine to visit foreign customers. The company does business mainly with customers in four to five countries that are not selectively chosen but stem directly from customer requests.

Most important because of the company possesses the necessary knowledge about the Dutch legislation. This is one of the main reasons that PersoComp does not have a foreign office, since they do not possess all the required foreign knowledge. The legislation in the pay rolling sector is very important for the company, so any future decision to start a foreign branch will be based primarily on the opportunities provided via the legislation. Gathering all the required knowledge takes time and resources, so the foreign office would need to bring in a tremendous amount of revenue in order to break even, due to the small margins.

“You can think you are very tough and race overseas with a briefcase under your arm, but if you don't know anyone or if you don't have a track record, you are going to run in to trouble.” CEO, PersoComp

Essential tips

The CEO of PersoComp indicated that especially in small to mid-sized companies, the gathering of the first portfolio of customers is difficult. PersoComp is clearly more in the client followership corner. The most important selection criteria for PersoComp in selecting a market for their products is legislation. The CEO stated: “It would be a requirement for me. In our current business model, our margins are too small, since we are in a business with high volume and low margins, and building up a high volume takes time.”

That means that in an emerging market where the product does not yet exist, the company would need too many resources to introduce the idea behind the product and the product itself. The CEO stated that, for PersoComp, this is too great a risk: “If we walk through this process several times without gaining revenue, we have a problem. We require a mature market with customers that are already acquainted with the idea of pay rolling.”

The main drivers of the internationalization for PersoComp are not the imperfection in the domestic market size but are mostly due to the ever changing legislation that sets up new laws that could present new challenges for the implementation of pay rolling and thus the selling of

software and services aiding pay rolling. If the company would gain revenue from more than one country, it would remove some of the dependency on the political decisions made by one single company.

Horror story

The CEO was asked to look back at the previous years and to try to pinpoint events or decisions that, in hindsight, could have gone better. The CEO indicated that some time ago at a different company a major player in local employment agencies started an office in Spain and Germany without properly assessing the local employment laws. After an economic recession, the number of companies looking for workers decreased, and the employment agency had to subsequently pay out large numbers of salaries to unemployed workers. In contrast with Dutch laws, German law requires employment agencies to hire employees for at least 2 years, making no distinction whether or not the employment agency has work for them. This resulted in a multimillion euro loss for the employment agency, which ultimately bankrupted the company.

8.1.7 Case 7 – BackupComp

Company name	BackupComp	Personnel outside the Dutch market	0
Company start year	2005	Function interviewee	CEO
Customers in number of countries	50+	Number of employees	30
Total percentage of income received abroad	77%	Active or passive internationalization	Passive
Market entry strategy	Direct export		

BackupComp was founded in 2005. Since its inception, BackupComp has been strongly focused on internationalization and eventually obtained 400 international partners; 77% of its sales now originate abroad. When the company started out in the Netherlands, it experienced a fast growth in its customer base, and the software was then translated into French due to customer requests. Subsequently, BackupComp translated its software into German, English, Spanish and Portuguese.



Currently, the company consists of 30 employees who win customers with a combination of proactive and reactive strategies. After correctly translating the software and combined with strong online marketing, the company chose to enter neighbouring countries such as Germany, Belgium, the United Kingdom, Sweden and France; Switzerland came up as well because three quarters of Swiss residents speak German. Initially, countries were chosen based on quantity or the "sheer size" of a particular market. In 2007 a venture capital group invested in the company, specifically to increase the internationalization.

Essential tips

Since 2008 the company has targeted larger customers. While the company realized that SMEs could easily be targeted via online campaigns, larger customers required a different approach. Large customers are now functioning as resellers and sell the product to their customers. These larger customers required a different approach than SME prospects, requiring the implementation of more personal marketing tools compared to strictly online marketing. BackupComp began visiting fairs and tradeshow, giving expert presentations that piqued the interest of larger customers.

"Especially SEO and online marketing is shooting with hail; it delivers on quantity, not quality . Therefore, the countries where we wanted to expand our operations, we started to connect with major local customers through exhibitions and conferences." CEO, BackupComp

BackupComp requires its employees to have mastered the English language and to preferably speak a second foreign language. This is combined with a flexible attitude not committed to a 9-to-5 mentality, due to the fact that many sales activities take place in different time zones.

Currently the company operates strictly with a sales force from the Netherlands and it cooperates with 400 partners and agents in Spanish-speaking countries. The CEO indicated: "When it comes to selecting the right market entry strategy, we Dutch have a good reputation. In my experience, Dutchmen have a good reputation abroad. Only the Americans preferred to contact a local. However, setting up a local distributor was a failure. We estimated our customer base to be consistent, but we've misjudged. We did not figure each other out and there was little interaction."

Horror story

International business is learning by doing. However, BackupComp has found the Asian market is difficult to enter due to the highly fragmented language market. Compared to Western Europe, the Asian sales process requires a totally different approach due to cultural differences. After meeting a potential customer at a trade show, the sales process followed up with the necessary negotiation. After several months passed, the CEO met the customer and tried to ask more directly about their buying intentions. This was received as an insult by the customer and resulted in the customer discontinuing the process.

8.1.8 Case 8 - IdenComp

Company name	IdenComp	Personnel outside the Dutch market	2
Company start year	2005	Function interviewee	CEO
Number of countries	5+	Number of employees	32
Total percentage of income received abroad	30%	Active or passive internationalization	Passive to Active
Market entry strategy	Resellers		

Founded in late 2004, IdenComp first focused on building their proof of concept with a launching customer and operated as a legal entity since 2006. IdenComp develops and sells software used to validate a wide array of identity documents. Currently, the software only supports the Roman fonts; therefore, the company chose to enter only specific markets due to the type fonts in America as well as the European market, which both use the same character set.



Initially, the company only focused on Dutch customers, without plans to go international. However the company continued to grow year after year, and the company was approached by a large American payment provider. After signing its first contract with the American payment provider in 2009, IdenComp gained international exposure and strived to create global solutions mainly focused on the US, with a secondary focus on Europe.

Essential tips

IdenComp places strong emphasis on the number of verticals in the market they want to access, clearly focusing on a set of target audiences consisting of the security and financial sector. They start with niche markets where the company thinks it can be most successful. In

the US, the nature of the data passing through the software has a great impact, since the company handles confidential information, which carries a different set of requirements in the US as compared to Europe. In addition, sales and marketing materials for the company differ in America, compared to the Netherlands.

“In the Netherlands, we like to keep information sheets and brochures clean and simple. Americans go crazy with embellishments, checkmarks and colours, providing a totally different message.” CEO, IdenComp

Currently, the CEO resides in the US and is opening a new office for the company, following the strategy of working primarily with resellers from the home base. The resellers provide sales and customer support. The CEO indicated the fact that resellers often choose products that do not conflict but complement their portfolio and interest. In addition, the resellers also provide more services, such as marketing and first-line support. The resellers sell the products along with their own products and integrate them into their customer solutions.

For IdenComp to come in contact with resellers and also new customers, the company has found that it is very important to visit trade shows and just walk around; they don't even get a booth, and the company does not visit shows at all in the Netherlands. In the US, the CEO deems it essential since the country is so big that the tradeshows attract a lot of people that come there to soak up all the information.

“The company experienced that in the Netherlands, physical meetings were always necessary from a customer perspective. This is less required in America due to the large size of the country.” CEO, IdenComp

The company chose to select the reseller model since the company did not see itself acquiring the necessary knowledge and capacity to open multiple offices abroad, requiring valuable time and money. This was one of the main reasons for choosing a set of resellers, teaming up with companies that are already well established and own an established customer base, which provides a connection to gain new customers.

Horror story

The company experienced high costs when contracting with a specific customer. IdenComp was already working on the integration, product roadmap and department interviews when all communication was stopped and the company heard about the customer choosing a

competitor. The CEO noted it was more of a horror story because it was annoying but it made the company much more sceptical and pragmatic about doing business in the US. This resulted in a situation that made the company keener in detecting essential problems in the sales process.

8.1.9 Case 9 - ResearchComp

Company name	ResearchComp	Personnel outside the Dutch market	12
Company start year	2007	Function interviewee	CEO & founder
Number of countries	50+	Number of employees	12
Total percentage of income received abroad	90% +	Active or passive internationalization	Passive
Market entry strategy	Direct export		

Founded in 2007, ResearchComp has recently partnered with a larger research company. The company started releasing its first product – a software application that aids researchers in the management of their literature research – some years before founding the company. The ResearchComp application was written completely in English, since the science field is mostly English-oriented. The product was then translated into Japanese, German, French, Chinese, Portuguese and Spanish – all based on customers who volunteered to translate the product.

“English is so integrated now days, even your grandmother speaks English. Why not support the English language?” ResearchComp CEO



Essential tips

The CEO indicated that people are coming forward in support of the product, aiding new customers by the fact that the software is available in their own language. The translation does result in a slower development cycle, creating more overhead. The company indicated

translations make it harder to develop the software, each change must pass through all translators because company personnel do not speak all the specific languages.

“We are a company with no headquarters, we are a company which fully distributes. Internationalization is in our DNA.” ResearchComp Founder & CEO

All development started out in English, but the company now recognizes that the introduction of native languages is becoming more important in larger countries or regions, especially with sales to large governmental institutions.

In order to improve the development process, the company challenge is to manage the translation process without slowing down development. This can be accomplished, for instance, by the release of an asynchronous English version with a delayed international version. Thus, the English version is launched and then the translators receive a copy for launching the international edition. The company experienced no significant changes in the requests of customers between countries, although the software does integrate with a selection of local research search engines. ResearchComp integrated a modular system especially for this.

The increase in the number of international customers is largely due to news publications and word of mouth in the academic world. Still, the company does not pay for marketing and the software is distributed purely based on word of mouth. The CEO indicated that in the English-speaking market, the penetration of the vertical market is quite essential. The company indicated having no plans to introduce the application in the app stores due to a number of technical constraints that have to do with the use of a number of private frameworks not allowed by Apple in the App Store. Combined with a number of commercial restrictions, the company makes strong use of volume licenses, coupons and discount licenses – all forms that are very difficult to implement in the app stores. In addition, the CEO stated it is very hard to sell updates through the app stores, which is a very important revenue model for the company.

The initial language selection was chosen largely based on the size of the market. But it occurred in a mostly organic way, headed by people from the user group who were willing to come forth to help with translating. The support was always largely based on the English language, but to this day people know that they have Dutch roots so they also receive Dutch questions. The CEO does not know why any software company would focus solely on the Netherlands.

If a customer sends a message in a different language, such as Korean, the ResearchComp staff send an email back in English asking the customer to rephrase their question in English; customers then always resend their questions in English.

Horror story

The only horror story the company can recall was while setting up an administration with the Spanish tax authorities – a real horror story. They have employees in 10 different countries with a holding company in the Netherlands and a limited company in the UK. Now the company follows a more centralized approach, which produces fewer problems since most of their employees reside in the UK.

“All these administrations are hard to set up, registering all social contributions – that really was a nightmare. Receiving fines for not registering required reports because we were unaware of the forms.”

CEO, ResearchComp

8.1.10 Case 10 - MochaDocs

Company name	MochaDocs	Personnel outside the Dutch market	0
Company start year	2012	Function interviewee	CEO & founder
Number of countries	52	Number of employees	3
Total percentage of income received abroad	20% +	Active or passive internationalization	Passive
Market entry strategy	Direct		

Founded in 2012, MochaDocs provides a software product for contract management. The idea for the product came during the CEO's previous career working in the contract management business. None of the products the founder used suited his needs; they lacked a clear and crisp vision. In 2006, the founder conducted a large number of interviews to discover the top three features missed in current contract management solutions.



After conducting the interviews, it was decided to develop a product that would out-perform the current alternatives. By this time, the current management team already had the necessary experience in the conduct of international business.

“Very few problems only occur in the Dutch market, so why develop a product that focuses only on the Netherlands?” CEO, MochaDocs

MochaDocs specifically chose not to work abroad with a large number of consultants. They

focus strongly on a low labour model, and consulting services beyond the domestic border are performed by partners. Regardless of the translation, the company receives the same questions about the product. After developing specific materials to answer the specific questions, the company is able to respond to these requests in a scalable way.

The current MochaDocs vision is strongly focused on a proactive response in the Dutch market. For instance, in the Netherlands they speak the language so they do contact prospects by telephone. This allows Dutch customers to request a demo via the website, which is then contacted by sales. Prospects from abroad are treated differently.

The main challenges in the product architecture lie in the country-specific payment implementations, for instance, implementing the specific currencies, VAT and taxes. For the company, English is a logical choice due to the large number of Dutch companies with English speaking staff. MochaDocs first developed the product in the English and Dutch languages, after which the interface was translated into Norwegian, German and Spanish. These languages were mainly chosen as a response to the requirements of the current prospective clients. Currently, three quarters of customers are strictly Dutch, with the rest located internationally.

