



Master Thesis

Benefits and Challenges of Firm's Expansion to the European Market

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Benefits and Challenges of Firm's Expansion to the European Market

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- FOLEY, James.F., 2017. *Global Entrepreneur: Taking Your Business International*. 4th ed. USA: Jamric Press International. ISBN 978-0-9753153-2-3.
- GERINGER Michael, Jeanne MCNETT and Donald A. BALL, 2019. *International Business*. 2nd ed. New York, NY, USA: McGraw-Hill Education. ISBN 978-1-259-68522-4.
- PETERSEN, Bent and Lawrence S. WELCH, 2002. Foreign operation mode combinations and internationalization. *Journal of Business Research*, **55**(2002): 157-162. ISSN 0148-2963.
- TORKKELI, Larse (ed.), 2021. *Contemporary Issues in International Business and Entrepreneurship*. Newcastle upon Tyne, UK: Cambridge Scholars Publishing. ISBN 978-1-5275-6980-5.
- PROQUEST, 2022. *Database of Articles ProQuest* [online]. Ann Arbor, MI, USA: ProQuest. [cit. 2022-09-30]. Available at: <http://knihovna.tul.cz/>.

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Anotace

Předkládaná práce se zaměřuje na poskytnutí návodu pro vstup indické společnosti na evropský trh. Diplomová práce je rozdělena do tří kapitol: První kapitola vysvětluje různé teorie, které je možné využít pro podnikání v jiné zemi, a také uvádí výhody, úskalí a problémy při expanzi podniku do zahraničí. Druhá kapitola popisuje jednotlivé metody a data, která byla použita ve třetí, praktické části práce.

V případové studii společnosti Lodestar 3D, představené ve třetí kapitole, byly provedeny analýzy SWOT a PEST, jejichž cílem bylo identifikovat výhody a nevýhody, které by pro společnost znamenalo založení dceřiné společnosti v České republice. Výsledky těchto analytických nástrojů jsou doplněny informacemi získanými prostřednictvím polostrukturovaného rozhovoru s ředitelem společnosti Lodestar 3D. Hlavní závěr práce navrhuje společnosti Lodestar 3D jasně formulovanou obchodní strategii odkoupení české společnosti a vytvoření nové dceřiné společnosti mateřské společnosti, která sídlí mimo Indii (převodem licencí a povolení), a řešení všech klíčových problémů pro zahájení podnikání ve střední Evropě. Dodržování uvedených pokynů může společnosti pomoci zahájit podnikání a lépe sloužit evropským zákazníkům.

Klíčová slova

Podnikání v zahraničí, evropský trh, internacionalizace, výrobní jednotka a prodejní dceřiná společnost, 3D tisk

Benefits and Challenges of Firm's Expansion to the European Market

Annotation

The presented thesis focuses to provide a tutorial for the Indian company to enter the European economy. The diploma thesis is divided into three chapters: Chapter one explains the different theories which are available to use for doing business in another country and also lists the benefits, challenges, and problems for the company during its expansion abroad. Chapter two describes the various methods and data which were used in the third, practical part of the thesis.

In the case study of Lodestar 3D company, presented in the chapter three, the SWOT and PEST analyses were carried out to identify the advantages and disadvantages for the company to set up a subsidiary in the Czech Republic. The findings of these analytical tools are supplemented with the information gathered through the semi-structured interview with the director of Lodestar 3D. The main conclusion of the thesis proposes Lodestar 3D a clear-cut business strategy of buying out a Czech company and making it a new subsidiary of the parent company which is based out in India (by transferring licenses and permits) and addressing all the key challenges for starting the business in Central Europe. Following the specified guidelines can help the company to start the business and serve the European customers in a better way.

Key Words

Doing Business Abroad, European Market, Internationalization, Manufacturing Unit & Sales Subsidiary, 3D Printing

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His discussions and ideas helped me to structure my thesis and also supported me to apply the things practically in building a case study for the parent company.

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List of Abbreviations

3D	3 Dimensions
AG	Public Limited Company (<i>Aktiengesellschaft</i>)
AM	Additive Manufacturing
APAC	Asia Pacific
ATM	Automated Teller Machine
B2B	Business to Business
BRICS	Brazil, Russia, India, China, South Africa
CAGR	Compound Annual Growth Rate
COVID-19	Coronavirus Disease 2019
EMEA	Europe Middle East and Africa
EMMNE	Emerging Market Multinational Enterprise
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GDPR	General Data Protection Request
GE	General Electric
GmbH	Private Limited Company (<i>Gesellschaft mit beschränkter Haftung</i>)
HCL	Hindustan Computers Limited
HRM	Human Resource Management
IP	Intellectual Property
IT	Information Technology
JV	Joint Venture
km	Kilometre
LLC	Limited Liability Company
Lodestar 3D	Lodestar Innovations Private Limited

M&M	Mahindra & Mahindra
MSME	Micro Small and Medium Enterprises
OEM	Original Equipment Manufacturer
PEST	Political, Economic, Social and Technological
PESTEL	Political, Economic, Social, Technological, Environmental and Legal
PPP	Purchasing Power Parity
R&D	Research and Development
R&D	Research & Development
RFQ	Request for quote
SLA	Stereolithography Apparatus
SME	Small and Medium-sized Enterprises
SWOT	Strengths, Weaknesses, Opportunities and Threats
TCS	Tata Consulting Services
US	United States

Introduction

In recent times, there is a large number of companies going global from developing nations to effectively utilize the market demands from Europe. Particularly companies from the “BRICS” countries (Brazil, Russia, India, China and the South Africa) are expanding their activities around the globe. India is the 7th largest country with 1.429 billion inhabitants as per the United Nations Conference on Trade and Development (UNCTAD 2023). India has 2nd largest population in the world. In India, 50% of people are under 25 years and 65% of people are below 35 years. India ranks No. 1 with the largest amount of young work force in the world. Things started to improve when then finance minister Manmohan Sigh introduced new policies in the union budget of India in 1991. This led to opening Indian economy overseas and abroad. The current prime minister of India Narendra Modi has defined the economic policy for the country’s scalable growth in various fields, sectors and directions. He gave wings for Indian companies to diversify their presence in the global environment.

Developing nations like India have the advantage of manufacturing products at cheaper costs with comparable quality or at the same cost with much higher quality. India also has a huge potential to be considered as the cost-effective solution for the host country. Some of the notable Indian multi-national companies are Tata Consulting Service (TCS), Infosys, Hindustan Computer Limited (HCL), and Wipro in the IT sector; companies like Dr Reddy’s Lab and Cipla in the pharma industry; a company like Dookan in retail and wholesalers; companies like Tata Motors, Mahindra and Mahindra (M&M) in the automotive sectors; company like Netsurf in healthcare and agriculture-related herbal products and the list goes on (Sugre, 2017).

The above-listed Indian companies have already set a high standard in establishing successful companies in the European Union. These companies are also called emerging market multinational enterprises (EMMNEs). In the recent days, companies from emerging market economies (like India) have challenged advanced economies (like Europe) with better quality products, affordable prices and excellent services. Some of the sectors include IT, automobiles, machinery, food and agricultural products, toys and sporting goods, beauty and herbal products, leather products, apparel and jewellery, mustard oil, marbles and granite slabs, nuts, textiles, and traditionally also tea and coffee etc. In the beginning phase of the international

expansion, they start with sub-contracting, J.V (Joint Venture) or FDI (Foreign Direct Investment). They extensively make use of the paradigm shift to materialize things with the help of several theories like Transaction Cost Theory, Resource Based Theory and Internationalization Theories. Depending on the requirements of the advanced economies, they export items from India and start their work, sometimes they use resources that are locally available to save time, effort and money to serve European customers in a better way. By doing so, they also help to generate employment opportunities and tax revenues in the host country and help the host economy grow (Kedron a Bagchi-Sen 2012).

India exports different kinds of industrial machinery to Europe. These include electrical machinery, industrial machinery for dairy, food processing and textiles, construction machinery, ATM and Injection moulding machines, air conditioning and refrigerator machinery, pumps (all types), hand tools and cutting tools, machine tools, cranes, lifts and winches, accumulators and batteries and electrode accumulators etc. In this thesis, I will prepare a tutorial for Indian company to export industrial-grade machineries to the European market. This thesis is going to be a case study for the company Lodestar Innovations Private Limited or LODESTAR 3D which is based out in Bangalore, India. This thesis will help Lodestar 3D to internationalize itself in selling and servicing industrial-grade 3D printers in the European economy by establishing a sales office or a sales subsidiary in Europe.

