

Framework to comply the business model of Prange with their internationalisation ambitions



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Preface

The thesis is the final part of the Master Business Administration with a specialisation in innovation and entrepreneurship. The thesis is submitted to the faculty of Management and Governance of the University of Twente.

In choosing an appropriate subject for the thesis, I preferred an external project, because in my opinion, there is a lack of practical experience at the university. An adequate theoretical foundation is of significant value to succeed, but the practical application of the knowledge is in my view even more important. The thesis derives from my interest in entrepreneurship and smaller enterprises. In general, smaller enterprises are more flexible and less bureaucratic, by which I supposed that my thesis would have greater influence on the enterprise. The external project indeed met these aspects, by which the experience was satisfactory.

Subsequently, I want to thank Prange BV for the opportunity to do an internship at their enterprise, including the desired responsibility and freedom during the project. I want to thank all the employees of Prange for their cooperation and for the great time I had. More than that, special thanks to Jaap Wansink for his guidance during the project, including the great cooperation and the interesting discussions we had. I hope that the German market will successfully be entered by Prange in the future, with the guidance of my project.

Furthermore, I would like to thank both my supervisors; Jann van Benthem and Martin Stienstra, for their guidance and feedback. The appointments were clear and criticizing, by which my academic skills and the quality of the thesis both improved.

Last but not least, I want to thank my parents and girlfriend for their constant support, motivation and encouragement during this challenging process.

Abstract

In practice, a lot of enterprises make use of a business model in order to have a quick and simple overview of their enterprise. The business model concept became prevalent with the advent of the internet in the mid-1990s and it has been gathering momentum since then (Zott, Amit & Massa, 2011). Most business model scholars will agree that it is a concept worthwhile of academic study and also relevant in practice (Zott et al., 2011). On top of that, in the end, all enterprises, either explicitly or implicitly, employ a particular business model (Teece, 2010). Prange, a small high-tech enterprise in Winterswijk, the Netherlands, makes also use of a business model. Prange uses the business model of Osterwalder (2004) in order to have an overview of their enterprise. In the near future, Prange has planned to target a foreign market; the German market, which means that Prange has internationalisation ambitions. Internationalisation is the process by which enterprises both increase awareness of the direct and indirect influence of international transactions on their future, and establish and conduct transactions with other countries (Beamish, 1990; Coviello & McAuley, 1999).

The academic literature indicates that internationalisation requires business model innovation, in which Prange also wants to invest. Although business models need adjustments to fit in an environment abroad, Osterwalder did not consider the aspect of internationalisation in his business model ontology. As a result, a research gap exists in the business model literature. Consequently, there are no guidelines of how to internationalise the business model of Osterwalder, despite the need for the business model to fit in the environment abroad. This is especially the case for technology-based SMEs such as Prange, for which it is no longer possible to act in the market without considering the risks and opportunities of internationalisation. In this study, a framework for the internationalisation of the business model of Prange is developed. To develop the framework, the business model of Osterwalder is used, integrated with academic literature for the internationalisation of technology-based small- and medium sized enterprises. Consequently, the research method of the study is exclusively a systematic literature review. The method of the study resulted in an international business model domain, containing out of 84 articles; originated from 18 top journals. The subjects that are selected and discussed are chosen in the perspective of Prange.

The systematic literature review highlights the importance of preparation in advance of internationalisation, the identification of external forces and the entry mode decision, prior to the internationalisation of the business model of Prange. The study provides Prange with a framework to comply their business model with their internationalisation ambitions, by means of recommendations derived from the academic literature. Prange has to use this framework to prepare for their internationalisation ambitions, because if Prange pays attention to the developed framework including recommendations, it will have a significant effect on their international performance in the future.

Previously, a research gap existed, because Osterwalder did not consider the aspect of internationalisation in his business model ontology. By means of this study, Prange has better insights in how to internationalise their business model to their internationalisation ambitions. Moreover, this study provides the academic field with a framework to integrate the business model of Osterwalder with the internationalisation literature of technology-based SMEs, by means of a systematic literature review. On top of that, the study sets directions for future research.

Although the discussion lighted up possible implications, to my opinion; at least this approach to internationalise an enterprise's business model is widely applicable, by which this study is relevant for both practitioners and academics. Furthermore, I believe that my business model internationalisation has general applicability for technology-based SMEs, because the framework is based on the internationalisation of technology-based SMEs.

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1. Introduction

1.1 Background Information

In practice, a lot of enterprises make use of a business model. The business model concept became prevalent with the advent of the internet in the mid-1990s and it has been gathering momentum since then (Zott et al., 2011; Brea-Solis, Casadesus-Masanell & Griffell-Tatjé, 2015). In the review of Zott, Amit and Massa (2011), they stated that business model researchers generally adopt a holistic and systemic perspective, not just on what enterprises do, but also on how they do it. This is in line with the definition of DaSilva and Trkman (2014), who stated that a business model paints a picture of the enterprise and reveals how the various elements of the enterprise work together at a certain moment in time. Confirmed and complemented by Zott and Amit (2010); a business model can be viewed as a template of how an enterprise conducts business and how it delivers value to stakeholders. Most business model scholars will agree that it is a concept worthwhile of academic study and also relevant in practice (Zott et al., 2011). Although the business model is a theoretical construct, it is of strategic importance for an enterprise. More than that, Zott and Amit (2007) suggest that a competitive advantage can emerge from the enterprise's business model. On top of it, in the end, all enterprises, either explicitly or implicitly, employ a particular business model (Teece, 2010).

Prange, a small high-tech enterprise (approximately 10 employees) in Winterswijk, the Netherlands, makes also use of a business model. Prange delivers complex (micro) mechatronic modules and systems for the high-tech industry. In particular, Prange provides the complete assembly of these complex modules. In order to have an overview of their enterprise, Prange uses the business model of Osterwalder (2004).

In the near future, Prange has planned to target a foreign market; the German market, which means that Prange has internationalisation ambitions. Internationalisation is the process by which enterprises both increase awareness of the direct and indirect influence of international transactions on their future, and establish and conduct transactions with other countries (Beamish, 1990; Coviello & McAuley, 1999). This is not exceptional, because since the rise of transportation and communication technologies, and other facilitating factors, more and more enterprises are pursuing opportunities in international markets, even SMEs (Oviatt & McDougall, 1994) such as Prange. The use of low-cost communication technology and transportation mean that the ability to discover and take advantage of business opportunities in multiple countries is not only the preserve of large enterprises; small enterprises may also compete successfully in the international arena. Even if the enterprise is a SME with limited international experience, it is able to go international and compete globally (Oviatt & McDougall, 1994; Boter & Holmquist, 1996; Gankema, Snuif & Zwart, 2000; Lu & Beamish, 2001; Kalinic & Forza, 2012; Knight & Liesch, 2016). Moreover, technology-based industries have become increasingly global and competitive in recent years, by which technology-based SMEs such as Prange are simultaneously involved with developing internationalisation capabilities to enable them to compete in what is a global industry (Onetti, Zucchella, Jones & McDougall-Covin, 2012). Competitive rivalry has especially escalated in technology-based industries, because technological innovation, the driver of technology-based industries, has been a significant driver of international competition. Another factor that preclude a domestic focus for technology-based enterprises is that the volume generated in domestic markets is no longer sufficient to support competitive levels of R&D spending in technology-based industries (Karagozoglu & Lindell, 1998). Therefore, for many SMEs, particularly those active in technology-based industries, it is no longer possible to act in the market without considering the risks and opportunities of internationalisation (Ruzzier, Hisrich & Antoncic, 2006). More than that, Karagozoglu and Lindell (1998) stated that international orientation is even crucial to their long-term survival and growth of small and medium-sized technology-based enterprises.

However, according to the academic literature, in order to internationalise, it is important to see whether an enterprise's domestic strategy is appropriate for the foreign market in which the enterprise wants to compete (McDougall & Oviatt, 1996). Therefore, when internationalising, enterprises have to revise their strategy, because internationalisation does not appear to be a simple matter of applying established strategies developed for a domestic arena. More than that, when an enterprise decides to internationalise its activities, its focus is on business model innovation (Rask, 2014); internationalisation leads to globalized competition; not only in the value proposition of offerings in a domestic context, but also in the global sourcing and allocation of resources and activities, by which internationalisation influences an enterprise's business model. Therefore, enterprises need to design their business model according to the new industry (Onetti et al., 2012; Cortili & Menegotto, 2010). This is confirmed by Albaum, Duerr and Strandskov (2005), who stated that business models that are successful on the domestic market require adjustments to fit in an economic, political, legal, or cultural environment abroad. Thus, the domestic market's business model is often not a viable way to approach a new market (Mäkelä & Lehtonen, 2010).

Although business models need adjustments to fit in an environment abroad, Osterwalder did not consider the aspect of internationalisation in his business model ontology. Thus, in the times that the business model has been made, Osterwalder did not pay attention to the internationalisation aspect. As a result, a research gap exists in the academic literature. Consequently, for practitioners such as Prange, there are no guidelines of how to internationalise their business model. Nevertheless, a framework is needed in order to have better insights in how to internationalise their business model. In this study, such a framework for the internationalisation of the business model of Prange will be developed. In order to realise the framework, the model of Osterwalder will be used, integrated with academic literature for the internationalisation of technology-based small- and medium sized enterprises, since Prange is a technology-based SME. Consequently, the research method of the study is exclusively a systematic literature review, which will further be outlined in the method. The research question of the study is as follows;

"To what extent should Prange alter their business model in order to comply with their internationalisation ambitions?"

In this framework, all aspects of the internationalisation literature of technology-based SMEs, which are relevant for Prange, will be discussed. To my knowledge, there is no similar coherent framework to internationalise the business model, even though internationalisation requires business model innovation (Albaum et al., 2005; Mäkelä & Lehtonen, 2010; Cortili & Menegotto, 2010; Onetti et al., 2012; Rask, 2014). The noticed lack of the business model literature is acknowledge by Onetti, Zucchella, Jones and McDougall-Covin (2012) once more, who stated that the primary weakness of the business model literature is its failure to accommodate internationalisation. The other way around; Cortili and Menegotto (2010) identify a lack of knowledge, since there is no business model perspective in the academic literature of international entrepreneurship. Therefore, the international perspective on business model innovation is rare in the academic literature, but a common phenomenon in business, which emphasises the relevance of this study (Rask, 2014).

The research goal of this study is to provide the academic field with a systematic literature review to integrate the business model of Osterwalder with the internationalisation literature of technology-based SMEs, to provide Prange with a framework to comply their business model with their internationalisation ambitions and to set directions for future research.

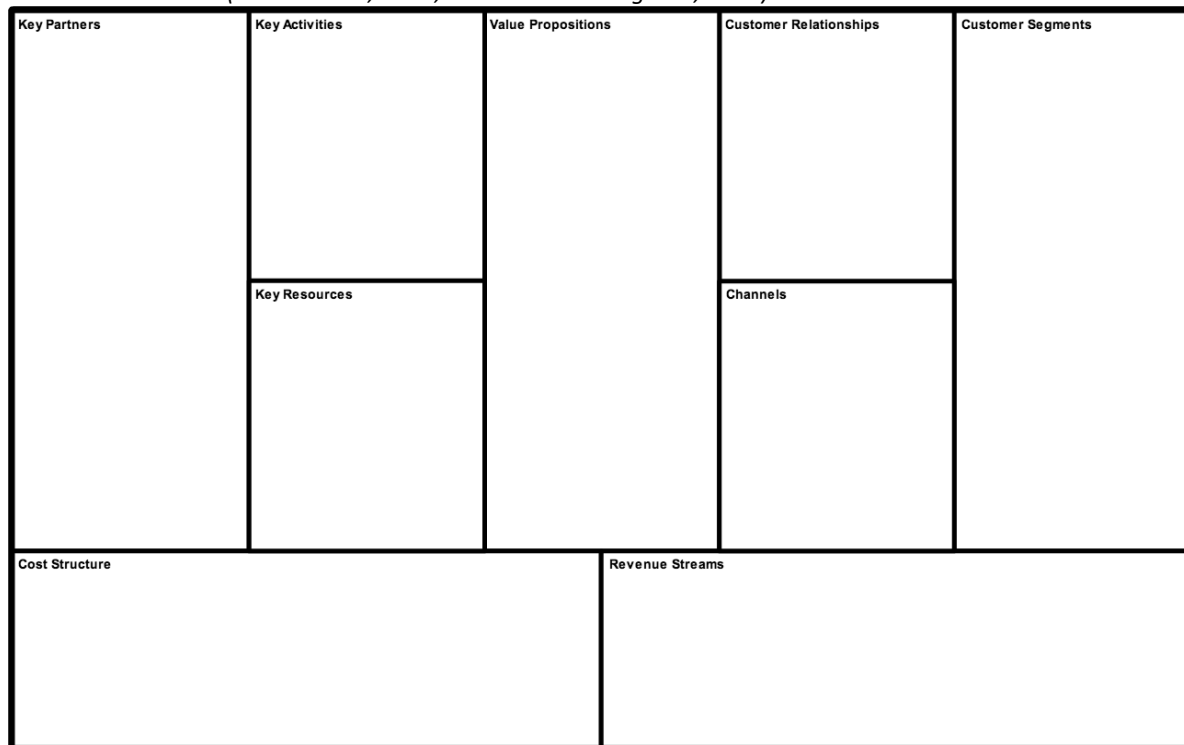
Subsequently, the theoretical background will be outlined, in which all concepts of the study will be defined and in which the choices for certain decisions will be justified. Next, the method to systematic review the existing literature will be specified. These two sections are both part of the introduction, to enhance the readability of the study. This will be followed by the results of the systematic literature review. The study will be finished with an overall conclusion, including managerial implications, continued by a discussion, including limitations and future research directions.

