

INTERNATIONALIZATION CAPACITATION OF A
SME IN THE DENTAL PROSTHETICS INDUSTRY:

ORALOOK

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I - Abstract

The phenomenon of market globalization has been posing new challenges and opportunities for Portuguese companies, resulting in internationalization initiatives. With the opening and expansion of markets and with the increasing competition and pace of innovation, companies seek for growth in international markets. Increasingly, companies' must be able to respond to challenges that threaten their economic survival, resulting in stagnation. Internationalization is one of business strategic responses to the globalization challenge.

The aim of this dissertation is to develop an in-company project to evaluate a dental laboratory internationalization capacity, and the subject to be studied is a top technological company, Oralook. The motivation to internationalize emerged from an entrepreneurial vision of the company's managing partner, Gonçalo Duque, a dental prosthetics expert. Today, Oralook has one of the best facilities among Portuguese dental laboratories, equipped with the latest dental technology worldwide, which allows the sale of products and services outside the domestic market.

From the detailed internal and external analysis, it is possible to answer pertinent questions brought up by careful research and find solutions towards shaping the future of the laboratory's internationalization process.

Keywords: SME, internationalization, dental prosthetics and export.

II - Resumo

O fenómeno da globalização do mercado tem vindo a oferecer novos desafios e oportunidades para as empresas portuguesas, incentivando-as a considerar iniciativas de internacionalização. Com a abertura e expansão dos mercados, com o incremento da concorrência e o acelerado ritmo de inovação, as empresas procuram o seu lugar nos mercados internacionais. Cada vez mais as empresas precisam de estar preparadas para dar resposta aos desafios que poderão ameaçar a sua sobrevivência económica, resultando em estagnação. A internacionalização é uma das estratégias que podem dar resposta ao desafio da globalização.

O objetivo desta dissertação é a de elaborar um projeto que avalie a capacidade de internacionalização de um laboratório de prótese dentária. Assim, faz sentido que o objeto de estudo seja uma empresa em constante evolução técnica e tecnológica: Oralook. A iniciativa para internacionalizar a empresa surgiu da visão empreendedora do sócio gestor, Gonçalo Duque, um profissional de prótese dentária. Atualmente, a Oralook tem uma das melhores instalações laboratoriais a nível nacional, equipada com a mais recente tecnologia na área dentária, o que permite a venda de produtos e serviços fora do mercado doméstico.

A partir da análise detalhada interna e externamente, é possível responder a questões pertinentes levantadas pela pesquisa cuidadosa e encontrar soluções com vista a moldar o futuro da empresa no processo da internacionalização.

Palavras-chave: PME, internacionalização, prótese dentária e exportação.

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Glossary

Lab - Laboratory

MPI – Market Potential Index

SME - Small and Medium Enterprise

Chapter 1. Introduction

1.1. Research Context

The topic of internationalization and globalization is nowadays in the forefront, especially with the depressive economic cycles that flooded Europe in the recent years¹, which have created substantial difficulties for the economic and social growth of a country like Portugal. The crisis has directly affected national companies in their performance and competitiveness.

How can a Portuguese SME² dental laboratory like Oralook successfully circumvent the current economic constraints of the Portuguese Market? The option chosen by the managing partner of Oralook is simple: sell abroad.

With the advance in the dental prosthetics industry and information systems, dental laboratories can now manufacture dental prosthesis without the use of physical mouth molds³. Selling implantology products abroad is now possible in a much more efficient way. Dental clinics no longer need to send physical molds from patients to the dental laboratories. With the new technology, it is now possible for dentists to perform an intraoral scan of the patient's mouth and send the mouth scan through a 3D image file to the labs, which will then be processed by a suitable software⁴. The digital template will then be edited to manufacture dental prosthesis in a milling robot, also known as Computer Numerical Control (CNC) machine⁵.

In 2012, Oralook invested in top dental machinery that allows them to process 3D mouth models sent by dental clinics from all over the world, in order to shape the prosthesis in an automated way using CNC. However, dental clinics must be equipped with the necessary equipment to perform intraoral scans, which may require a large investment.

The company has made a strategic restructuring with a massive change in their production policies and target customer. Oralook had to heavily invest in new facilities with technological innovation and constant training for their employees. Today, Oralook is entirely focused on their product quality with customization of each order. However, they have higher prices than the average Portuguese laboratories.

¹ Mainly the European debt crisis that has been taking place in the European Union since the end of 2009.

² Small / medium sized enterprise.

³ Also known as impression body.

⁴ Known as CAD/CAM system.

⁵ Implantology CNC Machines are programmed to build teeth in an automated way.

The company also created the brand h.andi, a training center in the same building where the laboratory is located. H.andi is aimed to train dental prosthetics technicians and dentists who are in active duty. The training center offers complete training programs of specialized courses, with well-known trainers, who transmit the most advanced and innovative techniques. The majority of the training provided to their own staff is also carried out in h.andi training center. With the new restructuration plan, the company has started to offer top quality products with higher prices and stopped selling low-quality products to low-cost dental clinics and laboratories.

The continuous training of its human resources, investment in innovation and rigor to deliver the best products in the market, allowed Oralook to reach customers more effectively and be recognized as the best dental clinics in Portugal.

1.2. Purpose of the project

A first contact was established with Oralook through a meeting with the company's managing partner Gonçalo Duque, followed by another meeting with this dissertation's adviser Professor António Vieira da Silva, where the objectives of this project were presented.

The purpose of this in-company project is to evaluate Oralook's readiness to internationalize, by analyzing if Oralook's laboratory have the necessary requirements to start selling abroad in an efficient way, with competitive prices and quality, maintaining excellence in the national market.

Internationalization emerges as a strategic option to expand and promote the sustained growth of the company, functioning as a complement to what the market already achieved.

Thereunto, this study will help to gain a better understanding of the internationalization process of SMEs, by analyzing the different internationalization theories to formulate strategies and to choose methods when expanding to international markets.

To minimize the risks associated with the internationalization process, we will analyze the internal and external environment of the company and which resources and capabilities are available to achieve the proposed strategic objectives.

1.3. Target Group

We believe that both academic and business people will find this study valuable and will be able to use the implications and results provided. This research will help to understand the theories of internationalization within SMEs through the specific case of a dental prosthetics company.

1.4. Delimitation

Many factors, internal and external, may affect a firm's internationalization process. Factors such as economic conditions, business culture, technology and infrastructures have an impact upon strategy and methods applied by SMEs from a particular country. One significant limitation of our study is the lack of academic research in the internationalization process of the dental prosthetics industry's specific case. At the date of this study we weren't able to find a single study into the internationalization process of dental laboratories' products or any similar report. The use of 3D scans is a recent technology applied in dental prosthetics industry which has yet to be adopted, with only a few clinics and laboratories using it. However, Oralook's believe it that is a matter of time until its entire wide spread adoption by dental professionals because it will significantly reduce the error margin and improve the product quality. It's the future of dental prosthetics' manufacture.

1.5. Structure

This project is divided in 6 major parts. The initial chapter gives an introduction to the project with the information collected through an interview conducted with Oralook Managing Partner. The second chapter is the literature review on the subject of internationalization, a necessary step in order to understand how companies internationalize and why. The fourth chapter gives an insight on the current situation of Oralook. In the fifth chapter we discuss the company readiness to internationalize by presenting the results for the research questions along with an internationalization checklist. The project is completed in the sixth chapter with the main conclusions, limitations and perspectives of future work.

1.6. Contextualization of Dental Medicine and Target Product

Dental Medicine in Portugal was throughout its history carried out by accredited professionals simultaneously with the practitioner with no academic education. In thirteenth century there was a separation between Medicine and Surgery being dental practice related to surgery. Initially, barbers carried out simple surgical acts. Later, in seventeenth century, a Royal Charter made mandatory the examination by surgeons, in addition to other professions, such as barbers. Also a fine was imposed to anyone who removed teeth without a license. Around nineteenth century, following the reform of health services, dental surgeons were authorized to practice their profession by a letter of examination and the approval of the Medical-surgical schools of the Kingdom.

In 1870, it was approved by decree the examination for dentists. After the implantation of the Republic was suspended by law the examination of Dentists, being the profession practiced by graduates in medicine. Later the discipline of Stomatology was created in the Faculty of Medicine. In the last years, they have opened schools of Dentistry at national level either in Public and Private Universities.

All individuals have different mood and emotional variations throughout the different stages of their life, from childhood to old age; therefore health professionals must understand patients' emotional state, masticatory function, aesthetics and self-esteem. Through their face expressions individuals reveal their feelings. Losing teeth causes insecurity and anxiety and when using dental prosthesis, patients also seek to improve their self-esteem as well as their personal and social image.

What is Dental Prosthesis?

In dental medicine, prosthesis allows replacing missing teeth and restoring the balance of the mouth and jaws. Teeth, in addition to their masticatory function, also have an aesthetic, phonetic and balance function. A good articulation of the upper jaw with the lower jaw is fundamental, and the correct occlusion of both jaws allows a good functioning of the mandible articulation.

Teeth loss can be caused by cavities⁶, gum disease⁷ and various injuries such as accidents. When teeth are lost, those at the side tend to move by occupying the free space causing

⁶ Also known as caries, happen as a result of tooth decay.

⁷ An infection of the tissues that surround and support the teeth.

imbalance in the dental arches. With the loss of teeth, phonetic function, that is, the articulation of words is altered because the air is expelled differently. From the aesthetic point of view the change is evident, both mouth and face change. Not having teeth can also mean bone resorption where the roots of missing teeth were. With dental prosthesis patients can recover chewing, aesthetic and phonetic functions. Replacement of missing teeth is absolutely necessary for all of the above reasons. The prosthesis may be removable or fixed.

As the name implies, removable prosthesis are the ones you can take out of your mouth to wash and then put them back. As shown in figure 1 and 2, there are acrylic and skeletal removable prosthesis.

Figure 1: Acrylic removable prosthesis



Figure 2: Skeletal removable prosthesis



On the other hand, fixed prosthesis cannot be removed for washing because they are permanently fixed. In this category, the most common prosthesis are crowns and bridges, see figure 3 and 4 below:

Figure 1: Crown – fixed prosthesis



Figure 2: Bridge – fixed prosthesis



Chapter 2. Literature Review

The literature review was carried out through the collection of information from scientific articles and books that focus mainly on the theme of internationalization and SMEs. Although there is phenomenon of internationalization for different sizes of companies and different proportions, the focus was especially on SMEs thus excluding micro and large companies. In addition to diverse academic bibliography used on internationalization of SMEs, data was also gathered consulting publications from Eurostat, The World Bank, The Observatory of Economic Complexity and various websites, including Orlookup's.

The literature review is focused on the following five central questions:

- 1) What is the concept of internationalization?
- 2) What are the motivations for internationalization?
- 3) What are the internationalization models?
- 4) How to proceed with the choice of international markets?
- 5) What are the existing international entry modes?

2.1. Internationalization

Internationalization cannot be considered a phenomenon of our times if we bear in mind that exchanges between nations happen for hundreds of years. However, the dimension, growth and characteristics that internationalization has reached in the last decades is the reason why this phenomenon became relevant, giving it a new breath and justifying a renewed interest in its knowledge. This chapter will thus address some of the key aspects of internationalization phenomenon, namely their concepts, explanatory theories, determinants and forms. Given the framework of the company under study, this research will focus in the internationalization of a SME company.

2.2. Concept of internationalization

In the literature about internationalization, several theories are presented to explain the involvement of companies in international operations. Researchers tried to identify their own concept of internationalization based on the goals, issues and interests of each study they conducted.

Internationalization is a must to be competitive and has a sustainable development of companies, in a context of globalization of technologies, markets and competition. It is, therefore, essential that Portuguese companies succeed in competing with companies inside and outside the country. Sometimes it is even the only way to be defensive, to face international competition and take advantage of the globalization of markets (AICEP, 2012).

The process of economic and financial globalization and the increasing liberalization of international markets, together with advances in information and communication technologies, imposes major competitive challenges for companies. They must react in the fastest way possible to the demands, but also to the opportunities that arise from a competitive business environment characterized by a strong interconnection of international markets and a great interdependence of national economies (Pleitner, 2002).

Internationalizing is, in the current global economic framework, a strategic decision of great relevance to guarantee the sustained growth of companies (Lu and Beamish, 2001), as companies facing international competition are forced to compete in international markets (Korsakiene and Tvaronaviciene, 2012).

The definition of the term internationalization can be explained as the process by which a company starts working beyond the limits of its domestic market, looking for foreign markets. Internationalization should be understood as a synonym for the geographic expansion of a company's economic activities outside its borders (Ruzzier, et al., 2006).

According to Barber and Darder (2004), this is one of the strategic management processes by which companies assess the changing conditions of international environment and develop an adequate organizational response to available resources, which will entail transposing national boundaries.