Essential tips

The demands from prospects in various countries are very generalizable, presenting no problems for the product strategy of MochaDocs. Customers can directly use its product without employee intervention.

MochaDocs began collaborating with a market research firm in order to gain international research reports on the demographics and characteristics of specific market segments. Especially the absolute numbers of internet penetration provide MochaDocs with an idea of whether its product is suitable for a particular market. The CEO indicated that the US Patriot Act creates additional interest in the accessibility of contracts by the US government. In order to avoid this problem, MochaDocs chose to host their infrastructure in Europe. Performance wise, this represents no major problems for customers with a high degree of Internet penetration, such as Asia or Singapore.

MochaDocs is currently planning on strengthening their position by developing a contract management method to interact with the existing known standards in project management. Examples of project management methods are Prince2, IPMA and ITIL. In this way, the company promotes its expert status and provides customers with a better insight into how to use its product.

8.1.11 Case 11 – HealthComp

Company name	HealthComp	Personnel outside the Dutch market	0
Company start year	2009	Function interviewee	CEO & founder
Number of countries	11	Number of employees	12
Total percentage of income received abroad	81% +	Active or passive internationalization	Active
Market entry strategy	Resellers		

HealthComp was founded in 2009 after two years of product development. The idea for the product came during the founder's thesis research, after which HealthComp developed a patient monitoring appliance combined with a software package. The product improves patient behaviour due to the communication of corrective signals sent by the monitoring appliance.



The company is strongly focused on the international market and boasts of goals such as signing a contract in a new country every week. This mentality has resulted in a level of internationalization where the Netherlands represents only 9% of all company revenue. The primary driver for the company to go international is the nature of the created product. Only customers in a small niche can utilize the product, and the CEO stated that this niche is very small in the Netherlands. This results in the company not reaping the necessary revenue with the envisioned business model, if the product would only be sold domestically.

Essential tips

The company began by conducting market research that was initially focused on countries geographically close to the Netherlands. The initial plan was described as an outward moving motion starting in the Netherlands and moving on to other countries.

“When selecting the first country in the process of internationalization you can do all the desktop research you want, it will always be limited to statistics. Eventually the actual situation of selling in a foreign country is more complex and can only be discovered in practice.” CEO, HealthComp

After representatives of HealthComp visited an international medical conference, the company found the adoption of new innovation was faster in Italy than in the initially selected companies. Only after discovering actual interest by potential customers can the market focuses be determined, rendering market research less useful. However, the CEO did indicate that it is essential to have a thorough understanding of a country’s healthcare market. For instance, how do the funding, financing, declaration and insurance system function within a country?

Currently, HealthComp works with resellers only, selling directly to country-specific distributors who in turn market and sell the product. In fact, by law HealthComp is prohibited from directly communicating with customers. The advantage of the distributors for HealthComp is the large sales network and existing ties with potential customers. The distributors also possess a large amount of knowledge of their domestic markets, allowing HealthComp to conduct less research on legislation and acquiring new business.

HealthComp currently exports to 11 countries controlled from a central location in the Netherlands. From its headquarters, HealthComp directs the sales and services processes in multiple languages; the company deems it necessary that every reseller is managed in their own language using bilingual salespersons. The CEO indicated that the main challenge of HealthComp is to obtain a correct level of performance of the resellers.

Horror story

When HealthComp originally began operating in Italy, there was a customer who encountered a problem with the software used in reading the patient monitoring devices.

“We were unprepared for the country specific characteristics in Italy, our online software was unavailable due to the fact that many Italian hospitals lacked a internet connection.” HealthComp CEO

This was a situation that was unimaginable when the company began exporting to Italy. The company continued by developing an offline version that could facilitate the offline use of the products in hospitals without Internet connections.

8.1.12 Case 12 - PurchaseComp

Company name	PurchaseComp	Personnel outside the Dutch market	11
Company start year	2000	Function interviewee	CEO & founder
Number of countries	4	Number of employees	25
Total percentage of income received abroad	10% +	Active or passive internationalization	Passive
Market entry strategy	Direct export		

PurchaseComp was founded in 2000 and specializes in facilitating the procurement process of large organizations and governmental institutions. The CEO indicated the difference between customers and users as being: customers pay the bill, however users are enrolled in the purchase processes. The percentage of international users is larger than the percentage of international customers. In the past, the company had made several attempts to enter foreign markets. Currently the company outsources the development of the software to Bulgaria. In the past, the company has requested academic researchers to study the business climate of different countries within the EU, assessing the level of electronic purchase systems and focusing on all country characteristics in order to assess the viability of the product in the country.

“Companies willing to go abroad should start by asking the question which countries are most appealing.” CEO, PurchaseComp



Apart from language, the culture within a country is essential. Ten years ago, the company attempted an internationalization process, moving into five country markets simultaneously and starting a separate domestic branch in each of the five countries. This is still a viable setup according to the CEO, however it is also a very expensive setup. After closing the domestic branches, the company did continue with foreign customers in the country and the company outsourced the development, due to a personal network and physical presence.

Essential tips

Currently, the company services large international companies. Due to the international nature of the customer companies these customer companies can also open doors for PurchaseComp to other markets and countries where the customer company is located.

“Using existing international customers’ contacts as a way in to other domestic markets is a powerful method.” CEO, PurchaseComp

Currently, the CEO admits internationalization is not a primary goal of the company. Internationalization is done in a passive way, mainly due to the fact that obtaining domestic customers is easier than acquiring foreign ones. Current market entry is primarily based on opportunities at hand; for instance, the use of a representing agent is mainly due to personal relations with a consultant.

The company experienced almost no deviation in the international customer requirements although the requirements vary from industry to industry, independent of the country of origin. When the company does experience different requirements, they focus largely on technical implementations, for instance, different implementations of rules and legislations such as the use of a physical authentication token in the authentication process.

Currently, the product architecture is a single code-based multi tenant web application, meaning all users use the same software product. The company experiences little to no resistance with delivering cloud solutions. When customers have an objection to the cloud computing architecture, the objections are largely based on a lack of trust. Countries with a high degree of competition are less interesting for PurchaseComp due to the pricing issues that can result.

The company’s CEO has stated that the company supports following an incremental process for market entry, starting with a method with a low level of commitment and gradually moving towards methods with a higher level of commitment. The CEO gave the following steps:

- Hire native speakers in the domestic market to try and acquire new business.
- Use a local business partner for local presence.
- Set up a domestic fully-owned office with locally hired employees.

The current partners of PurchaseComp consist of consultancy firms that advise customers on the redesign or optimization of the customer’s purchase process. These partners have experience with PurchaseComp’s product and can in turn utilize the product to enrich their portfolio, providing advisory services completed with a product implementation implementing the advice.

“Entrepreneurs interested in going abroad should enrol in international tenders. Allowing the entrepreneurs to get a feel for the customer demands in a specific market. Allowing the entrepreneurs to sharpen their proposition and improving their sales messages. After enrolling and doing a few of these tenders, the odds become much higher for companies to actually win a tender.”

CEO, PurchaseComp

For PurchaseComp, a fully-owned foreign establishment is the ideal setup, since PurchaseComp offers software for complicated material and processes, which customers need to use and enable their users to successfully operate the software. Thus, PurchaseComp requires local people to conduct training and support local customers.

“A B2B company is fundamentally different compared to the easy straightforward customer-oriented apps such as Skype or Whatsapp, since the latter do not require extensive support and training for the end users.”

CEO, PurchaseComp

8.1.13 Case 13 - BpmComp

Company name	BpmComp	Personnel outside the Dutch market	3
Company start year	2006	Function interviewee	Former consultant on internationalization
Number of countries	8	Number of employees	200 +
Total percentage of income received abroad	20% +/-	Active or passive internationalization	Active
Market entry strategy	Foreign subsidiaries		

In contrast to the other cases, the case of BpmComp was based on an interview with a former consultant who was no longer active within the company. At the moment of writing, BpmComp is faced with deteriorating conditions and is forced to lay off many of their employees due to impending bankruptcy. BpmComp was founded in 2006, producing a software suite for companies to manage their business processes by mapping, optimizing and documenting complex processes within organizations.



At the moment of founding the company was 100% oriented to the Dutch market. However, when a competitor was sold on the US stock exchange, it gave the founders the incentive to go abroad. The interviewee implied the strategy was continuous growth with the idea of a buyout. Since the US pays the largest sums for software companies, BpmComp decided to go abroad in order to get on the radar of the US software industry. This move combined with the fact that their largest (US based) competitor had started to enter the Dutch market.

Essential tips

Four years after the founding of the company, it decided upon a massive international expansion. A market entry strategy into eight countries simultaneously was implemented for Spain, Turkey, Belgium, Germany, Sweden, Finland, the UK and Brazil. This was done in the form of a 'big bang' approach to start immediately with the setup of domestic branches in most of these countries.

"The market selection and entry strategy was mainly based on the extensive international network of the director of sales, providing access to board level executives through his personal network." Interviewee, BpmComp

Not only was the director of sales the driving force behind the expansion drift, but he also based the market entry on the contacts in his network. Besides the personal network, there was no strategy behind the expansion drift other than the intense belief that the company possessed a better product than the competition.

Horror story

BpmComp started in the US with searching for a launching customer. After finding a "high profile" customer via the personal network of the sales director, the company hoped for an increase in credibility that would aid in finding new business in the US. In the EU, the company enrolled in tenders in combination with personal connections of the sales force in order to obtain new business.

The biggest subject causing problems for the company was the product management. Many customer companies used a different version of the software solution with special implementations and hacks that were implemented specifically for a single customer. A standard step in the sales process was the development of a customized demo version for the customer company.

There were nearly always specific changes in the demo that were implemented as standard code source. An additional item regarding the demo source code was that it automatically flowed back into the main source code, indicating there was a large amount of code that was actually unused. This caused delays in development of new features and bug fixing and resulted in a situation where there was no longer development based on a single product strategy; instead, the company customized their product on an ad-hoc basis.

The implementation process was very resource intensive, requiring three senior architects on location, brought in from the Netherlands. Subsequently, the development department in the Netherlands started to configure and develop the necessary features for the customer to use the product. Only three senior architects were able to correctly configure the product, and they were flown around to all international customers.

“Eventually, the cost of doing business was no longer possible to maintain due to lacking revenue gains in the domestic market.” Interviewee, BpmComp

8.1.14 Case 14 - BiComp

Company name	BiComp	Personnel outside the Dutch market	0
Company start year	2005	Function interviewee	Co-Founder & CEO
Number of countries	12	Number of employees	15+
Total percentage of income received abroad	81% +/-	Active or passive internationalization	Active
Market entry strategy	Reseller / Partner		

Founded in 2005, BiComp offers an extensive business intelligence solution that functions as an add-on to an IT service management software suite. It provides a better insight for management into the performance of the IT business processes through the use of dashboards, statistics and KPIs. The CEO of BiComp had extensive international experience through previous positions. The CEO takes a clear stand when it comes to internationalization:

“Why would you start selling software in the Netherlands only? Software is not bound to borders, it depends largely only on two factors: sales and marketing.” CEO, BiComp

At the moment of writing, the company was purchased by a company based in the US. At the start of the interview, the former CEO indicated he still continues in the role of the product manager but not in the role of the CEO. The former CEO indicated the choice for Dutch companies to stay focused on the domestic market is largely based on the lack of knowledge and experience of the management of these companies. The former CEO envisioned a trend of the last three or more years where the act of physical sales is diminishing more and more. Working towards virtual online sales, customers of companies like 37signals (the creator of basecamp) are located throughout the entire world. All sales could be (in theory) done without human intervention and be carried out through the use of a single credit card.



The CEO stated: "I think it is strange that Dutch companies choose to go to Germany due to the geographical distance, while Germany is known as a hard country in which to do business." The Netherlands has a strong advisory culture. Smaller software companies are faced with the fact that:

"In the Netherlands, no consultant has ever been fired for advising SAP or Oracle. It takes a lot of guts to advise a smaller independent software company." CEO, BiComp

The former CEO indicated that, in his experience, countries like the UK, Australia and the US are not used to physical sales cycles. This is in contrast to the Netherlands, where a customer is quick to request a physical meeting, even if the meeting could also be done by telephone or Skype.

The former CEO strongly believes that companies with investors on board are more likely to go abroad. Within BiComp, it was deemed important to focus and channel its energy. For

instance, why open a domestic establishment if you only have a handful of customers in the country and no chances of increasing that number in the future? It requires energy to file all the forms and handle the administration, resulting in a large overhead that is only justifiable for a large customer group.