1.2 Theoretical Background

In the theoretical background, the choice for the type of business model will be justified, because in the academic literature there are more business models than just the business model of Osterwalder (2004). Next, the internationalisation concept will be defined, including the internationalisation of small- and medium sized enterprises, after which relevant literature can be found and by which the study is delineated. To conclude the theoretical background, the internationalisation of the business model will be discussed.

The business model is used, because all enterprises, including Prange, either explicitly or implicitly employ a particular business model (Teece, 2010). Surprisingly, however, the business model is often studied without an explicit definition, because the definitions are fairly heterogeneous and none appears to be generally accepted (George & Bock, 2011; Onetti et al., 2012). Moreover, existing definitions only partially overlap, giving rise to a multitude of possible interpretations. The business model concept became prevalent with the advent of the internet in the mid-1990s and it has been gathering momentum since then (Zott et al., 2011). Given that the interest in the concept has emerged only recently, it is not surprising that the academic literature is currently characterized by a lack of clarity about the meaning of the concept. Definitional and conceptual disagreement is to be expected during the emergent phase of any new big idea of general usefulness (Gladwin, Kennelly & Krause, 1995; Zott et al., 2011).

Nevertheless, a business model will be chosen to be able to integrate the business model literature with the internationalisation literature of technology-based SMEs. This is in line with the recommendation of Zott, Amit and Massa (2011) who stated that scholars need to articulate and define precisely which business model concept they propose to use as a basis of study. In this study, the business model of Osterwalder (2004) and their follow-up study (Osterwalder & Pigneur, 2013) are used, because of both academic and practical reasons. First of all, because Prange makes use of the business model of Osterwalder. Next, since the research goal of this study is to provide the academic field with a systematic literature review to integrate the business model literature with the internationalisation literature of technology-based SMEs, the study needs a well-known and well-established business model. In that way, it is easier to compare the study with other academic articles and it is easier to set directions for future research. Furthermore, Mäkelä and Lehtonen (2010) and Rask (2014), who link internationalisation to business model innovation, used the business model of Osterwalder. Moreover, in the business model literature review of Zarei, Nasseri and Tajeddin (2011); they compared the most established business models and they reveal clear advantages and compatibility of the business model of Osterwalder. According to them; the business model is comprehensive, the presentation is simple so that it can make the business model understandable for even nontechnical people such as managers and entrepreneurs and it can be presented in different levels of details. Apparently, the authors who link internationalisation to business model innovation use most of all the business model of Osterwalder, which indicates the academic value. To see whether the academic value of the business model of Osterwalder is significant, all business models are summarized in appendix A, including the number of citations. To select all the business models, the broad and multifaceted review of Zott, Amit and Massa (2011) is used, complemented with the mentioned business models in the reviewed articles. In the oversight of the business models, it is clear that Osterwalder and Osterwalder and Pigneur (2013) have the most influence academically, with respectively 1634 and 3172 citations. More than that, it is a handbook for practitioners, by which it fits perfectly with the approach of this study. Furthermore, the significant influence of the business model is also supported by Rask (2014), who indicates that the business model of Osterwalder is a well-known business model. Confirmed by Eppler, Hoffmann and Bresciani (2011); the business model of Osterwalder is a prominent example that is often used in business. To conclude, the business model of Osterwalder (2004) and the follow-up handbook of Osterwalder and Pigneur (2013) will be used in this study (*figure 1*), because it is a prominent business model for practitioners and it has the most influence academically.

Figure 1*The Business Model (Osterwalder, 2004; Osterwalder & Pigneur, 2013)*

The aim of the business model is creating an explicit, formal and shared conceptualisation of enterprises. Osterwalder and Pigneur (2013) believe that a business model can best be described through nine basic building blocks that show the logic of how an enterprise intends to make money. The nine blocks cover the four main areas of an enterprise: infrastructure management, product, customer interface and finance. In other words; elements that create the value proposition, the value proposition itself, elements that deliver the value proposition to the customer and the underlying financial blocks.

- Infrastructure Management – Key Partners, Key Activities, Key Resources
- Product - Value Proposition
- Customer Interface – Customer Relationships, Channels, Customer Segment
- Finance – Cost Structure, Revenue Streams

The business model of Osterwalder a simple, relevant and intuitively understandable concept, while not oversimplifying the complexities of how enterprises function. The business model describes the rationale of how an enterprise creates, delivers and captures value, by which it allows managers to describe and think through the business model of their enterprise, their competitors or any other enterprise. It is like a blueprint for a strategy to be implemented through organisational structures, processes and systems. Hence, it allows managers to easily describe and manipulate their business models to create new strategic alternatives (Osterwalder & Pigneur, 2013).

The focus of the study is the integration of the business model of Osterwalder with the internationalisation literature of technology-based SMEs. Internationalisation is the process by which enterprises both increase awareness of the direct and indirect influence of international transactions on their future, and establish and conduct transactions with other countries (Beamish, 1990; Coviello & McAuley, 1999). A review of the internationalisation of smaller enterprises by Coviello and McAuley (1999) conclude that a variety of arguments are offered that provide rationale for interest in SMEs. These include the strong influence of the manager and the belief that their limited resources (managerial, financial, and informational) challenge SMEs (Coviello, Munro, 1997). To emphasise; smaller enterprises are not smaller versions of big enterprises. Smaller enterprises deal with unique size-related issues and they behave differently in their analysis of, and interaction with,

their environment. Thus, due to a different approach regarding internationalisation between SMEs and large enterprises, only the relevant SME internationalisation literature for technology-based enterprises will be reviewed.

When integrating the business model of Osterwalder and the internationalisation literature, there will be some external forces which affect more than one building block; even more than one element. The business model considers the need of activities performed outside its boundaries; by means of partners, suppliers or customers. However, external forces, which are inherent for every enterprise, are excluded. These external forces will all be identified in the systematic literature review, because these forces partly determine if the foreign market is an appropriate market to do business. An analysis of the macroeconomic environment is thus necessary to evaluate the viability to make business in the foreign country. Once the SME proves that the viability is positive, it can internationalise its business model. This is confirmed by Orr and Scott (2008), who stated that understanding the local institutional setting is of significant value when initiating operations in a foreign country. They stated that if the institutional environment is not properly investigated before operations are started; institutional exceptions will emerge; there will be problems stemming from cultural clashes, conflicting norms and regulations. Once operations have been started, it is very costly to fix these problems and it is likely that the costs from these problems cannot be recovered. Therefore, the systematic literature review will identify all relevant external forces which affects the operations of the enterprise abroad.

Furthermore, designing a business model also involves figuring out the entry mode decision. This is rather more a strategic issue than a business model issue (Teece, 2010). Besides that, it influences multiple building blocks, by which the entry mode decision will also be discussed before the internationalisation of the building blocks. Afterwards, the framework can be built to integrate the business model and internationalisation literature.

1.3 Method

The research method is a systematic literature review. The articles that will be used are the articles across academic top journals relevant to the field, from 1989 to 2015. The scope of the review is from 1989, because in 1989 the first article appeared which differentiated between domestic and international entrepreneurship, written by McDougall. Jones, Coviello and Tang (2011) executed a domain ontology and thematic analysis in International Entrepreneurship research. They confirmed that the foundation of International Entrepreneurship is in 1989. The articles selected originate from top journals, to delineate the field and in order to guarantee the quality of the articles used.

The result of the selected articles will be presented in a thematic map; in which the business model domain and the internationalisation domain are presented. The articles of both domains will be categorised according to the journals in which they are published and by which insight is provided in the most frequently used journals. The extensive methodological procedures for search, selection and exclusion are outlined in appendix B.

In the analysis of the articles, the focus will first be on the abstract/executive summary, discussion and conclusion of the articles. Afterwards, if the data is still vague, incomprehensible or incomplete, other parts of the article may then also be read. All data will be processed and classified by the use of open coding, axial coding and selective coding. The presentation of the results will be done by integrating the academic literature about the internationalisation of technology-based SMEs and the business model of Osterwalder. The subjects that will be discussed are chosen in the perspective of Prange. Besides that, there is a possibility that one or more building blocks contain barely any information, if the internationalisation theories do not elaborate on these blocks.

1.4 Relevance

The study is academic relevant, because it provides the academic field with a framework to integrate the business model of Osterwalder with the internationalisation literature of technology-based SMEs, by means of a systematic literature review. On top of that, the study sets directions for future research.

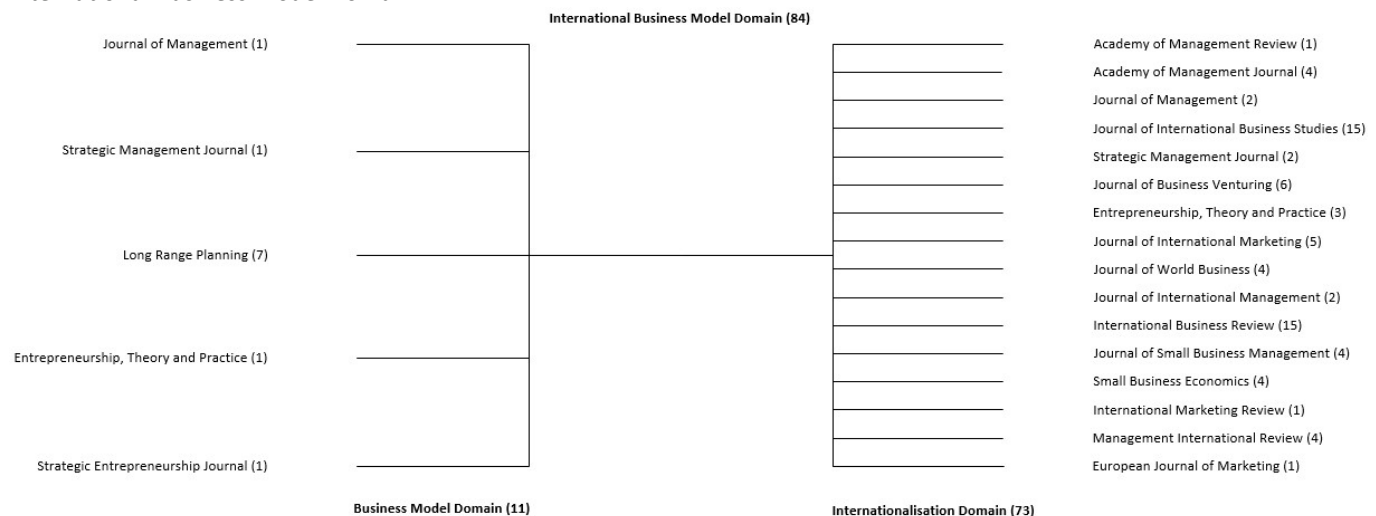
The study is practical relevant, because it provides Prange with a framework to comply their business model with their internationalisation ambitions, by means of recommendations derived from the academic literature. Prange has to use this framework to prepare for their internationalisation ambitions, because if Prange pays attention to the developed framework including recommendations, it will have a significant effect on their international performance in the future.

2. Results

At first, 109 articles were selected. However, after the final methodological selection and exclusion, the method resulted in 84 articles, originated from 18 top journals, which are relevant for this study. The international business model domain is represented below (*figure 2*). The difference between the amount of articles of the business model domain and internationalisation domain can be declared by the fact that the business model literature has emerged only recently; the oldest selected article originates from 2007, whereas the scope of the internationalisation literature is from 1989.

Figure 2

International Business Model Domain



The internationalisation literature highlights the importance of preparation in advance of internationalisation, the identification of external forces and the entry mode decision, prior to the internationalisation of the business model of Prange. Therefore, the results are divided in four parts. An overview of the articles which contribute to each part is presented in appendix C.

2.1 Internationalisation Preparation

The systematic literature review reveals that an enterprise's preparation in advance of entering a foreign market is of major importance. SMEs that prepare in advance to enter foreign markets tend to enjoy better performance (Liesch & Knight, 1999; Knight, 2001; Andersson, 2004). Internationalisation preparation entails the conducting of market research to gain knowledge about the foreign market, which means that enterprises have to invest in the preparation. Fortunately, it is

easier today to read about and understand the nature of opportunities that lie in foreign markets. Yet it is easier to understand the role of national cultures, history and geography (Oviatt & McDougall, 1994; Zahra, 2005). The study of Kalinic and Forza (2012) shows that it is necessary to research the organisational consequences of the internationalisation process, because it warns that internationalisation has consequences that last for some time for SMEs. This is complemented by Casadesus-Masanell and Ricart (2010), who stated that for every modification in the business model, the designer needs to assess the effects that it will have. While international market research seldom guarantees correct decisions, it usually improves the enterprise's chances for success by a substantial degree. In foreign markets, blunders most often result from inadequate knowledge and are almost always more expensive than the research that would have prevented their occurrence (Knight, 2001). Thus, internationalisation preparation will have significant effect on the success of Prange in the German market, according to the reviewed academic literature. Therefore, Prange has to invest time to acquire the necessary market knowledge of the German market, by taken advantage of the access to market knowledge.