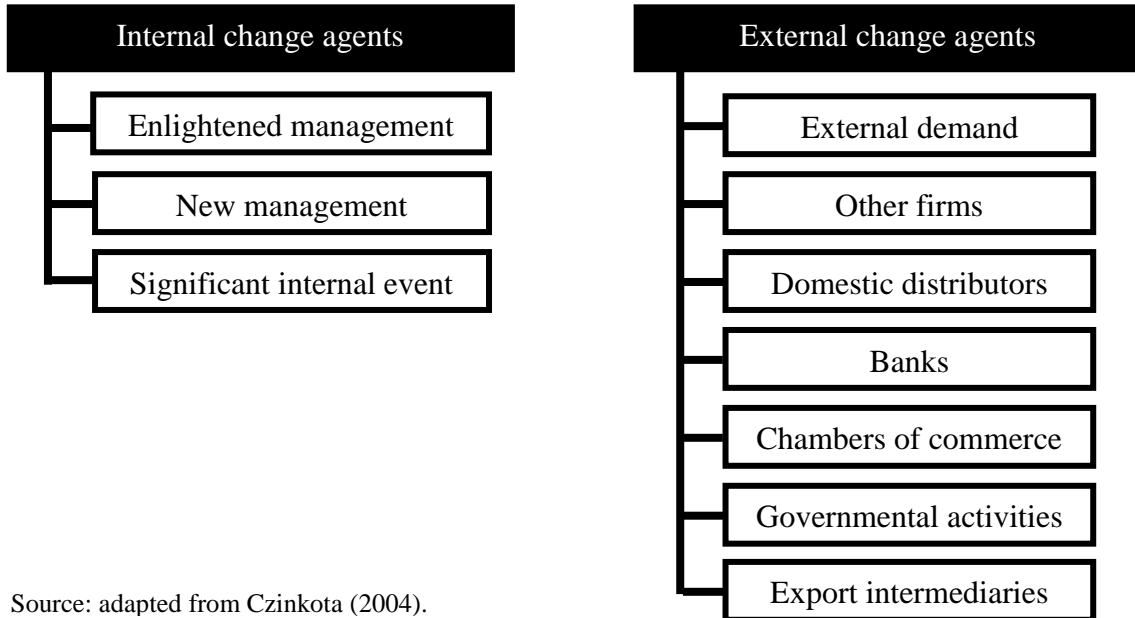
For Meyer (2006), internationalization is the process by which a company increases the level of its value-added activities outside its country of origin.

2.2.1. Change agents

The internationalization process means a change in the company, but what makes that change happen? A change agent is a definition for someone or something within the

company that initiates and drives change's implementation (Czinkota, 2004). The agents of change can be internal or external to the companies, as it is observed in the figure 5.

Figure 3: Change agents



Source: adapted from Czinkota (2004).

Enlightened management comes from both national and international experiences, especially when the company's management team discovers and understands the value of international markets and decides to look for business opportunities across borders. This type of enlightening can be triggered by trips abroad, during which new business opportunities are discovered (Czinkota, 2004).

New management can mean a strategic change of the company and this change may result from the international experience of the new managers or the development of new objectives for the company, such growth and expansion through internationalization activities (Czinkota, 2004).

Significant internal event may arise from the development of a new product useful for external markets or from a new employee who firmly believes that the company should carry out internationalization activities (Czinkota, 2004).

External demand has as powerful effect on the initial interest in entering international markets, since unsolicited orders from abroad can be an important factor that encourages companies to internationalize (Czinkota, 2004).

Other firms as a change agent derives from statements and actions of other companies operating in the same sector, such as the fact that what competition considers valuable

and growth-enhancing international markets, can attract managers' attention and lead to company's international expansion . These statements can occur in formal and informal meetings between managers of different companies, meetings of trade associations, or business conventions and not only have credible source, but are also viewed with certain amount of fear, because a successful competitor may eventually endanger the company's business (Czinkota, 2004).

National distributors are often involved in internationalization processes and, in order to increase their international distribution volume, they support domestic firms to enter international markets (Czinkota, 2004).

Banks and other financial service providers can serve as key agents of change, alerting domestic clients to international opportunities, as they hope their services will be used for any international transactions resulting from internationalization (Czinkota 2004).

Chambers of commerce and other business associations that interact with local businesses can often increase export interests. In most cases, these organizations operate only as secondary intermediaries, because real change is brought by the presence and encouragement of other managers (Czinkota, 2004).

Government activities, at the national or local level, can also act as an important agent of change. Considering exporting contributions to employment growth and tax revenue, governments are increasingly becoming active in promoting and supporting exportation (Czinkota, 2004).

Export intermediaries, such as export management companies and trading companies, can be considered as agents of change because they provide information to companies, display their products abroad, and, if necessary, provide financing (Czinkota, 2004).

2.3. Internationalization models

This chapter summarizes some of the existing literature on firms' internationalization. In addition to contributing for the understanding and evaluation of theory and the state of art on internationalization, it identifies which models could better explain the process of Oratook's internationalization..

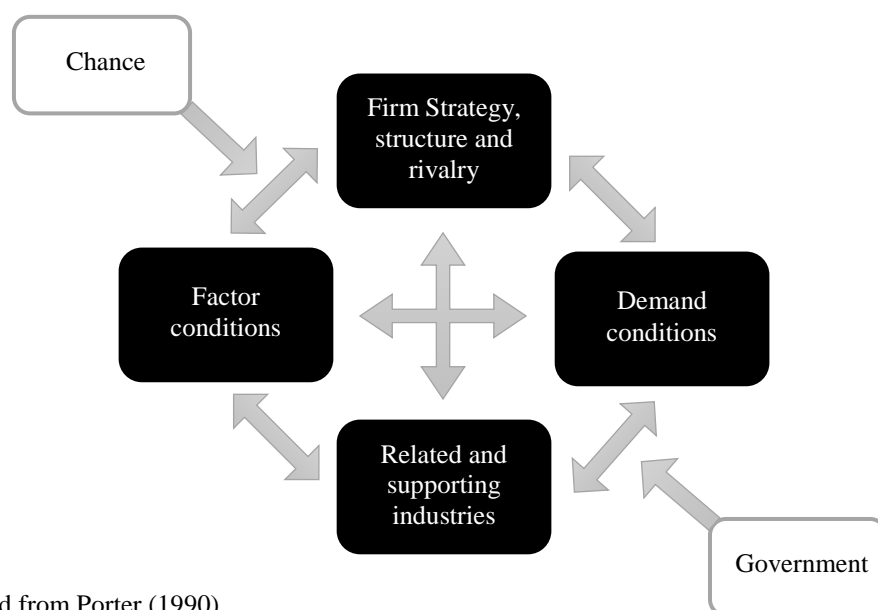
For a deeper understanding of the reasons that lead companies to internationalize, as well as used strategies, it is necessary to analyze some of main explanatory theories this subject, on which several empirical and academic studies are based.

Regarding internationalization models, it is important to bear in mind that there is no single theory that can explain companies' internationalization. There are several studies on this subject but all of them have limitations pointed out. The theories presented in this study, were considered the most appropriate to be studied for Oralook, according to the company's characteristics and the managing partner goals.

2.3.1. Porter's contribution to internationalization

Porter (1990) suggests that only after achieving a competitive advantage and having a defined strategy in its country of origin, a company may enter into international competition. To better compete and establish a position in a particular industry, a company must start by analyzing the external environment, and then define the strategy based on the obtained knowledge. The author has developed a model, which identifies four forces as being decisive in the evaluation of competition's intensity and profitability of an industry.

Figure 4: Porter's Diamond of National Advantage



Source: adapted from Porter (1990).

The set of national determinants that bring a competitive advantage to the company, are called “The Diamond of National Advantage”.

1. **Factor conditions** – a nation’s ability to turn its basic resources, (such as natural resources, human resources, capital resources, physical resources, knowledge resources and infrastructures) into a specialized advantage;
2. **Demand conditions** – the number and the level of sophistication of domestic consumers for and industry’s product;
3. **Related and supporting industries** – the presence of capable locally based suppliers and competitive related industries;
4. **Firm Strategy, structure and rivalry** – determine how a nation’s business are created, organized and managed.

For Porter, nations that comprise these competitive advantages are the target to internationalization processes. The author also highlights government support in the internationalization process, with domestic firms being encouraged to compete internationally support by incentives from the government. Also, chance events such as major innovations, can reshape an industry structure (Porter, 1990).

The model fails to explain the complexity of the international trading system, with three main criticisms being pointed out: it generalizes without solid empirical foundations, its degree of predictability is very doubtful and it does not consider how multinationals generate competitive advantages.

2.3.2. The Eclectic Paradigm - OLI Advantages

The eclectic paradigm is a multi-theoretical approach that emerged from an evolution and synthesis of the remaining FDI theories - market imperfections theory, internalization theory, product life cycle theory - (Dias, 2007) and was published by John Dunning in the 80s.

Dunning (1977, 1980), considering that the remaining theories were not complete, seeks to explain the internationalization process based on FDI and analyze the questions “why?” “where?” and “how?” in internationalization decisions. The author argues that a successful investment must respect three conditions, best known as OLI (Ownership, Location, Internalization) advantages:

Ownership advantages relate to specific advantages that the company possesses and can differentiate it from competition, for instance, control of strategic assets such as technology, own brand and management skills. These advantages aim to answer the question: why?

Localization advantages are related to the benefits of exploiting company's supremacy in the foreign country, such as cost factors (human resources, energy, materials, components, semi-finished products) and differences (ideological, cultural, business, political, economic) between the two countries. These advantages aim to answer the question: where?

The advantages of **internalization** are the benefits of running operations within the organization (vertical integration) rather than relying on the market, such as avoiding transaction costs. This type of advantage reveals four decision criteria: risk, control, return and resources. These advantages aim to answer the question: how?

In summary, from Dunning's point of view, a company should only use FDI if all three conditions (OLI advantages) are satisfied. If the company only meets one or two of the three conditions, the company must choose another entry mode, as exemplified in table 1.

Table 1: Dunning's model of entry mode selection

Entry Modes	Advantages		
	O	L	I
FDI	+	+	+
Export	+	-	+
Licensing	+	-	-

Source: adapted from Dunning (1998).

This type of model is generally adopted by large companies with international experience, with vast financial resources and abundant information on the markets, since it implies a high-risk investment.

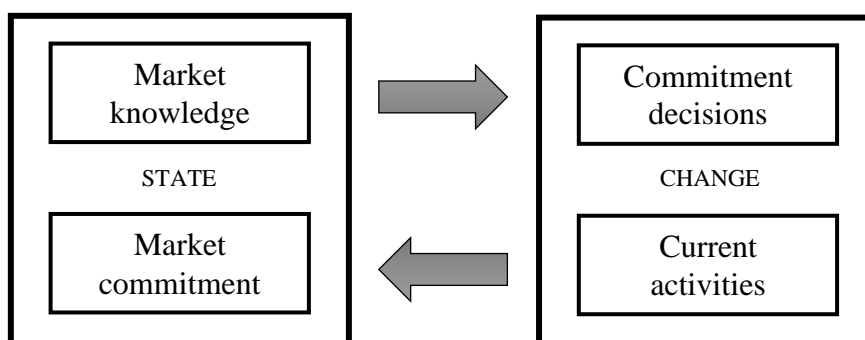
In the case of Oralook, the location will not be an benefit to take advantage of, as it has no initial plan to invest abroad, only expand sales to Europe, where they hardly could take

advantage of the location. Thus, according to the Eclectic Paradigm, exporting is the entry mode that best fits Oralook for now.

2.3.3. The Uppsala model

The Uppsala model is an important and well-known theory in the subject of business internationalization. This model emerged in 1975 at the University of Uppsala in Sweden when researchers proposed that the internationalization of an individual enterprise should be made progressively. According to Johanson and Wiedersheim-Paul (1977), as resource allocation and knowledge of foreign markets grows, companies gradually increase their degree of commitment to their markets. Thus, gaining international experience allows psychological distance between companies and new foreign territories to be reduced, and consequently, promotes progression and exploitation of opportunities offered by the host countries. Psychological distance is defined as the set of factors (language, culture, political systems, level of education, level of industrial development, etc.) that hinder the flow of information between the company and the market (Johanson and Wiedersheim-Paul, 1975).

Figure 5: Uppsala basic model of internationalization

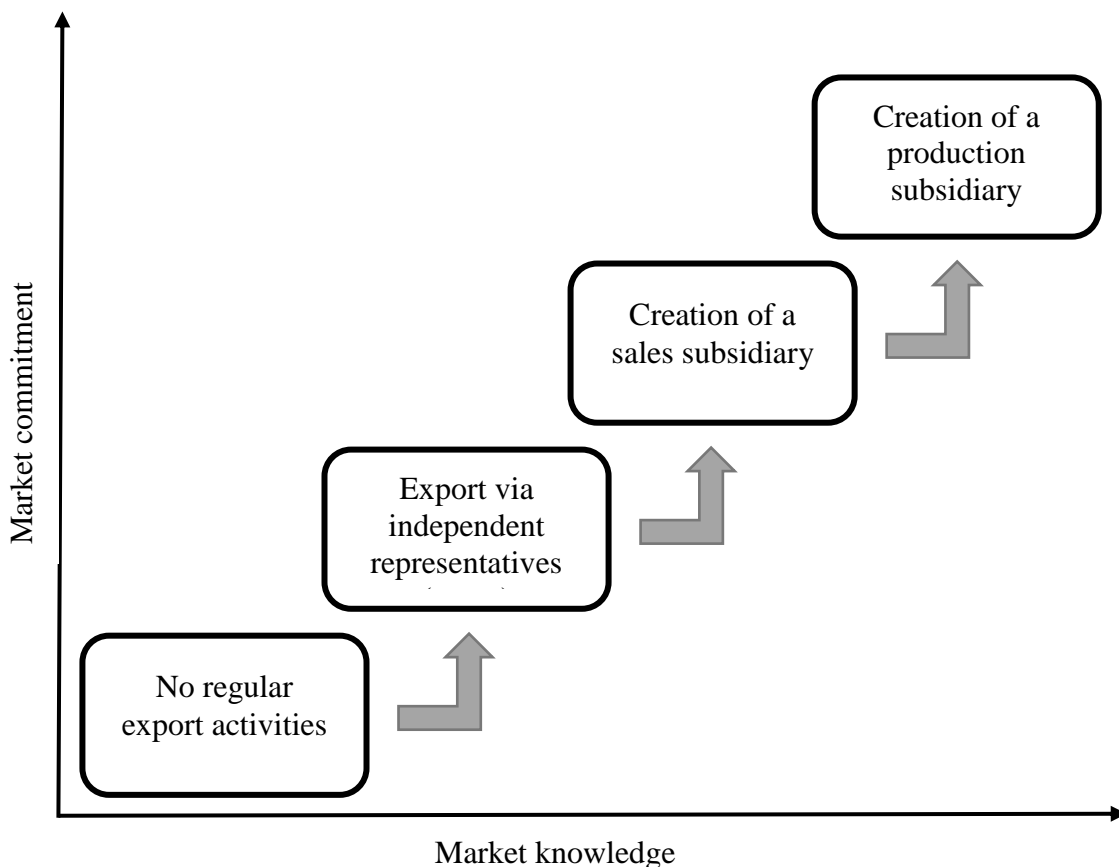


Source: adapted from Johanson and Vahlne, (1977; 1990).