My thesis aims to provide a tutorial for the Indian company to enter the European market. By keeping the aim of my thesis in mind, I am going to identify & analyse the problems faced by companies during their expansion in European countries and derive from them the opportunities for parent country enterprise. Based on findings from research journals and books. I have formulated 3 research questions that will help me to create a well-defined strategy for Lodestar 3D to venture out into the European market successfully with good business potential results. The research questions are:

1. Why do companies want to go global and what are the expectations of the company after global expansion?
2. What are the main difficulties faced by the company during its global expansion?
3. How to implement the best practices and innovative ideas during market expansion?

I feel that there is a huge research gap that exists between the theoretical framework and practical implementation of methods and strategies for the companies during the expansion of their brand presence in Europe. Because each company falls under a different field or sector or industry for example companies may fall under pharmaceutical, imports and exports of raw materials or machinery or food products, IT, financial services, chemical industries, agriculture, hotels and restaurants, oil and gas, textiles and leather etc. Each sector or industry is different from the others with its day-to-day operation, business strategy, financing, business operations and marketing activities. When a company enters from one market to another market, it needs to follow the host country's following criteria and conditions for example:

- The legal system (law) for rules to register as a new company or buy out the procedure of another company, submitting all the authorization and necessary documents in setting up the new enterprise. The parent company needs to follow the employment law concerning the payment and working conditions for employees. This legal framework will set a way for the companies to close the necessary contracts with their customers or suppliers, when they face any disputes or conflicts of interest they can make use of the host country's corporate law to solve the particular issue in less time.
- The tax system for filling the tax returns, claiming government subsidies, dividends, transfer pricing and much more.
- Rules and regulations for IP rights and trademarks for the host country and Europe.
- GDPR rules and regulations to avoid any individual data thefts and protection of data during international business operations across Europe.

To address the research gap and find answers to the set questions, the thesis starts with theoretical background of approaches to internationalization and global expansion. In the second chapter, the selected indicators, their definition, meaning and measurement are described as well as research methods used for meeting the aim of the thesis. The third chapter represents the core of the thesis, where on the case of an India-based company, the process of internationalisation of their business activities is projected, the weaknesses and strengths of the Czech location for the subsidiary company are assessed, the opportunities and threats of the European business environment are articulated and the guidelines for this particular way of

international business activities expansion are formulated. The conclusion of the thesis is summing up the key findings and also suggests where further research and analyses are needed and relevant.

1 Theoretical Background

This part of the thesis is addressing the research question, why do companies want to go global and what are the expectations of the companies after the global expansion.

Internationalization is defined as the way to enhance a company's participation in international markets. Knowing the broad picture of the particular market in which the company is operating helps them to take careful decisions related to the company's growth in future. Internationalization can also be expressed as a way to take actionable steps towards the company's internal and external trade needs for broadening their horizons for faster development and for carrying global trade smoothly. This is the reason why companies should consider the internationalization process as one of the important steps for business expansion overseas and beyond borders. This judgement would be based on the needs and requirements of the other offshore markets against the home country. The other reasons why the companies go global, are their financial gains, brand presence, obtaining a competitive edge over competitors etc. Everything is based on how the business strategy is implemented in the international environment. It is said that due to internationalization businesses can become larger in terms of brand visibility and brand recognition while growing their fiscal performance in international territory. Companies adopt several steps to overcome the challenges when they go global. Some of them include principal investment, recognition and infiltration in the emerged economies or emerging economies (Toda 2017).

There are many reasons for companies to go global but the cardinal and foremost reasons are for the parent company's business expansion and business growth. During the expansion phase companies hire international or local employees of the host country as a part of their international strategy to cater to the needs of the host market. In some cases, they also send their employees to the host country for deputation work for 2 to 3 years to support, and train employees whom they have newly hired with the business processes, and technical know-how and also, they help them to achieve the revenues in the allocated region or the country. Companies consider going global as the way to the rapid development of new markets and a way to include international/overseas clients in their customer bases or portfolios. These

activities are nowadays, easily possible because of the technological advancements in the information technology field. The introduction of digital communication is highly possible via mass media in the 20th Century with the help of computers (writing down emails to customers and vendors), and Mobile Phones (making audio or video calls with clients or suppliers) beyond borders made worldwide conversations and connections very simple.

Before going global, companies consider some important things for the expansion of their customer base overseas. Foreign opportunities are alluring and captivating for companies. For example, if an Indian company expands through its sales office in Europe. Where Indian companies can utilize the benefits of the currency value difference between Europe and India, it can generate high profits. Since the cost of making the product is affordable, export options are easier. Cost of labour is cheaper in developing economies like India when compared to the developed economies like Europe. In this way, India can replace the products of the first world countries by supplying an affordable product with great cost and good quality to Europe. In this way companies that are going global can reduce their dependencies on the federal or home markets. The stability and balance can be achieved by penetration in the international markets. Large market size than the home market size also plays a major role in business expansion, where it provides opportunities for the company to diversify its global presence and product portfolios in terms of goods and services. Sometimes going ahead for abroad expansion in untapped markets with wide product scope gives them a path to generate new streams of revenues and sales in the new country which can benefit both the parent company and the home economy, because of the market potential and customer preferences based on the demand and the supply. Thereby the company can operate freely without any developmental threats or competition from the inland companies. Some of the other reasons for going global might include to acquire a competitive edge and equilibrium for the unexpected losses that occurred in the home country (Twarowska a Kakol 2013).

It helps companies to obtain the key essential assets to fight against their competitors overseas and nationally. In this way, they reduce their risks or threats due to the unstable market. And also, they maintain their aggressive long-lasting competitive strategy. Companies from developing economies anchorage on the core abilities and skills to sustain themselves in advanced economies. Companies acquire ultra-modern

technology which is in a way beneficial for both the home market and the international market. If the market is small and saturated in the home country, going abroad can add new feathers to the cap and increase global brand presence. Then once companies achieve a significant amount of profits, in the next few years they can start production activities in the host country itself. This is highly suitable if they get any import quota or trade restriction from the host country.

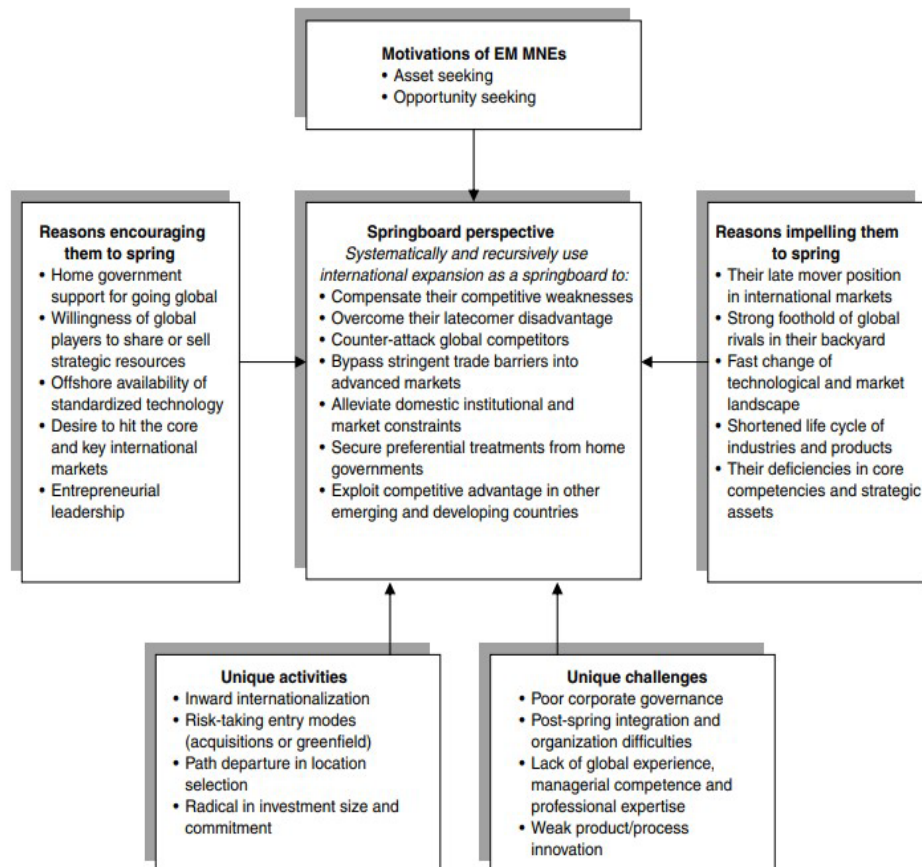


Figure 1: International Expansion of EMMNE'S: A Springboard Perspective
Source: (Luo a Tung 2007)

The figure 1 sums up the expectations of the companies when going global. They are:

1. Making use of strengths and utilizing the opportunity to get prospective clients or potential customers.
2. Attaining top-end business tiers by achieving financial goals for the quarterly, half-yearly and yearly.
3. Multiplicating the brand reputation and the size of the company to 2× or 3×.
4. Safeguarding themselves from home government constraints (for example: running away from a narrow and unstable market).