The former CEO indicated that it became clear early on that software is not bound to a specific language if it is built well. From Day One, the product was built with correct translations in mind since they all experienced problems in earlier positions with what happens when this is incorrectly anticipated. In particular, vertically focused software solutions do not differ from country to country. Niches that depend strongly on local rules and legislations are often won by local companies with in-depth knowledge and specialized products.

In our experience, the support and commitment of the founders before starting on an internationalization process is key. Companies that send a salesperson on their own are not going to survive. An essential difference between the US and the Netherlands is the focus on stock; in the Netherlands, it is highly unlikely that founders will give stock to partners or employees. In the US, having “skin in the game” is an important way to prove loyalty.

Resellers are less loyal than people think; they easily hop from product to product, even demanding exclusivity. The most valuable way to find partners that can help with consulting is through a personal network. Without a doubt, the US has the largest product software market in the world, combined with a high volatility rate of companies using software products.

“Companies in the Netherlands tend to stick four times longer to a specific product even if it is a badly performing solution, compared to US-based companies.” CEO, BiComp

After two years the company obtained 60 international customers, largely by traveling and building their reseller channel. Since the product was an add-on, resellers and technology partners were of great importance since the product could not function on its own. The company focused on buying a company to become an integral part of the software suite instead of developing a new product.

The selection of countries made for BiComp was based on the number of customers using the software product in which the BiComp add-on could be integrated. The company subsequently found the most important resellers and partners in the specific countries. By using content marketing, direct marketing and trade shows, the company got on the radar of these resellers and partners. The former CEO indicates that it took more than three years for a partnership model to become profitable. Eventually, the company never actually needed to make any profit since the company was bought.

Since US-based companies rely less on consultants to select suiting software solutions for their needs, product software is one of the only sectors where technology allows for easy scalability. The former CEO stated: “The only thing that doesn't scale is the mentality of the founders.”

“A big mistake made by Dutch entrepreneurs is an over excitement when a large consulting firm shows interest in the product. Almost all energy put into this contact is almost always a complete waste of time.” CEO, BiComp

During the interview, the former CEO pointed out the fact that he deemed it important to make choices that simplify the overhead of internationalization, for instance by choosing:

- to support customers only in English; or
- not to translate manuals and wikis into any other language than English.

Resellers are important for achieving a scalable situation and for obtaining a name within a country, especially when a company focuses on install-based software. However, the company experiences resellers to be worthless for obtaining a profitable internationalization strategy, since they will only cost money in the first three years. When it comes to getting your software to the largest group of customers, you have to make choices. BiComp had a small group of customers which the company thought used the product in a correct way. Those were the companies with direct influence on the road map, since it is not possible to retain a close relationship with 200 companies using only 15 employees. In practice, BiComp used a rule that dictates that each feature should be useful for at least 80% of its customers.

The strategy BiComp implemented is based on a theory coined by Geoffrey A. Moore called crossing the chasm. The process starts with the selection of an area where your company is going to land, by that they mean a specific niche, as this could be a region or an industry or an installation base. Subsequently, “the whole product” is developed, meaning not just the product but the entire value chain of the product.

The company should then unleash the sales funnel on the landing area. After gaining a group of customers, they will start to talk to other companies. It is important to continue towards the next beach. In the first phase, personal contact is important, however when you reach the “Tornado phase” it is important to prevent the company from focusing on one troubling customer since there are ten others that could step into its place. The challenge is for the decision-makers within the company to recognize in which phase the company is located at the moment. BiComp’s former CEO indicated that he expected to see a large difference between companies supported by venture-backed capital and companies not backed with venture capital, since these companies are highly stimulated to strive for growth of the company.

9. Case analysis

9.1 Market selection criteria in theory and practice

During the interviews, the decision-makers were questioned on the reasons behind their choices leading up to the country or countries in which they decided to sell their products. After conducting all the interviews, the following market selection criteria were identified:

Market selection criteria	# Used by case companies
Sheer size of the country market	6
Speed of market technology adoption	4
Based on market needs	2
Cultural distance	2
Initial country selection	2
Market competition	2
Proficient English speaking customers	2
Tech savvy ness	2
Unsolicited inquiries	2

Figure 16. Market selection criteria used by the number of case companies

However essential, desk research will only get you so far

One of the first steps in considering internationalization is evaluating the potential for exporting products. Not all products can be easily exported, especially region or country-specific products. For instance, products developed to perform a Dutch tax return might not be ideal for direct export to the US. While conducting the interviews, it became clear that this was not always the case; decision-makers did not decide beforehand the specific country or countries for the company's focus.

When decision-makers did determine the actual countries of choice, they mainly used high-level statistics of a specific country, such as level of Internet penetration or number of potential customers. Only MochaDocs indicated hiring a market research firm to aid in the market research. The limited research could be explained by the comments of HealthComp, ImageComp and IntraComp. One of them made the following statement:

"Everybody has a plan until they get punched in the face." Mike Tyson

All in all, the fact is that you can do all the desk research you want, but the actual situation at hand is too complex to fully comprehend based on desk research. For instance, cultural distance (a shared third place in selection criteria most often used) focuses on the degree to which a culture differs from your own culture, which is hard to measure by conducting desk research only.

“During the process where customers start using the product, the company receives a better insight on the perceived ease of use. Some customers are really tech savvy compared to others. The fact that a Swedish customer signed up and implemented our product without human intervention was a massive confidence boost that our product could function in Sweden.”

Product manager, ImageComp

In some ways, to solve the problem ImageComp used a shotgun tactic, where the first step was aimed at making a selection of countries based on the number of potential customers and the level of internet adoption, since their software product is dependent upon internet access. The product was then translated into ten languages. Combined with a multilingual marketing website with a series of landing pages optimized to entice visitors to the website, the company continues to analyse and measure the outcome, such as the number of new customers.

“In order to get a better view of the potential market, we sent out surveys to the potential customers. This way we get a better idea of the willingness and the eagerness of the potential customers, going beyond the general statistics obtaining the actual opportunities within a market.”

PurchaseComp

Companies rely on the location of their required ecosystem

The CEOs of HealthComp, BackupComp, PurchaseComp and PersoComp concurred, mentioning that performing market research in order to make a country selection was mainly helpful in determining the country specifics when it comes to:

- Rules and regulations: can the company correctly conduct their business in the specific country? and
- Product compliance: does our product comply with the rules and legislation?

IdenComp, BiComp and MediComp all displayed a selection criteria largely based on their product and the networks of partners, since the products of these three companies are implemented as add-ons – components or modules in a larger system – and simply do not function on their own. For these three companies, the customer installation base and the location of partner networks are more important, in other words, the location of the current and potential customers already using software systems that present an opportunities for the three companies to implement their products.

9.2 Market entry strategies

After conducting the interviews, the market entry strategies chosen by the companies followed the distribution as depicted in Figure #17. For a description of all specific market entry strategies, please refer to Section 5.3.

Market entry strategies	# Used by case companies
Direct Export	7
Client followership	4
Foreign establishment	4
Partnership	4
Reseller	4
Internal international sales force	3
Expert evangelism	2
Technology partner	2
Agent	1
Internationalization attitude\Passive attitude	1
Personnel\expats for local sales representation	1
Piggyback method	1
Pioneer	1

Figure 17. Market entry strategies distribution

Current state of literature vs. practice

Currently, the most used and best known internationalization theory – the ‘stage theory’ – consists of companies going through different types of market entry strategies, beginning with strategies that are low in risk and commitment. As an example, the literature suggests an agent contracted on a commission base. As this strategy proves itself to be successful, companies can move towards market entry forms that require a higher level of commitment in resources and pose a higher risk level – for instance, the opening of fully owned foreign branches. Table #17 provides an overview of all case companies and their primary market entry strategies.

“The CEO of MochaDocs indicated it is key to follow a low labour business model. This results in a company strategy in which the company tries to operate as lean as possible by focusing only on the absolute core business, thus preventing the company from racking up high overhead costs. The company strategy, therefore, is not compatible with the suggested market entry forms introduced by the Stage model. For instance, the opening of a domestic branch is not part of the strategy, since this will cause more overhead, which is unnecessary due to the ‘low sales touch’ nature of the product. This means the product itself does not require personal intervention, thus eliminating the use of a local presence. CEO, MochaDocs

Foreign establishment

After analysing the statistical database of ISV world (an index of data of Independent software vendors) it is found that Dutch ISVs tend to primarily focus on the US when it comes to setting up a foreign office. ISV World claims to have the largest independent ISV database in the world. However, there is no guarantee that all ISVs are included in this database, or that all foreign establishments are included. Currently, ISV World indexed 5,676 Dutch companies selling product software with headquarters located in the Netherlands.

Of the 5,676 companies indexed by ISV World, 441 have an office in the US; Figure #18. Confirming the results found in the Grounded theory, where nine out of the 14 companies identified the US as one of their primary markets. Of these companies, most of the key decision-makers indicated the size of the IT market, the relative ease of entering the market and the customer skill and mentality were the most important reasons they chose the US. Success in the US usually drives a successful international marketing campaign, since most of the US IT industry press is read by foreign companies. This results in a situation in which the reputation of a software company will precede it in foreign countries, and they will already want the company's products by the time it reaches them.

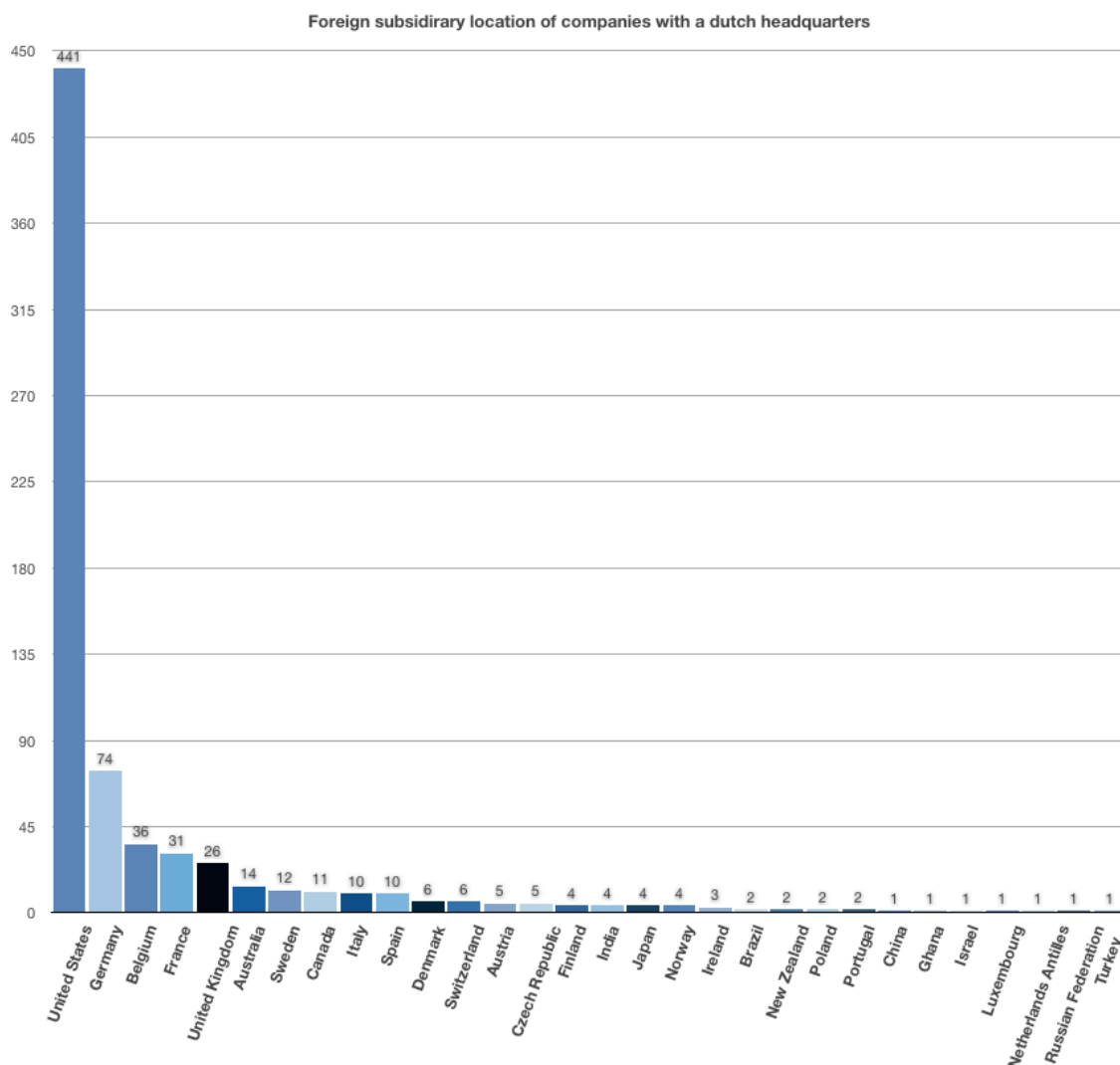


Figure 18. Distribution of foreign subsidiaries

Company	Primary market focus	Market entry form	Market entry enabler	Primarily focused on	Capital
ResearchComp	Scientific researchers / academics	Direct export		US, UK, NL	Private
HealthComp	Healthcare	Resellers	Piggy Back	IT, UK, CH	Awards & venture capital
BiComp	IT departments	Foreign subsidiaries	Personal network	US, UK, EU	Private
MediComp	Healthcare	Resellers / Partners	Piggy back, personal network & Expert evangelism	CA, US, UK	Investment
BackupComp	Internet service providers	Direct export / resellers	Piggy Back	US, CA, EU	Investment fund
ImageComp	Marketing / Advertisement departments	Direct export / resellers	-	US, EU	Private
AppComp	Healthcare	Direct export	Client followership	UK, Germany	Private