The internationalization process evolves as company increases the acquisition of knowledge about foreign markets and operations, as well as increases allocation of resources to markets (Johanson and Vahlne, 1990). The obstacles to internationalization (lack of knowledge and resources) are reduced through incremental decision-making because of the knowledge acquired (Johanson and Wiedersheim-Paul, 1975). Johanson

and Vahlne (1977) point out that the output of a step becomes the input to the next step, which according to Hadjikhani (1997) makes it a dynamic model. As company obtains knowledge about the markets in which it operates, there is an awareness of business opportunities, which increases company's commitment to these markets (Johanson and Vahlne, 1990). Thus, the internationalization trajectory followed by companies is basically identified by four stages, as shown in figure 8:

Figure 6: Uppsala Model: Successive Steps in the Internationalization Process



Source: adapted from Johanson and Wiedersheim-Paul (1977).

Two patterns are considered in the procedure of company's internationalization: its involvement is sequential, in stages, with increasing commitment (ranging from no regular exports to the installation of a local production subsidiary); company enters successively in markets with greater psychological distance.

In sum, the Uppsala model describes an internationalization process focused on the learning and knowledge of external markets: there is a gradual approach by the company and a greater knowledge of the market leads to the company's involvement in this market.

This type of model is, therefore, generally adopted by small companies with no international experience, with limited financial resources and insufficient information on markets, as these companies seek, progressively and at the lowest possible risk, to gain international experience and grow their business.

2.3.3.1. Revisited Uppsala model

Following the development of the original model in 1975, there have been theoretical advances along with changes in business practices (Johanson and Vahlne, 2009). Thus, Johanson and Vahlne (2009) made modifications to the Uppsala model, due to the growing importance of business networks. Consequently, this new approach to internationalization, through a network of relationships, emphasizes that it is more important to overcome the lack of knowledge of business networks (outsidership), than to be “foreignness”, related to the psychological distance of foreign markets (Pukall And Calabro, 2014).

Another point suggested in Uppsala's (1990) revisited model is the inclusion of factors such as trust and commitment building. The authors give importance to affective and emotional dimension, since it represents a relevant element for the development of new knowledge. Trust can become a substitute for knowledge, for example when a company relies on an intermediary or client for developing the activity abroad (Johanson and Vahlne, 2009).

2.3.3.2. Critics to Uppsala model

In terms of criticism, the Uppsala model, despite being dynamic and pragmatic, is considered deterministic and rigid. Turnbull (1987) pointed out that there are companies that skip phases and forget key aspects in internationalization such as inter-company relations and agreements. Specifically, Uppsala model does not consider the increasing homogenization of cultures, tastes and living standards as well as facilitated access to information resulting from globalization, factors that call into question the concept of "psychological distance" and existence of stages. O'Grady and Lane (1996) suggested modifications in the conceptualization and measurement of the concept of "psychological distance", considering managers' behavior.

2.3.4. The Innovation-related internationalization models

Innovation-based internationalization models also have an incremental role in the process of companies' internationalization. The internationalization decision is, in this context, assumed as a company innovation (Andersen, 1993). Table 2 presents the four most relevant models of innovation, namely the models of Bilkey and Tesar (1977), Cavusgil (1980), Czinkota (1982) and Reid (1981).

Table 2: Innovation-based internationalization models

Bilkey and Tesar (1977)	Cavusgil (1980)	Czinkota (1982)	Reid (1981)
Stage 1 The company is not interested in exporting.	Stage 1 Domestic market: The company sells only to the home market.	Stage 1 The completely uninterested company.	Stage 1 Export awareness: Problem opportunity recognition, arousal of need.
Stage 2 The company is willing to fill unsolicited orders, but makes no effort to explore the feasibility of active exporting.	Stage 2 Pre-export stage: The company searches for information and evaluates the feasibility of undertaking exporting.	Stage 2 The partially interested company.	Stage 2 Export intention: Motivation, attitude, beliefs, and expectancy about export.
Stage 3 The company actively explores the feasibility of active exporting.	Stage 3 Experimental involvement: The company starts exporting on a limited basis to some psychologically close country.	Stage 3 The exporting company.	Stage 3 Export trial: Personal experience from limited exporting.
Stage 4 The company exports on an experimental basis to some psychologically close country.	Stage 4 Active involvement: Exporting to more new countries - direct exporting – increase in sales volume.	Stage 4 The experimental company.	Stage 4 Export evaluation: Results from engaging in exporting.
Stage 5 The company is an experienced exporter.	Stage 5 Committed involvement: The company constantly makes choices in allocating limited	Stage 5 The experienced small exporter.	Stage 5 Export acceptance: Adoption of exporting/rejection of exporting.
Stage 6 The company explores the feasibility of exporting to other more psychologically distant countries.		Stage 6 The experienced large exporter.	

	resources between domestic and foreign markets.		
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Source: adapted from Andersen (1993).

Thus, incentives to initiate export are understood differently in Bilkey and Tesar (1977) and Czinkota (1982) models, in contrast to Cavusgil (1980) and Reid (1981) models. The first two assume that the company is not interested in exporting in stage 1 and only satisfies uninvited orders, being partially interested in stage 2, which is due to a “push” mechanism or an external change that leads to the export decision. In the other two models, the company is more interested in exporting and is more active during the first stages. In these models, there is a "pull" mechanism or an internal change that explains the transition to the following stages (Andersen, 1993).

2.3.5. Networks theory

Networks theory uses networks as an approach to internationalization. Johanson and Mattsson (1988), describe industrial markets as networks of relationships between companies. A company’s competitive advantage results from its ability to respond to market challenges from its own resources or to mobilize and coordinate existing resources in other companies. Given this approach, competitors, stakeholders and partners with whom the company maintains relationships, are assets that can represent a competitive advantage for companies within the network that cooperate in the internationalization processes.

Table 3: Network Theory: Degree of company's Internationalization versus Degree of market Internationalization

Degree of internationalisation	Low degree of market internationalization	High degree of market internationalization
Low degree of company's internationalization	The Early Starter	The late starter
High degree of company's internationalization	The lonely international	The international among others

Source: Adapted from Johanson and Mattsson (1988).

According to Johanson and Mattsson (1988), in order to achieve a position in an international network a company should establish positions in several national networks with new partners for the company (international extension), should also develop positions and commit resources increasingly in networks abroad where the company already held positions (penetration) or increase coordination between positions already held in different national networks (international integration). The company's assets are different depending on their degree of internationalization and the market in which they operate. The situations that arise from the degree of internationalization and the market are depicted in the following table:

- **Early Starter:** When the company's degree of internationalization and the market is low. The company has few or no relations with international networks and has scarce market knowledge, we are in the presence of a pioneer company, which initiates internationalization process in an early stage (Johanson and Mattsson, 1988).
- **Lonely International:** When the company has already built a strong number of relationships in the market, and the market in which it operates as a low level of internationalization. This type of company is defined as an isolated internationalization (Johanson and Mattsson, 1988).
- **Late Starter:** The company has weak relationships in international networks and the market is already well developed. It faces a market in which competitors have a broader market knowledge, which increases barriers for the non-

internationalized companies in order to penetrate the already established networks. In this case, we are in the presence of a late internationalization carried out by a late starter company (Johanson and Mattsson, 1988).

- International among others: The company has good relations in international networks, guaranteeing external resources and internationalizes to a market with well-established networks. Thus, it is an internationalization among others and a company among several (Johanson and Mattsson, 1988).

For Malhotra et al. (2003) this theory, although it is dynamic, proactive and explains more completely the internationalization of SMEs, does not explain the internationalization of companies that are not in networks.

2.4. Motivations for internationalization

Knowing the motivations for internationalization is one of the first and most important steps in the internationalization process. This point is beneficial for guiding the companies that set up and put into practice an adapted strategy in the process of internationalization.

In the internationalization processes' analysis, Simões (1997) identifies the motivations for internationalization in five main groups of reasons, which are summarized in table 4.

Table 4: Motivations for internationalization

Motivations for Internationalization	
1. Endogenous	<ul style="list-style-type: none"> ✓ Need for company growth. ✓ Utilization of available productive capacity. ✓ Achieving economies of scale. ✓ Exploitation of skills, technologies. ✓ Diversification of risks.
2. Markets characteristics	<ul style="list-style-type: none"> ✓ Limitations of the domestic market. ✓ Perceived dynamism of external markets.
3. Relational	<ul style="list-style-type: none"> ✓ Response to competitors. ✓ Follow-up of clients in their internationalization. ✓ Approaches by foreign companies. ✓ Access to resources abroad

4. Access to resources abroad	✓ Lower production costs abroad. ✓ Access to technological knowledge.
5. Government Incentives	✓ Support from governments (country of origin or host country).

Source: Adapted from Simões (1997).

According to Simões et al (2013), the motivations for internationalization can be related to a set of internal and external factors of the company. The internal factors are the company's management decision; the external factors are those that contribute to a decision on the possibility of internationalization. But in the decision making to internationalize, the entrepreneur's role is decisive in international operations.

On the other hand, according to Czinkota et al, (2004) these motivations can also be divided into reactive and proactive. This aspect is useful to divide more clearly and concretely the motivations for internationalization.

Table 5: Proactive and reactive motivations for internationalization

Proactive Motivations	Reactive Motivations
✓ Benefits in terms of profits.	✓ Competitive pressures.
✓ Unique products.	✓ Excess of productive capacity.
✓ Technological advantage.	✓ Saturation of the domestic market.
✓ Exclusive information.	✓ Proximity of customers and ports of embarkation.
✓ Management commitment.	
✓ Fiscal benefits.	
✓ Economies of scale.	

Source: Adapted from Czinkota et al (1999).

Brito and Lorga (1999), add a third category in the proactive and reactive motives: the mixed motivations. In the mixed motivations, geographical proximity, cultural and linguistic affinities are noticeable, which many companies do not dismiss. According to the authors, betting on the nearest geographic markets provides greater security, since the degree of uncertainty and complexity they face is lower than in more distant markets.

Summarizing, there are several authors' proposals regarding the motivations for internationalization, which are closely linked to internal or external factors and depending on the stage of the international expansion process, which the company has achieved. Based on the authors' reading, one must conclude that motivations reflect the company's

internal and external factors and they depend on the stage of the international expansion process, which the company has achieved.

Douglas and Craig (1995) believe that there are three phases determining the process of the company internationalization, each of which corresponds to a determinant, as shown in table 6.

Table 6: Stages and determinants of internationalization

Phases	Detonators	Determinant Factors
Phase 1: Initial entry into the foreign market	<ul style="list-style-type: none"> · Opportunistic behavior of the company in response to an unsolicited customer approach · Passive behavior of the company with the opportunity <hr/> <ul style="list-style-type: none"> · Saturation or limitations in the domestic market for the growth of the company <hr/> <ul style="list-style-type: none"> · Track customers or get close to customers · Track competitors for best defense · Need to diversify markets to reduce risk · Better supply opportunities abroad · Retaliation of external competitors entering the domestic market · Technological upgrading and benchmarking · Use of incentives and exchange rate fluctuations · Progress in transportations and communications leading to cost reductions 	International leverage of company assets already exploited in its market (innovative products, brands, management skills, distribution)
Phase 2: Expansion in the foreign market	<ul style="list-style-type: none"> · Growth and increased market penetration · Need to combat competition · Initiation and motivation of the local management team · Desire to use local assets more effectively · Constraints and natural market barriers (transport, distribution, financial aspects) 	Leverage skills locally acquired at production and marketing level, for other products or lines of business, using the brand image of the company
Phase 3: Globalization	<ul style="list-style-type: none"> · Cost inefficiencies and duplication of efforts in subsidiaries · Opportunity to transfer products, brand, experience from one market to another 	Use of synergies derived from operations on a global scale, with optimal allocation of resources between

· Emergence of global customers	markets, market segments, to maximize overall profitability
· Increased competition on a global scale	
· Better links between national marketing infrastructures leading to global infrastructures	

Source: Adapted from Douglas and Craig (1995).

2.5. Barriers and risks of internationalization

This research intends to understand and identify the barriers that hamper the internationalization process, so the companies could find solutions to operate internationally in a sustained and efficient manner.

Martins and Pinho (2010) identify that the lack of knowledge of potential markets and the lack of qualified workers in the export area, are the most significant negative aspects that affect the decision to export. Other factors such as the lack of product / service and the degree of competition in foreign markets also seem to inhibit the export decision among SMEs.