5. Grabbing the scope of the gainful and affordable production capabilities in advanced economies (Luo a Tung 2007).

1.1 Different Approaches Involved in the Internationalization of Business

It is said that to internationalization the company can become larger in terms of brand visibility and brand recognition while growing its fiscal performance in international territory. Companies adopt several steps to overcome the challenges when they go global. Some of them include principal investment, recognition and infiltration in the emerged economies or emerging economies. Different theories are available in practice to help them bypass these challenges. They are: Uppsala Internationalization Model, Stopford Model, Theory of Business Network, and Multinationalization: Born Global (Toda 2017).

1.1.1 Uppsala Internationalization Model

Uppsala's internationalization model explains the process of internationalization of a firm in the international environment. The company assumes all the business and economic factors in the beginning stage for becoming successful in the host market. In this way, it gives the company a pattern or way to implement the process methodology. As seen below in figure 2 the Uppsala internationalization model layout is broadly classified into five different components. They are:

- Foreign market
- Export method
- Alliances/partnerships/cooperation
- Foreign direct investment

As per the Uppsala model in the beginning stage company starts by doing an irregular export activity to the particular country and reaches the terminal stage by establishing an overseas manufacturing and production facility at the host country to serve host country customers as well as their neighbouring country customers.

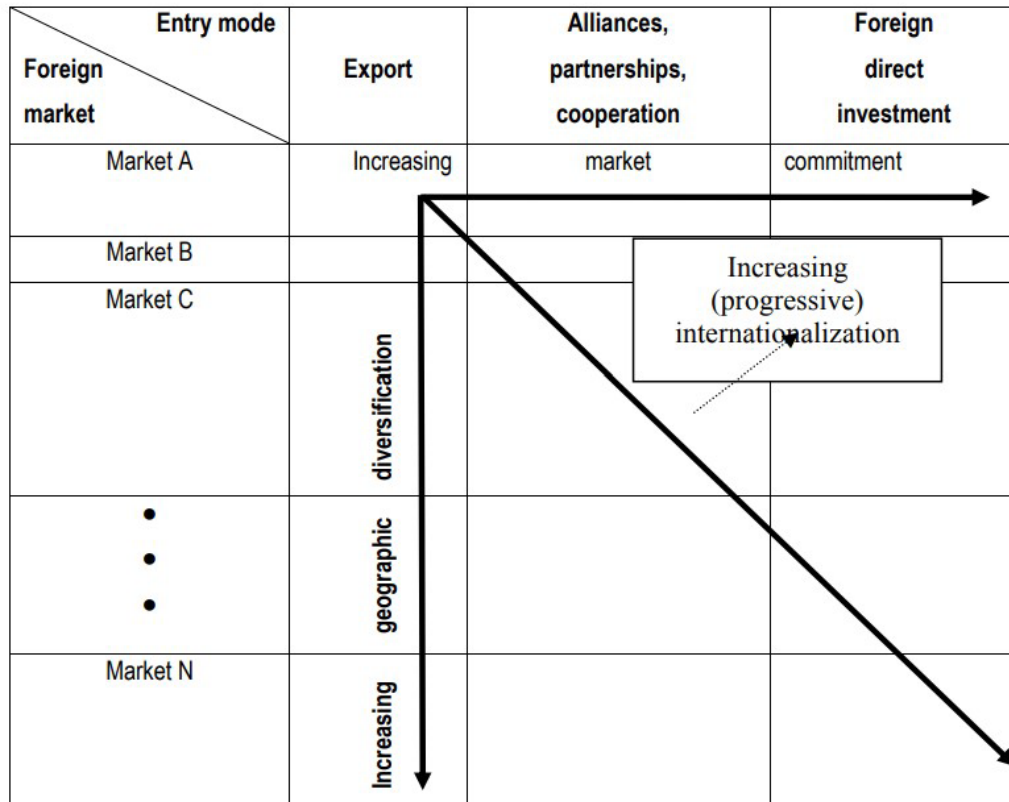


Figure 2: Uppsala Internationalization Model

Source: (Danciu 2012)

The above picture explains the working of the Uppsala model. Uppsala's internationalization model is known for describing that many organizations obtain a gradual international presence. This is done in two different aspects: 1) Geographic way (countries) close to geographic market (for example Germany expanding its market presence in the Czech Republic, Poland, Austria, France and Switzerland to which it shares its borders). And then gradually expanding through the world market, thereby, showing an increase in geographic diversification. 2) And also, through the move from initial sporadic export to finally setting up overseas sales, manufacturing and production facility, thereby, showing the market commitment. Uppsala internationalization model is also called the "Stage Model". It describes the corporation's process of gradual internationalisation including the above-listed aspects. Stages involved in Uppsala Model:

- Stage 1: Irregular overseas export business activities (Sporadic Export).
- Stage 2: Exporting via individual frontman (Exporting Approach).
- Stage 3: Creation of overseas sales supplementary institution.
- Stage 4: Overseas manufacturing and production.

Dynamic Approach of the Uppsala Model

Mechanisms of internationalization are classified into two states and two changes as illustrated by the figure 3. The two aspects of the state are:

- Market Knowledge (includes all the knowledge opportunities).
- Market Commitment (includes the network position of company and suppliers in host or home country).

And the two aspects of the change are:

- Commitment Decisions (includes relationships between the company and their customers).
- Current Activities (includes learning, creating and building confidence).

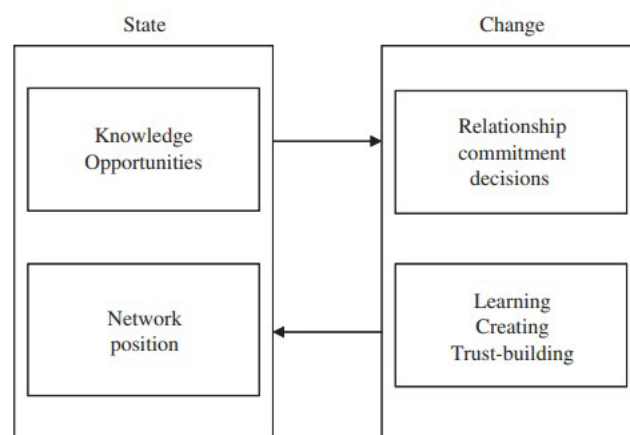


Figure 3: Dynamic Approach of the Uppsala Model

Source: (Johanson a Vahlne 2009)

- **Market Commitment:** Market commitment consists of two factors. They are: the total amount of resources committed to the market and the degree of commitment given to the customers.

Resources that are locally sourced from the host country can be considered as the market commitment to the particular country. There is also a possibility to use the resources which are available in the home country to meet the needs of the host country. When the commitment is higher, all the resources which are needed for the market are very well integrated with different parts and dimensions of the firm. So that the customers get value out of it from the integrated or coordinated functions. Let's take one example for both of the above-mentioned factors.

Example 1 (Resources committed to customers) – A resource cannot be transferred to another market or used for other requirements in different markets. In this way, the company can establish a good relationship with their consumers.

Example 2 (Degree of commitment to customers) – Let's consider Volvo (the Swedish car maker), the major customers of their cars are people living in the United States (US) Volvo makes cars for the US market based on their requirements by their Swedish engineers who are trained to make cars as per the standards and specification of the US by being present in Sweden. This can be also considered the best example of the degree of market commitment given to the host country by the home country. Better decision-making capability is required to use the available resources in the best possible way to cater for the needs of the particular country.

- **Market Knowledge:** When the company enters the process of internationalization, it should have a certain degree of knowledge to support its customers. The company should think about alternate sources, considering the future supply and demand needs, payment methods, distribution channels, and expansion strategy and be as flexible to the market changes and requirements. There are 2 types of knowledge required for corporations, they are general knowledge and experiential knowledge. General knowledge includes customer type, customer locations, frequency of orders, order conversion ratios and process of production and shipping/delivery. And experiential knowledge includes managing sales, marketing, teams etc. Experiential knowledge is a crucial type of knowledge required for all companies.
- **Commitment Decisions:** To offer the commitment given by the company to their customer, the company has to take certain decisions to stand out from the crowd. Those decisions might be taken to address the problems and opportunities. Alternate solutions might include serving customers which are bordered by the host country. The company analyses the market influencing factors and takes a collective decision after thoroughly understanding the needs of the specific market. Some steps can be taken for example to maximise the interactions with suppliers and customers, increase the repeat rate of the customer orders, creation of a new product for the customer or start up a new service for their existing customers to enhance the value (Johanson a Vahlne 1977).
- **Current Activities:** Since the market conditions are fluctuating, there is a constant clear-cut need for current activities related to learning and

development, trust building and the creation of new processes or routines. Daily routines and methodologies play a significant role in increasing the involvement, dedication, practical knowledge and confidence of employees in what they do. Experiential learning is a type of learning which help a person to do the same task with the highest efficiency, and speed. This results in saving costs and time involved in the particular process. In this way, the foundation of trust is laid on the employees who are working on a particular activity, and once the employees are skilled it provides opportunities for the company to explore new shores, create new process methodologies etc. In this way, both the social capital and intellectual capabilities of the person are used (Johanson a Vahlne 2009).