However, according to the study of Andersson (2004); the importance of market research and analysis depend on the type of market an enterprise wants to enter. In the early stages in a growing industry, the changes are so rapid that collected information can become quickly outdated, by which it is very hard to analyse the enterprise's environment. In that case, strategic decisions should mainly be based on the enterprise's internal strengths and resources. In the early stages in mature industries, market research is useful, because enterprises are more dependent on their environment for strategic decisions. In that case, the market research and analysis must be carried out by their own enterprise and it must be seen as a way to learn about the foreign market. Thus, Prange must be aware that information can become quickly outdated. However, general knowledge about the German market and environment will not be outdated quickly. Nevertheless, it is an interesting pitfall from the academic literature to keep in mind.

Other authors in the existing literature place the importance of internationalisation preparation more in perspective. An implication for SMEs is that the process of internationalisation is less likely to be pre-conceived and planned in detail. Hence, preparations does not mean that an extensive planned strategy must be formulated (Eriksson, Johanson, Majkgard & Sharma, 1997; Chetty & Campbell-Hunt, 2003). Moreover, the findings of the study of Crick and Spence (2005) clarify that a majority of the enterprises faced serendipitous encounters, which were important either initially and/or in later times after they had internationalised. The findings indicate that managers must not undertake a planning in a formal sense, but rather could react to changing circumstances by having a notional idea of where they want to take their enterprise. Therefore, a clear vision of where a manager want to take their enterprise is the most important. Furthermore, internationalisation is also a learning process according to the academic literature. Due to the limited resources, SME internationalisation is more likely to be experienced as a process in which learning is mixed with evolving experience (Eriksson et al., 1997; Autio, Sapienza & Almeida, 2000; McDougall & Oviatt, 2000; Chetty & Campbell-Hunt, 2003; Johanson & Vahlne, 2009). As enterprises learn, they develop new vocabulary and increase their comprehension of their internal processes that allow them to reconfigure their business models. Repeated and intense situational uncertainty, as caused by internationalisation, quickened this learning process and expedited the adaptation to market environments (Autio, George & Alexy, 2011). Hence, success and failure teaches an enterprise what course of action is suitable in a specific international setting (Eriksson et al., 1997), by which the learning aspect also preclude an extensive planning.

Briefly, internationalisation preparation is an important task to acknowledge. However, an outlined and detailed planning is not suitable for an internationalisation process, but a clear vision is essential for Prange to manage the internationalisation process. Next to that, Prange should embrace the learning aspect and should consider adjustments and restructurings on their path to internationalisation.

2.2 External Forces

The external forces, which are inherent for every enterprise, partly determine if the foreign market is an appropriate market to do business. According to the academic literature; managers and policy-makers should recognise the dynamics of environmental conditions and enterprises must study the environment in which they are operating (Boter & Holmquist, 1996; Buckley, 1997; Dimitratos, Lioukas & Carter, 2004; Crick & Spence, 2005; Rialp, Rialp & Knight, 2005). When doing so, the proposed advantages of internationalisation for SMEs needs to be set against their vulnerability to change in technological, political, institutional and competitive conditions (Buckley, 1997). Therefore, an analysis of the macroeconomic environment is necessary to evaluate the viability to make business in a foreign market. In the reviewed academic literature, different external forces are discussed which influence the viability of the internationalisation process of Prange.

The work of McDougall and Oviatt (2000) underscores the importance of considering cultural differences. This is in line with Coviello and McAuley (1999, p. 245) who emphasise the need for cultural differences instead of the focus on different countries;

“Although context-specific information is important, our understanding of small firm internationalisation may be overly country-specific. This perspective may be explained by the assumption that each country has a unique cultural context, yet given the nature of internationalisation as a subject, this view seems rather narrow”.

More than that, the paper of Andersson (2004) shows that it is important that the analysis of cultural differences is carried out at industry level, as cultural differences vary between industries. Nevertheless, learning about cultures is a challenging process that might require years of thoughtful study and first-hand interaction with those cultures. Understanding how history and geography are combined to shape the evolution of industries and norms of competition is equally difficult and time-consuming. Building relationships and gaining access to existing networks can help to shorten and expedite the learning process. Hiring locals is another way of gaining access to tacit knowledge about cultural norms (Oviatt & McDougall, 1994; Zahra, 2005). Next to the cultural differences, the language barriers must be taken into account, because Eriksson, Johanson, Majkgard and Sharma (1997) showed that it is a problem in the internationalisation process of enterprises.

There is a difference between international and domestic enterprises in the perceived restrictiveness of governmental policies. The international enterprises perceived a statistically significant higher degree of restrictiveness due to government regulation (McDougall, 1989). Moreover, according to Oviatt and McDougall (1994), enterprises conducting transactions in a foreign country has certain disadvantages vis-a-vis indigenous enterprises, such as governmentally instituted barriers to trade and an incomplete understanding of laws. If the legal barriers to enter are tended to be high, SMEs report lower performance than SMEs entering markets where the perceived legal restrictions are low (Brouthers & Nakos, 2004). However, collaboration between governments can also be advantageous for the internationalisation process. For example, in free trade zones (e.g. European Union); more steps are being taken to unite the countries, both economically and politically. This transition changes the national and international business environment. Due to this, it has become easier to broaden the enterprise's activities internationally (Gankema et al., 2000). Moreover, trading blocks offer the availability of specialized spatial clusters, often facilitated by governments, which may be interesting for technology-based SMEs such as Prange (Malhotra, Agarwal & Ulgado, 2003).

According to the academic literature, the type of industry plays an important role. The evidence of Buckley (1997) describes that SMEs such as Prange will not, in aggregate, be the major suppliers and transferors of technology in the world economy, but they can fill crucial niche roles. The success of these niche roles will be partly determined by the key relationship between enterprise size and industry size. First, SMEs may be operating in industries where efficient scale is reached at a small volume of output relative to the total demand for the product; when the industry can

accommodate a large number of SMEs. Second, there are industries where efficient scale is reached only at a large volume of production, but demand still remains unsatisfied, by which SMEs can fill this unsatisfied demand. Third, SMEs can operate alongside large enterprises where there are not huge cost penalties in operating below efficient scale. In that case, SMEs may use different production modes, such as specialising in made-to-order, custom build or small batch production. Thus, the overall market size and the potential role for SMEs must be evaluated before internationalising to the industry in question.

The role of the SMEs will vary over the life cycle of an industry. In the early stages of an industry, numbers of SMEs will vie for position (Buckley, 1997). In these growing industries, it is hard to learn about the market, since the industry is new and volatile. Market choice in the early international stages is therefore a consequence of the enterprise's internal resources. In mature industries, the rate of change is slower than in growing industries. In the early stages of the internationalisation in a mature industry, theories built on learning may be useful. Thus, enterprises in an early stage of internationalisation in a mature industry can succeed by means of a slow, incremental internationalisation strategy (Buckley, 1997; Andersson, 2004; Prange & Verdier, 2011). Hence, the life cycle of an industry is also of influence on the success of the internationalisation process of SMEs, which must be taken into account by Prange.

In the industry, the location matters for internationalisation, especially in terms of clustering. Industry clustering within a geographic region can provide the resources that are useful for internationalisation process of a SMEs. However, SMEs need to be mindful of the extent to which industry clustering is occurring in the region. As industry clustering saturates, SMEs which want to target a certain foreign market may well be advised to locate in less concentrated regions, if they hope to access the resources that will enable them to succeed in internationalisation (Fernhaber, Gilbert & McDougall, 2008). Therefore, the concentration of industry clustering is relevant for the decision of the location abroad for technology-based SMEs such as Prange.

Obviously, the intensity of international competition is one of the most important variables (McDougall, 1989; McDougall & Oviatt, 1996). Whereas domestic operating enterprises characterized competition as being relatively intense, the international enterprises compete in industries with higher levels of international competition. Moreover, when competing to other enterprises; local enterprises nearly always enjoy certain advantages over their foreign competitors, such as greater knowledge of the culture and a superior network of local business partners (McDougall & Oviatt, 1996). Therefore, for Prange, it is crucial to consider the competition in the foreign market, because it can be a huge threat.

Next to the dependence of the environment abroad, an enterprise is also dependent on the reputation of their domestic environment. The study of Hadjikhani (1997) proved that actions of other actors in their domestic environment are of influence on the enterprise's internationalisation process. In their study on Swedish enterprises, the government was important for the reputation of Swedish enterprises (e.g. the Swedish government taking sides in the war, Sweden being famous for its neutral foreign policy) and also the overall reputation of Swedish enterprises was important (Swedish enterprises generally being known for their good quality). In their case study, enterprises were trusted, because they originated from Sweden. The conclusion is that these intangible commitments of the environment may help or impede an enterprise's internationalisation process in a specific country. Therefore, the reputation of Prange's domestic environment in the foreign market must be considered before internationalising to that foreign market.

To conclude, in order to assess the foreign environment, managers must not only focus on traditional measures of political risk or cultural similarity. Understanding the role that institutions play, both the more visible regulatory and legal institutional processes as well as the less prominent socio-cultural mechanisms, is essential for enterprises. Thus, managers must be aware of all the mechanisms that lead to particular outcomes in foreign environments. Additionally, they would be able to develop strategies to influence specific mechanisms and processes to obtain desired outcomes, by which they are able to shape that environment as well. Such a result would obviously lead to higher rates of success for enterprises (Szyliowicz & Galvin, 2010). Nevertheless, as a

technology-based SME, you need to be responsive to change. Jones & Coviello (2005, p. 297) emphasise the importance of adaptability to a foreign market;

"It is likely that firms with more boundary permeability will internationalise more rapidly and more successfully than those with boundaries that are relatively less permeable, that is, firms that are less responsive to change".

Therefore, it is necessary to study the environment for Prange, including all discussed aspects, to see whether the opportunities are of significant more value than the assessed threats. Afterwards, it remains important to be responsive for change and to reconfigure the business model if required.

2.3 Entry Mode Decision

The third important aspect that is highlighted by the internationalisation literature is the entry mode decision. This is rather more a strategic issue than a business model issue (Teece, 2010). More than that, the decision for an entry mode is not a trivial activity; it is a profound strategic decision and has long-term implications. Thus, the entry mode decision is important to the overall success of the internationalisation of SMEs (Burgel & Murray, 2000; Lu & Beamish, 2001). Internationalisation can occur through various modes of entry, each requiring potentially different competencies and changes in strategy (McDougall & Oviatt, 1996; Calof & Beamish, 1995). From the perspective of Prange, the different types of entry mode and the corresponding advantages and disadvantages will be discussed below.

In general, enterprises may seek to internalise activities during internationalisation, in form of foreign direct investment or an export mode (Coviello & McAuley, 1999). In an ideal world, it is likely that any enterprise would prefer to be in charge of its destiny and would therefore choose for foreign direct investment or an export mode, because they want to retain control over their valuable assets and skills, especially enterprises which have the ability to develop differentiated products (Agarwal & Ramaswami, 1992). Another type of enterprise that prefer these modes are enterprises that sell a highly customized products, which prefer close contact to the customer and thus must commit appropriate resources to their presales and after-sales service strategy (Burgel & Murray, 2000).

However, the results of Jones (1999) and Burgel and Murray (2000) reveal that expansion through an export mod should not necessarily be the sole prescribed mode for small high-technology enterprises; exporting is only preferred when no involvement with the customer is required and when risks of foreign direct investment are high (Agarwal & Ramaswami, 1992). It is necessarily a trade-off between the resources available and the support requirements of the customer (Burgel & Murray, 2000). Moreover, study of Westhead, Wright and Ucbasaran (2001) argue that enterprises with more resources and experience, denser information and contact networks, and considerable management know-how are significantly more likely to be exporters. Consequently, due to the likeliness of the poverty of these resources and capabilities, exporting is not made for most SMEs.

Furthermore, Lu and Beamish (2001) provide strong support for the argument that foreign direct investment is potentially a more competitive way than exporting, unless foreign direct investment into international markets may entail high costs to SMEs. The implication is that SMEs should not curtail internationalisation activities at the export stage, nor be deterred by the potentially high costs in initialising foreign direct investment, but explore opportunities to make foreign direct investments so as to benefit from the value associated with such investments. When enterprises first begin foreign direct investment activity, profitability declines, but greater levels of foreign direct investment are associated with higher performance (Lu & Beamish, 2001). This is complemented by the findings of Zahra, Ireland and Hitt (2000) who argue that foreign direct investment provides greater opportunities for learning because of the intensity of involvement in the new markets. However, obviously, there are more costs; both financial and managerial, related to foreign direct investment than other entry modes. Thus, foreign direct investment is likely to have

greater longer-term effects on SME internationalisation, but the initial investment and the corresponding risks may be too high for SMEs. Although the potential, foreign direct investment is thus usually outside the reach of SMEs (Agarwal & Ramaswami, 1992; Burgel & Murray, 2000; Hollenstein, 2005). It is likely that the proportion of resources committed to a foreign direct investment will be greater than for a large enterprises; failure is thus more costly (Agarwal & Ramaswami, 1992; Buckley, 1997). The role of risk and uncertainty is thus an important aspect in the internationalisation process of SMEs. The size matters up to a certain threshold; the boundary for foreign direct investment is according to the study of Hollenstein (2005) 200 employees. Another reason for SMEs to enter without foreign direct investment is when environmental uncertainties were perceived to be high, then they tended to prefer non-equity modes of entry, presumably to reduce risks (Brouthers & Nakos, 2004). Consequently, SMEs serve foreign markets with a minimal use of internalisation and a greater use of alternative entry modes (Oviatt & McDougall, 1994; Hollenstein, 2005). Due to the fact that the resources available to smaller enterprises are limited, the chance that the enterprises take advantage of other entry modes than export and foreign investments increases (Agarwal & Ramaswami, 1992; McDougall, Shane & Oviatt, 1994; Shrader, 2001).