According to the OECD study (OECD, 2009) Top barriers and drivers to SME internationalization, the four obstacles developed in this study and pondered to be the most important are:

- Scarcity of working capital for export financing: for a SME intending to start to internationalize the limitations of physical resources and lack of capital are the main reasons for the process not to develop.
- Limited information for locating and analyzing markets: even in this age characterized by information, lack of knowledge about foreign markets remains a challenge for SMEs.
- Inability to contact potential clients abroad: difficulty in locating / obtaining adequate representation in foreign markets;
- Lack of time management, skills and knowledge: perceived risk management and lack of knowledge about markets, are the main reasons for companies not being involved in the internationalization process.

According to the *O horizonte Internacionalizar: Guia PME (2013)*, there are three frequently underestimated aspects in the internationalization decisions:

1. International portability of the company's competitive advantage;
2. Credibility (or not) of potential clients;
3. Risk of political, social and economic instability in destination countries.

These barriers emerge and differ in the different phases of the internationalization process, however, if the company is unable to deal with impediments in the early stages of pre-export, it will quickly quit from internationalization (Leonidou, 2004).

2.6. Choice of markets in international expansion

The choice of markets is particularly important in the early stages of internationalization. The wrong choice will not only result in financial loss, but also opportunity costs. By choosing inappropriate markets, the company will commit resources that could have been more lucrative in another business (Hollensen, 2004).

The international selection of markets is a key strategic decision in the processes of companies' internationalization (Papadopoulos and Martín, 2011). For these authors, the selection significance results from four factors:

- Diversity of international markets with different levels of attractiveness and risk;
- Supporting the process of internationalization and the way of entry in foreign markets;
- Relationship with companies' competitive positioning;
- The choice of markets precedes the development of local strategies and marketing programs, conditioning their form.

The choice of markets has a critical impact on the company performance, affecting its strategic competitiveness, production costs, management capacity and coordination of international activities (O'Farrell and Wood, 1994).

According to Cavusgil et al (2010), there are two simple methods of selecting markets that offer the best prospects:

- Gradual elimination - begins with a large number of countries for prospecting and gradually restricting the choices; initially it should start with the analysis of macro indicators, such as demographic and income indicators, and then more specific indicators such as export statistics.

- Indexing for classification - assigning a score to countries based on general market attractiveness; Identify a set of comprehensive market potential indicators and use one or more to represent a variable.

Thus, the variables and their indicators that are often used in the classification of countries in the index of emerging market potential indicators are the following (Cavusgil et al, 2010):

- Size of market (urban population)
- Market growth rate (real GDP growth rate)
- Market intensity (GDP per capita, private consumption as a percentage of GDP)
- Market consumption capacity (percentage share of consumption in income)
- Commercial infrastructure (easy access to distribution and marketing channels)
- Through the population (by point of sale, televisions per capita)
- Economic freedom (trade and tax policy, monetary and banking policy)
- Market revenue to imports (per capita imports)
- Country risk (country risk rating)

According to Dionísio et al (2004), the objective criteria that should be used in the choice of countries is divided into three groups:

Table 7: Selection criteria of the countries of deployment

Market Potential	Regulation	Political risk assessment
<ul style="list-style-type: none"> • Situations and demographic trends; • General economic situation; • Market size and trends; • Analysis of cultural and social factors; • Competition analysis; • Feature of distribution and communication channels. 	<ul style="list-style-type: none"> • Barriers to entry; • Prices regulation; • Restrictions on the movement of capital; • Possibility of obtaining political support; • Social legislation, wages level; • Advertising regulation. 	<ul style="list-style-type: none"> • Analysis of the country’s political and institutional stability; • Risks of changes in legislation.

Source: Adapted from Dionísio et al (2004).

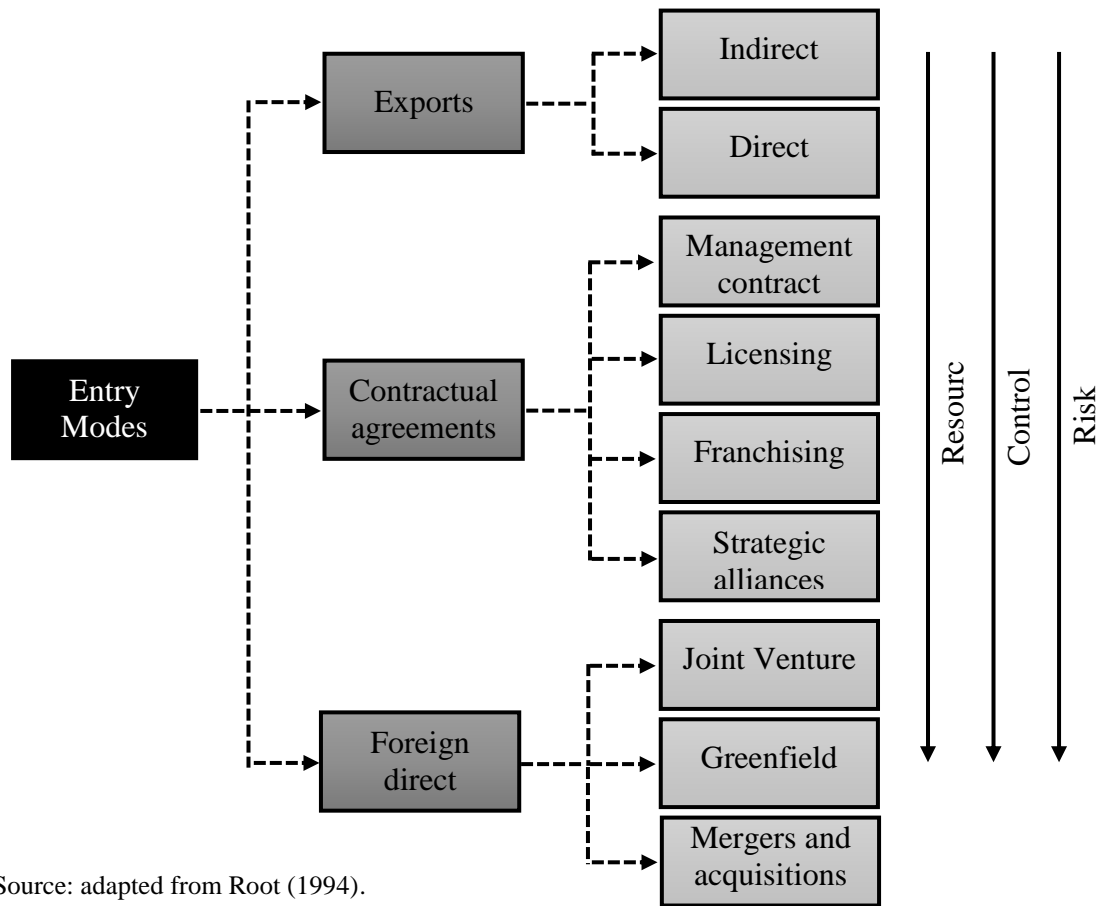
2.7. Entry Modes

An entry mode is “an institutional arrangement that makes possible the entry of a company’s products, technology, human skills, management, or other resources into a foreign country” (Root, 1987).

Internationalization researchers have pointed out that the entry mode is one of the most important decisions that companies have to take (Bradley, 2005). This choice determines how the company deals with its foreign buyers and partners, its ability to control the nature and process of its international business, and the internal resources allocated to the foreign market.

When companies decide to explore markets across borders, the choice of the best entry mode is made through company's expansion strategy, which will depend on a number of internal and external factors (Bartlett and Beamish, 2010). Companies that decide to internationalize have three main mechanisms that they can choose to enter the new markets: (1) export, (2) contractual agreements and (3) foreign direct investment (FDI), as shown in figure 12.

Figure 7: Entry Modes in International Markets



2.7.1. Exports

Export is the sale of goods, products or services that are intended to be used or consumed in another country. It can be done indirectly, when an intervener, usually an export company, performs the operation of the export process. The intermediary can be a commercial export company, a trading company or simply a broker. Or directly, when companies are responsible for all export procedures (commercial and operational), which implies that the exporter has more control over its international operations (Cavusgil et al, 2010).

The table 8 exposes the main advantages and disadvantages of the two export mechanisms.

Table 8: The advantages and disadvantages of direct and indirect export

	Advantages	Disadvantages
Indirect export	<ul style="list-style-type: none"> • Very low risk and fast access to markets; • Concentration of resources in the production; • Outsourcing of various stages of the export process; • Focus on the domestic market. 	<ul style="list-style-type: none"> • Lower profit margins; • Lack of control over distribution, sales, marketing and image in the foreign market; • Difficult access to feedback and information from foreign markets, with no relationship with the final customer.
Direct export	<ul style="list-style-type: none"> • Control over the entire export process, namely the development of customer relations; • Direct and fast access to feedback and information from foreign markets; • Protection of trademarks, patents, goodwill and other intangible assets; • Higher profit margins in the case of indirect export, due to the absence of intermediaries. 	<ul style="list-style-type: none"> • High initial risks in relation to indirect export; • High initial investment and resources; • Organizational changes; • The need for regular and reliable information and feedback.

Source: Self elaboration.

2.7.2. Contractual agreements

Contractual agreements are agreements whereby two or more persons and/or entities undertake to comply with the various points established by that agreement, which may include the granting of powers or the observance of certain obligations.

Contractual agreements presume that long-lasting agreements between companies from different countries will be established, promoting the transfer of knowledge, skills and alternative forms of action to export and the establishment of commercial and productive subsidiaries. License agreements imply the transfer of a set of technological, commercial and possibly even industrial property rights through payment. This type of contract is more frequent in smaller companies and with limited human and financial resources for direct investment abroad. These contacts can be adopted to reduce the risk of market entry and to provide greater speed in this process, however, it also presents risks for the licensor

to become a competitor and costs related to the transfer of knowledge and technological adaptation to the local conditions.

Franchising contracts have similarities to licensing but involve a more in-depth commercial component, being regulated by a brand image that will be recognized internationally with a standardized business concept allowing quick market entry and the use of standardized procedures, which also may cause constraints on the adaptation of products to different cultural contexts.

A management contract is a written agreement between the owner of a company and a management company, where it is possible to define the amount of control given to the management company, the terms of payment and the reasons for which the contract can be terminated. It can involve a wide range of functions, such as the technical operation of production facilities, human resources management, accounting, marketing services and training.

In the other hand, the alliances allow cooperation between companies through the acquisition of social capital and a joint activity with an association of efforts and capacities enabling mutual learning and economies of scale, however, this contractual form is not characterized solely by the synergies as there could be problems of coordination and opportunism of the partners.

2.7.3. Foreign direct Investment (FDI)

Foreign direct investment reflects companies' intention to establish lasting interests in economies other than domestic economies. The objective of the foreign direct investor is to gain an effective voice in the company's management, except in the case of portfolio investments⁸ that do not involve management control given their financial nature. The investment can be carried out from the ground up (greenfield⁹), in case of a new company being created, or the acquisition/merger (brownfield¹⁰) of a company in case the position of an existing company being acquired in whole or in part. The second form offers clear advantages because the company already has experience in the market and certainly possess advantageous skills and an image that might be recognized in the country.

⁸<http://www.investopedia.com/terms/p/portfolio-investment.asp>

⁹<http://www.investopedia.com/terms/g/greenfield.asp>

¹⁰<http://www.investopedia.com/terms/b/brownfield.asp?ad=dirN&qo=relatedSearchNarrow&qsrc=6&o=40186>

Investment abroad can also be realized through a joint venture, and the capital is shared by two or more independent companies with shared decision-making power. With this type of investment, companies diminish their risk and have greater ease of integration in the local networks; however, problems may arise in company control and coordination, as well as the risk of dissemination of knowledge to third parties increases.

2.8. The internationalization of SMEs

For Lu and Beamish (2001) the expansion of SMEs to international markets is an opportunity for growth and value creation, involving risks and challenges different from those in the domestic market. Leonidou et al. (2007) also add the possibility of boosting the use of installed production capacity, exploiting a single product or a patent, avoiding the risks of saturation of the internal market, reducing its dependence.

Traditionally, SMEs operate in their region of origin, up to the geographical limits of their domestic markets. Yet, over the last 20 years, we have been witnessing the expansion of SMEs towards other countries. The changes that have taken place in recent decades in world's economic scenario have forced SMEs to rethink their business strategies to the point where they become a player to be considered at global level, a multinational partner with a weight and know-how often under estimated (Pleitner, 1997).

Companies have different forms of internationalization, each having different levels of risk, control and associated costs (Wright, et al., 2007). As will be seen below, SMEs choose, for the most part, direct export without any type of deployment in the target market, ie, FDI is forgotten by SMEs and with it joint ventures. This posture can be explained by three factors:

- The availability and allocation of resources, as well as the desired level of risk (Wright, et al., 2007). If we understand that SMEs have limited resources, it is natural that their risk aversion is greater and, as such, simple export safeguards potential losses;
- SMEs have limited contact networks, while at the same time they do not wish to relinquish control of their resources. Namely, in cooperation / investment processes, such as joint ventures, SMEs are averse to sharing resources and knowledge, which in no way contributes to the development of an extensive network of contacts and partners (Wright, et al., 2007);

- Destination markets of internationalization are an essential element of the equation. If their nature allows them easy access to SMEs, through simple export processes, there is no need for them to be more involved. On the contrary, if barriers to market entry are in such a way difficult to transpose individually, there is no alternative but to proceed with the creation of a strategic partnership or Joint venture (Morresi and Pezzi, 2011).