1.1.2 Stopford Model

In this type of model, one international division is allocated with the roles and responsibilities, suitable when foreign sales and product diversity are very low. The prime focus of the company would be on the international, and the domestic operations are untouched. They mainly use this structure when foreign sales are low. Worldwide product division is best suited for heterogeneous companies with broad product scopes. In this type of structure, a separate division is made for the group of products or the product. Each division operates independently, and they create their value-generating activity for example R&D, marketing, sales and operations etc. When there is high product diversity and foreign sales, the company enters the global matrix or grid stage. This structure carries the advantage of both the region and the product structure, where local receptivity and global expertise are very much need and important. Area division structure gives main priority to the geography or territory and the MNC's primary division on that particular region or territory. In this structure, each region operates independently.

The Stopford model is based on two aspects:

- Horizontal aspects include foreign sales as a percentage of the total sales.
- Vertical aspects include foreign product diversity (Shah et al. 2012).

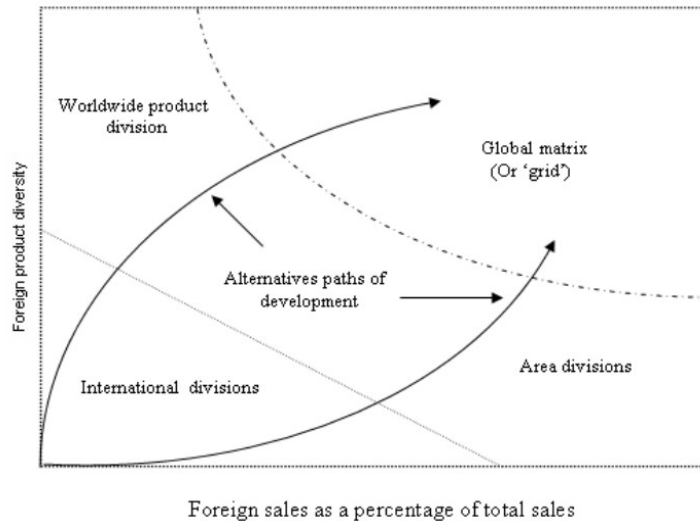


Figure 4: Stopford and Wells International Structural Stages Model
Source: (Shah et al. 2012)

Above, the figure 4 shows the four different structures of the Stopford model. They are:

- International division structure.
- Area division structure.
- Product division structure.
- Global matrix structure.

The best way to explain how Stopford model works is using an example of two companies, X and Y:

1. Company X and Company Y both are small-sized companies with one product or a single line of business with similar kinds of product scope or offerings. Company X achieves monetary gains after understanding the needs of the market with outward-managed trade activities.
2. Company Y understands the chances of the regional fabrication and manufacturing after good feedback from the sale place and obtains a license to from company X to manufacture the products at their own facility.
3. Due to this company X suffers from a loss in the overseas market share. For that reason, company X pushes Company Y to establish a joint venture between them to gain control over the market back.
4. This leads company X to set up or form their own 100% owned subsidiary corporation in the foreign land.

1.1.3 Theory of Business Network

The network model describes a model of internationalization, where an organization decides on a geographic expansion by establishing relationships with a network of independent actors in one or several foreign markets. The network is expanded through different types of bonds. These could be personal, legal, economical or perhaps technical. In this model relationships are flexible, so therefore it is suitable for the environment with regular changing conditions (see also figure 5).

- **The Early Starter:** Respected entity does not have any business tie-ups with companies outside their home country. They have a first-mover advantage in the market since there are no businesses that are currently offering the same output or competing in the same field. The company progresses slowly and steadily way in the overseas market with the help of a representative or a liaison. Then they establish a sales office and then a manufacturing unit in the host country following the Uppsala model.
- **The Lonely International:** These companies have already established alliances or connections with other companies overseas, where the users and competitors are way less globalized. They can venture out in exploring synergies with new companies or manage and amplify the existing tie-ups effectively by smoother functioning of their operations.

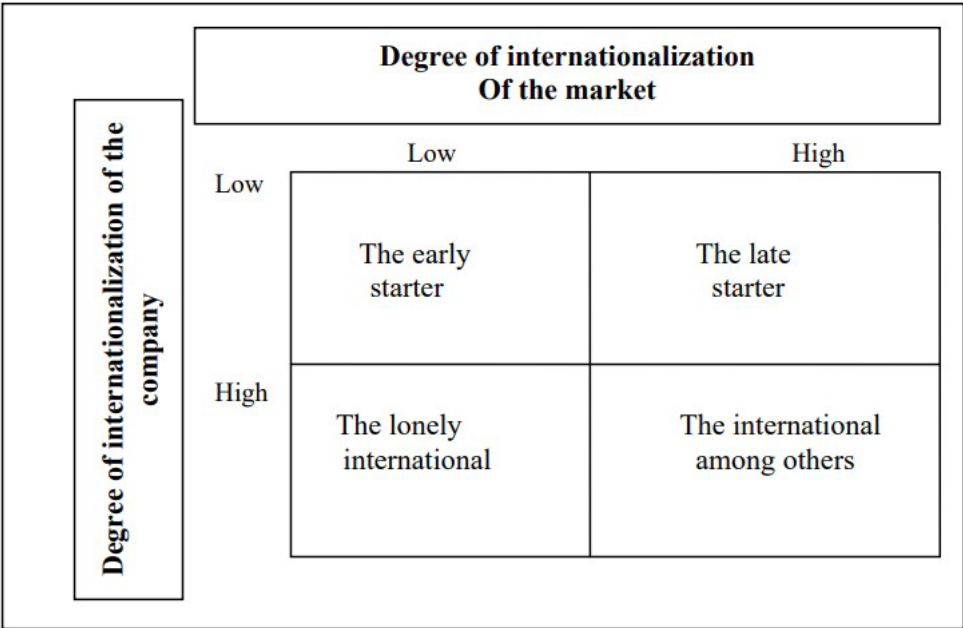


Figure 5: Theory of Business Network
Source: (Danciu 2012)

- **The Late Starter:** The prime focus of the company is the home market. While their competitors have already established successful deep-rooted or continuing relationships. The late starters have failed to discover the window of opportunity and started to expand in international markets lately than their peer competition. The late starters should manage the host market very well and side by side to stay ahead of their competition they need to look for a new target market where they can position their product or service to generate new income streams for the company. Other processes are also included during the time of the international market expansion. They are: Market research, Economic and political landscapes of the region or country, Business laws, rules and regulations, Licenses and permits to manufacture products if any, and Culture, norms and languages.
- **The International Among Others:** Companies have more opportunities to maximize the competitive edge from one market to another market by penetration. Regular co-ordinations and implementation of international tasks help them to achieve success in the market. A good example would be automotive, information technology, healthcare, fast food restaurants, hotels/resorts, and consumer electronics manufacturing etc (Danciu 2012).

1.1.4 Multinationalization: Born Globals

Multinationalization is an activity in which the parent company present in the home country puts money into the foreign market to broaden their national activities or to utilize the readily available resources in their home country market to cater for the needs of the foreign as well as homeland markets. This is a theory used to describe those organizations experiencing globalization from birth or day one of their undertaking. They see the world as one market and they are typically limited to the adaptation of the marketing mix (see also figure 6 for alternative configurations of multinationalization).