Company	Primary market focus	Market entry form	Market entry enabler	Primarily focused on	Capital
IdenComp	Security contractors, finance, telecom	Resellers	Piggy Back	US	Private
MochaDocs	Any functions using contracts	Direct export / partners		US	Private
BpmComp	Public sector & financial sector	Partners / foreign branch	Personal network	US, UK, DE	Private & venture capital
PurchaseComp	Public sector & academic	Direct export / foreign branch	-	No primary focus	Private
PersoComp	No specific sector	Direct export	-	No primary focus	Private
IntraComp	Public private sector	Direct export / Foreign branch	Personal network	Turkey	Private
FinanComp	Small companies, accounting firms	Foreign branch / direct export	Personal network	No primary focus	Private

Table 8. Market entry forms



Figure 19. Geographical drawing of the primary focus markets of the interviewed case companies

None of the companies followed a determined incremental approach. The expected research for not choosing a incremental approach could be explained by the following company case decision. For one, the selection and implementation of a market entry strategy can present a sizable investment. For instance, BiComp and MediComp stated that setting up a successful partnership network took several years (three years for BiComp, 2-3 for MediComp) to set up, all the while operating on a negative cash flow. The years it takes combined with the required resources prevent a company from quickly exchanging one market entry strategy for another.

Apart from the difficulty in switching from one strategy to another, the fact remains that not all market entry strategies are suitable for every business model. Current theory makes no real exception for the infrastructure of the products or the nature of the company's business model.

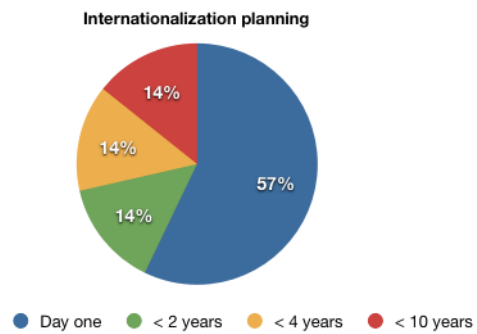


Figure 20. Internationalization planning

The CEO of PersoComp agrees, indicating that the entire sales process can be conducted directly from the current headquarters (if necessary at all) over the phone, eliminating the setup of resellers, agents or domestic branches.

9.3 Drivers of internationalization

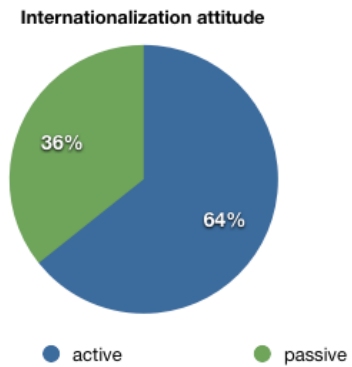
The drivers for initiating internationalization activities and the attitudes towards internationalization are based on interviews with the decision-makers of the 14 case companies. The company drivers behind internationalization are largely opportunity-based. Companies often play around with the idea of internationalization for years, however for several reasons there is no follow-up on the idea.

Drivers of internationalization	# Used by case companies
Opportunity based	5
Opportunity creation	4
Domestic market imperfections	2
Local customers do international	2
Personal motives	2
Personal network	2
English is sufficient	1
Experience gain	1
Increasing change of a buyout	1
Internationalization as a marketing tool	1
Launching customer	1
Legislation changes	1
Opportunity estimation	1
Part of enterprise strategy	1
Positive market survey	1
Sell mock-ups	1

Figure 21. Drivers of internationalization

During the interview with the CEO of FinanComp the reasons and drivers for undertaking activities in context of the internationalization of their product were discussed. Descriptions of ideas for internationalization were always around, influencing decisions such as setting up domestic branding that could easily be implemented abroad. The first planned internationalization steps were largely devoted to personal connections proposing the implementation of a first international initiative, acting on behalf of the company as an agent. The same situation can be seen at multiple case companies.

PurchaseComp, BpmComp and IntraComp indicated the same personal network or family connection, proposing to set up an agent construction or a foreign branch. The companies indicated to use the proposition as a opportunity to 'fly a kite' and get a feel for the business climate in a specific country.



ide

"When conducting business in the Netherlands, our domestic market, it is often required by customers to plan physical meetings even if these meetings can take place over the phone or by email, using up valuable time and posing a strain on the sales force. When conducting business with a prospective customer from New York, they would not even consider a physical meeting in person. This allows BiComp to setup a more scalable sales operation without having to grow in personnel." CEO, BiComp

Apart from acting responsively on opportunities, these opportunities can also be helped. MochaDocs, BackupComp, HealthComp, MediComp and IdenComp all used content marketing to both assert their knowledge and get noticed by potential customers. More physical forms consisted of visiting international trade shows and conventions. By presenting and attending these events, they put their company on the map both for potential partner companies but also for potential customers.

After representatives of HealthComp visited an international medical conference, the company found the adoption of new innovation was faster in Italy than in the initially selected companies. Only after finding the actual interest by the potential customers can the market focuses be determined, thus rendering market research less useful. CEO, HealthComp

9.4 Barriers encountered during internationalization

After conducting the interviews and analysing the case companies, this research found none of the companies experienced country-specific changes in customer requirements. The companies that developed the product software experienced the same functionality demand from customers, and even the setup of the product was usable by a large number of customer companies. The companies did not experience differences in, for instance, the wishes of a US-based marketing firm using the product software and a Dutch-based marketing firm.

Apart from the customer requirements, none of the companies experienced significant problems on the infrastructure or product level. The greatest number of challenges encountered in practice by the case companies at the product level are mostly focused on different technical third parties; for instance, country-specific payment modules. Most of the problems encountered focused on the operational part of the company. Legislation and tax legislation come in at first place, and a shared second place focused on settling sales tax in different countries, especially social employee surcharges and social securities. Companies such as ResearchComp indicated an unexpectedly high overhead in resolving social employee benefits and taxes. ResearchComp employed over 15 people in 15 different countries; none of them were born in the specific country but lived abroad, posing a maze of social constructions and salary, which resulted in unexpected fines and penalties for not submitting the correct legal documents.

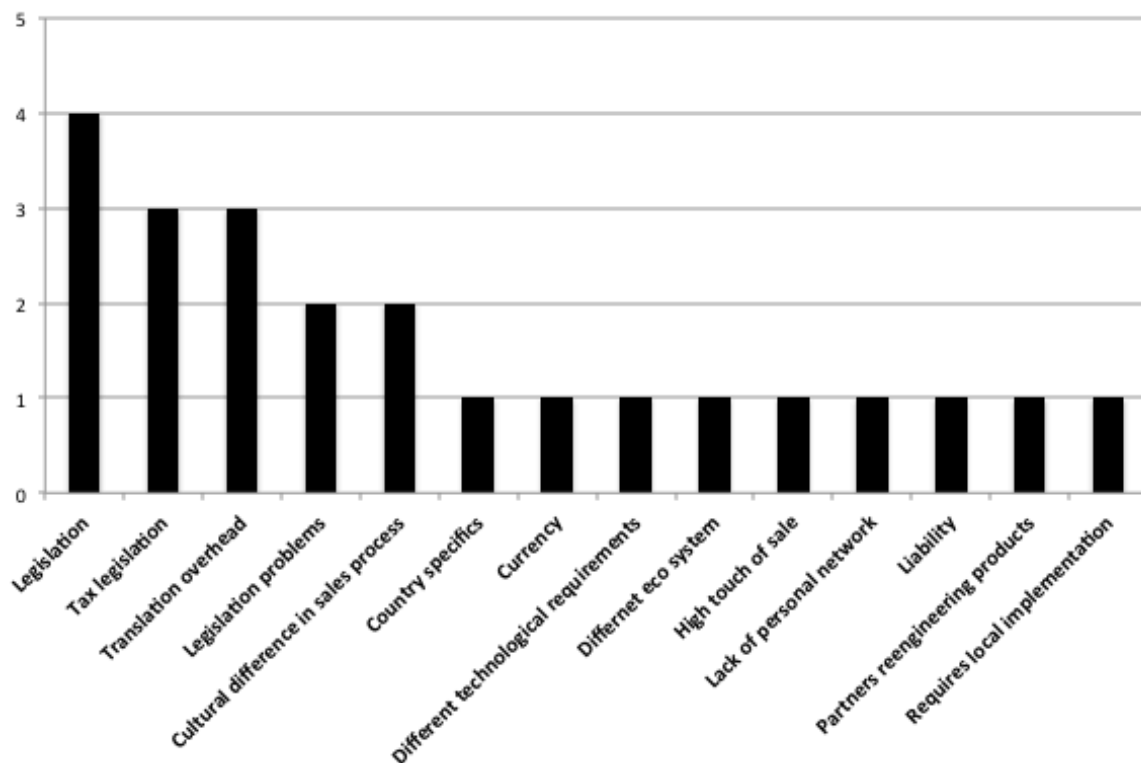


Figure 23. Barriers encountered found trough the case studies

9.5 Product characteristics

This research identified three global product architectures: SAAS, installation-based & on-site.

- SAAS consists of multi-tenant web-based software solutions serving a large customer, based on a single shared hosted software product.
- Installation-based consists of desktop software installed on a single desktop, combined with apps installed on mobile devices.
- On-site software is software installed within the borders of the customer company. It is installed by the customer or by the vendor on the infrastructure managed by the customer company.

SAAS	Installation-based	On-site
+ Easy to update the software solution for all customers.	+ Does not require an active internet dependency	+ No data trust issues since all data of the product software resides within the company
+ Easy release management	- Harder to test the software on all the different installation platforms with different language and region settings	- Harder to keep up-to-date by the vendor
- Custom customer-specific modifications are difficult to implement	+ More easy to distribute since there are abundant channels: i.e. app stores	- Less control of the actual product performance by the vendor
- Zero or low implementation cost and time	+ No data location issues	- More effort required implementing the software
- Costly architecture is funded and maintained by the vendor or trusted third party	+ No problems with performance issues due to geographical distance between vendor and customer	+ Easier to implement customer-specific modifications
- Product software requires an active and quick internet connection		
+ The infrastructure is easy scalable		

Product translations

The case companies indicated during the interviews that the product translation drastically slowed down the development and testing process. Each product release introduces new interface elements and new help information, requiring the new additions to be translated. The translation is done either by a translator from the software vendor, by a translation partner or by the community. The CEO of ResearchComp indicated the use of community-based translation can result in a dramatic increase in the throughput time of the releases. As a solution, the company chose to implement asynchronous releases, releasing the product first in English.

The translators subsequently receive the English version to translate, resulting in a new release supporting the translated company. Companies increasing in size tend to hire employees with a second native language to provide support in the translation of the software product. This avoids the extra overhead time encountered by choosing a third party for the translations.

International product scalability

Delivering product software to the customers using the SAAS infrastructure can present new challenges compared to delivering SAAS locally. The case companies indicated that in some cases the location of the data is very important to the customer. This problem was solved by choosing a cloud infrastructure provider with a large international presence, thus allowing the case company to place the database on a server located within the customer's country.

Apart from the data location, performance was mentioned as a second scalability challenge. ImageComp, for instance, delivers a solution that is centered on the management of large media files. Obviously the loading of a large image from a sever in the Netherlands to a customer in the Netherlands is performed faster than the same action for a customer located in the US. The company solved this challenge by using a CDN (content delivery network). A CDN is provided by a CDN vendor that maintains a large array of end nodes located in more than 250 countries. These end nodes hold a copy of the customer's application data, and the actual data used by the application depends on the region of the customer; a customer opening the application from Germany will be served with large files located on a server in Germany.

Low touch vs. high touch sales

During the interviews, the research identified a scale that rated the degree to which the products require human intervention for the customer to use a vendor's product software.