Chapter 3. Methodology

This chapter serves to explain the methodology used to obtain the results of the research. That is, the methods used to answer the research questions and consequently the purpose of the project.

First, unit of analysis under study is described, followed by the method used, questions and research design, and finally, the data collection method used for the elaboration of the case study.

3.1. Unit of analysis

This project is the result of a qualitative research on Oralook. According to Ghauri et al. (1995), a qualitative research is a mixture of rational, exploratory and intuitive, where the experience and capabilities of the researcher play an important role in data analysis.

The method used to proceed with this academic research is an in-company business project. This study aims to positively impact the company by adding value with an analysis to a possible future internationalization of Oralook.

3.2. Research questions

The definition of research questions is probably the most important step in a research study, and should be done with time and weighting (Yin, 1989). In order to address the purpose of this study, the research questions intended to be answered are as follows:

Research question 1:

Which factors contribute for Oralook's performance in the Portuguese market?

Research question 2:

Is the company ready for internationalization?

Research question 3:

What factors motivated the internationalization process?

Research Question 4:

What are the new target markets to address?

Research question 5:

How to approach the new target markets?

3.3. Research Design

The research design is the overall plan to relate the conceptual research problem to relevant and feasible empirical research. This choice influences the following research activities, such as the data to be collected and the way of doing it (Ghauri et al., 1995).

The analysis of the information obtained through the accessed literature was carried out through an open procedure, thus having an exploratory character. The exploratory research technique allowed to evaluate what existing theories or concepts can be applied to a given problem, involving bibliographical research, statistical data and analysis of examples.

3.4. Data collection

To answer the questions, it was necessary to carry out an extensive research to analyze the data of the foreign markets and to evaluate the readiness of the internal structure of the company itself.

For Yin (1989), the interview is a common tool for conducting researches, allowing the interviewee to bring new topics and data for the conversation. Compared to rigid and standardized interviews, the semi-structured interview can, in large part, capture information and points of view on various topics.

The primary data was obtained through semi-structured interviews and informal conversations, by skype and in person, with the managing partner Gonçalo Duque and the prosthetics technician employee Inês Jorge. The initial interviews were crucial to understand Oralook's business and products as well as their motivations and objectives. During the search for data on the internationalization of companies in the dental

prosthetics industry and also for the difficulty of finding academic literature, an informal conversation was conducted via email with Lisbon University of Dental Medicine assistant Professor João Roque who confirmed the inexistence of academic literature related to this subject.

Secondary data covers internal information about the company, such as charts, financial data, goals, and other information taken from the company's website and social networks. These will be used to create an initial database about the company before collecting primary data, allowing insight and knowledge about the background, history and stimulus of the company. The e-mails exchanged with the company will help to obtain specific information on doubts resulting from the research process.

In addition to the secondary research related to the company, it was also researched studies about companies' internationalization, small and medium enterprises, statistical data, publications, etc. These secondary data will be the main contributor to external analysis discussed in Chapter 4, since they provide a more detailed and objective view.

Chapter 4. Oralook Case

The information contained in this chapter follows the ideals of Oralook's managing partner Gonçalo Duque who also provided the necessary data.

4.1. The company

Table 9: General company data

Name	Oralook, Unipessoal lda
Location	Santa Eufémia, Leiria
Year of foundation	2008
Legal form	Limited partnership
CAE	32502-R3
Employees	10
Equity	52.568
Financial autonomy	17%
Net income in 2017	17.942
Turnover in 2017	311.884
Share capital	5.000

Oralook is a small company¹¹ laboratory in the dental prosthetics field, founded in 2008 by its current managing partner and dental prosthetics technician Gonçalo Duque.

Figure 8: Oralook Logo



In the period between 2008 and 2012 Oralook's activity focused on the offer to local clinics (Leiria district) of solutions in the area of Acrylic, Skeletal, Orthodontic and removable prosthesis combined.

¹¹ According to the European Commission Recommendation 2003/361/CE, Oralook is considered a small company (employs more than 9 and less than 50 people and total turnover and / or balance sheet per year does not exceed 10 million euros)

With a range of clients essentially oriented to the general public that privileges price to the detriment of quality, the company experienced difficulties due to technical issues, as well as the clients' profile, having to market solutions focused to patient's specific clinical case or solutions in the area of fixed prosthesis.

Oralook works exclusively for dental medicine professionals, providing an effective service to achieve a work of excellence. Its headquarters and laboratory are located in Santa Eufemia, Leiria and it is there, in a quiet environment, that since 2012 the company invested on a solid path of quality, growth and modernization.

With a well-defined objective in quality service and believing that change is an integral part of its growth, Oralook is always doing better. The company seeks to work with the latest technologies and materials available, optimizing production and logistics processes, enabling a rapid and efficient response to its clients.

Oralook's management understands the need to innovate, to progress, to do more and better, always providing training to their human resources, privileging the employment of young people, graduates and with a strong will to improve and innovate.

Oralook produces solutions in the prosthetics areas of acrylic, skeletal, fixed, prosthesis on implants and orthodontics, always focusing on a relationship of proximity and partnership with dental professionals, seeking to provide the best solution for each case, sharing challenges and risks.

Oralook's operations are based on management control and computer production, which ensures a correct work evolution at any stage. Together with their approach of proximity to its clients, looking at each case as a new challenge to overcome enables to achieve a high adaptation level and a high degree of satisfaction..

With a young and constant technical development team, Oralook has been growing steadily and sustainably over the last years, increasing its market position between national SMEs.

4.1.1 Mission

Freire (1997) maintains that an organization' mission is a "written statement that seeks to translate the organization's overall ideals and orientations into the future." He also says

that the mission should contain the business concept. In this sense, Oralook presents its mission as follows:

“We are a technical dental laboratory oriented to offer products and services of excellence, aimed for dental clinics and dental laboratories. We privilege partnerships, focusing on product quality, continuous training of our human resources and technological investment, as a way to achieve success.”

4.1.2 Vision

According to Freire (1997), "a company's vision translates, in a comprehensive way, a set of intentions and aspirations for the future, without specifying how they should be achieved." According to the author, a vision has a role that should motivate employees, take advantage of their capabilities and boost their results. Oralook's vision is "To be recognized as the leading Portuguese company in the dental prosthetics field".

4.1.3 Values

Innovation and creativity

Exploring ideas and markets, developing solutions.

Team spirit

Taking an aligned, cooperative and joint attitude towards a common goal.

Integrity

To believe and act according to principles of transparency, respect, honesty, independence and ethics.

Employees

To stimulate continuous training of employees, either through training actions, through self-study or through their constant academic progression.

Flexibility in work through the adaptation of the conditions and needs of employees.

Providing excellent working conditions, favoring comfort and ergonomics, reducing the risks of occupational diseases and creating an environment that stimulates teamwork and individual satisfaction.

Society

To contribute in a positive way to social environment, supporting schools, social institutions, receiving trainees or contributing with financial and material support for projects of social interest.

Environment

Dematerialization of information, reducing the use of paper, implementing policies of reuse and recycling of used materials.

Policy-making for conscious use of natural and energy resources, enabling the effective reduction of their consumption and nature's preservation

4.2. Situation Analysis

4.2.1. Infrastructures

Since 2012, Oralook has highly invested in new facilities and the latest technologies of dental prosthetics industry in order to provide the best working conditions and, consequently, the best quality products on the market.

Figure 9: External front view



Figure 10: External side view



With the enlargement of the laboratory and its modernization, production automatism were implemented and new equipment was acquired. This allowed quality improvement and production increase, thus responding with differentiating and innovative aspects to the growing customers' needs.

4.2.2. Organizational Structure

Figure 13: Interior laboratory facilities



Figure 14: Interior laboratory facilities



Figure 15: Interior laboratory facilities

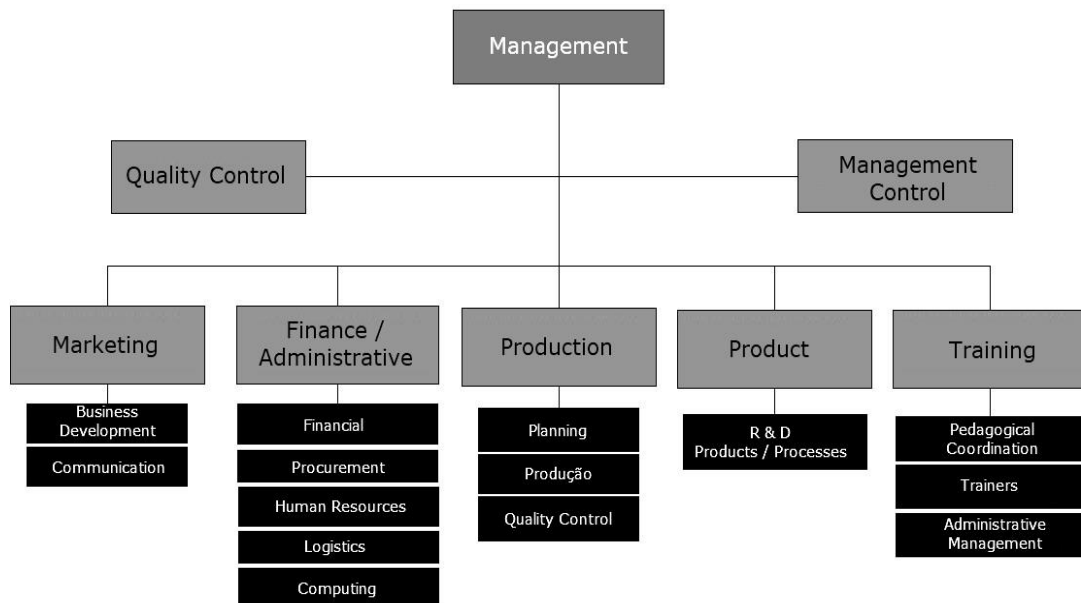


Figure 16: h.andi Training Center



The organizational structure can be depicted through the following organizational organogram:

Figure 17: Orallook's Organogram



Source: Orallook

More important than a comparative analysis of the different departments is the identification of the type of people who have responsibility for the various functional areas and their relationship with company's manager. The founding partner and manager, Gonalo Duque, has provided an entrepreneurial vision since the beginning and is always at the forefront of the company's strategic operations. He concentrates on himself the responsibility of the main decisions taken in any of the functional areas of the organization. The company can be considered family-based since Cristina Branco, wife of Gonalo Duque, is responsible for the financial department and also helps in the company's management.

It is a simple hierarchical and organizational structure, however, the company has a well-defined functional structure, with autonomous departments, all managed by Gonalo Duque.

Having an organizational structure without intermediate managers, influences the speed and efficiency of the outputs, due to the amount of tasks to be performed by the management. On the other hand, being a family-based company and having the organizational structure centralized around the managing partner, implies that information circulates more easily, which can be a facilitator of contact and decision making (Ilh u, 2009).

According to managing partner's vision, one of the fundamental characteristics for company's development is the constant training of its employees. These training courses are carried out mostly in the h.andi training center, however, employees' also attend sessions in Lisbon and Porto with all expenses paid by Oralook.

Figure 18: h.andi Training Center Logo



4.2.3. Economic and Financial Analysis

Table 10: Economic and financial data of Oralook (2015 - 2017)

	2015	2016	2017
Income Statement			
Sales and services provided	229 074 €	279 476 €	311.884 €
EBITDA	14 275 €	52 037 €	74.522 €
EBIT	8 823 €	11 980 €	27.356 €
Net income	3 109 €	3 812 €	17.942 €
Balance Sheet			
Assets	354 971 €	385 685 €	411.308 €
Equity	48 755 €	52 568 €	70.509 €
Long term debt	195.714 €	175.279 €	197.974 €
Short term debt	41.244 €	64.744 €	90.504 €
Financial autonomy	14%	14%	17%

The company has been growing its sales year after year and consequently its net income. Its equity and assets has also shown positive growth in the last years, however have been accompanied by the increase in debt with the bank. The financial autonomy as finally increased in the last year of 2017, which gave a little more economic solidity in regard to indebtedness. Although the company does not show interesting results, Although the company does not present interesting results, it has complied with excellence to all its stakeholders. The strategic option of internationalization emerges with the goal of growing the company sales and reduce the risk of operating only in the domestic market.

4.2.4. Target Customer

The company focus on providing the market with innovative solutions in the dental prosthetics area, it has over time invested in creating partnerships with its clients, working in a way to associate knowledge, technology and materials, aiming to provide the best results.

The customers' profile that comprises Oralook's client portfolio can be classified into 3 groups:

- A. Strategic clients with technical capacity and business vision compatible with Oralook's objectives. Customers with communication skills and innovative spirit with the possibility of establishing a partnership with Oralook.
- B. Customers to retain, which meet the same technical orientations as Oralook's.
- C. Customers who endorse aspects that are not compatible with Oralook's technical definitions and whose specifications diverge from Oralook's good production practices. Customers that privilege price in detriment of quality are removed from the customer list.

Thus, a set of actions were developed with the objective of reaching new class A customers by searching clinics which Oralook identified itself, making efforts to schedule meetings directly with dentists, presenting processes, protocols and products.

Reinforce the communication with customers of classification B leading them to strengthen the connection between Oralook and the goal to retaining them.

Stop to manufacture products and services to C-rated customers, finish ongoing work, receive overdue amounts, or negotiate with customers to terminate the existing relationship.