One type of alternative entry mode than internalisation is the use of a distributor. It appears that in getting a new, technologically advanced product into the market, SMEs with a limited record of achievement should seriously consider distributors instead of exporting, because of the "liability of newness" and "liability of alienness", by which exporting is not appropriate due to a lack of experience and trust of customers. However, for a distributor, an enterprise is only one of several clients. In addition, the SMEs bargaining power may be small in comparison with bigger, higher-volume, and longer committed clients of the distributor. As a result, a situation with high risk and potential conflict emerges (Burgel & Murray, 2000). For technology-based SMEs such as Prange, this means that it must evaluate their liability of newness/alienness and the corresponding risks.

Another entry mode alliances; enterprise create alliances to optimize their business models, reduce risk, or acquire resources (Osterwalder & Pigneur, 2013). Smaller enterprises have a higher propensity for an entry through alliances in high potential markets. These enterprises are interested in expanding into high potential markets, but do not have the requisite resources and experiences to do so by themselves (Agarwal & Ramaswami, 1992). Alliances with partners with local knowledge can be an effective strategy to overcome the deficiencies in resources and capabilities, such as local market knowledge (McDougall, 1989; Lu & Beamish, 2001; Kirby & Kaiser, 2003; Freeman, Edwards & Shroder, 2006). Thus, alliances are an entry mode to gain access to resources embedded in other organisations and is particularly favoured in situations when foreign direct investments is too expensive, when national governments are attempting to restrict foreign ownership (Calof & Beamish, 1995) or where local expertise and connections are seen to be important in facilitating the entry mode. The sharing of costs and risks enables such enterprises to reduce the long-term uncertainty more efficiently (Agarwal & Ramaswami, 1992).

Although these advantages, there is no direct relationship between alliances and performance. Moreover, alliances are not without disadvantages or risks for SMEs (Zahra et al., 2000; Shrader, 2001). First of all, national culture directly and indirectly influences alliances. It is thus important to consider cultural differences in alliances (McDougall & Oviatt, 2000). Besides that, many enterprises experience problems in terms of a lack of coherence in their alliance, which creates risks. In terms of commitment, exploiting the potential of such an extended resource base requires that the enterprise's own resources must be coordinated by its partners and vice versa (Johanson & Vahlne, 2009). Next to that, an investor which provides financial resources may also be a huge risk; this relationship between the investor and the manager of the SME can be challenging. Investors might encourage managers of SMEs to take bolder steps in building an international presence (George, Wiklund & Zahra, 2005), by which investors are a risk for the survival of SMEs. Furthermore, for technology-based SMEs, alliances in combination with R&D intensity is strongly negatively related to performance (Shrader, 2001). Although R&D intensity is positively associated with performance in foreign markets. This provided evidence of an internalisation advantage for transferring technological

advantages. Technological advantages are difficult and costly to transfer to external partners, by which enterprises that invest heavily in technology should avoid using alliances.

The implication for technology-based SMEs such as Prange is that collaboration is optimal only under the right circumstances (Shrader, 2001). Although many enterprises experience problems in terms of a lack of coherence, SMEs can manage these particular issues. The managers can share risk through strong partnerships, by which the partners are sheltered (Freeman et al., 2006). It is argued that the key to success appears to be the choice of the partner. Hence, managers should actively develop their network relationships. If an enterprise only passively follows its networks to foreign markets, it might lose such entry mode opportunities (Ojala, 2009). If suitable partners can be identified, there appears to be little reason why small and medium sized enterprises cannot create alliances as a means of entering international market (Kirby & Kaiser, 2003).

To conclude, a lot of factors influence the entry mode decision of technology-based SMEs, such as Prange, according to the reviewed academic literature. As a start, Prange should assess their assumptions and attitudes about various foreign markets and the effectiveness of different entry modes. The accuracy of these attitudes should then be investigated and corrective action taken if faulty attitudes are identified. Analysis can be done by travelling to the foreign market, talk with customers or suppliers from the foreign market, read articles or reports on the foreign market, and talking to international business experts, competitors, suppliers and government trade officials. Through this experience, uncertainty about the foreign market is reduced. The experience may lead to either an increase or decrease in the perception of entry mode potentials (Calof & Beamish, 1995). After discussing the entry mode decision of technology-based SMEs, the integration of the business model of Osterwalder and the internationalisation literature will be executed in the fourth section of the results.

2.4 Business Model Internationalisation

The systematic literature review integrates the internationalisation literature with the nine building blocks of Osterwalder's business model. The subjects that will be discussed, which derive from the academic internationalisation literature for technology-based SMEs, are chosen in the perspective of Prange. In appendix C, all articles which contribute to the internationalisation of each building block are presented. The contribution for Prange is that recommendations are given in every building block, derived from the reviewed academic literature.

Infrastructure Management

The first element is the infrastructure management that consist out of the building blocks that create the value proposition for the customer. The element consists out of three building blocks; key partners, key activities and the key resources of an enterprise. In these building blocks, different subjects will be discussed, which derive from the academic literature.

In the reviewed academic literature, the difference of the internationalisation process between SMEs and large enterprises is discussed. The difference is of influence on all the building blocks of the infrastructure management. The difference is that their limited resources (managerial, financial, information) challenge SMEs (Coviello & Munro, 1997; Karagozoglu & Lindell, 1998; Coviello & McAuley, 1999). Moreover, smaller enterprises differ from larger enterprises in terms of their managerial style, independence, ownership and scale/scope of operations. SMEs have also been found to have different managerial processes, with structures that are less rigid, sophisticated and complex than those in larger enterprises (Coviello & McAuley, 1999). Furthermore, technology-based SMEs, in particular, face additional challenges due to their accelerated time-to-market and product differentiation imperatives. Next to these general challenges for technology-based SMEs, the history and the internal situation of the enterprise also strongly influence the internationalisation (Boter & Holmquist, 1996), because when an enterprise wants to internationalise, it risks weak performance due to path dependence on purely domestic activities (McDougall & Oviatt, 1996). Consequently, the

internationalisation process is also enterprise-specific, by which Prange needs to critically assess itself.

Therefore, the internationalisation of technology-based SMEs such as Prange is tremendous (Jones, 1999) and encompasses decisions relating to all the building blocks of the infrastructure management. Subsequently, the three building blocks will be discussed, in which the internationalisation of every building block is discussed more extensive.

2.4.1 Partners

“The key partnership building block describes the network of suppliers and partners that make the business model work” (Osterwalder & Pigneur, 2013, p. 33).

In the reviewed academic literature, different aspects of the internationalisation of technology-based SMEs are discussed, which are relevant this building block. The study of Chetty and Holm (2000) shows how an enterprise's internationalisation is influenced by the actors in its network. In order to extend their internationalisation process, each enterprise builds and maintains relationships with its suppliers, customers, distributors, competitors and government organisations, which emphasise the relevance of partners in the internationalisation process.

In terms of the entry mode decision, by means of an alliance; a partner can provide SMEs of the necessary resources and capabilities, such as local market knowledge, experience, expertise and financial resources. Besides that, with a partner; risks, uncertainties and costs can be shared and thus reduced. Although these advantages, the implication for managers is that collaboration is only optimal under the right circumstances (Shrader, 2001). A possible limitation of partnerships is that managers of SMEs face a threat of opportunism from their partners that could lead to failure. Hence, it is argued that the key to success appears to be the choice of the partner (Kirby & Kaiser, 2003). If managers of SMEs rely on members of their close personal networks as partners, they can often avoid these problems of opportunism (McDougall et al., 1994). Otherwise, potential partners often require assistance in locating and selecting each other.

Suppliers are also important partners of enterprises. According to Buckley (1997), the barriers for internationalisation in terms of supply are greater for SMEs than for larger enterprises, because the risk of poor local supplies threatens SMEs. Besides that, according to Hadjikhani (1997), former suppliers are less risky than prospective suppliers, which indicates that long-term partnerships with suppliers reduce risk. Confirmed by Karagozoglu and Lindell (1998); long-term relationships with suppliers is a major need for technology-based SMEs. Every project increases trust between SMEs and suppliers (Hadjikhani, 1997). Hence, the internationalisation process manifests itself by successive increases in the number and value of projects. Trust building is a costly and time-consuming process (Johanson & Vahlne, 2009), by which commitment to all kind of partnerships is essential for a long-term relationship. Briefly, the suppliers are assumed to be important partners for technology-based SMEs, by which it is important to prefer long-term relationships in order to reduce risk. On top of that, solid relationships with its suppliers, if sustained, improve an enterprise's foreign performance (Armario, Ruiz & Armario, 2008).

Furthermore, mediated relationships can be a valuable resource for SMEs that do not have a formal or informal network relationship available to facilitate their internationalisation process. SMEs can, for example, benefit from the knowledge of consulting enterprises when entering new markets and can use their connections for further networking in the target country (Ojala, 2009). Hence, these consulting organisations can be of huge value for technology-based SMEs, which managers must take into account when internationalising.

To conclude, partners can be of significant value for Prange. Different types of partners are featured, which all can have a positive contribution to the internationalisation process of Prange. For possible partners in the entry mode decision, the identification of an appropriate partner is most important. Next to that, long-term relationships with suppliers must be preferred in order to build trust and decrease risk. Finally, Prange can make use of consulting enterprises to benefit from their connections and local knowledge.

2.4.2 Key Activities

"The key activities building block describes the most important things a company must do to make its business model work" (Osterwalder & Pigneur, 2013, p. 31).

The internationalisation of technology-based SMEs has also influence on the activities of these enterprises. Although a lot of activities are enterprise-specific, some general subjects are discussed in the academic literature, which are relevant for the internationalisation of Prange.

The first subject is the adaptability of the activities of SMEs to their new circumstances. According to Knight (2000), SMEs need to modify their activities, such as marketing- and other activities. Complemented by Chetty and Campbell-Hunt (2003), who stated that enterprises need to adopt marketing, R&D and manufacturing activities to be coherent with the rest of the enterprise. Hence, SMEs that respond to the new market by appropriately adapting their marketing, manufacturing and other activities they employ, are likely to perform better than enterprises that do not (Knight, 2000). To do so, a narrow product scope is preferred, because it is relatively easy to deconstruct business activities in research and development, production and marketing. In that way, it is easier to find an effective way of organizing and executing these functions on an international basis (Boter & Holmquist, 1996). A narrow product scope is even an explanation of the global view of innovative enterprises, by which it is recommended for Prange.

The academic literature emphasises the importance of marketing. Marketing capability is the result of an integrative process, designed to apply the collective knowledge, skills and resources of the enterprise to the market-related needs of the enterprise. Distinctive marketing capabilities allow enterprises to effectively and rapidly access and penetrate markets with their innovative products (Weerawardena, Mort, Liesch & Knight, 2007). Moreover, marketing capability provides the ability to position products in predominantly niche markets (Madsen & Servais, 1997) and conform the product to the needs of the market. Above all, carefully executed marketing allows enterprises to respond to the market in ways that may provide a competitive advantage (Knight, 2001). Therefore, the marketing capability of Prange is an important activity in their internationalisation process.

Although the importance of marketing, according to the study of Qian and Li (2003); for technology-based SMEs, activities to create market awareness are not meaningful, because they found no significant correlation between market awareness and profitability. This implies that Prange should not spend much in advertising. They also offered three possible explanations. First, there exists a low-level cost effectiveness threshold in high-tech industries. Over this threshold, advertising may not be effective in creating market awareness. Second, market awareness in high-tech industries may not necessarily lead to customers' conviction and their purchase action. Customers do not fully trust advertising, they would rather draw on their own or their friends' experience with the products. Third, substantial advertising expenditures to create market awareness may erode technology-based SMEs' competitive advantages as these expenditures possibly weaken the necessary investments in R&D. Therefore, traditional ways to create marketing awareness by advertising is not useful for Prange, according to the academic literature.

Furthermore, international competition requires more efficient and effective management of the R&D process (Karagozoglu & Lindell, 1998). Knight (2000) emphasises the importance of acquiring technology, because SMEs are strongly affected by globalisation and can respond to globalisation by acquiring technology. Technology acquisition through R&D allow enterprises to develop innovative products and services, thereby staying abreast of market demands and competitive threats. Moreover, R&D is critical to the pursuit of the foreign market, because it facilitates greater understanding of buyers and the adaptation of products, which best suit to local needs (Knight, 2001). Thus, while R&D may be costly and can, at least in the short term, decrease the profitability, it is nonetheless indispensable to the extent it allows enterprises to address the specific needs of the foreign market. In contrast to the costs of R&D, technology acquisition can also promote, through the improvement of manufacturing processes, lower costs and enhance productivity. Innovation through R&D is not only a driver of early internationalisation, but also an

important factor for survival in the international environment. SMEs with a R&D focus may exhibit a particular capability that better positions them to counter liabilities of newness and smallness, by which they survive in international markets (Lee, Kelley, Lee & Lee, 2012; Sui & Baum, 2014). Briefly, innovation arising from acquired technology is a key source of competitive advantage, particularly in turbulent environments, that can enable Prange to market new or improved goods faster than their competitors (Knight, 2000).