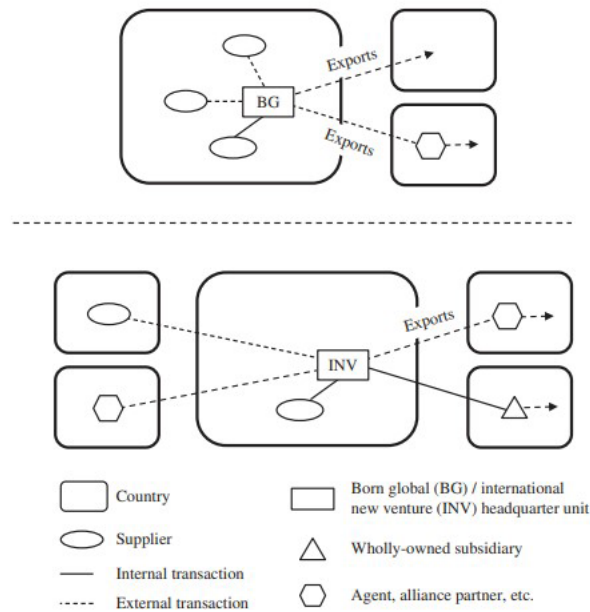


Figure 6: Multinationalization: Alternative Configurations

Source: (Minbaeva et al. 2003)

Due to the nature of their operation, born global companies focus on a large number of represented audiences at the same time with the same content improving the financial gains. A good example of this type from the market is Netflix. Companies that are in Europe, since Europe is under the Schengen area/zone which consists of 26 European countries, as part of the free trade economy or open market which helps them to expand their markets in the other countries very easily. The subsidiary, agents, and alliance locations also play a major role in determining the company's long-term success. In the beginning, stage company would sell its own country products/services and adapts in the future to the country-specific necessities. They need to always focus on ways to improve the existing innovation or creation of innovation to succeed in the competitive market. Thus, resulting in opening new opportunities for the born global companies. This company's growth trajectory increases from one year to another year (Minbaeva et al. 2003).

1.2 Benefits, Challenges and Problems During Company's Global Expansion

1.2.1 Benefits for Developing and Developed Economies

Because of the 4th industrial revolution in the world, developing economies like India are investing funds, time, effort, energy and knowledge to develop new high-class advanced technologies with R&D activities to become and stay competitive in the international market. Selling machinery overseas obviously will help Indian companies to generate more money as they penetrate new foreign markets. Indirectly, firms can generate additional money from annual maintenance, on-call maintenance, and revenues from consumables and spare parts, by replacing damaged components and other services. These firms will gain a status quo and brand reputation in both domestic as well as in foreign markets. Where it will help them to increase their market share, generate higher sales revenue, and increase customer acquisition and it will also prepare them to handle the unfavourable conditions which might arise in the future either at home or abroad.

Talking about the technological side, it will set a path for the companies to improve the existing technologies and make the particular industry progress with new advancements in technology through ground-breaking innovations. It will also help companies to elevate their technical and scientific capabilities in a particular sector. Developed countries in Europe can make use of cheaper scientific powers which are available at less cost when they make high-technology purchases from developing countries like India. In our case, we are exporting 3D Printers and selling them through the Lodestar 3D sales office in Europe, which does not need any huge manpower like a production-ready environment where people need to work in 3 shifts 24×7 and where protectionism of employees and increasing wages come into the picture in the developed nations. In future, these machines can use locally sourced raw materials from suppliers from the home country/region to gain trust and self-reliance on technology adopters in the host country. Firms from developing countries can promote technological activity by onboarding a new channel partner as a part of a joint venture set up to make and distribute the machines in Europe and beyond. This will make it possible for the developed countries not to buy the machines with inflated

bids from other countries. There are many scopes for developing nations to transfer technologies to developed nations by licencing, contracts and agreements. In this way, companies can achieve a win-win situation for themselves and their technology adopters. Companies doing these things can generate high profits in the host country. There are also chances of market domination and creating a monopoly for the product in the particular technology or industry. Firms can also focus on generating revenues through patents, R&D and skills when disrupting the particular industry with advanced manufacturing technologies on a larger scale. To sum it up from the above information there are significant benefits for both economies. The benefits are in a broader context. It is truly said that countries like India focus more on technological innovation which makes buying and selling technology-related products easier and more affordable. In a way, it makes the earth a better place to live for humans and animals. In future, these can bring fruitful results to mankind through the development of new industries on their own (Lall 1981).

1.2.2 Operational, Informational, Internal and External Challenges

These are the challenges that can be anticipated by the company during the machinery export. Currency exchange rates and trust in the company play major roles in the SME (Small and Medium-sized Enterprises) growth. Aspects of the exporting barriers are classified into four types: They are available resources, procedures (transportation cost, insurance cost), knowledge of the market and exogeneous barriers (host country rules and regulations, trade policies, laws, huge differences in theoretical and practical, tariff and non-tariff barriers). No experience/less experience and knowledge barriers in the foreign market can cause harm to the parent company.

The above-listed exporting barriers can be classified into four groups: operational, informational, internal and external. Export marketing problem falls under both internal and external barriers. In this case internal (micro) exporting challenges are connected with the company's capability in handling export marketing activities and the problems associated with the company's export department. Since the company would be exporting the machinery for the first time, they might not know how to carry out the export procedure. High-skilled and experienced people need to be hired in the company to handle customs and export documents as per the requirement of the

host country. There is also a high chance that the company might face a financial crisis or financial constraints to export its machinery to a foreign country.

The company's financial capabilities and its supply chain capabilities to leverage its strengths are other major challenges during international expansion. External problems can be related to the host country's market, procedures, government, industrial standards and the macro environment in the bigger picture. As can be seen in the figure 7 below, the major barriers faced by foreign exporters which are small and medium-sized enterprises, can be categorized between internal and external: Some internal barriers for a company can be less international experience, insufficient funds and resources, and lack of accessing the right pieces of information. Some external barriers for the company can be less demand in the market, political and legal issues, and market fit of the product.



Figure 7: Major Barriers for SME Exporters

Source: (Paul et al. 2017)

All the above-mentioned aspects are very important for defining the right market strategy for the particular host market. Other challenges might include logistics, method of sales practice in the foreign country, management skills, cultural differences, quality standards, payment options, Payment terms and conditions, and exchange rates (Paul et al. 2017). On the logistic side, problems can arise from the difference in the logistic systems of the host country. Challenges possessed by quality standards are connected to the measurement standards and type of components to be used as per the requirements of the host country standards. If the products are not made as per host country specifications, low-quality standards or

usage of poor components in the product can lead to non-acceptance of the product and loss of trust. In some special cases, the country requires local content or local components on technology-based machinery to promote the economic growth of their own economy. There can emerge challenges with the exporting agency not being able to meet the delivery timelines of the customer, and for example, a machine can be halted in seaport or airport customs clearance due to incomplete documentation or missing documents. Government bureaucracy can be also associated with the existing export activity.

Other threats and dangers include damage to the machine at the time of shipment activity when the customer receives some parts or components of the machine broken. In such a case, the packaging of the machine should be taken into account for serious consideration and insurance during transportation. Depending on the macro environment conditions, the export managers need to be aware of the governmental policies and procedural changes for exporting machinery to the host country. Therefore, the company needs to give prime focus on creating a superior quality product as per the host country's market requirement and follow sales plans to achieve success in the European market. This is why the company needs to meet the exporting product quality standards to minimize the negative impact of these challenges. The in-house exporting team should be there to monitor quality control and check the products which are about to be shipped to the host country (Neupert et al. 2006).

1.2.3 Language Barriers, International HRM, Managing Global Teams and Technical Support Issues

When companies go global, language issues are considered to be one of the fundamental problems for the company to do business in the host country, If the language is not as same as the one which is used in the home country, translation may become a serious issue. Addressing the challenges helps the company to operate smoothly in the particular target market and serve its customers in a better way. The new environment would be filled with new market criteria, conditions, new customers, customer choices and preferences, and technical support to their customers in the local languages. Since the environment is new, managers might face difficulty in quicker decision-making to cater to the needs of the company's suppliers

and customers. Companies cannot take more time in decision-making because it indirectly affects the productivity and performance of the company, where here the performance and productivity are connected directly to Sales/Revenues. In an international environment, day to day activities of the company involve client interactions, the flow of information between their customers and the company's suppliers, managing the activities and resources of the company, maintaining the level of corporate procedures and performance parameters, project management and sales controlling, where language aspects also play a significant role in company growth and it needs to be considered very carefully. Based on the language combinations below-attached figure 8 explains the mode of language combinations to be achieved in the international environment by the company to gain a success rate in keeping their customers and suppliers happy (Marschan-Piekkari 2015).