Low sales touch products are characterized by a low level of human intervention required to sell and implement a software product. By correctly recognizing the degree of human intervention required to sell and implement the product types, this research was better

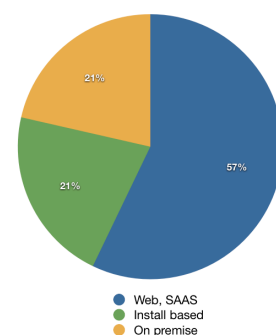


Figure 23. Product infrastructure

able to categorize them.

Products with a high sales touch require a different strategy for entering a foreign market compared to products with a low sales touch. When support is intensive, the support can only be performed in-person by highly trained professionals, providing less cost-effective ways to deal with support. Companies with products with a high sales touch opt for reseller, agent or partnership-oriented strategies, or choose to open a fully-owned domestic branch in the selected country. Companies with products with a low sales touch more often tend to choose a low-labour business model, selling large volumes of low priced fees compare to a smaller volume of high priced fees. This limits companies with a low sales touch product in choosing direct export as a market entry strategy, using a centralized sales force operating from within the domestic borders in order to service and manage international customer and sales operations.

9.6 Company types

Based on the interviews this research identified 4 company types based on the most defining factors found during the interviews. The touch of sale, or degree to which personal assistant is required. It is important to note that the types do not represent the degree of internationalization. Current internationalization strategies and market entry strategies pay little attention to the company characteristics. During the interviews this research found different market entry strategies where applied by different type of companies.

Company	Types	income received from abroad	# FTE	# FTE international	Year founded	Foreign customers since	Application distribution type	Present in #countries
ResearchComp	Large scale potential	95%	12	12	2007	Day one	Install based	50+
BackupComp	Large scale potential	77%	30	0	2005	Day one	SAAS	50+
ImageComp	Large scale potential	50%	7	0	2009	Day one	SAAS	16+
IdenComp	Large scale potential	30%	32	2	2005	>1-2 years	SAAS	5
MochaDocs	Large scale potential	20%	3	0	2012	Day one	SAAS	52
MediComp	Small scale potential	80%	35	2	2006	Day one	On Premise	11
BiComp	Small scale potential	81%	15	0	2005	Day one	SAAS	12
BpmComp	Tiny scale potential	20%	>150	6	2006	>3 years	On Premise	8
HealthComp	Tiny scale potential	81%	12	0	2009	Day one	SAAS	11
AppComp	Tiny scale potential	40%	7	1	2009	Day one	Install based	7+
PurchaseComp	Tiny scale potential	10%	25	15	2000	>10 years	SAAS	4
PersoComp	Tiny scale potential	8%	40	0	2007	+/- 1 year	SAAS	5
IntraComp	Tiny scale potential	4%	150+	5	1996	>10 years	On Premise	10+
FinanComp	Tiny scale potential	2%	10	1	2008	>4 years	SAAS	3

Table 6. Company types

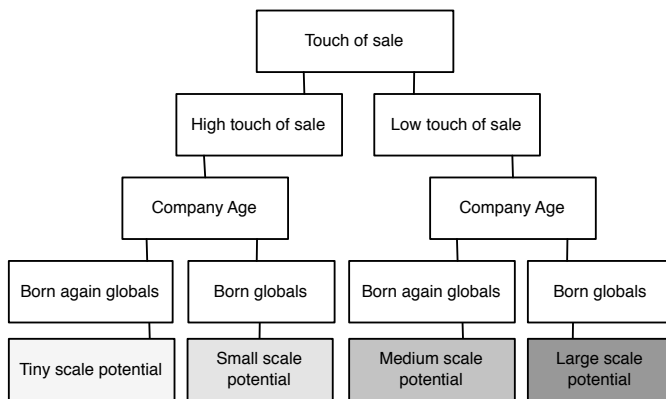


Figure 26. Company archetypes

Tiny scale potential

These are companies already in business for at least 3 years focusing mostly on the domestic market with little attention to other countries. The companies sell software that require a high level of personal attention before customers can successfully use the software. For these companies the personal network of employees is very important, since the personal network offers a foothold with potential customers. During the interviews BpmComp stated that the entire market selection and entry was determined based on the personal network of the sales force. These companies mostly use direct export and partnerships as a market entry strategy. Again the partnerships are build via the personal network of the employees. Although these companies experience a hold back due to the already existing customer base in the domestic market. For instance during the interviews PurchaseComp indicated a situation: “when presented with two prospecting customers (a domestic and international prospect) the sales staff is more inclined to follow-up the domestic customer due to the prospect from being more simple”. Combined with insecurities mentioned by FinanComp that indicates their product is build and customized based on domestic requirements, doubting if these requirements overlap with customers operating in different countries. The upside of performing in the domestic market before going international as demonstrated by AppComp is the fact that the exiting customer base could function as a bridge toward connections abroad, as described by the client followership market entry strategy.

Small scale potential

The small scale potential share the same characteristics as the tiny scale potential due to the level of personal attention required to sell and implement the product. Although the company type is less bound by previous manner of conducting business since the company type operates on an international scale from day one. Therefore the company spends little time in changing existing work processes. The company can start from day one developing a product for an international market, preventing expensive redesigns to make a software product suit a global market.

Again personal experience is one of the most important factors, as stated by BiComp: “those who have previously been involved with the building of an international product know which mistakes not to make, guaranteeing a product that has a high change of adoption by international customers”. Companies tend to choose partners to aid with the level of personal attention required to sell and implement the products. Since a high degree of human intervention is needed in the selling and implementing of the products these two company types are also most inclined towards setting up foreign branch offices. Providing customers with better more committed support compared to partners and providing potential customers with a high level of trust due to the sign of commitment to a geographical area.

Medium scale potential

Compared to the first two company types the Medium scale potential describes a company with a low level of personal intervention required to sell and implement the software products. Companies often operate on a high volume, low margin base. Since the products require less human intervention it presents new market entry strategies for companies to use. The company type uses both the reseller and the piggyback market entry strategy. Since the product does not require human intervention the company is less faced with the training of resellers and partners.

Of the companies interviewed in the research most of the companies that fit the medium scale potential are mostly add-ons or present products that serve as an addition of extra functionality build upon an existing product. Since these products don't function on their own. Apart from the piggyback market entry method the resellers method is often used since the products can easily fit the resellers product suite. Personal experience is an important factor in gaining resellers and managing the performance of the resellers. Compared to the first two company types the market selection is more limited due to the nature of the software product. Products that offer a component or add-on are limited to the geographical penetration levels of the compatible software products that connect to the add-on.

Large scale potential

Compared to the first three company types the Large scale potential describes a company with a very low level of personal intervention required to sell and implement the software product. Companies are largely focused on building related services to increase the product adoption. For instance MochaDocs focuses most of the effort building “the whole product”. Creating methods to integrate the product into the work processes of a company. Creating high quality video material to motivate user on how to use the product. The company is setup with international ambitions from day one, focusing mostly on obtaining a high volume of customer by using low labour business models that limit the selection of market entry forms. Contrarily to the traditional internationalization theories these companies don not see a local presence in every country as their end goal. Both BackupComp, MochDocs and ImageComp stated the setup of multiple foreign branches does not fit with their low labour model. Especially since the product requires little human intervention the need for a local presence quickly diminishes.

10. Research limitations and future research

Before presenting the conclusions of this research project, the entire research approach and process has been evaluated, with a focus on the limitations, weaknesses and threats to the validity and reproducibility of the research, for research method. The perceived future research that could build upon this research project is also presented.

10.1 Limitations

The limitations of this study are characterized by research design and methodology, which impact and influence the interpretation and application of the findings and results. Most of the limitations are caused by constraints of time and resources.

Sector limitation

The research is oriented towards commercial product software. While some findings could prove useful, they may not directly address the market specifics of custom, military or embedded software. This research only focuses on independent software vendors, meaning the findings might not apply for large multinational companies.

Limited sampling frame

At the moment of writing, the Dutch statistical institutions do not have specific data on the field of product software companies. Although there are statistics focused on the software industry, the Statistical Bureau of the Netherlands (CBS) presents data focused on software companies grouped in SBI 621. However, this includes support, system administration and custom software development that are conducted within a completely different type of business. This limits the current research, since there is no clear image of the trends: for instance, is the number of product software companies increasing or decreasing, limiting researchers in calculating a proper sample.

Due to the absence of a complete sampling framework, this research used the Deloitte Fast 500 ranking as such a framework. This is an annual ranking which presents a list of the most successful IT companies. However, the Deloitte ranking is a proprietary list, and the inclusion and exclusion criteria are not fully shared with the public. Furthermore, the ranking requires a company to willingly and truthfully hand over the necessary financial documents. During one of the interviews, the CEO indicated the fact that their company did not grow in number of employees was seen as a negative point, even if the company still produced significantly more revenue. The ranking requires companies to grow in staff as well.

Sampling strategy

While selecting the cases to include in this study, the researcher found great difficulties in finding CEOs willing to commit to the research, dedicate their valuable time and be willing to discuss company strategies, which are often described as highly sensitive information. Due to the difficulty in reaching companies, the choice was made to switch to a more convenient sampling strategy. This allowed the researcher to access companies through his own network. However, due to switching to a non-randomized selection, this introduces a bias in the research since not all product software companies in the Netherlands are given an equal chance of being included in this study.

Sampling size

This research was limited to 14 companies due to constraints of time and resources. By increasing the number of the sample companies, the reliability of the research would increase. Increasing of the number of case companies could be achieved by increasing the research team. In this study, the acquisition of the case companies, the interviews and the transcriptions were done by a single person. By creating a team of 10 people combined with the doubling of the project span, a similar company response would result in 280 case companies, thus increasing the reliability of the findings.

Grounded theory encoding bias

During the grounded theory process, the researcher scanned the transcripts of the interviews and coded specific text fragments to identify important trends in the process of internationalization. These codes in turn are categorized: for instance, which market entry strategies were used by a case company. By increasing the project team, the validity of the grounded theory process would increase as well. By performing the encoding process twice, by more than one researcher, the validity of the research would increase since the chances of incorrect coding and categorization would decrease.

Interview limitations

During the interviews with the key decision-makers of the case companies, most of the anecdotes and answers given to the questions focused on the internationalization of the case companies. The decision-makers relied on their memory to recall the specifics of certain decisions they made during the internationalization process of their company. This presents a recall bias since some situations that were discussed took place more than five years ago; in the mean time, decisions by key decision-makers may have been forgotten or kept secret from the researcher.

Not all CEOs interviewed took part in the founding of the company or were even present at the

time of founding. The departure of a former CEO can introduce a set of problems concerning the knowledge on the internationalization of the company. The CEO that followed might not be aware of earlier internationalization attempts done and may not know which attempts were successful or not. This presents a limitation in the number of lessons learned that can be found during the interviews.

Systematic mapping study

Based on a collection of inclusion and exclusion criteria, the systematic mapping study maps out an area of research. Each of the exclusion criteria could also be seen as a limitation of the research. Currently the research focuses only on the Dutch and English languages, therefore excluding research studies performed and documented in other languages.

Due to limitations in financial resources, not all found literature that remained after inclusion and excluding all literature could be accessed. Only freely available literature available through the Utrecht University proxy is included in the final selection of papers. If a researcher performed the same research with enough funds to purchase all literature, then he or she could come to different conclusions than those presented here.

10.2 Future research

After completing the research, some steps that could be undertaken in future research have been identified.

Different countries

This research focuses only on the Dutch software market. However, it would be interesting to conduct similar research focused on different countries to see if the findings of this research hold up elsewhere. This research focused only on companies with headquarters in the Netherlands. It would be interesting to research trends in market entry strategies among countries. For instance, does the domestic market play a different role in US-based companies compared to companies with German headquarters?

More company cases

Due to the limited resources, this research was limited to 14 case companies. By conducting research that includes more cases the validity of the results would increase. Since the findings and conclusions are based on interviews with the Dutch case companies, the quality would increase with an increased number of cases. By increasing the research to 60 cases the validity would dramatically increase. A second suggestion would be to perform a survey to complement the company cases. By using multiple research methods the validity and the degree to which the research can be replicated is expected to increase as well. By conducting a survey among the product software companies in the Netherlands, the findings of this

research can be validated.

Data mining

Apart from the suggested survey and case study research, this study suggests data mining research. By mining for data, more statistics could be added to the body of knowledge. The data mining should focus on the company and product websites. This would provide interesting statistics on the number of Dutch companies presenting product information in English or other foreign languages. A data mining research study could present product architectures and the distribution of international presence, for instance, by recognizing foreign contact or address data. The data mining research could also be performed at a fixed interval to identify trends in companies becoming international.