Next to the acquisition of technology, the importance of technological learning is also mentioned in the reviewed academic literature, because learning enables an enterprise to develop new knowledge. One means by which enterprises learn is to move into new foreign markets, in which they are exposed to different types of knowledge. Thus, the higher the diversity of foreign markets entered, the greater the opportunity for learning. Technological learning is positively associated with performance. This can play a pivotal role in differentiating an enterprise's products, achieving speedy market introductions and gaining a competitive advantage (Zahra et al., 2000). Moreover, performance (growth and ROE) is improved by technological learning gained from international environments (McDougall & Oviatt, 2000; Zahra et al., 2000). However, managers cannot assume that learning will occur automatically and that it will lead to improved performance automatically. Therefore, managers must develop and nurture skills that ensure effective integration of learning as their enterprise expands internationally. Prange should learn from the new opportunities and acquire new knowledge, by which the absorptive capacity becomes important. Absorptive capacity refers to the ability to identify, value, select and assimilate knowledge that exists in their external environment and make use of it in their operations (Zahra, 2005).

When internationalising, SMEs must develop structures and routines that are compatible with its internal resources and competence, so that it can guide the search for experiential knowledge about foreign markets (Eriksson et al., 1997; Autio et al., 2000). Ideally, SMEs should have policies, procedures and cultures that are international from inception (McDougall et al., 1994). Otherwise, when an enterprise internationalises, it risks weak performance due to path dependence on purely domestic activities. This may be an important point for older enterprises (McDougall & Oviatt, 1996) such as Prange. In that case, managers are advised to build an international entrepreneurial culture that accommodates the entrepreneurial activities of their enterprise abroad (Boter & Holmquist, 1996; Knight, 2001; Dimitratos, Voudouris, Plakoyiannaki & Nakos, 2012). These organisational culture characteristics pertain to cultivating an international entrepreneurial orientation, distinguished by; risk-seeking, problem-solving behaviour and a proactive/innovative propensity. Next to that, a market orientation is needed that puts the international customer at the centre of enterprise activities and collects competitor information abroad, a motivational structure is needed that induces employees to propose ideas and suggestions for foreign activities, a learning orientation is needed and an energetic networking stance is preferred. Moreover, SMEs that wish to improve their international performance and competitiveness would be well advised to develop market-oriented behaviours. These are outside-in capabilities that link enterprise's processes with its external environment, thus helping the enterprise to surpass its competition by creating and enhancing solid relationships with its suppliers, customers and distributors. In addition, an enterprise that adopts a market-oriented culture will be in a better position to identify and exploit new market opportunities, because it facilitates the acquisition of market knowledge. Further, managerial involvement, commitment and risk-aversion are essential to the successful development of market-oriented behaviours in an enterprise (Armario et al., 2008). Accordingly, managers should seek to develop an international entrepreneurial orientation and encourage it throughout the enterprise, because it enables enterprises to be more responsive to changes in their external environment. To conclude, Prange should evaluate their internal organisational culture in order to see if it is suitable for the internationalisation process. Otherwise, it is advised to build an international entrepreneurial culture that accommodates the entrepreneurial activities of their enterprise abroad. Although the advantages, it may also stimulate expensive pioneering and excessive risk taking that might ultimately harm the enterprise. Hence, the best managed enterprises will be those that strike some ideal balance.

2.4.3 Key Resources

"The key resources building block describes the most important assets required to make a business model work" (Osterwalder & Pigneur, 2013, p. 29).

Every business model requires key resources. International survival is even resource-dependent (Mudambi & Zahra, 2007; Sui & Baum, 2014), because resources allow enterprises to create and offer a value proposition, reach markets, maintain relationships with customer segments and earn revenues. Key resources can be physical, financial, intellectual or human (Osterwalder & Pigneur, 2013). When an enterprise has internationalisation ambitions it must first reflect on their resource base. Subsequently, managers should choose an internationalisation strategy that is consistent with the enterprise's resource strengths (Sui & Baum, 2014). This is important, because internationalisation entails the commitment of resources to international operations (Crick & Spence, 2005) that is positively associated with enterprise performance (Knight, 2000). Specific resource allocations are important in light of the often highly specialized circumstances that confront the enterprise in foreign settings (Knight, 2001). Moreover, it is very hard to analyse the enterprise's environment in growing industries, which means that the enterprise's internal resources are crucial for its international strategies (Andersson, 2004). Thus, enterprises need to identify and focus on the first critical steps in the internationalisation process and deploy their limited resources accordingly (Li, Li & Dalgic, 2004). Hence, Prange should reflect on their resource base to see whether it is suitable for the foreign market. Afterwards, Prange should commit resources to the internationalisation process. In doing so, Prange should also consider the circumstances in the foreign market.

Although the importance of resource, a lack of resources is recognised in the academic literature, which challenge SMEs (Oviatt & McDougall, 1994; Boter & Holmquist, 1996; Reuber & Fischer, 1997; Buckley, 1997; Coviello & Munro, 1997; Coviello & McAuley, 1999; Lu & Beamish, 2001; Chetty & Campbell-Hunt, 2003; Hollenstein, 2005; Jansson & Sandberg, 2008). Consequently, the acquiring of resources is a widely discussed subject, which already became clear in the entry mode decision. The study of Sui and Baum (2014) emphasises that the ability to acquire resources during internationalisation will be critical to the survival in the international market. Because of the lack of resources, SMEs need to acquire resources externally. Thus, managers must rely on alternative modes of controlling many vital resources (Oviatt & McDougall, 1994). In that case, enterprises must invest in efforts to externalise international market development activities, e.g. through network relationships (Coviello & McAuley, 1999). Osterwalder and Pigneur (2013) also recognize that key resources can be acquired from key partners.

A powerful resource-acquiring alternative to internalisation is a network structure. Networks help managers identify international opportunities, gain market access and provide access to a diverse range of critical resources (McDougall et al., 1994; Oviatt & McDougall, 1994; Coviello & Munro, 1997; Chetty & Holm, 2000; Yli-Renko, Autio & Tontti, 2002; Oviatt & McDougall, 2005; Coviello, 2006; Gassmann & Keupp, 2007). Besides that, managers with geographically diverse networks have access to a larger pool of vital information and are at a position to pursue opportunities that best match their product offering and competitive abilities (Musteen, Francis & Datta, 2010). More than that, Johanson and Vahlne (2009) emphasise the relevance of networks, because according to their opinion, "outsidership" is the root of uncertainty. Outsidership is their understanding of enterprises which do not have a position in a relevant network (Johanson & Vahlne, 2009). If an enterprise attempts to enter a foreign market where it has no relevant network position, it will suffer from the liability of outsidership, by which outsidership makes it impossible to do business. An enterprise's problems and opportunities in international business are becoming less a matter of country-specificity and more one of relationship specificity and network-specificity (Johanson & Vahlne, 2009). To conclude, Prange should be aware of the importance of external relationships and an outside-in perspective, by which Prange should develop the capabilities to manage these efforts effectively (Lee et al., 2012).

Furthermore, some authors separate the use of formal and informal network relationships (Coviello & Munro, 1997; Andersson, 2004; Musteen et al., 2010). According to Oviatt & McDougall (1994); networks depend on the social (informal) control of behaviour through trust and moral obligation, not formal contracts. Nevertheless, the study of Andersson (2004) shows that it is fruitful to distinguish between networks on the individual (informal) and enterprise level (formal). According to them are informal networks the most important for decisions in the early phases of the enterprise's international development. In later stages, when the enterprise is a more important player in the industry, the formal networks are of a greater value. More than that, Musteen, Francis and Datta (2010) warn managers for overreliance on personal/informal networks. SME managers ought to be mindful of the background and expertise of their international contacts. The study indicates that decisions made based on information obtained from them may lack the level of quality that is important to success. Therefore, managers need to carefully evaluate the quality of information to ensure that the information provided is not inaccurate, incomplete or overly optimistic. Contrary, Zhou, Wu and Luo (2007) argue that internationalisation orientations require informal network to have a positive performance impact. According to them, it seems reasonable that internationally active managers rely on the available informal networks and social interactions to obtain particular information benefits. As a result, the value of informal networks and more formal networks are evaluated on a different level, by which the academic literature is somehow fragmented. Nevertheless, for Prange, it seems reasonable to attach value to both kind of relationships, but Prange must carefully evaluate the quality of information they receive, especially from informal networks.

Although the advantages of networks, also some disadvantages have been noticed in the academic literature. It is important to acknowledge that networks can have a dark side, whereby networks may constrain an enterprise (Coviello & Munro, 1997; Coviello, 2006). An example of risk associated with networks is that a network can be dominated by weak relationships, which give a SME no access to resources (Sharma & Blomstermo, 2003). Sharma and Blomstermo (2003) observed that the process by which weak relationships change into strong relationships is gradual. As the commitment of resources by the enterprise in the foreign markets increases, some of the weak relationships will be transformed. Thus, acquiring resources means that a lot of commitment is needed of enterprises. The second risk associated with networks is that an abundance of relationships can cause control problems and an inability to prioritise and leverage key relationships (Coviello, 2006). Hence, the different type of relationships must be evaluated and the commitment necessary to acquire the appropriate resources is of significant value.

While the lack of resources is discussed, internationally sustainable advantage is increasingly recognized to depend on the possession of unique assets. As such, even small enterprises with constrained resources can become international players, by which the gap in competitive advantage between large and small enterprises in international markets has narrowed (Oviatt and McDougall 1994). However, attaining unique resource combinations that fit in the desired international strategies is difficult (Karagozoglu & Lindell, 1998). These unique assets are discussed below.

The first unique resources are intangible resources, which are critical to internationalisation of small enterprises (Rialp et al., 2005; Zahra, 2005; Gassmann & Keupp, 2007; Lee et al., 2012; Sui & Baum, 2014). According to Rialp, Rialp and Knight (2005); an enterprise's intangible resource base (which basically consists of organisational, technological, relational, and human capital resources) may be of the highest importance in enterprise internationalisation. Zahra (2005) also emphasises the importance to develop and protect unique intangible assets, e.g. organisational cultures, relationships, and innovative abilities, especially those that enhance their entrepreneurial activities in foreign markets. Briefly, enterprises require such intangible resources to adapt efficiently to demand changes and to adapt to the cultural and institutional plurality of international markets (Sui & Baum, 2014). Therefore, Prange has to pay attention to the need of these intangible resources and should invest in it. The way to stimulate intangible resources will be specified below.

Knowledge- and R&D-intensity are especially explained as a unique resources for enterprises. In the activities building block, the relevance of R&D is already discussed, on which this part

continues. Controlling unique knowledge creates value for enterprises. The greater the enterprise's knowledge intensity, the more rapidly they grow internationally (Oviatt & McDougall, 1994; Autio et al., 2000). Moreover, knowledge may create differentiation or cost advantages that overcome the advantages of indigenous enterprises (Oviatt & McDougall, 1994). The output of knowledge are patents and innovativeness. Consequently, it may be that intangible human knowledge, rather than technologies and products, helps an enterprise to adapt products overseas (Lee et al., 2012). Therefore, managers of SMEs should invest less in tangible assets, but more in R&D to generate knowledge. Moreover, SMEs should invest in social capital (e.g. employees' creativity) to stimulate innovations (Gassmann & Keupp, 2007). Social capital has actually a significant impact on the development of the knowledge base of technology-based enterprises. Social capital is the interaction between members within an enterprise as well as between the enterprise and external organisations and it leads to a higher accumulation of knowledge. Therefore, enterprises should actively build and harness social capital in both their internal and external relationships (Yli-Renko et al., 2002; Presutti, Boari & Fratocchi, 2007). Besides the value of knowledge for enterprises; with modern communication infrastructures, valuable knowledge can be reproduced and can travel literally with the speed of light at minimal marginal cost (Oviatt & McDougall, 1994). Knowledge is thus an important resource for Prange, in which Prange has to invest in order to gain competitive advantage abroad.

Protection is as a result important to prevent imitation of the enterprise's specialised knowledge (Gassmann & Keupp, 2007), because knowledge is at least to some degree a public good. Its easy dissemination threatens an enterprise, because knowledge may not remain unique for a long time. Thus, the ability to reproduce and move knowledge at nearly zero marginal cost is a simultaneously beneficial and troublesome property. Therefore, enterprises must limit the use of its knowledge by outsiders (McDougall, 1989; Oviatt & McDougall, 1994). Ways of protecting such knowledge are direct patent protection, uncertain imitability, license fees and network alliances (Oviatt & McDougall, 1994). It is even more relevant when the enterprise decides to extent its involvement in networks to access external resources, because the enterprise's exposure in these networks can make its knowledge observable (Gassmann & Keupp, 2007). Therefore, Prange may use these different forms of protection in order to retain their advantage in terms of knowledge.