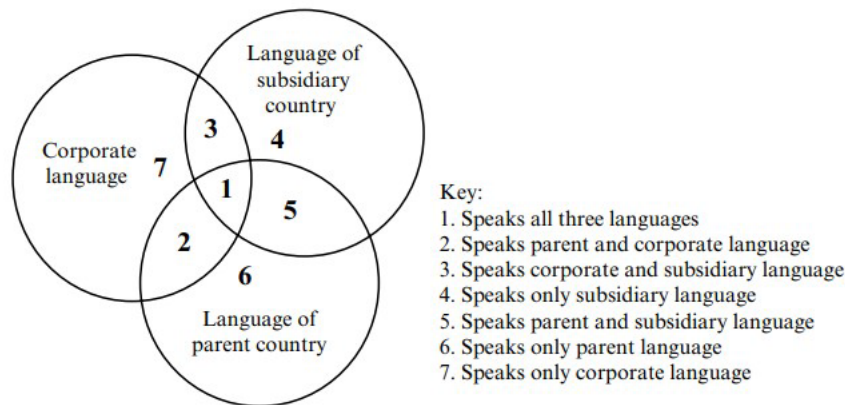


Figure 8: Language Combinations
Source: (Marschan-Piekkari 2015)

Companies also might face some International HRM (Human Resource Management) problems when entering a new country. For example, cross-cultural issues, non-effective recruitment, issues related to selecting the right talent abroad, legal issues, failed international assignments, and coping with digital human resource management, and issues related to business ethics (discipline, professionalism, productivity, respect for work). If the issues are not addressed at the right time, it might create financial loss and time loss for a company which indirectly affects the growth and development of the company. Managing geographic distance and rethinking international boundaries is always considered an important priority for small and medium-sized firms.

As an example, consider in the COVID-19 time, a machine manufacturer has sold a machine in Germany with the help of their overseas subsidiary. After a certain period of usage, there is a technical issue in the machine and the machine cannot be supported online, physically a person needs to be present at the customer's facility to do the diagnostics, check the machine and repair the machine. Since the company's technical engineer cannot carry out business travel. Because the machine is idle without working it creates a loss of time, loss of effort, loss of commitment to their customer in delivering the projects to their customers at right time, and loss of productivity. We all have experienced that COVID-19 has completely modified our normal life. So companies should stock up all required necessary spare parts and effectively manage their inventory levels (For example managing the required consumables for the machine – Resin). Other methods of providing tech support can be via video calls, addressing the customer issue via a client-specific WhatsApp group, email etc. Since the teams can be located in different areas across the globe, multinational enterprises should train their employees on cross-cultural virtual collaboration methods via zoom calls or skype meetings and conference calls to discuss the future scopes, development and challenges in the company. Companies need to follow these ways for leading a successful global team. These include:

- Better communication with employees.
- Effective use of common platforms.
- Scheduled meetings with team members and clients (Especially when they are operating in different time zones).
- Building new networks.
- Providing resources to all employees (Technology solutions like a mobile, laptop).
- Updating project management systems (Project management software like JIRA).

2 Methods

To conduct the analysis of the potential company, the methods of qualitative and quantitative research will be combined. The qualitative methods include the PEST analysis embodied into the SWOT analysis and supplemented with the structured interview with the representative of the existing parent company. The quantitative part of the research is based on the renowned database provided until the year 2020 by the World Bank Group assessing the business environment in 190 countries and regions of the world. Unfortunately, the World Bank organization unit responsible for collecting and publishing these data decided to stop working on this project and thus no further updates of this database are (or will be) available.

2.1 SWOT Analysis

SWOT Analysis is considered one of the methods which are used for making the strategies associated with the management and planning activities of the company. On basis of this companies can build their competitive and core organizational strategy to stand out in the market. The SWOT Analysis is mainly classified into two sub-systems considering the company's internal factors and external factors including opportunities and threats which are connected with the external environment when a company enters a new market or new country for their business expansion. Below the figure 9 explains the main components of the SWOT analysis.

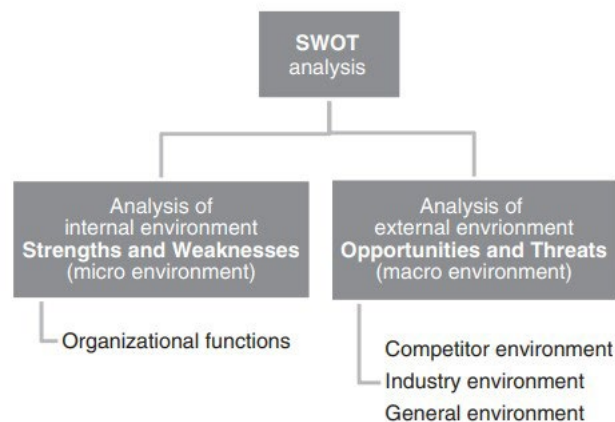


Figure 9: SWOT Analysis: Main Components
Source: (Sammut-Bonnici a Galea 2015b)

This method of finding out about the company based on its internal and external environment is termed SWOT analysis. SWOT analysis is an easy and effective way of utilizing the company's resource capabilities and insufficiency, its current opportunities in the market and predicting the external threats which we can anticipate in the future and in the advanced stage itself. In the word SWOT S stands for Strength, W stands for Weakness, O stands for Opportunities and T stands for Threats. SWOT analysis is a methodical planning framework used to assess a company's business plan, future projects or new business activities. I am going to use this SWOT analysis method to analyse Lodestar 3D'S Strengths, Weaknesses, Opportunities and Threats for their business expansion activity in Europe.

- **Organizational Strengths:** Strength can be defined as the peculiar traits which add value to the company when comparing other companies in the same industry. Strengths refer to the company's favourable conditions and positive nature in the market. Strengths act as a main differentiator with their competitors to stand against them in the market by gaining an advantageous position over some time. It also determines the effectiveness of the corporations. A company can be classified as strong, weak or equal competitors based on these 5 things they are financial structure, technical and production capabilities, research and development, management and human capabilities and the current market conditions. Strengths can also be defined as the skills, which are good at doing. Strength can also be something like their relations with their customers, relations with their suppliers or buyers, financials, human capital after sales and services support, flexible payment terms offered to customers and their maintenance support during machine breakdowns etc. Companies are aware of their strengths to face the challenges and problems which occur in the micro and macro level environment.
- **Organizational Weaknesses:** Weaknesses are generally the grey area for all companies, which means the company is not good at a particular activity or skill or thing which the company lacks. It also refers to the things which the company doesn't possess when comparing their competitors and the things or activities in the company which is not efficient or less effective in nature. Weaknesses affect the company's performance and weaken them in front of its competitors. The company needs to address their weakness by constantly changing the way it responds to situations that are subjected to market changes. Weaknesses make

companies fall therefore companies need to know their weaknesses and work on them to improve the resultant effects.

- **Environmental Opportunities:** Favourable conditions or situations for the company in the market are considered opportunities. They act as a driving force for companies to reach their goals. After analysing the situations, the things or activities which lead to positive results can be considered the best opportunities for the company. In some cases, opportunities act as motivation factors for the company to shine in the market. Opportunities help the company to make use of its strengths and overcome or improve its weakness to perform better in the market. Opportunities are considered based on the external environment or circumstances. It mainly helps companies to neutralize threats and company's weaknesses.
- **Environmental Threats:** The threat is defined as the unfavourable conditions or unfavourable situations which put the company in dangerous situations by creating losses for the company. Environmental threats act as a negative characteristic, proper actions must be taken in advance to avoid them. Threats create difficulties in reaching the company's goals. Companies need to predict the threats in advance to avoid losing their competitors and their existence. They delay the success of the company and cause harmful damage to the company. All companies in the new world have both opportunities and threats in the particular industry or sector or field. Therefore, companies need not only consider opportunities but also consider the possible threats to plan and act strategically when they face such threats in future (GÜREL 2017).

2.2 PEST Analysis

The Acronym of PEST is associated with the four types of changes, they are Political, Economic, Social and Technological. This tool helps us to understand the strategic risks. It also helps us to understand the causes and their effects in the external Macro environment. The external environment might give many challenges to the company which is operating in the international environment. When the environment and the legal components are added to the PEST analysis it will form a new variation called PESTEL or PESTLE. Below figure 10 explains the model of a PEST analysis.