4.2.5. Operational Analysis

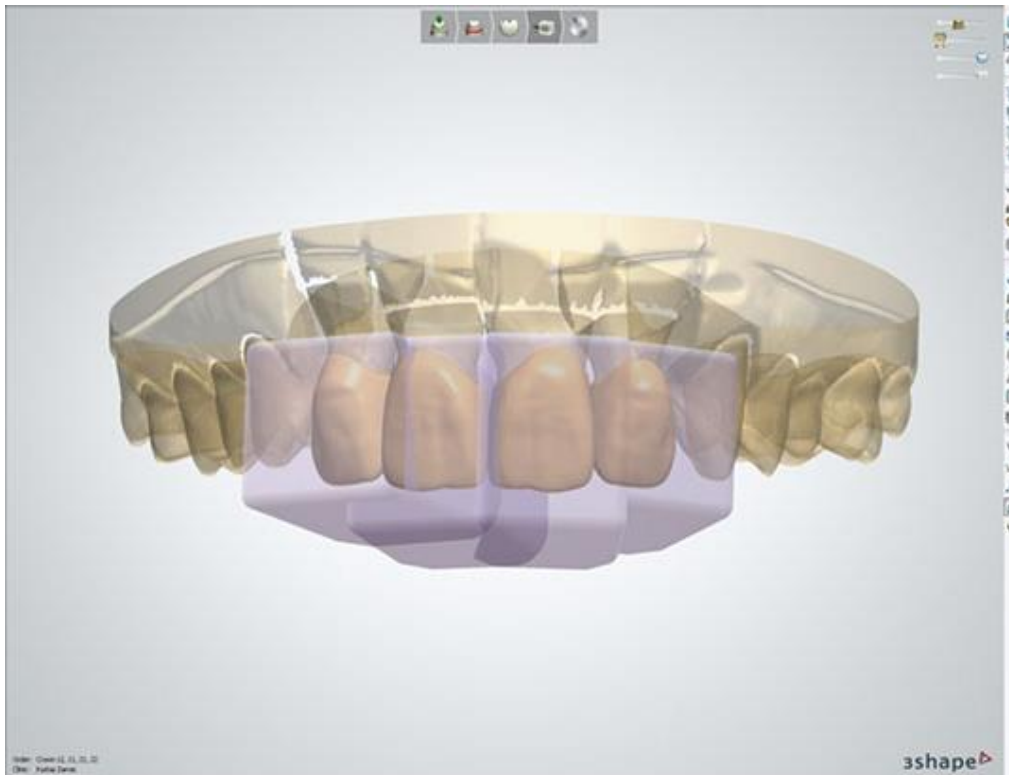
The company receives 2 type of orders: the ones that arrive by post mail with the physical mouth molds sent by the dental clinics or dental prosthetics laboratories (most of the orders) and the orders that arrive by electronic mail or directly through their software (3Shape), both online in digital file format (STL file) with a 3D mouth mold.

Most of the orders still arrive by post mail from dental clinics or dental prosthetics laboratories because they do not have scanning and 3D modeling technology. Upon arriving the orders, they are inserted in the system and code labeled. According to the ordered product, is then forwarded to the specific production department.

Nowadays, the company is working almost entirely with the CNC milling machine that produces prosthesis in an automated way using 3D software. Thereunto, the company has to scan molds sent by post mail from the clinics and labs, into their 3D software in order to computationally design the construction of the ordered product. Additionally,

prosthetic models delivered by digital format can be immediately reviewed on the computer without any extra step of scanning any molds.

Figure 19: Example of dental a prosthesis design using 3Shape software



The company doesn't have an integrated distribution, they simply use private distributors such as MRW and DHL or public post office (CTT), to deliver their urgent and normal orders as soon as they are finished.

In order to work in a more efficient way, the company intends to sell abroad using only digital files format in the production, which are sent online. Gonçalo Duque points one main reason for being more efficient using the new 3D technology: saving time with the transportation of the molds. The digital file format is sent instantly online, saving time by avoiding the delay due to transportation of the molds from dental clinics and laboratories to Oralook. Also, there might occur precision errors on the molds, which have to be rebuilt, causing even more delays.

4.2.6. SWOT Analysis

The purpose of SWOT analysis is to build a strategy for the company taking into account several internal and external forces. The study of this variables can result in a recognition of the company's environment, which will be fundamental in the company's good

decision making process. The model identifies the strengths and weaknesses of an organization as well as opportunities and threats of the environment. The strengths and weaknesses of a company are identified through an internal appraisal while opportunities and threats are identified by the evaluation of external factors. The first ones are analyzed the personnel, facilities and location, as well as products and services of a company. In the external side, it is analyzed the Political, Economic, Social and Technological Environment plus the competitive landscape (Dyson, 2002).

The following figure summarizes the strengths and weaknesses of the company as well as the threats and opportunities available in this business sector.

Table 11: SWOT Analysis

<p><u>Strengths</u></p> <ul style="list-style-type: none"> - Recognized product quality; - Responsiveness; - Resources with adequate technical skill; - Advanced facilities; - High-end technology. 	<p><u>Weaknesses</u></p> <ul style="list-style-type: none"> - Low financial autonomy; - Weak quality control in production; - Fragility of the company with seasonal demand.
<p><u>Opportunities</u></p> <ul style="list-style-type: none"> - The use of advanced technology to sell all over the world; - Dental prosthesis for veterinary. 	<p><u>Threats</u></p> <ul style="list-style-type: none"> - Low cost implantology labs (e.g. Chinese laboratories); - Lack of qualified human resources willing to work in Leiria; - Clinics opening own Dental labs.

Regarding the strengths of the laboratory, it stands out due to its quality and expertise, which is recognized by working with some of the best Portuguese Dental Clinics and using the latest technology available for dental prosthetics manufacturing.

About the weaknesses of the company, the limitation of financial resources prevents the company from investing more in marketing and communication in order to reach more national and international customers. Additionally, the managing partner identified a weak control in the production quality that is being performed only by himself. Another point is the fragility of the company towards seasonal demand, usually the high demand occurs in Christmas and summer holidays.

The opportunity arises with Oralook having high quality facilities and the latest technology in the dental prosthetics industry that allows working with clinics and laboratories all over the world with faster and more personalized projects' flow. The

technology implemented in the laboratory also allows them to expand to the veterinary dental prosthetics sector.

Finally the threats faced by Oralook are the low cost dental prosthetics laboratories from China that manufacture with significantly lower prices and also export everywhere. The lack of qualified human resources willing to work in Leiria is also considered a threat to the company's growth. Another threat is dental clinics opening their own laboratories which facilitates communication between dentists and dental prosthetics technicians.

4.3.7. Critical success factors

After reflection, the following points were found to be critical for a good foundation of Oralook's success that need to be encouraged and strengthened:

- Capacity for Production Planning and Management
- Ability to manage the company
- Rigor in details and commitments
- Innovation in terms of processes and products
- Partnership spirit
- Investment in human resources
- A commitment to excellence

4.3. International Markets

4.3.1. Target Market

To better study the potential markets to internationalize, the initial idea was to study the dental prosthetics industry on each country using detailed information of the market. However, it proved not to be possible due to lack of dental prosthetics market information, such as number of dental clinics or laboratories on each country and their products price. The attempt to get information about clinics and laboratories was done via cold emails, which turned out to be a failure for lack of response or due to refusal to send information without a scheduled face-to-face meeting first. The only laboratories that immediately

sent their prices without hesitating were from China, however, it was not possible to obtain any other data beside prices.

Therefore, to properly choose the country markets to approach, it was used an indexing for classification proposed by Cavusgil (2010) which was explained in the literature review.

The list of potential markets was restricted only to countries of the European Union and Switzerland due to the preference of Oralook’s manager. Switzerland was added due to contacts that the company already has within the country and because of its market potential score. Malta which is also part of the European Union, is not included in the list for lack of data to properly analyze the country market potential.

The two following tables were taken from globalEDGE website that uses Cavusgil (1997, 2004) indexing approach to measure and rank the Market Potential Index (MPI) – 2017

In table 10, it is possible to observe each dimension, weight and data used to measure each country market potential and attractiveness.

Table 12: Dimensions and Measures of Market Potential for 2017

Dimension	Weight	Data Used
Market Size	25/100	<ul style="list-style-type: none"> • Electricity Consumption (2014) • Urban Population (2015)
Market Intensity	15/100	<ul style="list-style-type: none"> • GNI per Capita Estimates Using PPP (2015) • Private Consumption as a percentage of GDP (2015)
Market Growth Rate	12.5/100	<ul style="list-style-type: none"> • Compound Annual Growth Rate (CAGR) of Primary Energy Use (2009-2014) • Compound Annual Growth Rate (CAGR) of GDP (constant 2005 US\$) (2010-2015)
Market Consumption Capacity	12.5/100	<ul style="list-style-type: none"> • Consumer Expenditure (2016) • Income Share of Middle-Class (2016) • Household Annual Disposable Income of Middle-Class (2014)
Commercial Infrastructure	10/100	<ul style="list-style-type: none"> • Available Airline Seats (2016)

		<ul style="list-style-type: none"> Cellular Mobile Subscribers (2015) Households with Internet Access (2015) International Internet Bandwidth (2015) Logistics Performance Index (LPI) (2016) Paved Road Density (2016) Population per Retail Outlet (2016)
Market Receptivity	10/100	<ul style="list-style-type: none"> Per Capita Imports from US (2015) Trade as a Percentage of GDP (2014)
Economic Freedom	7.5/100	<ul style="list-style-type: none"> Economic Freedom Index (2017) Political Freedom Index (2017)
Country Risk	7.5/100	<ul style="list-style-type: none"> Business Risk Rating (2016) Country Risk Rating (2016) Political Risk Rating (2016)

In order to shorten the list, in table 11 only the top five countries from European Union and Switzerland are listed. The ranking was done according to their overall score after summing all the different dimensions multiplied by their weight.

Table 13: TOP Ranked MPI - 2017 European Union Countries and Switzerland

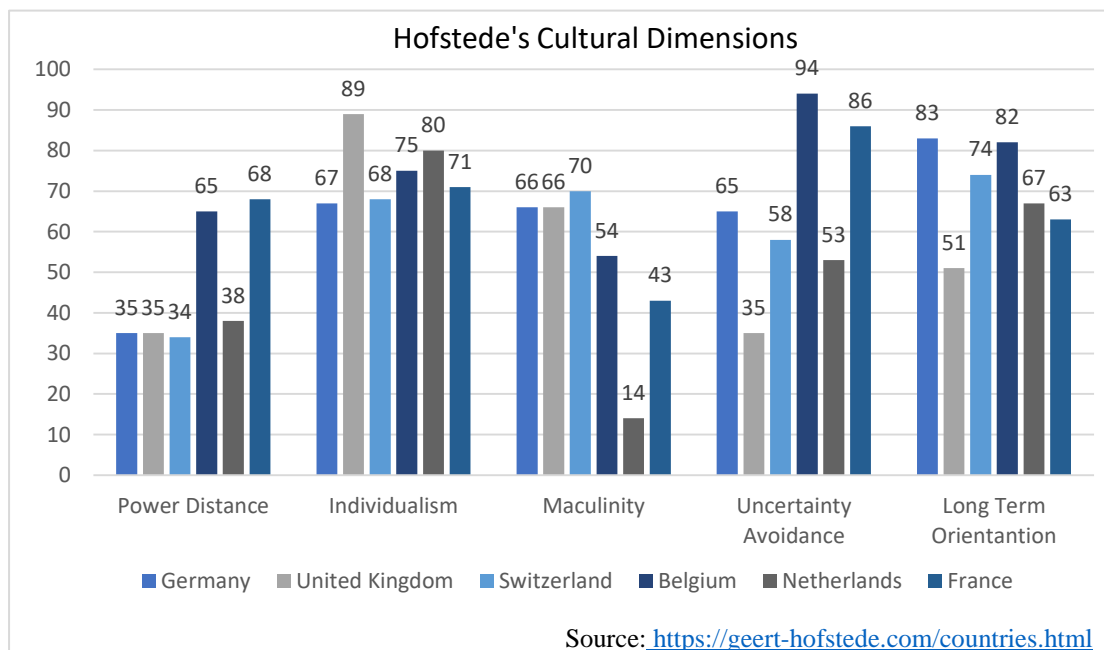
Country	Market Size	Market Growth Rate	Market Intensity	Market Consump. Capacity	Comm. Infrastr.	Market Recept.	Economic Freedom	Country Risk	Overall Score
Germany	10	36	64	90	63	16	70	97	39
United Kingdom	7	34	76	85	67	13	73	84	37
Switzerland	2	34	78	73	54	38	78	100	35
Belgium	2	30	57	76	60	47	64	92	33
Netherlands	3	31	50	74	63	41	72	92	33
France	9	31	60	83	57	11	57	92	32

We can conclude that Germany has the best market potential index score. However, all the countries listed above have the best score among all the European Union countries and are considered optimal countries to internationalize due to their overall score from the different variables.

4.3.2 Hofstede's Cultural Dimensions

Hofstede's model of cultural dimensions (Power Distance, Individualism, Masculinity, Uncertainty avoidance and Long-term orientation) is a framework that describes five dimensions of value differences among national cultures (Hofstede 2001). Through figure 22 it is possible to compare each of the five dimensions for the six chosen countries with the best MPI.

Figure 20: Top ranked countries Hofstede's Cultural Dimensions



Power distance: Also called hierarchical distance, is a measure of how much the less powerful members of a civilization accept and expect unequal distribution of power in society. It is measured from the value systems of those who have less power. The power distance dimension is directly related to the way found by different societies to deal with the fundamental issue of managing inequalities between individuals. France and Belgium have high power distance meaning that it is a society in which a fair degree of inequality

is accepted. The rest of the countries have a more decentralized hierarchical power where inequality is not so accepted.