Next to the influence of knowledge, the role of the entrepreneur/manager in SMEs is widely discussed as a unique asset, because there is a strong influence of the entrepreneur on the SME performance (Oviatt & McDougall, 1994; Calof & Beamish, 1995; Boter & Holmquist, 1996; Buckley, 1997; Reuber & Fischer, 1997; Coviello & Munro, 1997; Madsen & Servais, 1997; Coviello & McAuley, 1999; Jones, 1999; Chetty & Holm, 2000; Li et al., 2004; Andersson, 2004; Zahra, 2005; Crick & Spence, 2005; Jones & Coviello, 2005). An important success factor is the skill of entrepreneurs in SMEs being able to spot and to take opportunities in situations where resources are scarce and information is expensive. The knowledge of the entrepreneurs and their personal experiences are of significant value, because it can drive internationalisation at an accelerated pace, especially for technology-based SMEs. Next, through advice and training; capabilities, competencies and networks of entrepreneurs can be enhanced (Westhead et al., 2001). Moreover, some authors argue that the influence of the entrepreneur is especially important in the early stages. They argue that entrepreneurial characteristics of the manager appear to be especially critical in the very early phases of SME internationalisation, because entrepreneur's decisions regarding internationalisation early in the enterprise's development will be assimilated into the enterprise's routine and occur in an intense and repetitive fashion (Autio et al., 2000; Etemad & Wright, 2003). To conclude, the implications for the managers of Prange is that they need to be aware of the importance of issues such as their own attitudes, timing, coherence, networks and learning in the internationalisation process. Since the attitudes influence the perceptions of benefits, costs, risks and subsequently the ensuing internationalisation path, it is imperative that managers take steps to ensure that these are appropriate. Therefore, it is important to investigate the role managers can play in creating and sustaining entrepreneurial activity in an enterprise (McDougall et al., 1994; Autio et al., 2000).

Product

The second element of the business model of Osterwalder is the product. This element contains out of one single building block; the offer/value proposition for the customer. The discussed infrastructure management is the input, by which the value proposition is the output. For technology-based SMEs such as Prange, there are some recommendations that derive from the reviewed academic literature.

2.4.4 Value Proposition

"The value propositions building block describes the bundle of products and services that create value for a specific customer segment" (Osterwalder & Pigneur, 2013, p. 17).

The value proposition is the reason why customers turn to one enterprise over another; it solves a customer problem or satisfies a customer need. Each value proposition consists of a selected bundle of products and/or services that is in line with the requirements of a specific customer segment. Some value propositions may be innovative and represent a new or disruptive offer, others may be similar to existing market offers, but with added features and attributes (Osterwalder & Pigneur, 2013). Therefore, an understanding of some deep truth about the fundamental needs of consumers and how competitors are or are not satisfying those needs is important (Teece, 2010). Hence, the environment, including its competitors, must be evaluated. Subsequently, Prange must tend to satisfy those needs, for which the academic literature is reviewed to discuss the recommendations.

In the reviewed internationalisation literature, the strategy of an enterprise and its adaptation to the foreign market is an important subject. There must be a difference in strategy of international and domestic operating enterprises, because internationalisation entails the adaptation of products to suit conditions overseas (McDougall 1989; Knight, 2001). Skilful strategic competence links the enterprise to the buyers in the external environment, by which it appears to be a critical ingredient for international success (Knight, 2001). To adapt the products, advance preparation before entering foreign markets is necessary and is even positively associated with enterprise performance (Knight, 2000). Although it is possible that a product holds considerable potential in a given foreign market, it will probably have to be modified in some way, even if this applies only to packaging, product-use instructions, warranties, or other such attributes that may need to be translated into a foreign language. Thus, new foreign conditions may require managers to devise a distinctive mix of products, services, packaging and other such elements tailored to local needs and tastes (Knight, 2001). This means that Prange should invest sufficient time in market research in order to modify the value proposition to the needs of the foreign market.

In general, enterprises with clear strategic profiles or orientation perform better than enterprises who have not (Hagen, Zucchella, Cerchiello & De Giovanni, 2012). More than that, the empirical evidence of Kalinic and Forza (2012) suggests that specific strategic focus is the determinant success aspect in the internationalisation process. International SMEs with a specific strategic focus pursue more actively international opportunities, expand more rapidly and exhibit superior international performance when compared to enterprises which lacking any clear strategy. Enterprises that increase international sales, relative to those that do not, exhibited more positive associations between the degree of strategic change and performance as measured in terms of both relative market share and ROI (McDougall & Oviatt, 1996). Therefore, according to the review literature, skilful strategic competence is needed to come up with a specific international strategy, because having a specific strategic focus is of significant importance in the internationalisation process. Moreover, the business model should articulate the strategy, because an enterprise's business model and strategy are complements (Zott & Amit, 2007). Briefly, a clear and specific strategic focus and its consistency with business strategy leads to improved international performance.

In order to be more specific, the adjustment of the strategy will be discussed more in depth. As already discussed, most technology-based SMEs have to focus on niche markets, by which these enterprises must adopt specific focus strategies in the internationalisation process (Chetty & Campbell-Hunt, 2003). Moreover, technology-based SMEs should adopt an innovator strategy, by investing considerably in R&D activity in order to establish and maintain their competitive advantage (Qian & Li, 2003). Autio, Sapienza and Almeida (2000) argue that internationalisation survival must be explained by their ability to innovate and adapt more rapidly in new and dynamic environments. These findings are in line with the proposed activities and resources in the infrastructure management element. Furthermore, a narrow product scope is preferred, because it is relatively easy to deconstruct business activities in research and development, production and marketing. In that way, it is easier to find an effective way of organizing and executing these functions on an international basis. This clear distinction between functions has been advantageous to the process of internationalisation (Boter & Holmquist, 1996). In the end, international success seems to depend on having an international vision, an innovative product or service and a tightly managed enterprise focused on international sales growth (McDougall et al., 1994; Oviatt & McDougall, 1994). Briefly, according to the reviewed academic literature, a specific/focused international strategy is needed, complemented by an innovator strategy and a narrow product scope.

Furthermore, in order to gain competitive advantage, technology-based SMEs must exploit their advantage over large enterprises. SMEs can have unique technology along with greater flexibility, speed and agility that make them quick to respond and adapt (Karagozoglu & Lindell, 1998; Dimitratos & Jones, 2005; Freeman et al., 2006). These advantages work particularly well for them in new product development and entrepreneurship, driven by their motivation to constantly seek new opportunities and to aggressively challenge the status quo (Karagozoglu & Lindell, 1998). Next to these ways to gain competitive advantage, the age of the enterprise is also of importance. For managers, it is important to question how they want to build their competitive advantage. Enterprises differ in their internationalisation processes, because all face specific constraints. For early internationalising enterprises, major challenges result from the quest for survival and profitability. When they get older, they need to unlearn constraining routines and build disruption capabilities (Prange & Verdier, 2011). As a result, Prange has to gain competitive advantage in the foreign market by exploiting their advantages over other enterprises. Besides that, they should unlearn possible constraining routines.

Customer Interface

The third element of the business model of Osterwalder is the customer interface. The customer interface delivers the value proposition to the customer and contains out of three building blocks; customer relationships, channels and customer segments.

2.4.5 Customer Relationships

"The customer relationships building block describes the types of relationships a company establishes with specific custom segments" (Osterwalder & Pigneur, 2013, p. 23).

In the reviewed internationalisation literature, some contributions are found to manage customer relationships abroad. Obviously, technology-based SMEs have to understand the differences in the environment, as discussed. Enterprises should clarify the type of relationship they want to establish with each customer, because relationships can range from personal to automate (Osterwalder & Pigneur, 2013). Enterprises in technology-based industries need close contact with both people and organisations close to the technological core of the industry, for developing and serving new products (Boter & Holmquist, 1996; Presutti et al., 2007). By means of close contact, customers may enhance the innovation capability of an enterprise abroad, by providing new ideas and knowledge. Although the advantages of close contact with the customer, it is only true when enterprises do not develop strong and close personal social relationships with their customers. Professional business

networks reinforces learning opportunities between an enterprise and its main foreign customers; sustaining the advantage of reciprocal knowledge. Hence, professional business networks offer significant learning opportunities for the foreign development of enterprises (Yli-Renko et al., 2002). This requires the managerial ability to transform close and social personal relationships into more professional business networks, aimed to transfer knowledge. However, the development of professional business networks with foreign customers may create several problems, because it reduces trust and identification. This means that finding the optimal level of social capital inside business relationships is a challenge for the managers of enterprises operating in foreign markets (Presutti et al., 2007).

To conclude, for Prange, it is necessary that they have close contact with both people and organisations close to the technological core of the industry; for developing new products. However, Prange has to find the optimal level of social capital inside business relationships, because according to the academic literature; professional business networks are preferred in order to increase the potential of new sources and ideas, but it may be a risk for the trust and identification of the customer.

2.4.6 Channels

"The channels building block describes how a company communicates with and reaches its customer segment to deliver a value proposition" (Osterwalder & Pigneur, 2013, p. 21).

In the academic literature, the entry mode decision is a widely discussed subject. However, the entry mode decision influences a lot of building blocks of the business model, by which the entry mode decision is a decision at forehand of the internationalisation of the business model. Nevertheless, the entry mode decision is determining for this building block. Besides that, the reviewed academic literature did not contribute to the channel building block.

2.4.7 Customer Segments

"The customer segments building block defines the different groups of people or organizations an enterprise aims to reach and serve" (Osterwalder & Pigneur, 2013, p. 15).

The customer segments building block is also in line with the discussed subjects at forehand of the business model internationalisation, such as the need to analyse the whole environment, including the industry and the international competition. The chosen target segment is thus elaborated on the evaluation of these factors. Next to that, Johanson and Vahlne (1990) emphasise that market knowledge is also a matter of time and learning.

Market knowledge can be separated in two kinds of knowledge; objective knowledge, which can be taught and experiential knowledge, which can only be acquired through personal experience. First of all, the objective knowledge can be acquired by adequate market research, which is therefore of significant value for enterprises. Second, experiential knowledge is assumed to be the primary way of reducing market uncertainty. Thus, in a specific country, an enterprise can be expected to reduce market uncertainty as it gains experience from current activities in the market. This market experience is to a large extent country-specific, by which it can be generalised to other country markets only with difficulty. Moreover, when foreign market conditions are stable and homogeneous, learning about them becomes easier (Oviatt & McDougall, 1994). However, in technology-based industries, the conditions are probably unstable and heterogeneous. To conclude, the preparation in advance of the internationalisation process in terms of market research is of great importance, but the experiential knowledge and the learning process during the internationalisation process are probably even more important for Prange.

Finance

The last element of the business model of Osterwalder is the finance element. This element contains of two building blocks; the underlying costs structure and revenue streams of the business model. However, there is barely useful information about international revenue streams. When searching for valuable articles, "international revenue stream" does not result in any academic article originating from a top journal, that sets one thinking. Therefore, researchers and top journals should spend more time in the investigation of international revenue streams in the future. Costs, on the other hand, are discussed in the academic literature, but most of all, the performance is a widely discussed subject in the reviewed academic literature. Therefore, the performance of the internationalisation of technology-based SMEs will be outlined, including the costs, because this is relevant for both building blocks. Consequently, the cost structure and revenue stream building block will not be discussed separately.

2.4.8 Performance

In 1996, McDougall and Oviatt argued that there was no evidence for a significant relationship of internationalisation and performance. The findings suggested that having foreign sales does not by itself increase the financial performance. Nevertheless, they found that internationalisation was associated with higher relative market share. However, there was no significant direct relationship between international sales and the return on investment (ROI). Perhaps an advanced technological level, combined with shorter product life cycles, drive enterprises to invest more intensively in the internationalisation process in order to achieve the necessary market volume within a limited time span, by which costs of internationalisation are higher than expected (McDougall & Oviatt, 1996; Boter & Holmquist, 1996). Nevertheless, internationalisation does not result exclusively in higher risks or failure for SMEs; rather than increase the liability of foreignness, internationalisation provides opportunities that can increase survival (Lee et al., 2012). Moreover, as internationalisation generates additional sales, it helps enterprises to split the investments across various markets. It also provides more opportunities for enterprises to maximize profits before their innovations become obsolete (Qian & Li, 2003). On top of that, Contractor concludes in 2007 that, while internationalisation does not necessarily always improve performance, for the most part, international expansion does indeed result in net positive benefits to an enterprise. These benefits are knowledge derived from abroad, accessing or arbitraging cheaper inputs, exploitation of enterprise-specific assets in foreign markets, accumulation of global market power, international scale, lowering of volatility from geographical diversification and accumulated internationalisation experience. Complemented by Sapienza, Autio, George and Zahra (2006); internationalisation indeed does increase risks of failure, but also increases opportunities for significant growth, by which internationalisation improves the chances of building an enterprise of great potential.

Therefore, the chance of success or failure is a grey area and is particularly enterprise-specific. Nevertheless, a pattern was discovered for the internationalisation of enterprises and their performance. In the initial stages of internationalisation, performance declines as the enterprise deals with the liability of foreignness, by which perceive costs are higher and revenues are lower than enterprises farther along in the internationalisation process. However, performance improves as new knowledge and capabilities are developed, as competitiveness is enhanced and as market opportunities are captured by the enterprise's investment activities in international markets. However, afterwards, in most cases, the profit declines. Thus, there is curve for the performance versus internationalisation link, beginning with a positively slope (Calof & Beamish, 1995; Lu & Beamish, 2001; Contractor, 2007). The trick then, for enterprises, as a managerial implication, is to quickly get through the net negative effects of stage one (initial internationalisation) into the net positive zone of stage two, but without expanding excessively into stage three; the zone in which the profit declines. The middle zone is therefore the strategic and financial target.