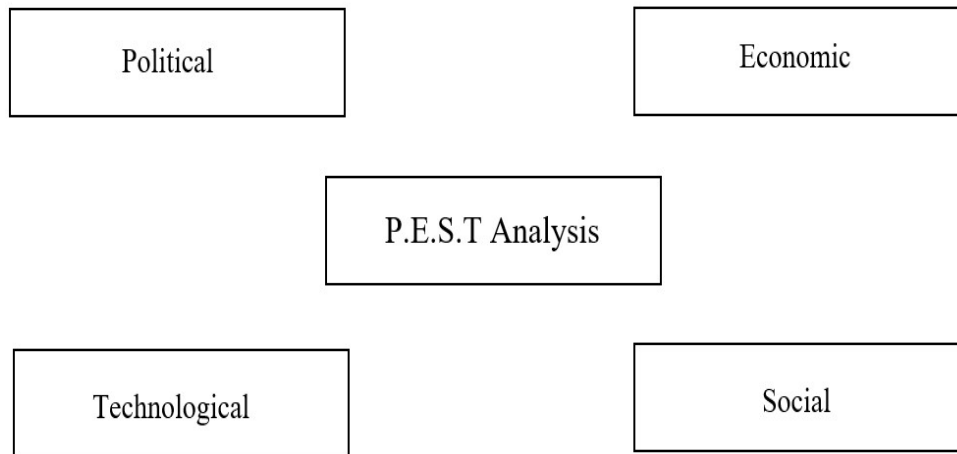


Figure 10: PEST Analysis: Main Components

Source: (Own contribution)

- **Political Factors:** The policymaker's decisions which intervene in commercial decision making is an important political factor. Financial restrictions and political instability determine the progress or failure of the business. In recent years we might have noticed the exiting of Britain from the EU, affecting the investment decisions in European Union. The three levels of the political factors are the Supernational, the National and the Subnational. Any organization which is entering a new country, need to be aware of the political situation best to utilize the strength in the right way. Sometimes fiscal policy, Enterprise's national incentives for permitting and planning, licensing procedures and new product approval, transparency and government supporting initiatives are the things amongst others. When the company considers the above-listed political environment factors, it will help them with smooth operation in the host country. Because political climate changes might change the operations/services in the industry or the particular market.
- **Economic Factors:** Economic factors impact the profitability of the business and purchasing decisions of the customer in the particular market or industry in the host country. GDP (Gross Domestic Product) acts as an important indicator of the performance of the national economy. This is directly connected with the PPP (Purchasing Power Parity), multilinear regression and time series analysis helps to determine the success of the particular project. GDP per capita is useful data for industries like construction, tourism, entertainment, cosmetics, jewellery and other luxury items. In other industries, demand is subjected to fluctuations based on GDP. Fluctuations due to exchange rates between two country which will result in the same product/services being cheaper or costlier in the other country

based on their purchasing power. Changes that happen due to economic factors affect industries in different ways. Let us take an example of the tourism industry since we all know that due to COVID-19, tourists were not able to visit Europe which directly affected the tourism industry and indirectly affected the industry which is associated with the tourism industry for example Hotels and restaurants, theme parks and fixed industry are some great examples. Financial market crashes and recessions affect the economies all around the world, and countries that do business with them. Ignoring these things might lead to a fatal loss for the organization.

- **Social Factors:** Social factors can be something like consumer attitudes, behaviour, preferences, expectations and demand for a particular product or service in another country. Since customer requirements vary from country to country, one needs to monitor the social changes to generate multiple benefits for the corporations which are operating at the international level. We all know that in the past decades, back then Air travel were very expensive and only high-network individuals were able to afford international travel. Now we can see that companies like Ryan Air with their affordable costing model by keeping consumer safety and ease of travel in mind, where people can travel from one country to another country within the EU (European Union). A country's talent which possesses a higher level of education will help the company to find the right talent very easily. Other social factors example can be something like the ageing population of one country and whereas other countries like India and China have 60% of the population with youngsters. Where the ageing population country's demands might be in health care, medicines, treatments, and products related to support them with their health, these things will have a greater demand. And for the countries with higher youth force with employment, food, shelter and education. The prediction and evaluation of the social factors will help the government, decision makers policymakers and corporations to define a strategy properly catering to the needs of the people who are living in the particular country.
- **Technological Factors:** Since we all are aware that the world is subjected to technological changes, where companies are focusing on innovations in products, processes and services that they are offering to their customers to create value. Technological breakthrough has created and destroyed many industries based on the way how the work used to be done earlier. In some

industries, technological strength acts as a main differentiator for the companies to stand against their competitors in a particular market, industry or sector. In recent years, we have seen that technology itself has given birth to a new way of intermediaries. This is called re-intermediation. Examples include E-Bay, Amazon, and Expedia. In some industries, technology has replaced the old with the new one and in other industries, they are against each other. From a business point of view, technological advancements lead to improved branding, quality of product and cheaper cost of production of a particular component amongst other. For companies to compete in the fast-paced environment, they need to be flexible and quickly adaptive to the changes which occur in the micro and macro environment. So that in the future they can utilize and gain more profits and attract more customers.

2.2.1 Process and Stages of PEST Analysis

Below the figure 11 explains the process and stages which are involved in a PEST analysis.

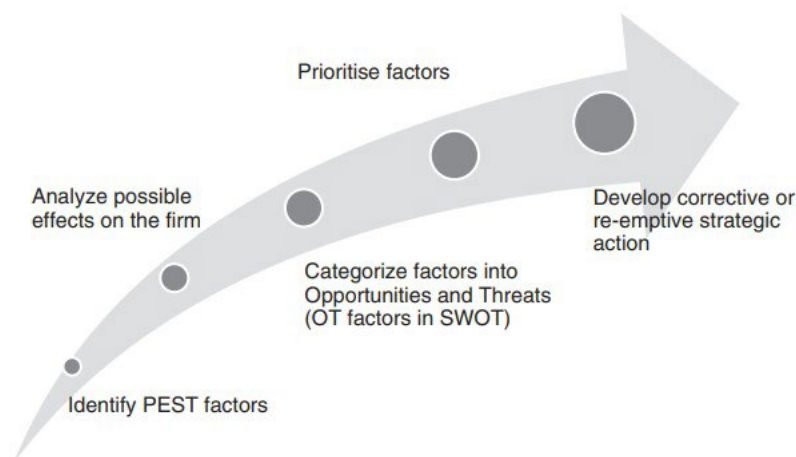


Figure 11: Process and Stages of the PEST Analysis

Source: (Sammut-Bonnici a Galea 2015a)

1. Identification and understanding of Political, Economic, Social and Technological aspects at the deeper level.
2. Analysing the effects on the company and competitive position based on the above list of PEST factors.

3. Categorizing the Political, Economic, Social and Technological factors into opportunities and threats to the company.
4. Prioritizing the PEST factors by ranking methods 1 to 5. [Where 1 is maximum importance and 5 with least importance]
5. Defining a strategy to make changes in causes that can reduce the negative effects (Sammut-Bonnici a Galea 2015a).

2.3 Steps and Procedures to Conduct an Interview

It might look easy for us to ask questions and get the possible answers in the interview process. Interviewing is considered the best and most effective process to understand other human beings. There are different ways to conduct an interview, they are via face to face, individual, other forms are through self-monitored, questionnaires, mailed, telephonic and surveys. An interview helps the person to understand the perspective of the person or group which is interviewed. Conducting an interview falls under qualitative research methodology, this mainly depends on asking questions to generate information and collect required data. Mainly there are two ways of conducting interviews (Structured and Unstructured). Which can be conducted with an individual or a group. There are five stages in the interview process.

1. Small introductions.
2. Small talk to make them comfortable.
3. Asking the right questions.
4. Gathering pieces of information via Questions and Answers.
5. Wrapping up the session.

And there are seven steps involved to conduct a successful interview, they are:

- Step 1: Preparing in advance thoroughly – preparation involves understanding the company in a more detailed way by going through its website understanding its product or service offerings stakeholders and annual reports.
- Step 2: Gain trust and gather a good first impression.
- Step 3: Behave as a neutral person.
- Step 4: Use both verbal and non-verbal way of communication strategies.

- Step 5: Show positivity.
- Step 6: Connect all the dots.
- Step 7: Recording interview process.

In the structured interview, the interviewer asks open-ended questions where the respondent answers the questions in his own and detailed way without any restrictions to choose options that are only available in the closed questions. The answering person can participate and apply his knowledge and thoughts freely. This helps us to bring the best out of him through his responses. Setting up closed-ended questions and open-ended questions entirely depends on the interviewer's end goal. It includes some important guidelines they are:

- Do not deviate from the order of the questions.
- Do not interrupt the person when he is answering the question.
- Do not agree/disagree or suggest an answer to the person.

Telephonic interviews, video interviews, face to face interviews, the interview which is conducted in day-to-day busy places like parks and malls also fall under the category of structured interviews. Mostly when the interview is conducted in a structured way, where the interviewer can modify or improvise on the respondent's answers. Good interviews know that there is no common interview style that fits all. It is always important to understand the respondent's point of view and what stimulates him to give a particular response.