11. Conclusion

This research found current internationalization theories lack important steps, skipping the selection of target markets and planning of internationalization process. After analysing the case company interviews this research found the following phases to be most important when setting up a successful internationalization strategy. A company follows the stages clockwise; with each step and each fully completed process the company and the employees involved gain experience. Experience was one of the most import factors influencing the degree of internationalization. Figure #24 consists of a square, each side of the square consist of two arrows the first influences the second. For instance the internationalization attitude influences the market selection, the product type influences the actual market entry and the market entry enabler influences the marketing tools selected. Each arrow in the figure presents a list of options to choose from.

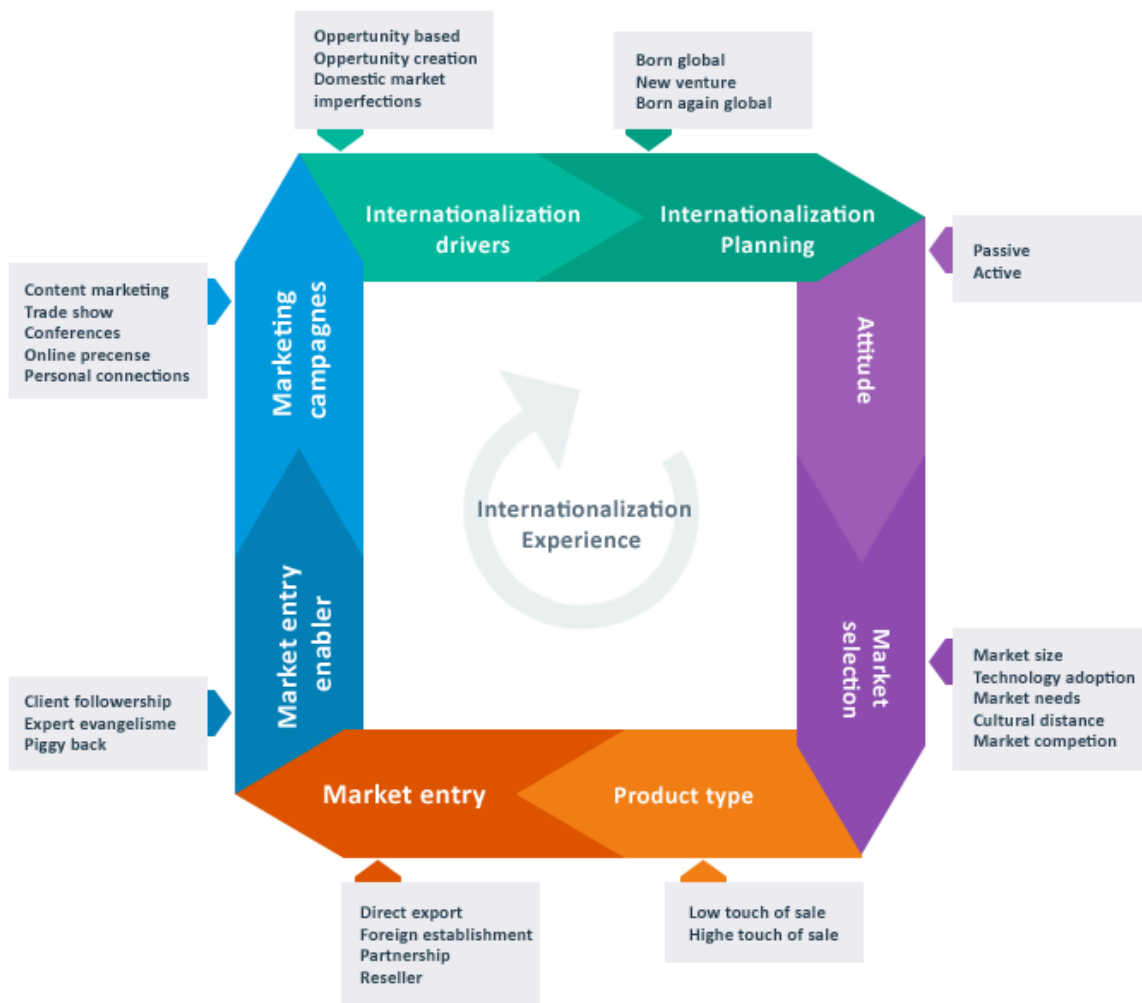


Figure 24. The internationalization experience model

Market entry strategies

This research concluded, based on both the results of grounded theory and the current literature, that there is no single predominant market entry strategy for Dutch ISVs. The market entry strategy depends on product and company characteristics. Instead of finding the expected incremental approach with which companies enter international markets as described in current leading literature, this research did not find any support for an incremental approach. This research presents the fact that a market entering strategy can present a sizable investment, requiring up to four years of operating with a negative cash flow.

After interviewing the case companies each market entry strategy was identified. Some case companies indicated using multiple market entry strategies. The following market entry strategies are most used by the studied case companies:

- Direct export
- Client followership
- Foreign establishment
- Partnership
- Reseller

After conducting and analysing all the interviews it became clear that the interviewed case companies did not change the market entry strategy after implementing them.

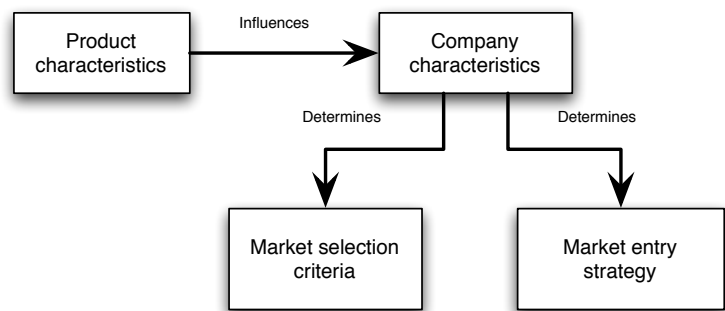


Figure 25. Influences on the internationalization choices

The years it takes combined with the required resources prevent a company from quickly exchanging one market entry strategy for another. Apart from the difficulty of switching from one strategy to another, the fact remains that not all market entry strategies are suitable for each company strategy. Current theory makes no distinction between the infrastructure of the software product and the nature of the company's business model. Current research indicated that the product characteristics are one of the key aspects that influence the eventual chosen form of market entry.

Product characteristics

The largest factor separating the products is the type of sales touch. This research identified three product architectures: SAAS web-based, installation-based (desktop software/apps) and on-site software running on the infrastructure of the customer company. Each infrastructure type presents its own set of advantages and disadvantages. The most important category of these characteristics can be ranked according to the degree of human intervention.

By recognizing the degree human intervention required to correctly sell and implement the product types, this research is better able to categorize the entry strategies.

Companies with a product considered to be high touch of sale use a different strategy to enter a foreign market compared to products with a low sales touch of sale. When support is intensive, it can only be performed in person by highly trained professionals, providing less cost-effective ways to deal with support. Products with a high sales touch

opt for a reseller, agent or partnership-oriented strategy or choose to open a fully owned domestic branch in the chosen country.

Companies with a low touch sales product more often tend to select a low labour business model, selling large volumes of low priced products compare to a smaller volume of high products. This limits companies with a low sales touch product in choosing direct export as a market entry strategy, using a centralized sales force operating from within the domestic borders to service and manage international customer and sales operations. Since there are more intangible factors influencing the degree of internationalization, the key decision-makers within a company must be open to reevaluate "the way they do things". It might not be the optimal path to new markets.

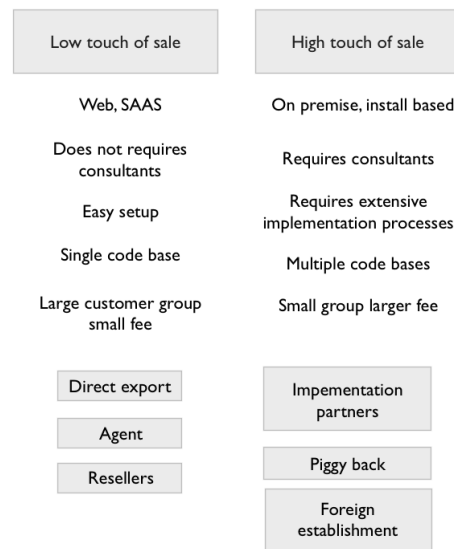


Figure 26. Low touch vs. High touch

Not all market entry strategies are optimal for all companies. When a company does not have the budget to support an international reseller network, it would be wrong to require such an implementation. The company should be prevented from spending time setting up a reseller network when it cannot financially support the network.

Market selection criteria

Companies selling products with a low sales touch tend to use a shotgun tactic, creating an initial selection of countries based on the number of potential customers, the level of internet adoption and a basic amount of competitor analysis. Companies with a high sales touch product tend to use their personal networks to gain new business, combined with the use of content marketing, trade shows and conferences, in order to come in contact with potential customers.

Often a new market is approached as a product evangelist, presenting and communicating related technologies or business strategies that can be obtained by customers using the company’s product. Literature continues by pointing out that in smaller countries, people in the customer market tend to know each other. This provides less excuse for not meeting in person, explaining the customer will fear the seller will not be there when she or he needs him

after buying the product.

Company characteristics

Most of the interviewees within the case companies indicated the following drivers for initiating internationalization activities:

- Opportunity based; internationalization is initiated out of an opportunity at hand encountered by the company.
- Opportunity creation; a company starts with internationalization activities in order to create new opportunities.
- Domestic market imperfections; a company start with internationalization activities due to shorting comings in the domestic market or due to a high domestic competition.
- Local customers do international activities; The current customer companies are undertaking international activities, requiring the company to start enrol in international activities.
- Personal motives; presenting them self in various personal motives by key decision makers that connect to their own heritage or personal connections resulting in a willingness to relocate to a different country.
- Personal network; trough personal connections a company is more inclined to experiment with internationalization attempts. Trough a personal network the key decision makers within a company can employ relatives to start a foreign agent or find opportunities trough personal ties with other companies abroad.

These internationalization drivers connect to the company characteristics, since a company managed by seasoned international entrepreneurs are more likely to posses a network of international connections.

This research identified the level of personal experience of the management team gained in former positions, life experience and education as an important foundation for both high touch and low touch sales products. With high touch sales products, the international personal network of the company management is the primary way of building a reseller or partnership network as well as a main means of contact and creation of international business opportunities. For companies with low touch sales products, the personal experience is mainly helpful in the creation of the “whole product”, since the management with greater international experience has a better overview of all the necessary steps for building a product that is suitable for international sale. They avoid making mistakes that decrease the chances of the product appealing to an international market. The literature also sees management with a lack of international business experience as a warning sign. The research indicated the management must have travelled or studied extensively outside of the country. International experience can, however, also be gained or hired since not all decision-makers possess extensive management experience (Roger A. Philips, 2014).

This research has found an increasing interest of Dutch product software companies in selling their products beyond the domestic border. This positive finding suggests great opportunities for Dutch independent software vendors lie beyond the domestic market. More than half of the case companies actually skipped the domestic market as an intermediate step and continued directly on to international sales. Together, almost half of all case companies researched received more than 50% of their revenue from companies outside of the domestic market.

While internationalization poses many challenges and pitfalls, internationalization offers great opportunities that should at least be considered by the management of all independent software vendors. It provides an important opportunity for all software vendors to increase their revenue and decrease their dependence on the domestic market, whether they are in the start-up phase or have been in business for a considerable period of time.

Terminology

This section focuses on explaining the definitions behind the terms used throughout this thesis study, thus preventing misinterpretations of the terms used.

Localization: Kersten (2002) describes localization as the act of adapting software for customers of one culture to another customer language and culture. Localization is part of the internationalization of a software product. Compared to localization, internationalization focuses on the company level and the expanding of international activities. Localization examines the software-level issues concerning language translations together with all country-specific application changes required to serve customers.

Market entry: This term is used to describe the decisions, resources allocation and strategies regarding the way in which a company enters a foreign market.

Psychic distance: This denotes the perceptual distance for a company that is comparing the country of origin and the foreign markets that the company wants to enter. The term is primarily used to illustrate the level of cultural differences rather than spatial distance. A large psychic distance could mean a more difficult challenge for market entry as suggested by traditional internationalization theories (Bilkey & Tesar, 1977; Cavusgil, 1984). Lu and Beamish (2001) quantify this term as a large difference between countries, thus making the endeavour more entrepreneurial.

Internationalization factors: Early research by Letto-Gillies (1992) described a set of factors that lead to internationalization decisions. These factors consist of (a) Industry-specific factors, which relate to the industry type and the associated products; (b) Region-specific factors; and (c) Firm-specific factors, which focus on the specific company characteristics and capabilities. Critical success factors are vital elements for an internationalization to be successful. A critical success factor defines the elements that drive the strategy forward. These elements make or break the success of an internationalization strategy, hence the term 'critical'. This concept was first introduced by D. Ronald Daniel of McKinsey & Company in 1961. Therefore, critical success factors are of great importance to the decision-makers responsible for exploring or implementing internationalization.