Individualism versus collectivism: the extent to which people feel they must take care of themselves, their families or organizations to which they belong. This dimension indicates whether a society is a social network unrelated to individuals, in which each one is supposed to be concerned only with itself (individualism), or whether it offers a closed social structure in which individuals are divided between members and non-members of groups and expect the group to which they belong to protect them (collectivism). All the countries have high score of Individualism, showing to be individualist societies. United Kingdom as the highest value among the six countries and is one of the most individualistic countries in the world.

Masculinity versus femininity: the extent to which culture is more conducive to dominance, assertiveness and acquisition of things (masculinity) versus a culture that is more conducive to people, feelings, and quality of life (femininity). It also refers to the extent to which sex determines the roles of men and women in society. In this dimension, Germany, United Kingdom and Switzerland have similar scores and are considered masculine societies. In turn, France and Netherlands are feminine societies with Netherlands standing out with a score of fourteen on this dimension and is therefore one of the most feminine societies in the world: “In Netherlands conflicts are resolved by compromise and negotiation and Dutch are known for their long discussions until consensus has been reached.” (<https://geert-hofstede.com>) Belgium has an intermediate score of fifty-four, balancing in the middle of this dimension.

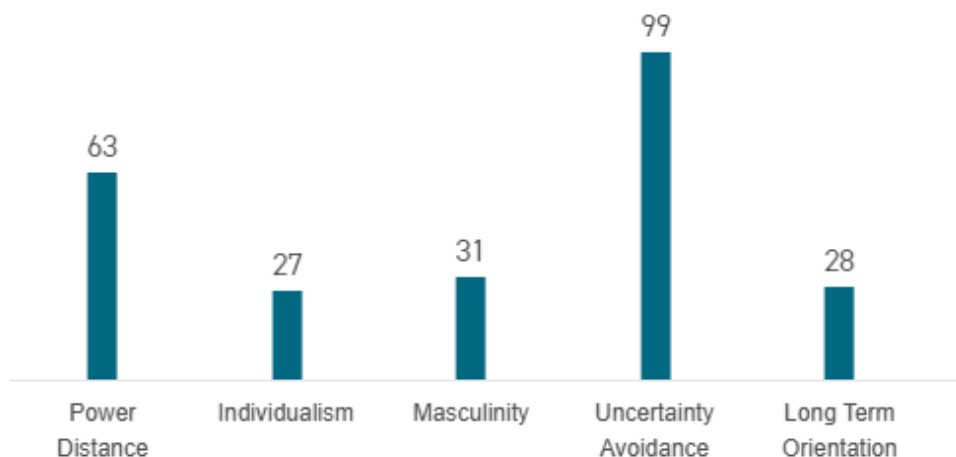
Uncertainty avoidance: Hofstede defined this dimension as the degree of threat perceived by members of a culture in uncertain or unknown situations, that is, it reflects the feeling of discomfort that people feel or insecurity with risks, chaos and unstructured situations. United Kingdom scores thirty-five which means that, as a nation, they like to take risks and new challenges without knowing what the next day will bring. The rest of the countries have more avoidance to uncertainty with France and Belgium being extremely averse to uncertainty. Therefore, planning, having rules and security is very welcome.

Long term versus short term orientation: it indicates to what extent a society bases its traditions on past or present events, on the benefits presented or even on what is desirable for the future. Long-term values will be oriented towards the future, such as savings and

persistence; Short-term will be values oriented to the past and the present, such as respect for tradition and fulfillment of social obligations. In this dimension, only United Kingdom stands has an intermediate between long term and short term orientation. In the other hand, all the five other countries (Germany, Switzerland, Belgium, Netherlands and France) are long term oriented. However, Germany and Belgium have the highest scores which means that they are pragmatic countries. “In societies with a pragmatic orientation, people believe that truth depends very much on situation, context and time. They show an ability to adapt traditions easily to changed conditions, a strong propensity to save and invest, thriftiness, and perseverance in achieving results.” (<https://geert-hofstede.com>)

When comparing to Portugal (figure 20), in the Power distance Hofstede cultural dimension, Belgium and France are the most similar to Portugal. About the individualism dimension, Portugal doesn't have any similarity with all the above countries, with a much lower individualism ratio. The masculinity is also lower in Portugal aside from the Netherlands with a score of 14. Portugal is one of the countries with more uncertainty avoidance and exceeds all the other selected countries, however, Belgium and France are close. In the long term orientation, Portugal is much lower than the rest of the countries to which the nearest country but still well above is the Netherlands.

Figure 21: Portugal Hofstede's Cultural Dimensions



Source: <https://www.hofstede-insights.com/country-comparison/portugal/>

We can conclude that according to Hofsted cultural dimensions, Belgium, France and the Netherlands have the most similar culture when comparing to Portugal. Therefore, it is expected a lower cultural impact when entering these markets.

Chapter 5. Results Discussion

5.1. Oralook's performance

Research question 1:

Which factors contributed to Oralook's performance in the Portuguese market?

With the deep analysis of the company profile as well as its fragilities, held in early 2012 and with the definition of a set of objectives, the company established a work plan that led to:

- Change of structure (organization of the company).
- Reassignment of responsibilities leading to a verticalization of the organizational structure and functions.
- Entry of more human resources into the company (production area).
- Entry of human resources into the production control and management area.
- Hiring a graduate employee in the area of business management for company's administrative and financial management department with tasks of financial and control management of Oralook.
- Hiring of an external human resource on a contract basis to provide support in the area of strategy and control of company management, namely with responsibilities in the area of negotiation with clients and suppliers and management of internal projects, as well as support to the implementation of system quality management.
- Recruitment of a law firm for legal support to Oralook's activity.
- Replacement of the accounting office with an office which, in addition to fulfilling its statutory legal obligations, could support the company in improving economic and financial ratios leading to the achievement of a market-leading status, particularly among financial institutions, suppliers, partners and customers.
- Participation in IAPMEI program Academia PME with the support of SPI - Sociedade Portuguesa de Inovação, leading to the development of a set of training and diagnostic and consulting activities in the area of innovation, strategy and competitiveness.

By analyzing the results of the work plan carried out in 2012, we can notice that Oralook has been increasing its sales and consequently the company's net income year after year.

The reason for positive financial results is due to restructuring points listed above and the determination to produce prosthetic of the highest quality. Nevertheless, the fundamental pillar for company's development and growth was the entrepreneurial vision of managing partner Gonçalo Duque and the support of his wife Cristina Branco.

Nowadays, Oralook holds a solid position in dental prosthetics industry working with nationally recognized dental clinics. One of the partnered dental clinics is Visual Dente managed by Hélder Monteiro, known for having well known athletes as his clients, such as Cristiano Ronaldo and most players in the soccer team Futebol Clube do Porto.

5.2. Oralook internationalization readiness

Research question 2:

Is the company ready for internationalization?

Evaluating company's readiness for exporting is recommended not only by researchers but also by practitioners and international business consultants (Cavusgil & Nason, 1990).

In order to evaluate Oralook's internationalization readiness we have used an SME's export diagnostic framework with advanced updated approaches presented by David and Cariou (2014). The authors proposed six main dimensions, also known as CHROME (acronym taking the first letter of each of the framework's six dimensions), and three or four criteria in each dimension for the evaluation of a SME that is going to internationalize. By using and adapting authors' framework, we have validated the applicability within Oralook's capacitation, as shown in Table 15.

Table 14: Qualification dimensions and respective criteria

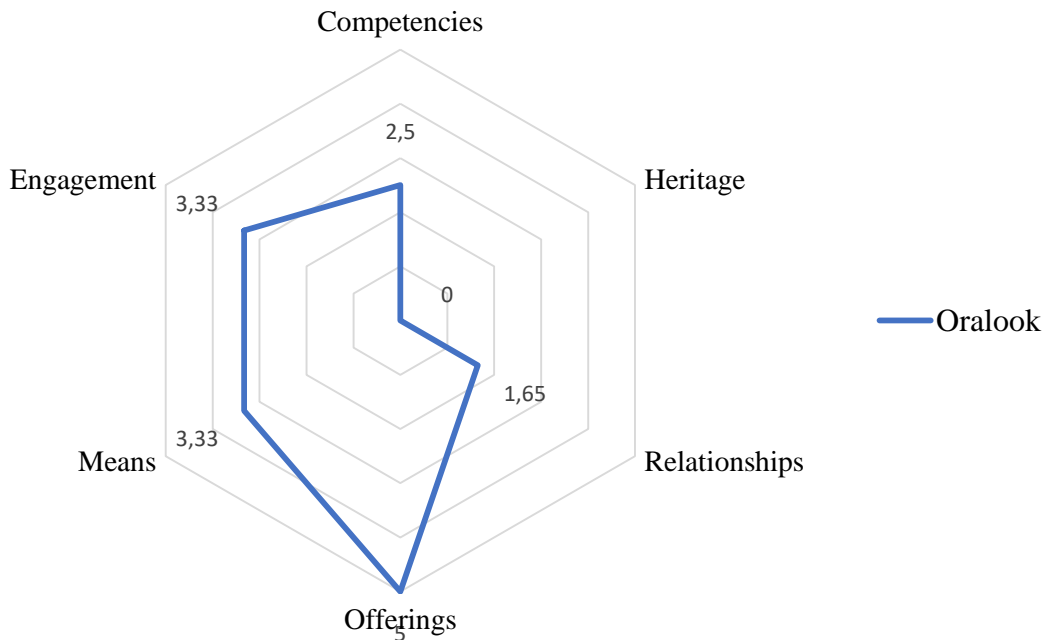
Dimensions	Short list of international qualification criteria	Validation
Competencies of Management	• Training in international business	✗
	• Knowledge of foreign markets	✓
	• Knowledge of foreign languages	✓
	• Experience in international business	✗
Heritage	• Prominence, recognition of the firm globally	✗
	• Intellectual property held in certain countries	✗
	• Presence in foreign markets	✗
	• Lessons learned from the internationalization experience	✗
Relationships	• Branches, foreign subsidiaries etc.	✗
	• Established business relationships in certain countries	✗
	• Internet presence of the SME abroad	✓
Offerings	• Assets (strengths), handicaps (weaknesses) related to products, services or solutions pertaining to an international expansion	✓
	• Adaptability of the SME's products, services or solutions with respect to new foreign markets	✓
	• Adapted or adaptable pricing structure and financial modalities for foreign markets	✓
Means	• Financial health of the SME	✓
	• Access to financing or new capital	✗
	• Available production (operational) capacity	✓
Engagement	• Top management's availability to dedicate time to international activity	✓
	• Top management's preparedness to invest in the international venture Level of risk tolerance	✗
	• Motivations, objectives, targets, scenarios and economic models pertaining to the internationalization project	✓

Source: Adapted from David and Cariou (2014)

The framework gives a score of 5 points to each of CHROME framework's dimensions and evaluates the SME overall score. With the applied framework, total maximum score is 35 points, to which Oralook achieves 15,83 points (Competencies: 2,5 points; Heritage: 0 points; Relationships: 1,67 points; Offerings: 5 points; Means: 3,33 points and Engagement: 3,33 points).

The figure 26 illustrates the score obtained by SME Oralook along each dimension in the context of its international qualification.

Figure 22: CHROME Oralook – international qualification



Source: Self elaboration

Although Oralook has only achieved 15,83 points out of 35, the company is ready to begin its first steps for internationalization with a low level of investment due to lack of financial resources. With its strong point within the offerings dimension, Oralook may opt for a low risk strategy such as exportation.

5.3. Motivations

Research question 3:

What factors motivated the internationalization process?

Oralook is a promising SME with more than a decade of experience in the dental prosthetics industry. The vision shared by managing partner Gonalo Duque and his team shows an ambition to recognize the company as a brand image of strong national and

international quality in the dental health sector. In the long term, they aim to broaden the range of products and services always focused on top premium quality.

Concerning the motivations for internationalization of companies, and in order to answer the second research question, after a reflection with Gonçalo Duque, we have concluded that Oralook's main motivations to internationalize are framed in the following motivational typologies referenced by Simões (1997):

1. Endogenous

- Need for company growth;
- Utilization of available productive capacity;
- Exploitation of skills, technologies;
- Diversification of risks.

2. Markets characteristics

- Limitations of the domestic market (saturated market).
- Perceived dynamism of external markets.

In short, the company is ready to work with clinics and laboratories from abroad. Currently, Oralook has the necessary facilities and technology along with qualified human resources to start selling their products all over the world. With lower production costs in Portugal, when comparing to the Six TOP Ranked Countries by MPI defined previously, Oralook will be able to provide competitive prices towards its competitors abroad. Consequently, working with foreign clinics and laboratories will help to diversify the risk of being dependent on a small group of good Portuguese clinics for which the company sells much of its production.

5.4. International Markets

Research Question 4:

What are the new target markets to address?

According to the results of table 10 showing the top six countries with the best market potential index score we have concluded that the countries with more market potential by score are Germany, United Kingdom, Switzerland, Belgium, Netherlands and France.

However, according to Hofstede cultural dimensions, the countries with the most similar culture to Portugal are Belgium and France. When looking for foreign partners and due to the cultural similarities, Oralook should have special focus in these countries as a starting point for future marketing actions.

Nevertheless, with the technology already implemented in Oralook laboratory, it is possible to sell products to any country around the world.

5.5. Entry modes

Research question 5:

How to approach the new target markets?