Furthermore, Sapienza, Autio, George and Zahra (2006) specified the age of the enterprise as an influence on international performance. According to them, enterprises that are older when they internationalise may have learning disadvantage, by which the costs of capability development may be higher. Older entrants need to find ways to overcome the structural inertia and rigidities that could hamper their ability to learn about new markets and to respond to changes. However, the other way around; taking bold steps, such as internationalising at an early age, may both increase the survival risk for an enterprise and its prospects for significant payoffs if survival is achieved (Autio et al., 2000). Therefore, time management for internationalisation becomes important, as managers have to decide when to accelerate or deaccelerate internationalisation, as resources are limited (Chetty & Campbell-Hunt, 2003). Briefly, the age and speed of internationalisation should be taken into account.

A threat for the internationalisation process is a lack of internationalisation knowledge. Internationalisation knowledge has a strong impact on the lack of both business and institutional knowledge which, in turn, influence the perceived cost of internationalisation. In the process of internationalising, enterprises have to seek business knowledge on individual clients and markets, as well as on institutional factors such as local laws, local governments and local cultures. This information is collected through activities abroad and through a presence in foreign markets. These activities and presence abroad entail costs, related to collecting, encoding, transferring and decoding knowledge, as well as changing the resources structures, processes and routines in the enterprise. Thus, the process of complementing the lack of internationalisation knowledge influences an enterprise's performance in the internationalisation process, by means of the costs involved (Eriksson et al., 1997; Autio et al., 2000). Nevertheless, Prange should invest sufficient to complement a possible lack of internationalisation knowledge.

3. Conclusion

The conclusion of the study contains several practical implications, since it provides Prange with a framework to comply their business model with their internationalisation ambitions. At first, there were no guidelines of how to internationalise the business model of Osterwalder, although the business model needs adjustments to fit in the environment abroad. In this study, a framework for the internationalisation of the business model of Prange is developed.

The systematic literature review highlighted the importance of preparation in advance of internationalisation, the identification of external forces and the entry mode decision, prior to the internationalisation of the business model of Prange. The results are therefore divided in four parts, which will be outlined in this section. The contribution for Prange is that recommendations are given in every part, derived from the reviewed academic literature. An overview of the articles, which all contributed to different parts of the conclusion, is presented in appendix C.

(1) Internationalisation Preparation – According to the academic literature, internationalisation preparation appears to have a highly significant direct effect on international performance. The preparation of Prange in terms of business model internationalisation has thus a positive effect on the international performance of Prange in the future. First of all, Prange must take advantage of the access to market knowledge and has to invest time to acquire the necessary market knowledge of the German market. Prange must be aware that information can become quickly outdated. However, this will not be the case for general knowledge about the German market and environment. Unless the need for internationalisation preparation, an outlined and detailed planning is not suitable for the internationalisation process; Prange could rather react to changing circumstances by having a clear vision of where they want to take their enterprise. Moreover, Prange should embrace the learning aspect and should therefore consider adjustments and restructurings of the business model on their path to internationalisation.

(2) External Forces – For successful internationalisation, it is necessary to study the foreign environment, including all external forces, to see whether the opportunities are of significant more

value than the assessed threats. An analysis of the macroeconomic environment is thus necessary to evaluate the viability to make business in the foreign country. In the reviewed articles, different external forces are discovered, including; culture, legislation, industry size, life-cycle of the industry, clustering, competition and the reputation of the domestic environment. It is necessary for Prange to study the environment, including all these discussed aspects, to evaluate whether the German market is an appropriate market to do business. Although the opportunities are of significant more value than the assessed threats, it remains important to be responsive for change and to reconfigure the business model, if required.

(3) Entry Mode Decision - Designing a business model also involves figuring out the entry mode decision. This is rather more a strategic issue than a business model issue. The entry mode decision influences multiple building blocks, by which it will also be discussed before integrating the business model and internationalisation literature. The entry mode decision is important to the overall success of the internationalisation. For this reason, the different entry modes are widely discussed in this study, including all advantages and disadvantages. In an ideal world, it is likely that every enterprise would prefer to be in charge of its destiny and would choose the entry mode foreign direct investment or exporting. However, due to the limited resources and consequently an increased risk, foreign direct investment is outside the reach of Prange. The export mode is also not a suitable entry mode, due to the liability of foreignness. Moreover, exporting is only preferred when no involvement with the customer is required, whereas Prange needs close contact with both people and organisations close to the technological core of the industry. Consequently, technology-based SMEs such as Prange serve foreign markets with a minimal use of internalisation and a greater use of alternative entry modes. Prange can choose to use a distributor, but this entry mode also requires an investment and it creates a situation in which high risk and potential conflict emerge. Also in this case, Prange needs close contact with both people and organisations close to the technological core of the industry. Furthermore, Prange can enter the German market by means of an alliance, to optimize their business model, reduce risk and/or acquire resources. Alliances with partners with local knowledge can be an effective strategy to overcome the deficiencies in resources and capabilities. The implication for Prange is that alliances are only optimal under the right circumstances, by which the key to success appears to be the choice of the partner.

To conclude, a lot of factors influence the entry mode decision of Prange. According to the reviewed academic literature, Prange should use an alliance as entry mode, to acquire resources, reduce risk and optimize their business model. Nevertheless, Prange should assess their assumptions and attitudes about the effectiveness of different entry modes. Analysis can be done by travelling to the foreign market, talk with customers or suppliers from the foreign market, read articles or reports of the foreign market and talking to international business experts, competitors, suppliers and government trade officials. Through this experience, uncertainty about the most appropriate entry mode decision is reduced. The experience may lead to either an increase or decrease in the perception of entry mode potentials, after which an appropriate entry mode can be chosen.

(4) Business Model Internationalisation – The following part is the internationalisation of the business model. A recapitulation of the internationalisation of the building blocks of Prange gives a brief and concise answer to the research question.

“To what extent should Prange alter their business model in order to comply with their internationalisation ambitions?”

(1) Key Partners - Different types of partners are featured, which all can have a positive contribution to the internationalisation process of Prange. In terms of the entry mode decision, a partner can provide SMEs of the necessary resources and capabilities, such as; local market knowledge, experience, expertise and financial resources. Besides that, with a partner; risks, uncertainties and costs can be shared and reduced. It is argued that the key to success appears to be the choice of the partner. If Prange relies on partners out of their close personal networks, they can reduce potential risks. Moreover, suppliers are assumed to be important partners for Prange, by

which it is important to prefer long-term relationships in order to build trust reduce risk. On top of that, solid relationships with its suppliers, if sustained, improve an enterprise's foreign performance. Finally, Prange can benefit from the knowledge of non-profit consulting enterprises and can use their connections for further networking in the German market.

(2) *Key Activities* - The activities of Prange must be adapted to the foreign market. A narrow product scope is in that case preferred, by which it is relatively easy to deconstruct business activities in R&D-, manufacturing- and marketing activities. Afterwards, these activities can be adapted to their new circumstances. In the systematic literature review it became clear that the marketing capability of Prange is an important activity in the internationalisation process, because carefully executed marketing allows Prange to follow the market and respond to the market in ways that may provide competitive advantage. On the other hand, traditional ways to create marketing awareness by advertising is not useful for Prange. Furthermore, technology acquisition through R&D allows Prange to develop innovative products and services, thereby staying abreast of market demands and competitive threats. In addition, Prange must adapt their internal organisation to stimulate the internationalisation process. This means that SMEs must develop structures and routines that are compatible with its internal resources and competence. Prange is advised to build an international entrepreneurial culture that accommodates the entrepreneurial activities of their enterprise abroad, because it enables Prange to be more responsive to changes in their external environment.

(3) *Key Resources* - Internationalisation entails the commitment of resources to international operations, which is positively associated with enterprise performance. In doing so, Prange should reflect on their resource base to see whether it is suitable for the foreign market. If Prange has a lack of resources, it can be acquired in their network. The different types of network relationships must be evaluated and the commitment necessary to acquire the appropriate resources is of significant value. The discussed risks of networks which derived from the academic literature should be kept in mind. Next to the lack of resources, internationally sustainable advantage is increasingly recognized to depend on the possession of unique intangible assets. Knowledge is one of these unique assets, which can be stimulated by Prange through investments in R&D and social capital. Finally, the role of the entrepreneur/manager in SMEs is widely discussed as a unique asset, because there is a strong influence of the entrepreneur on the SME performance. Therefore, the implication for Prange is that they need to be aware of the importance of issues such as their own attitudes, timing, coherence, networks and learning in the internationalisation process. Since it is the attitudes that influence perceptions of benefits, costs, risks and subsequently the ensuing internationalisation path, it is imperative that Prange takes steps to ensure that these are appropriate.

(4) *Value Proposition* - In terms of the value proposition, the strategy and its adaptation to the foreign market is an important subject, because internationalisation entails the adaptation of products to suit conditions overseas. Skilful strategic competence is needed that links Prange to the buyers in the external environment. To adapt the product(s), advance preparation in terms of market research is necessary for Prange to enter a foreign market. This means that Prange should invest sufficient time in market research in order to modify the value proposition to the needs of the foreign market. Furthermore, a specific strategic focus is the determinant success aspect for internationalisation. To be more specific, a focused strategy is needed, complemented by a narrow product scope and an innovator strategy, by investing considerably in R&D activity in order to establish and maintain their competitive advantage. On top of that, the business model should articulate that strategy, because an enterprise's business model and strategy are complements. In the end, a clear and proactive strategic orientation and its consistency with business strategy leads to improved international performance.

(5) *Customer Relationships* - For the customer relationships, it is necessary that Prange has close contact with both people and organisations close to the technological core of the industry, for developing and serving appropriate products. By means of close contact, customers may enhance the innovation capability of an enterprise abroad, by providing new ideas and knowledge. In doing so, Prange has to find the optimal level of social capital inside relationships, because professional business networks are preferred instead of personal relationships, because these increase the

Prange has to use this framework to prepare for their internationalisation ambitions, because if Prange pays attention to the developed framework including recommendations, it will have a significant effect on their international performance in the future, according to the reviewed academic literature. Although the different building blocks, it is important for Prange to recognize that it is an interactive model, not a static model, because various elements need to be co-specialized to each other and work together well as a system (Lu & Beamish, 2001; Teece, 2010; McGrath, 2010). Thus, the internationalisation of the business model must be seen as whole. Furthermore, for every modification in the business model, Prange needs to assess the effects that it will have (Casadesus-Masanell & Ricart, 2010). Even after internationalisation it is important to stay alert, because Prange must be able to effectively and timely modify their business model when an opportunity or threat arise (DaSilva & Trkman, 2014). Consequently, Prange must adopt an active attitude toward business model experimentation. Some experiments will fail, but so long as failure informs new approaches and understanding within the constraints of affordable loss, this has to be accepted (Chesbrough, 2010; Sosna, Treviño-Rodríguez & Velamuri, 2010). Hence, business model experimentation is the key and it may even offer a source of competitive differentiation, as some enterprises develop superior capabilities in experimentation and consequently can build better models more quickly than their slower counterparts (McGrath, 2010). To conclude, for successful business model internationalisation, Prange needs to be resilient in times of adversity, face down initial failure, keep their eyes open to the outside world, listen to and learn from their customers, and, when the time is right, they need to be bold in pursuing opportunities (Sosna et al., 2010).

4. Discussion

In the following section; the relevance, limitations and future research directions will be discussed. First of all, the study is academically relevant, because at first a research gap existed, since Osterwalder did not consider the aspect of internationalisation in his business model ontology. This study provides the academic field with a framework to integrate the business model of Osterwalder with the internationalisation literature of technology-based SMEs, by means of a systematic literature review. On top of that, the study sets directions for future research. Moreover, the study is practical relevant, because it provides Prange with a framework to comply their business model with their internationalisation ambitions, by means of recommendations derived from the academic literature. Prange has to use this framework to prepare for their internationalisation ambitions, because if Prange pays attention to the developed framework including recommendations, it will have a significant effect on their international performance in the future.

Despite the academic and practical relevance, this study has a few limitations, on which some future research directions are based. The study may not be generalised among other industries, because the academic articles used are based on the internationalisation of technology-based SMEs. Nevertheless, the approach for the internationalisation of a business model can be used more widely in the academic research. Therefore, it is suggested that future research extends this investigation to other industries.

Next to that, the subjects which originate from the reviewed academic literature are chosen in the perspective of Prange, by which the study may not be generalised among other technology-based SMEs without any warning. Nevertheless, I believe that my approach to internationalise a business model has general applicability for technology-based SMEs, because the internationalisation is based on the internationalisation of technology-based SMEs. Future research should discover if the study is suitable for other technology-based SMEs. A requirement should be that the model should be empirically tested; discussing and performing tests of different types of validity should have a high priority in the further development of such a model.