Internationalization theories: There have been many approaches to explaining the expansion of business through internationalization activities. Different theories focus on different aspects of the phenomenon of internationalization. Describing the way companies conduct their business is constantly evolving; they are implementing new business models and strategies, thus changing the way they implement internationalization. The focus of the most recent theories has shifted from the enterprise view towards an SME-oriented view that focuses on small and medium-sized companies.

Product software: a standardized software product solution, which can be bought of the shelf, or rented for a specific period. These software products are not only shrink-rapped but also software as a service architectures. These software products are developed by software vendors often intended for a large audience.

Globalization: the process of continues increasing international integration and interchanging worldviews, products and services. The emergence of an international networks and social networks are fueled trough the uses of communication technology.

Outsourcing: contracting a third party to relocate business functions from one country to another. The relocating of business is often initiated from the perspective of financial savings, trough relocating business function to low labor rates.

References

Ahn, S., Fukao, K., & Kwon, H. U. (2004). The Internationalization and Performance of Korean and Japanese Firms: An Empirical Analysis Based on Micro Data. *Seoul Journal of Economics*, 17(4), 439-482.

Ahn, Sanghoon, Kyoji Fukao, and Hyeog Ug Kwon. "The Internationalization and Performance of Korean and Japanese Firms: An Empirical Analysis Based on Micro Data." *Seoul Journal of Economics* 17.4 (2004): 439-482.

Albaum, G., & Duerr, E. (2008). *International marketing and export management*. Pearson Education.

Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business venturing*, 18(1), 105-123.

Arenius, P., & De Clercq, D. (2005). A network-based approach on opportunity recognition. *Small Business Economics*, 24(3), 249-265.

Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of management journal*, 43(5), 909-924.

Ayne, G. T., Kennedy, K. H., & Davis, J. L. (2009). Competitive dynamics among service SMEs. *Journal of Small Business Management*, 47(4), 421-442.

Barringer, B. R., & Greening, D. W. (1998). Small business growth through geographic expansion: a comparative case study. *Journal of Business Venturing*, 13(6), 467-492.

Bell, J. (1995). The internationalization of small computer software firms: A further challenge to "stage" theories. *European Journal of Marketing*, 29(8), 60-75.

Bell, J., Crick, D., & Young, S. (2004). Small Firm Internationalization and Business Strategy An Exploratory Study of 'Knowledge-Intensive' and 'Traditional' Manufacturing Firms in the UK. *International Small Business Journal*, 22(1), 23-56.

Bell, J., McNaughton, R., Young, S., & Crick, D. (2003). Towards an integrative model of small firm internationalisation. *Journal of International Entrepreneurship*, 1(4), 339-362.

Benito, G./Welch, L., De-internationalization, *Management International Review*, 37, 1997, pp. 7-25.

Benjamin, R. and Wigand, R. (1995), "Electronic markets and virtual value chains on the information superhighway", *Sloan Management Review*, Vol. 36 No. 2, pp. 62-72.

Bilkey, W. J. (1978). An attempted integration of the literature on the export behaviour of firms. *Journal of International Business Studies*, 33-46.

Bilkey, W. J., & Tesar, G. (1977). The export behaviour of smaller-sized Wisconsin manufacturing firms. *Journal of international business studies*, 8(1), 93-98.

Bjerre, M., & Sharma, D. D. (2003). Is marketing knowledge international? A case of key accounts. *Learning in the Internationalisation Process of Firms*, Edward Elgar, Cheltenham, 123-141.

Blomstermo, A., Sharma, D. D., & Sallis, J. (2006). Choice of foreign market entry mode in service firms. *International Marketing Review*, 23(2), 211-229.

Brereton, P., Kitchenham, B. A., Budgen, D., Turner, M., & Khalil, M. (2007). Lessons from applying the systematic literature review process within the software engineering domain. *Journal of systems and software*, 80(4), 571-583.

Brouthers, L. E., & Nakos, G. (2005). The role of systematic international market selection on small firms' export performance. *Journal of Small Business Management*, 43(4), 363-381.

Buckley, P.J. & Casson, M. (1987) *The Future of the Multinational Enterprise*, Building European Ventures, Elsevier, New York

Buckley, P.J. & Casson, M. 1988 P .J. A Theory of Cooperation International Business. In F.J. Contractor & P . Lorange (Eds.) *Cooperative Strategies in International Business*: Lexington, pp.31-53.

Cadogan, J. W., Diamantopoulos, A., & Siguaw, J. A. (2002). Export market-oriented activities: their antecedents and performance consequences. *Journal of International Business Studies*, 615-626.

Cai, H., Reinwald, B., Wang, N., & Guo, C. J. (2011). SaaS multi-tenancy: Framework, technology, and case study. *International Journal of Cloud Applications and Computing (IJCAC)*, 1(1), 62-77.

Cantwell, J.A., Iammarino, S., 2000. Multinational corporations and the location of technological innovation in the UK regions. *Reg. Stud.* 34 (3), 317–332.

Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 44(3), 493-511.

Cavusgil, S. T. (1984). Differences among exporting firms based on their degree of internationalization. *Journal of Business Research*, 12(2), 195-208.

Cavusgil, S. T., & Knight, G. (2009). *Born global firms: A new international enterprise*. Business Expert Press.

Cavusgil, S. T., Chan, K., & Zhang, C. (2003). Strategic orientations in export pricing: a clustering approach to create firm taxonomies. *Journal of International Marketing*, 11(1), 47-72.

Child, J., & Rodrigues, S. B. (2005). The Internationalization of Chinese Firms: A Case for Theoretical Extension?[1]. *Management and organization review*, 1(3), 381-410.

Coviello, N. E., & Jones, M. V. (2004). Methodological issues in international entrepreneurship research. *Journal of Business Venturing*, 19(4), 485-508.

Coviello, N. E., & Munro, H. J. (1995). Growing the entrepreneurial firm: networking for international market development. *European journal of marketing*, 29(7), 49-61.

Coviello, N., & Munro, H. (1997). Network relationships and the internationalisation process of small software firms. *International business review*, 6(4), 361-386.

Crick, D., & Jones, M. V. (2000). Small high-technology firms and international high-technology markets. *Journal of international marketing*, 8(2), 63-85.

Crick, D., & Spence, M. (2005). The internationalisation of 'high performing' UK high-tech SMEs: a study of planned and unplanned strategies. *International Business Review*, 14(2), 167-185.

Daniel, D. Ronald, "Management Information Crisis," *Harvard Business Review*, Sept.-Oct., 1961.

Elfring, T., & Hulsink, W. (2003). Networks in entrepreneurship: the case of high-technology firms. *Small business economics*, 21(4), 409-422.

Etemad, H., Wright, R. W., & Dana, L. P. (2001). Symbiotic international business networks: collaboration between small and large firms. *Thunderbird International Business Review*, 43(4), 481-499.

Faems, D., Van Looy, B., & Debackere, K. (2005). Interorganizational collaboration and innovation: toward a portfolio approach*. *Journal of product innovation management*, 22(3), 238-250.

Friedman, T. L. (2006). *The world is flat [updated and expanded]: A brief history of the twenty-first century*. Macmillan.

Gabrielsson, M., & Pelkonen, T. (2008). Born internationals: Market expansion and business operation mode strategies in the digital media field. *Journal of International Entrepreneurship*, 6(2), 49-71.

Gawer, A and MA Cusumano (2002). *Platform leadership. How Intel, Microsoft and Cisco Drive Industry Innovation*. Boston, MA: Harvard Business School Press

Gawer, A., & Cusumano, M. A. (2002). *Platform leadership. Harvard Business School Press, Boston, MA, 316.*

Grant, R. M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. *Journal of Management Studies*, 41(1), 61-84.

Han, M., & Celly, N. (2008). Strategic ambidexterity and performance in international new ventures. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 25(4), 335-349.

Han, Mary, and Nikhil Celly. "Strategic ambidexterity and performance in international new ventures." *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration* 25.4 (2008): 335-349.

Harrison, J. S., Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. (2001). Resource complementarity in business combinations: Extending the logic to organizational alliances. *Journal of Management*, 27(6), 679-690.

Hedlund, G., & Kverneland, A. (1985). Are strategies for foreign markets changing? The case of Swedish investment in Japan. *International Studies of Management & Organization*, 41-59.

Hitt, M. A., Dacin, M., Tyler, B. B., & Park, D. (1997). UNDERSTANDING THE DIFFERENCES IN KOREAN AND US EXECUTIVES' STRATEGIC ORIENTATIONS. *Strategic management journal*, 18(2), 159-167.

Hitt, M. A., Ireland, R. D., Camp, S. M., & Sexton, D. L. (2001). Strategic entrepreneurship: entrepreneurial strategies for wealth creation. *Strategic management journal*, 22(6-7), 479-491.

Hitt, M., Ireland, R. D., & Hoskisson, R. (2007). *Strategic management cases: competitiveness and globalization*. Cengage Learning.

Hoch, Detlev J.; Roeding, Cyriac R.; Purkert, Gert; Lindner, Sandro K.; Mueller, Ralph (2000), *Secrets of Software Success: Management Insights from 100 Software Firms around the World*, Harvard Business School Press, Boston, Massachusetts.

Hofstede, G. (1984). The cultural relativity of the quality of life concept. *Academy of Management review*, 9(3), 389-398.

Hohenthal, J. (2001). The creation of international business relationships: experience and performance in the internationalization process of SMEs.

Hollensen, S. GLOBAL MARKETING: A Market-RESPONSIVE APPROACH.

IETTO-GILLIES, G. (1992), *International Production. Trends, Theories, Effects*. Polity Press, Cambridge.

Ietto-Gillies, G. (1992). Different conceptual frameworks for the assessment of the degree of internationalization: an empirical analysis of various indices for the top 100 transnational corporations. *Transnational corporations*, 7, 17-40.

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Author(s): Yadong Luo and Rosalie L. Tung Source: *Journal of International Business Studies*, Vol. 38, No. 4, International Expansion

Johanson, J., & Vahlne, J. E. (1990). The mechanism of internationalisation. *Internationalmarketing review*, 7(4).

Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm—four Swedish cases. *Journal of management studies*, 12(3), 305-323.

Jones, M. V., & Coviello, N. E. (2005). Internationalisation: conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36(3), 284-303.

Jones, M.V., Coviello, N.E. (2005). Internationalisation: Conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36, 284-303.

Julian, C. C., 2003, 'Export Marketing Performance: A Study of Thailand Firms', *Journal of Small Business Management* 41(2), 213–221.

Kersten, G. E., Kersten, M. A., & Rakowski, W. M. (2002). Software and culture: Beyond the internationalization of the interface. *Journal of Global Information Management (JGIM)*, 10(4), 86-101.

Keupp, M. M., & Gassmann, O. (2009). The past and the future of international entrepreneurship: a review and suggestions for developing the field. *Journal of Management*, 35(3), 600-633.

Kidd, J. B., & Teramoto, Y. (1995). *The learning organization: The case of the Japanese RHQs in Europe* (pp. 39-56). Gabler Verlag.

Kogut, B. (1985). Designing global strategies: Profiting from operational flexibility. *Sloan Management Review* 27(1), 27–38.

Korhonen, H., Luostarinen, R., & Welch, L. (1996). Internationalization of SMEs: Inward-outward patterns and government policy. *MIR: Management International Review*, 315-329.

Kropp, F., Lindsay, N. J., & Shoham, A. (2008). Entrepreneurial orientation and international entrepreneurial business venture startup. *International Journal of Entrepreneurial Behaviour & Research*, 14(2), 102-117.

Kudina, A., Yip, G. S., & Barkema, H. G. (2008). Born global. *Business Strategy Review*, 19(4), 38-44.

Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. *International Journal of Entrepreneurial Behaviour & Research*, 6(6), 295-310.

Lloyd-Reason, L., & Sear, L. (Eds.). (2007). *Trading Places--SMEs in the Global Economy: A Critical Research Handbook*. Edward Elgar Publishing.

Loane, S., & Bell, J. (2006). Rapid internationalisation among entrepreneurial firms in Australia, Canada, Ireland and New Zealand: An extension to the network approach. *International Marketing Review*, 23(5), 467-485.

Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic management journal*, 22(6-7), 565-586.

Lu, J. W., & Beamish, P. W. (2006). Partnering strategies and performance of SMEs' international joint ventures. *Journal of Business Venturing*, 21(4), 461-486.

Lu, J. W., & Beamish, P. W. (2006). SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship*, 4(1), 27-48.

Maia, G. M. D., & Lima, G. M. (2011). Internationalization strategies of Brazilian companies in the textile industry (Doctoral dissertation, Halmstad University).