Taking into account that Oralook never sold abroad, we are in the initial phase of the Uppsala model that describes internationalization process focused on the learning and knowledge of external markets. The model is, therefore, generally adopted by small companies with no international experience, with limited financial resources and insufficient information on markets. Oralook will seek progressively and at the lowest possible risk to gain international experience and grow their business with international sales.

Therefore, internationalization entry mode should occur through direct export, due to company's limited financial resources, the lack of information on international markets and the already existing company structure which is ready to start receiving orders from foreign companies using a 3D dental modeling software. The exportation should be made directly because there will be no advantage in obtaining an intermediary, besides the carrier of finished products. The existence of more intermediaries would difficult communications and products personalization.

According to the innovation models of internationalization, Cavusgil's theory (1980) is the one that better fits Oralook's profile, which comprises the following stages:

Stage 1

Domestic market: The company only sells to home market.

Stage 2

Pre-export stage: The company searches for information and evaluates the feasibility of undertaking exportation..

Stage 3

Experimental involvement: The company starts exporting on a limited basis to some psychologically close country.

Stage 4

Active involvement: Exporting to new countries - direct exporting – increase in sales volume.

Stage 5

Committed involvement: The company constantly makes choices in allocating limited resources between domestic and foreign markets.

Regarding networks theory to internationalization elaborated by Johanson and Mattsson (1988), dental prosthetics industry market has a low degree of internationalization and Oralook has no international experience, which turns the company in an early starter.

One possible way to approach new customers is to participate in international fairs to promote Oralook's products. However, for setting up a showroom it is necessary to obtain financial resources allowing not only to pay the fair's registration but also transportation expenses to exhibition locations. These international fairs are of great interest for the company to establish new contacts with dental clinics and their dentists as well as dental prosthetics labs. Here are some examples of upcoming international trade fairs:

Table 15: Upcoming international trade fairs

Fair	Country	Date
Dental World	Hungary	11 - 13 October 2018
BelarusDent	Belarus	17 - 19 October 2018
CADEX	Kazakhstan	17 - 19 October 2018
Dento	Bulgaria	17 - 20 October 2018
Medikos	Serbia	17 - 18 October 2018
Pragodent	Czech Republic	18 - 20 October 2018
Dentima Siberia	Russia	10 - 12 October 2018
Dental-Expo	Russia	07 - 09 November 2018

Source: <https://www.tradefairdates.com/>

Another way to approach new customers will be by organizing more international training sessions in h.andi training center. The coming of international dentists and prosthetists to the laboratory, will allow them to see Oralook's facilities with advanced technology, as well as company working procedures. In this way, Gonçalo Duque, managing partner of the company, can expand his contact network with professionals from the dental health sector, which are working abroad.

Chapter 6. Conclusion

The main objective of this project was to make an internal and external analysis of Oralook dental laboratory, in order to evaluate company's capacitation to become international and decide the first steps to be taking in order to sell abroad.

Literature Review has helped us to understand the phenomenon of internationalization and the crucial importance of all the different theories, as well as a wide range of features involved in companies' internationalization process. It also provided several tools that helped to analyze the factors that affect internationalization and how the process can be initiated.

With the analysis made to the company and, consequently, by answering the research questions, we were able to understand that this company was successful in domestic market mainly by focusing in providing high quality products. Thereunto, Oralook had decided to reorganize its structure and enhance its processes with top advanced technology. From readiness test carried out, we have concluded that the company can begin to take its first steps towards internationalization however it is not at its optimal stage. The main internationalization motivation identified in the company, is related with the entrepreneurial vision of the managing partner. After the internal analysis of the company, we were able to identify some markets with a better market potential index, but not excluding any market. We close the discussion of this project results, by presenting an alternative of markets' entry mode and a strategy to approach new markets.

In terms of limitations, it was not possible to find any researches or projects in the specific case of dental prosthetics laboratories internationalization, making more difficult developing this project. We must also emphasize the difficulty in obtaining data from domestic and international markets from dental prosthetics industry. The laboratories just didn't reply to any emails with research purposes and there was almost no relevant data about the dental prosthetics sector.

III - Bibliography

AICEP. 2012. Agência para o Investimento e Comércio Externo de Portugal.

Internacionalizar. <http://www.portugalglobal.pt/PT/Biblioteca/LivrariaDigital/AspectosAcautelarProcessoIDPE.pdf> ((Accessed on 22-05-2018))

Andersen, O. 1993. On the internationalization process of firms: a critical analysis. *Journal of International Business Studies*, 24, 209-231.

Barber, J. and Darder, F. 2004. *Dirección de Empresas Internacionales*. Madrid, Pearson.

Bilkey, W. J. and Tesar, G. 1977. The export behaviour of smaller-sized Wisconsin manufacturing firms. *Journal of International Business Studies*, Vol. 8, Spring/Summer, pp. 93-8.

Brito, C. and Lorga, S. 1999. *O Marketing Internacional*”, Sociedade Portuguesa de Inovação. Porto: Edição Principia.

Bruner, J. 1990. *Acts of Meaning*. New York: Harvard University Press

Cavusgil, S. T. 1980. On the internationalisation of firms. *European Research*, Vol. 8, November, pp. 273-81.

Cavusgil, S., and Tamerand Nason, R. W. 1990. Assessment of Company Readiness to Export. *International Marketing Strategy*, 129–139. Oxford: Pergamon Press.

Cavusgil, S. T., Knight, G. and Riesenberger, J. 2010. *Negócios internacionais*.

Pearson Hollensen, S. 2004. *Global Marketing: A decision-oriented approach* (3rd Edition). Pearson Education Limited.

Czinkota, M. R. 1982. *Export development strategies: U. S. promotion policy*. Praeger, New York.

Czinkota, M., Ronkainen, I. and Moffett, M. 1999. *International business* (The Dryden Press Series in Management). Published by Harcourt College Pub, Red Lion, PA, USA.

Czinkota, M. R. 2004. *The Export Marketing Imperative*. Texere, an imprint of Thomson Learning, chapter 1, pp 1-12.

- David, J. and Cariou, G. 2014.** Evaluating the Firm's Readiness for Internationalization: from the Design to the Application of an International Qualification Framework. *International Journal of Business and Management*; Vol. 9, No. 7.
- Dias, M. 2007.** A Internacionalização e os Factores de Competitividade: o Caso Adira. Universidade do Porto: Faculdade de Economia.
- Dominguinhos, P. M. 2001.** A Internacionalização das Empresas Portuguesas: Realidades e Desafios. 1–33.
- Douglas, S. P. and Craig, C. S. 1995.** *Global marketing strategy*. McGraw-Hill, New York.
- Dunning, J. H. 1977.** Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach. In Ohlin, B. and Hesselborn, P. O. and Wijkman, P. M. (Eds.) *The International Allocation of Economic Activity* pp. 395–418. London: Macmillan.
- Dunning, J. H. 1980.** Towards an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11 (1), pp. 9–31.
- Dunning, J. H. 1988.** *Explaining international production*. London, Boston, Sydney, Wellington. Unwin Hyman, XVII, pp. 378.
- Dyson, R. G. 2002.** Strategic Development and SWOT analysis at the University of Warwick. *European Journal of Operational Research*, vol. 152, pp. 631-640.
- Freide, A. 1997.** *Estratégia – sucesso em Portugal*. Lisboa: Editorial Verbo.
- Hofstede, G. 2001.** *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Second Edition, Thousand Oaks CA: Sage Publications.
- Hofstede, G. 2018.** Retrieved from <https://geert-hofstede.com/> (Accessed on 06-07-2018)
- Ghuri, P., Gronhaug, K. and Kristianslund, I. 1995.** *Research Methods in Business Studies, A practical guide*. Prentice Hall.
- Hadjikhani, A. 1997.** A Note on the Criticisms Against the Internationalisation Process Model. *Management International Review*, 37 (2 - special issue), pp. 43-66.
- Hagedoorn, J. and Narula, R. 1996.** Choosing organizational modes of strategic

technology partnering: international and sectoral differences. *Journal of International Business Studies*.27. p. 285-284.

Ilhéu, F. 2009. *Estratégia de Marketing Internacional - Casos de Empresas Portuguesas*. II Série, Nº 11. Edições Almedina. Coimbra.

Johanson, J. and Wiedersheim-Paul, F. 1975. The Internationalization of the Firm – Four Swedish Cases. *Journal of Management Studies*, vol. 12; pp 305-322.

Johanson, J. and Vahlne, J. E. 1977. The Internationalization Process of the Firm: A Mode for Knowledge Development and Increasing Foreign Market Commitment. *Journal of International Business Studies*, 8, pp. 35-40.

Johanson, J. and Mattsson, L. G. 1988. *Internationalisation in Industrial Systems – A Network Approach*. Strategies in Global Competition, Croom Helm, London.

Johanson, J. and Vahlne, J. E. 1990. The Mechanism of Internationalisation. *International Marketing Review*, 7 (4), pp. 11-24

Johanson, J. and Vahlne, J. E. 2009. The Uppsala Internationalization Process Model Revisited: From Liability of Foreignness to Liability of Outsidership. *Journal of International Business Studies* 40 (9). Palgrave Macmillan: 1411–31.

Kaplan, B. and Duchon, D. 1988. Combining Qualitative and Quantitative Methods in Information Systems Research. A Case Study, *MIS Quarterly*, Vol.12, Nº 4, pp. 571-586.

Korsakiene, R. and Tvaronaviciene, M. 2012. The internationalization of SME's. *Journal of Business Economics and Management*, 13(2): 294-307.

Leonidou, L. C. 2004. An analysis of the barriers hindering small business export development. *Journal of Small Business Management*, 24 (3):279–302.

Leonidou, L. C., Katsikeas, C. S., Palihawadana, D. and Spyropolou, S. 2007. An analytical review of the factors stimulating smaller firms to export: Implications for policy-makers. *International Marketing Review*, 24(6): 735–770.

Lindon, D., Lendrevie J., Lévy J., Dionísio P. and Rodrigues, J. V. 2009. *Mercator XXI, teoria e prática do marketing*, Lisboa, Publicações Dom Quixote.

Lu, J.W. and Beamish, P. 2001. The internationalization and performance of SME's.

Strategic Management Journal, 22: 565-586.

Malhotra, N. K., Agarwal, J. and Ulgado, F. M. 2003. Internationalization and Entry Modes: a Multitheoretical Framework and Research Propositions. Journal of International Marketing, 11 (4), pp. 1-31.

Meyer, R. 1996. The Internationalization Process of the Firm Revisited: Explaining Patterns of Geographic Sales Expansion. Management Report. 300. Roterdão, Erasmus University Rotterdam.

Morresi, O. and Pezzi, A. 2011. 21 years of international M&As and joint ventures by Italian medium-sized listed firms: Value creation or value destruction? Research in International Business and Finance, pp. 75-87.

O'Farrell, P. N. and Wood, P. A. 1994. International market selection by business service firms: Key conceptual and methodological issues. International Business Review, 3(3): 243–261.

O'Grady, S. and Lane, H. W. 1996. The Phisic Distance Paradox. Journal of International Business Studies, 27 (2), pp. 309-334.

OECD, 2009. Top barriers and drivers to SME internationalization. <https://www.oecd.org/cfe/smes/43357832.pdf> (Acesso a 13-03-2018)

Papadopoulos, N. and Martín, O. M. 2011. International market selection and segmentation: perspectives and challenges. International Marketing Review, 28(2): 132-149.

Pinho, J. C. and Martins, L. 2010. Exporting barriers: Insights from Portuguese small- and medium-sized exporters and non-exporters. Journal of International Entrepreneurship, Vol.8 (3), pp.254-272.

Pleitner, J. H. 2002. The future of SMEs in a globalizes world, Paper Presented at the AISE Conference.

Pleitner, J. H. 1997. Globalization and entrepreneurship: entrepreneurs facing the

- ultimate challenge. *Journal of Enterprising Culture*, pp. Vol. 5 No. 1, pp. 27-55.
- Porter, M. E. 1990.** *The Competitive Advantage of Nations and Firms*, Free Press, New York.
- Pukall, T. J. and Calabro, A. 2014.** The Internationalization of Family Firms: A Critical Review and Integrative Model. *Family Business Review* 27 (June 2013): 103–25.
- Reid, S. D. 1981.** The decision-maker and export entry and expansion. *Journal of International Business Studies*, vol. 12, Fall, pp. 101-12.
- Ruzzier, M., Hisrich, R. D. and Antoncic, B. 2006.** SME internationalization research: past, present and future. *Journal of Small Business and Enterprise Development*, pp. Vol. 13, No.4, pp. 476-497.
- Simões, C. 1997.** Estratégias de internacionalização das empresas portuguesas. *Comércio e Investimento Internacional ICEP. Portugal. Investimentos. Comércio e Turismo de Portugal* (edição).
- Simões, C., Esperança, J. P., Vítor Corado Simões, V 2013.** *Horizonte Internacionalizar: Guia para PME*.
- Turnbull, P. W. 1987.** A Challenge to the Stage Theory of the Internationalization Process, in P. J. Rosson and S. D. Reid (eds.), *Managing Export Entry and Expansion*, Preager Publishers, New York, pp. 21-40.
- Wright, M., Westhead, P. and Ucbasaran, D. 2007.** The Internationalization of SMEs and International Entrepreneurship: A Critique and Policy Implications. *Regional Studies*, pp. Vol. 41, pp. 1013-1029.
- YIN, Robert K. 1989.** *Case study research - design and methods*. Sage Publications Inc., USA.