Furthermore, the consequence of selecting internationalisation articles which originate from top journals has two limitations. The selected top journals originate from the United States, England, Germany and the Netherlands, by which they originate exclusively from western countries. The internationalisation of the business model of Prange is consequently based on academic literature

originating from western countries. Hence, possible valuable knowledge from articles which originate from other journals were not taken into consideration. Second, future research has to indicate if the study is also applicable for technology-based SMEs in other areas than the western countries, such as developing countries in Asia, Africa and South America. Nonetheless, the chosen method is justified to delineate the field and in order to guarantee the quality of the articles used.

To conclude, although my discussion lighted up a few possible implications, to my opinion; at least the approach to internationalise an enterprise's business model is widely applicable, especially for technology-based SMEs. However, future research has to prove the generalisability of this study.

Furthermore, some weaknesses and limitations derive from the academic literature itself, upon which future research directions are based. First of all, the business model remains a theoretically underdeveloped (and sometimes overloaded) concept, which may raise doubts concerning its usefulness for empirical research and theory building (Zott et al., 2011). The business model literature is widely divergent; making sense of it is therefore challenging. More than that, only a few contributions have appeared in top journals. Thus, the academic literature needs more clarity about the theoretical building blocks of the business model, its antecedents and consequences, and the mechanisms through which it works. After the extensive review of Zott, Amit and Massa in 2011, including future research developments, no top journal dedicated an article which permanently clarifies the business model as a theoretical concept. As a consequence, the usefulness of theory building and empirical research on this concept is questioning. Therefore, the adoption of more precise concepts and terminology that indicate the researcher's main analytical focus will greatly enhance clarity. Future research on business models should seek to overcome these limitations. Besides that, there is a separation between the internationalisation of SMEs and larger enterprises. However, in the academic literature, the definition of a SME is different, e.g.; less than 500 employees (Buckley, 1997), less than 500 employees (Knight, 2000), the size matters up to enterprises with 200 employees (Hollenstein, 2005), less than 200 employees (Coviello & Jones, 2004) and, more than that, most of these studies examine enterprises with less than 100 employees (Coviello & Jones, 2004). Therefore, future research has to define one single definition for small- and medium sized enterprises, on which theory development can be based.

Last but not least, the internationalisation of the business model lighted up a future research direction, because a lack of knowledge was found in one building block. When searching for valuable articles, "international revenue stream" does not result in any academic article originating from a top journal, that sets one thinking. Researchers and top journals have should spend more time in the investigation of international revenue streams, since the academic literature in this field is scarce. This is especially the case in top journals, in which no relevant article or contribution was found.

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Non-Scientific References

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APPENDIX A - Business Model Literature

Business Model Literature	Citations
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Mahadevan, B. (2000). Business models for Internet-based e-commerce: An anatomy. <i>California management review</i> , 42(4), 55-69.	1045
Stewart, D. W., & Zhao, Q. (2000). Internet marketing, business models, and public policy. <i>Journal of Public Policy & Marketing</i> , 19(2), 287-296.	260
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Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. <i>Business horizons</i> , 48(3), 199-207.	1172
Bonaccorsi, A., Giannangeli, S., & Rossi, C. (2006). Entry strategies under competing standards: Hybrid business models in the open source software industry. <i>Management Science</i> , 52(7), 1085-1098.	356
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APPENDIX B - Methodological procedures for search, selection and exclusion

The method consists out of criteria to delineate the field and to create a systematic and reliable literature review. Subsequently, the method for analysing and presenting the academic literature will be outlined to work clear, concise and well-written.

Scope

First of all, the scope of the article is to systematic review all articles across academic top journals relevant to the field, from 1989 to 2015. The scope of the review is from 1989, because in 1989 the first article appeared which differentiated between domestic and international entrepreneurship, written by McDougall. Jones, Coviello and Tang (2011) did a domain ontology and thematic analysis in International Entrepreneurship research, who confirmed that the foundation of International Entrepreneurship is in 1989.

Type of Articles

Books, book chapters, reports and conference papers are excluded due to variability in peer review processes and more restricted availability. In contrast, journal articles are considered to be validated knowledge (Podsakoff, Mackenzie, Bachrach & Podsakoff, 2005). The articles which may be relevant for the study are as well as empirical, conceptual as review articles.

Key Journals

The articles selected originate from top journals, to delineate the field and in order to guarantee the quality of the articles used. The ranking of the journals is based on the Web of Knowledge, in the 2014th edition of 'Journal Citation Reports Social Science Edition', which ranks scientific journals based on multiple criteria. The impact factor for every journal is used, by which the most influential journals are ranked. The impact factor of the last five years will be used, so that the report filters out temporary high-ranked journals, by which the ranking is more reliable. The selected categories in the journal citation report are business and management, whereupon the selection of the top journals is made. The top journals are selected based upon relevance and a minimum five years impact factor of 1,00. The relevant journals are top management journals, top entrepreneurship journals, top international business journals and a few special/focused issues on IE related topics. The selection of top journals is broad in the beginning. During the selection of the articles, it may appear that a journal is missing, or that a few journals will be excluded, because no relevant articles are found. The key journals may therefore be refined during the process.

Selected Key Journals

2. Academy of Management Review	<i>United States</i>
3. Academy of Management Journal	<i>United States</i>
4. Journal of Management	<i>United States</i>
12. Journal of International Business Studies	<i>England</i>
13. Strategic Management Journal	<i>United States</i>
15. Long Range Planning	<i>England</i>
20. Journal of Business Venturing	<i>United States</i>
22. Entrepreneurship, Theory and Practice	<i>United States</i>
39. Journal of International Marketing	<i>United States</i>
40. Journal of World Business	<i>United States</i>
75. Journal of International Management	<i>Netherlands</i>
82. International Business Review	<i>England</i>
83. Journal of Small Business Management	<i>United States</i>
84. Small Business Economics	<i>Netherlands</i>
97. International Marketing Review	<i>England</i>
106. Harvard Business Review	<i>United States</i>

121. Management International Review
131. European Journal of Marketing

Germany
England

Appropriate sources

The sources used to find the relevant literature are Google Scholar, Web of Science and Scopus.

Search terms

- a. International Entrepreneurship
- b. International Business
- c. Internationalisation
- d. Small- and medium-sized enterprises
- e. (International) Business Model
- f. Business Model Innovation / Replication

Additives

- a. Review
- b. Ontology
- c. Research / field / territory
- d. Theory development / Future research

Initial Focus

The initial focus to select an article is on the title and abstract/executive summary, to see whether the article is relevant for the systematic literature review.

Select

First of all, filtering doubles and refining the sample based on the title and abstract/executive summary. If the content appears to be relevant, the conclusion will then be perused in order to monitor the suitability of the article. Afterwards, the sample will be refined based on the full text. While reading the text, forward and backward citation tracking is used to further enrich the quality of the sample.

APPENDIX C – Contribution Academic Literature

Themes			Articles
Internationalisation Preparation			Oviatt & McDougall, 1994; Eriksson, Johanson, Majkgard & Sharma, 1997; Knight, 1999; Autio, Sapienza & Almeida, 2000; McDougall & Oviatt, 2000; Knight, 2001; Chetty & Campbell-Hunt, 2003; Andersson, 2004; Zahra, 2005; Crick & Spence, 2005; Johanson & Vahlne, 2009; Autio, George & Alexy, 2011; Kalinic & Forza, 2012
External Forces			McDougall, 1989; Oviatt & McDougall, 1994; Boter & Holmquist, 1996; McDougall & Oviatt, 1996; Buckley, 1997; Eriksson, Johanson, Majkgard & Sharma, 1997; Hadjikhani, 1997; Coviello & McAuley, 1999; McDougall & Oviatt, 2000; Gankema, Snuif & Zwart, 2000; Malhotra, Agarwal & Ulgado, 2003; Andersson, 2004; Brouthers & Nakos, 2004; Dimitratos, Lioukas & Carter, 2004; Crick & Spence, 2005; Rialp, Rialp & Knight, 2005; Jones & Coviello, 2005; Zahra, 2005; Fernhaber, Gilbert & McDougall, 2008; Szyliowicz & Galvin, 2010; Prange & Verdier, 2011
Entry Mode Decision			McDougall, 1989; Agarwal & Ramaswami, 1992; McDougall & Oviatt, 1994; McDougall, Shane & Oviatt, 1994; Calof & Beamish, 1995; McDougall & Oviatt, 1996; Buckley, 1997; Jones, 1999; Coviello & McAuley, 1999; Burgel & Murray, 2000; McDougall & Oviatt, 2000; Zahra, Ireland & Hitt, 2000; Shrader, 2001; Lu & Beamish, 2001; Westhead, Wright & Ucbasaran, 2001; Kirby & Kaiser, 2003; Brouthers & Nakos, 2004; Hollenstein, 2005; George, Wiklund & Zahra, 2005; Shroder, 2006; Freeman, Edwards & Shroder, 2006; Johanson & Vahlne, 2009; Ojala, 2009; Teece, 2010; Osterwalder & Pigneur, 2013
Business Model	Infrastructure Management	<i>Key Partners</i>	McDougall, Shane & Oviatt, 1994; Boter & Holmquist, 1996; McDougall & Oviatt, 1996; Coviello & Munro, 1997; Buckley, 1997; Hadjikhani, 1997; Karagozoglu & Lindell, 1998; Coviello & McAuley, 1999; Jones, 1999; Chetty & Holm, 2000; Shrader, 2001; Kirby & Kaiser, 2003; Armario, Ruiz & Armario, 2008; Johanson & Vahlne, 2009; Ojala, 2009
		<i>Key Activities</i>	McDougall, Shane & Oviatt, 1994; Boter & Holmquist, 1996; McDougall & Oviatt, 1996; Coviello & Munro, 1997; Madsen & Servais, 1997; Eriksson, Johanson, Majkgard & Sharma, 1997; Karagozoglu & Lindell, 1998; Coviello & McAuley, 1999; Jones, 1999; Knight, 2000; Zahra, Ireland & Hitt, 2000; McDougall & Oviatt, 2000; Autio, Sapienza & Almeida, 2000; Knight, 2001; Qian & Li, 2003; Chetty & Campbell-Hunt, 2003; Zahra, 2005; Weerawardena, Mort, Liesch & Knight, 2007; Armario, Ruiz & Armario, 2008; Lee, Kelley, Lee & Lee, 2012; Dimitratos, Voudouris, Plakoyiannaki & Nakos, 2012; Sui & Baum, 2014
		<i>Key Resources</i>	McDougall, Shane & Oviatt, 1994; Oviatt & McDougall, 1994; Calof & Beamish, 1995; Boter & Holmquist, 1996; McDougall & Oviatt, 1996; Coviello & Munro, 1997; Buckley, 1997; Reuber & Fischer, 1997; Madsen & Servais, 1997; Karagozoglu & Lindell, 1998; Coviello & McAuley, 1999; Jones, 1999; Knight, 2000; Chetty & Holm, 2000; Autio, Sapienza & Almeida, 2000; Knight, 2001; Lu & Beamish, 2001; Westhead, Wright & Ucbasaran, 2001; Yli-Renko, Autio, Tontti, 2002; Sharma & Blomstermo, 2003; Chetty & Campbell-Hunt, 2003; Etamad & Wright, 2003; Andersson, 2004; Li, Li & Dalgic, 2004; Zahra, 2005; Crick & Spence, 2005; Jones & Coviello, 2005; Oviatt & McDougall, 2005; Hollenstein, 2005; Rialp, Rialp & Knight, 2005; Coviello, 2006; Mudambi & Zahra, 2007; Gassmann & Keupp, 2007; Zhou, Wu & Luo, 2007; Presutti, Boari, Fratocchi, 2007; Jansson & Sandberg, 2008; Johanson & Vahlne, 2009; Musteen, Francis & Datta, 2010; Lee, Kelley, Lee & Lee, 2012; Osterwalder & Pigneur, 2013; Sui & Baum, 2014
	Product	<i>Value Proposition</i>	McDougall, 1989; Oviatt & McDougall, 1994; McDougall, Shane & Oviatt, 1994; Boter & Holmquist, 1996; McDougall & Oviatt, 1996; Karagozoglu & Lindell, 1998; Knight, 2000; Autio, Sapienza & Almeida, 2000; Knight, 2001; Chetty & Campbell-Hunt, 2003; Qian & Li, 2003; Dimitratos & Jones, 2005; Freeman, Edwards & Shroder, 2006; Teece, 2010; Prange & Verdier, 2011; Hagen, Zucchella, Cerchiello & De Giovanni, 2012; Kalinic & Forza, 2012; Osterwalder & Pigneur, 2013
	Customer Interface	<i>Customer Relationships</i>	Boter & Holmquist, 1996; Yli-Renko, Autio, Tontti, 2002; Presutti, Boari & Fratocchi, 2007; Osterwalder & Pigneur, 2013
		<i>Channels</i>	-
		<i>Customer Segments</i>	Johanson & Vahlne, 1990; Oviatt & McDougall, 1994
	Financial Aspects	<i>Performance</i>	McDougall & Oviatt, 1996; Calof & Beamish, 1995; Boter & Holmquist, 1996; Eriksson, Johanson, Majkgard & Sharma, 1997; Autio, Sapienza, Almeida, 2000; Lu & Beamish, 2001; Chetty & Campbell-Hunt, 2003; Qian & Li, 2003; Sapienza, Autio, George & Zahra, 2006; Contractor, 2007; Lee, Kelley, Lee & Lee, 2012