Majkgård, A., & Sharma, D. D. (1998). Client-following and market-seeking strategies in the internationalization of service firms. *Journal of Business-to-Business Marketing*, 4(3), 1-41.

Manolova, T. S., Brush, C. G., Edelman, L. F., & Greene, P. G. (2002). Internationalization of Small Firms Personal Factors Revisited. *International Small Business Journal*, 20(1), 9–31. New Challenges, New Approaches: A New Model of Firm Internationalisation.

Marston, S., Li, Z., Bandyopadhyay, S., Zhang, J., & Ghalsasi, A. (2011). Cloud computing—The business perspective. *Decision Support Systems*, 51(1), 176-189.

McGrath, R. G., MacMillan, I. C., & Venkataraman, S. (1995). Defining and developing competence: a strategic process paradigm. *Strategic Management Journal*, 16(4), 251-275.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.

Moen, Æ., Bolstad, A., Pedersen, V., & Bakas, O. (2010). International market expansion strategies for high-tech firms: Examining the importance of different partner selection criteria when forming strategic alliances. *International Journal of Business and Management*, 5(1), P20.

Moen, Ø. (2002). The born globals: a new generation of small European exporters. *International Marketing Review*, 19(2), 156-175.

Moen, Ø., Bakas, O., Anette, B., & Pedersen, V. (2010). International Market Expansion Strategies for High-Tech Firms: Partnership Selection Criteria for Forming Strategic Alliances. *International Journal of Business and Management*, 5-1, 1-11.

Moen, Ø., Endresen, I., & Gavlen, M. (2003). Use of the internet in international marketing: a case study of small computer software firms. *Journal of International Marketing*, 129-149.

Moen, Ø., Gavlen, M., & Endresen, I. (2004). Internationalization of small, computer software firms: entry forms and market selection. *European Journal of Marketing*, 38(9/10), 1236–1251.

Moen, Oystein, Morten Gavlen, and Iver Endresen (2004), "Internationalization of small, computer software firms: Entry forms and market selection," *European Journal of Marketing*, 38 (9/10), 1236-1251.

Mosa, A. S. M., Yoo, I., & Sheets, L. (2012). A systematic review of healthcare applications for smartphones. *BMC medical informatics and decision making*, 12(1), 67.

Nixon, B. (1998). Creating the futures we desire-getting the whole system into the room: part I. *Industrial and Commercial Training*, 30(1), 4-11.

Ojala, A., & Tyrväinen, P. (2007). Market entry and priority of small and medium-sized enterprises in the software industry: An empirical analysis of cultural distance, geographic distance, and market size. *Journal of International Marketing*, 123-149.

Oviatt, B. M., & McDougall, P. P. (1997). Challenges for internationalization process theory: The case of international new ventures. *MIR: Management International Review*, 85-99.

Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship theory and practice*, 29(5), 537-554.

Oyson 2004 Boynton, A.C., and Zmud, R.W. 1984. "An Assessment of Critical Success Factors," *Sloan Management Review* (25:4), pp. 17-27.

Oyson, M.J. (2006) Internationalisation of Small New Zealand Firms

Philips, R. A. (1998). *Guide to software export: a handbook for international software sales*. International Business Press.

Phillips, L. A., Calantone, R., & Lee, M. T. (1994). International technology adoption: Behavior structure, demand certainty and culture. *Journal of Business & Industrial Marketing*, 9(2), 16-28.

Rasmussen, E. S., Madsen, T. K., & Evangelista, F. (2001). The founding of the born global company in Denmark and Australia: sensemaking and networking. *Asia Pacific Journal of Marketing and Logistics*, 13(3), 75-107.

Rennie, M. W. (1993). Born global. *McKinsey Quarterly*, 45-45.

Reuwer, T., Jansen, S., & Brinkkemper, S. (2013). Key factors in the internationalisation process of SMEs exporting business software as a service. *International Journal of Business Information Systems*, 12(2), 140-162.

Ritter, T., & Gemünden, H. G. (2003). Network competence: its impact on innovation success and its antecedents. *Journal of Business Research*, 56(9), 745-755.

Romijn, H., & Albaladejo, M. (2002). Determinants of innovation capability in small electronics and software firms in southeast England. *Research Policy*, 31(7), 1053-1067.

Roth, K., & Morrison, A. J. (1992). Implementing global strategy: characteristics of global subsidiary mandates. *Journal of International Business Studies*, 715-735.

Rugman, A. M., & Verbeke, A. (2002). Edith Penrose's contribution to the resource-based view of strategic management. *Strategic Management Journal*, 23(8), 769-780.

Rugman, A. M., & Verbeke, A. (2008). The theory and practice of regional strategy: a response to Osegowitsch and Sammartino. *Journal of International Business Studies*, 39(2), 326-332.

Ruigrok, W., & Wagner, H. (2003). Internationalization and performance: An organizational learning perspective. *MIR: Management International Review*, 63-83.

Ruzzier M, Hisrich RD and Antoncic B (2006) SME internationalization research: past, present, and future, *Journal of Small Business and Enterprise Development* 13(4): 476-497.

Ruzzier, Mitja, Robert D. Hisrich, and Bostjan Antoncic. "SME internationalization research: past, present, and future." *Journal of small business and enterprise development* 13.4 (2006): 476-497.

Ryals, L., & Payne, A. (2001). Customer relationship management in financial services: towards information-enabled relationship marketing. *Journal of Strategic Marketing*, 9(1), 3-27.

Sambharya, R. B. (1995). The combined effect of international diversification and product diversification strategies on the performance of US-based multinational corporations. *MIR: Management International Review*, 197-218.

Sanders, W. G., & Carpenter, M. A. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41(2), 158-178.

Sapienza, H.J., Autio, E., George, G. & Zahra, S.A. 2006. A capabilities perspective on the effects of early internationalization on firm survival and growth. *Academy of Management Review* 31 (4), 914-933.

Sapienza, P., Zingales, L., & Guiso, L. (2006). *Does culture affect economic outcomes?* (No. w11999). National Bureau of Economic Research.

Sheng-yue, H., & Xu, R. (2005). Analyses of Strategic Alliance Failure: A Dynamic Model. In *International Conference on Management Science and Engineering-ISTP*.

Sheng-yue, H., & Xu, R. Analyses of Strategic Alliance Failure: A Dynamic Model.

Sink, E. (2006). *Eric Sink on the Business of Software*. Apress.

Sink, E. (2006). Exploring Micro-ISVs. *Eric Sink on the Business of Software*, 39-50.

Storey, D. J., & Tether, B. S. (1998). New technology-based firms in the European Union: an introduction. *Research Policy*, 26(9), 933-946.

Storey, D.J. (2000), *Understanding the Small Business Sector*, Thomson Learning, London.

Tallman, S., & Li, J. (1996). Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management journal*, 39(1), 179-196.

Terpstra, V., & Chwo-Ming, J. Y. (1990). Piggybacking: a quick road to internationalisation. *International Marketing Review*, 7(4).

van de Weerd, I., Brinkkemper, S., Nieuwenhuis, R., Versendaal, J., & Bijlsma, L. (2006). Towards a reference framework for software product management, 319–322.

Velde, R., Veldkamp, J. & Plomp, M. (2010). De softwaresector in Nederland Survey 2010. *De softwaresector in Nederland*, 1–53.

Welch, L. S.; Luostarinen, R. 1993 Internationalization: evolution of a concept *Journal of General Management*, 14 (2): 34-64

Westhead, P., Wright, M., & Ucbasaran, D. (2001). The internationalization of new and small firms: A resource-based view. *Journal of business venturing*, 16(4), 333-358.

Winch, G. (1998). Zephyrs of creative destruction: understanding the management of innovation in construction. *Building Research & Information*, 26(5), 268-279.

Wong, P. K., Ho, Y. P., & Autio, E. (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics*, 24(3), 335-350.

Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. (2005). Strategy Research in Emerging Economies: Challenging the Conventional Wisdom*. *Journal of management studies*, 42(1), 1-33.

Xu, L., & Brinkkemper, S. (2007). Concepts of product software. *European Journal of Information Systems*, 16(5), 531-541.

Zahra, S. A., & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5), 469-492.

Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of management review*, 27(2), 185-203.

Zain, M., & Ng, S. I. (2006). The impacts of network relationships on SMEs' internationalization process. *Thunderbird International Business Review*, 48(2), 183-205.

Zhou, L., Wu, W. P., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies*, 38(4), 673-690.

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Table 4. Project vs Product business

Table 5. Internationalization theories characteristics

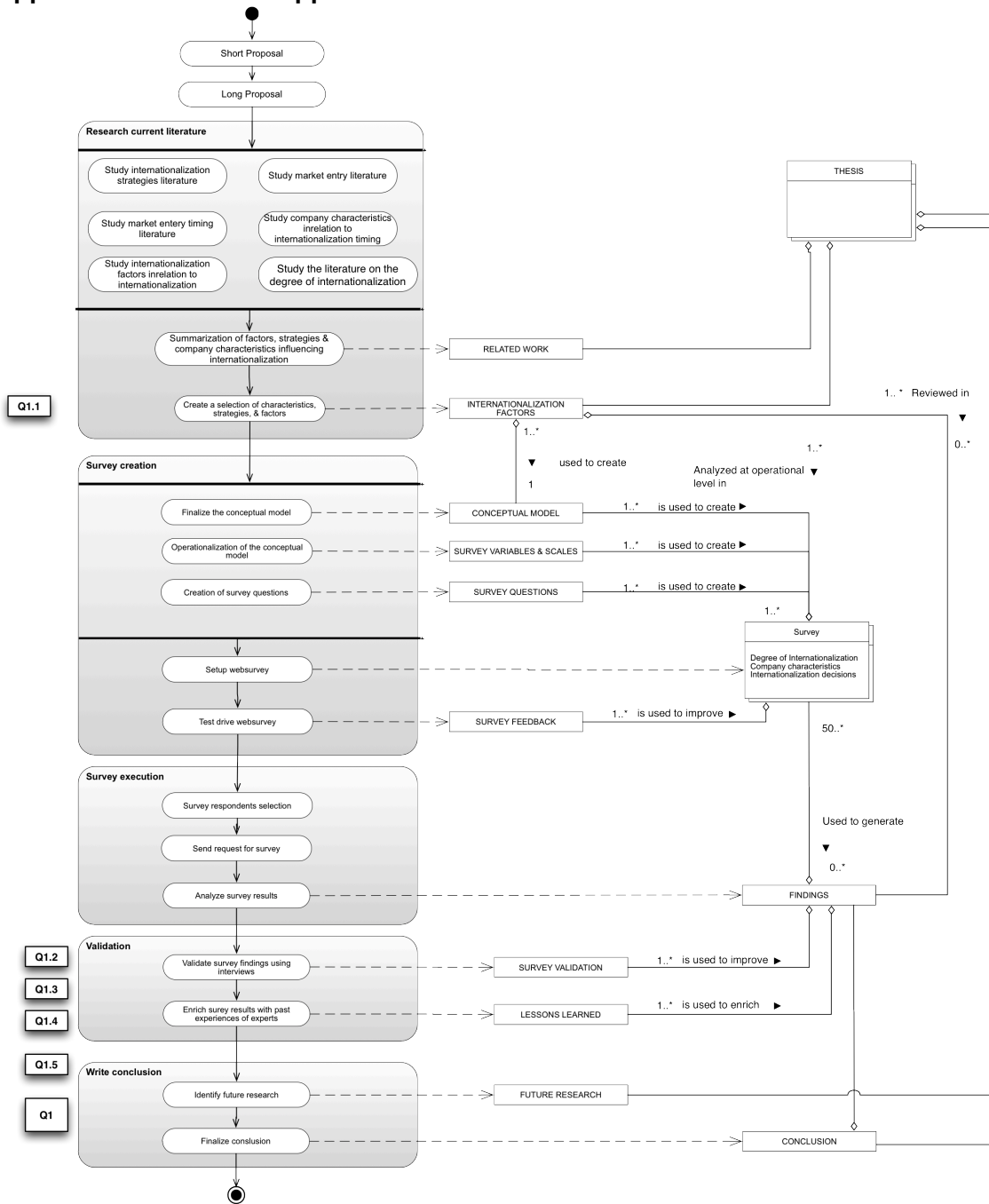
Table 6. Company types

Table 7. Market entry strategies and commitment

Table 8. Case company degree of internationalization

Table 9. Market entry forms

Appendix A. Research approach PDD



Appendix B. Interview protocol

Governmental support	
Problems/limiting factors	
Number of international customers? / % of total customers	
Horror story	
Reference case	

Internationalization attempt	
Product age	
Functionalities & product form	
Initiated in	
Internationalization drivers	
Internationalization speed	
Market entry mode	
Market selection choices	
Employee experience	
Export form	

Target market	
Company business description	
Company history	