2.3.1 Framing Interview Questions and Interpreting Interview

First, the type of interview method is selected, techniques to be used, framing the right questions to get the expected results or answers and using audio and video recording devices to record the interview results. Techniques to implement vary from situation to situation. Thus, the interviewer needs to have a friendly conversation with the respondent to bring up what he has in his mind. The interviewer must avoid having personal questions which are not related to the results or outcome which he expects from the structured interview. Interviewers need to avoid getting trapped by similar opinions to him or other respondents. As we all know that interpreting can be done by analysing, measuring, verifying and evaluating the obtained data from the

interview to turn into a potential result. Generally, after the interview, the person who is analysing the data should not get buried under the ocean of data which is generated from the interview. He should segregate what information's are needed and not. Then the data is compiled and made into a result from the interview (Fontana a Frey 2000).

2.4 Data

For assessing the environment in which the companies are being established and are operating in different European countries, the database of Doing Business 2020 will be used. It is an instrument provided by the World Bank Group that combines the data in ordinal and cardinal forms. The methodology used in the World Bank report is by data acquisition, data analysis and segmentation. Quantitative indicators are used to compare the 190 economies all over the world after analysing the economic situations of the countries and the business rules and regulations for starting the business, running the business, hiring and laying-off the employees and many others (incl. terminating the business, enforcing the law and regulation etc.). To start the business twelve indicators and the sub-indicators have been considered in the World Bank Group Report. They are:

- Starting a business in a specific country.
- Construction permits.
- Getting electricity.
- Registering property.
- Getting credit.
- Protecting minority investors.
- Paying taxes.
- Trading across borders.
- Enforcing contracts.
- Resolving insolvency.
- Employing workers.
- Contracting with the government.

World Bank data uses scoring, ranking and pointing-based methods for calculating the individual country's performance in a particular year after considering all the above-mentioned indicators. (World Bank Group 2020)

For the general analysis of the 3D printers market development, the Wohlers Report (Campbell et al. 2023) and the AM Power Report (Munsch 2023) were used. Both were published in 2022. Wohlers Report and AM Power Report use similar methodologies for data acquisition, region of interest, respondents, market players and categorization. Both reports provide the following reliable information related to additive manufacturing (AM) and 3D printing industry, for example:

- Entire AM market size (Global Report).
- Plastics and metal AM market size.
- Plastics and metal AM market by region (Europe Middle East and Africa – EMEA, Asia Pacific – APAC, North America and South America).
- Plastics and metal AM market by technology.
- Plastics and metal AM market by industry.
- Industry growth.
- Development and innovations in AM software.
- Research and development – R&D (latest trends, patents and AM standards).
- Materials & processes.
- The Future of Additive Manufacturing.
- Investors view.

3 Case Study

Following the chapter focusing on the theoretical approaches to reasons, benefits, challenges and procedures connected with internationalization of business activities the analysed company is about to establish a subsidiary company in Europe to provide the European customers with better facilities and faster and more reliable services of higher quality.

The overall additive manufacturing (AM) industrial market consists of both plastic 3D printing systems and metal 3D printing systems. For the past few years, the market grew rapidly in market size:

- In 2020, the market size was 7.7 billion Euros.
- In 2021, the market size was 8.33 billion Euros (growth by 16.2% when compared with 2020 data).
- In 2022, the market size was 9.53 billion Euros (growth by 14.4% when compared with 2021 data).
- In 2027, the market size is expected to reach around 21.58 billion Euros with the projections based on the compound annual growth rate by 17.7% (Munsch 2023).

Additionally, the usage of industrial metal additive manufacturing machines grew by 20% in the year 2022. The metal additive manufacturing market was valued at around 3 billion Euros in the year 2022. The metal 3D printers market is annually growing at the compound annual growth rate of 30% by 2027 (Campbell et al. 2023).

Considering all the industrial-grade additive manufacturing installations worldwide, the Wohlers Report shows that installations of AM systems in the Asia Pacific Region were 28.4% and installations in Europe were around 30.7% in the world in 2022. Obviously, there is a good amount of potential opportunities in the European fast-growing market. The industrial AM market in the European region seems to be growing at a very good rate and looks more promising than other markets (Campbell et al. 2023).

3.1 About Lodestar 3D

Lodestar Innovations Private Limited is a company based out in Bangalore (Karnataka, India) established in 2013. Lodestar 3D is India's premier 3D Printer and 3D Scanner solution company is engaged in providing B2B sales and services of 3D printers and 3D scanners solutions to specialized industry verticals such as Aerospace and Defense, R&D, Jewellery, Automotive, Medical and Engineering. Lodestar 3D has formed partnerships with the Industry's leading manufacturers such as GE (Sweden), DSM (Netherlands), Shining 3D (China), TPM 3D (China), Sharebot (Italy), German Rep Rap GmbH (Germany), Materialise Magics (Belgium), Coreline Soft (Korea), Additive Woks GmbH (Germany) and Geomagics (USA) for their brand building, sales representation and post-sale support in INDIA, Middle East Region. Lodestar 3D engineers have 2 decades of tech-savvy and sales expertise in selling and maintaining Industrial-grade 2D and 3D printers. The founders of Lodestar 3D have wide-spanning experience in selling 2D industrial-grade capital equipment of companies like EFI, Oce, Canon, Agfa etc., and they have also represented these companies at international levels.

Key Activities of Lodestar 3D:

1. Representing OEMs (Original Equipment Manufacturer) in International and National Exhibitions as a value-added reseller to promote 3D Printing and 3D Scanning solutions across INDIA, and the Middle East Regions.
2. Promoting the additive manufacturing business for India with a special focus on industrial-grade Polymer, Metal 3D Printers.
3. Establishing and maintaining new dealers and manufacturer tie-ups for Industrial-grade 3D Printers, 3D Scanners and additive manufacturing software's portfolios.
4. Carrying out direct sales, machine maintenance/services, estimations, negotiation, operations, logistics and finance management to achieve company upper and lower-level tiers based on the company's business goals.
5. Responsible for developing and maintaining new customer accounts as well as corporate accounts. And also, was the driver to elevate Metal 3D Printing into leadership levels in its segment in India.
6. Building a stable relationship with customers, helping customers in choosing the right additive manufacturing Solutions based on their RFQs.

7. Carrying out business meetings with clients, scheduling demos of machines, and software and obtaining revenues from the allotted region.
8. Handling Import/Export compliances and Inward/outward Forex Transactions when a customer places a machinery order.

3.2 Reasons for Choosing the Czech Republic

Based on the previous business history of the Lodestar 3D, the company is about to set-up a subsidiary in Europe. They have already sold some of their products to this region and would like to strengthen their position on this particular market more-or-less following the Uppsala model and becoming probably an early starter from the Indian perspective, but perhaps a late starter on the European market.

Indicators considered for starting a subsidiary in potential European countries when comparing the home country are summed up in the following table 1. The green colour indicates the most advantageous or most beneficial score among the considered countries. As the table indicates, the business environment in the selected European countries is much favourable for the entrepreneurs than the Indian one and as such offers huge opportunities for the Indian businesses when considering internationalization.

Table 1: Comparing Business Regulations in Selected Countries

Selected Indicators	India	Czech Republic	Germany	Austria	France
Income group	Lower middle	High income	High income	High income	High income
Ease of doing business rank	62	41	22	27	33
Rank trading across border	68	1	42	1	1
Rank getting credit	25	48	48	92	104
Protecting minority investors	13	61	61	37	45
Rank paying taxes	115	53	46	44	60
Rank enforcing contracts	163	103	14	10	17
Rank resolving insolvency	52	16	4	22	26
Employee wages	Low	Medium	High	High	High
Rank registering property	154	32	76	31	99
Profit tax (% of profit)	21.6	5.2	23.2	17.1	2
Living expenses	Low	Medium	High	High	High
Cost of doing business	Low	Medium	High	High	High
Industries (rail, aviation, defence, automobiles, medical, production etc.)	Medium	High	High	High	High

Source: (World Bank Group 2020)

Reasons for localizing the subsidiary company in the Czech Republic instead of other countries in Europe to cater for the needs of the European market are closely connected to the table 1 in the previous subchapter. They can be summed up into the following criteria:

- **Pro-Business Environment:** The Czech Republic has a pro-business environment, making it an attractive destination for Indian businesses looking to set up overseas subsidiaries. It is ranked 41th on the World Bank's Ease of Doing Business index, and offers competitive tax rates as well as relaxed labour laws (World Bank Group 2020).
- **Strategic Location:** The Czech Republic is exactly located in Central Europe and is one of the safest countries in the world providing easy access to major European markets such as Germany, Austria, and Poland. And also to the other markets in Europe like Italy, Sweden and Norway. The Czech Republic has an excellent transport link by rail, road and air making it ideal for distribution across Europe as well as for importing raw materials from other parts of the world without any major delays or transit problems at less cost. This makes it a great choice for an Indian company selling industrial-grade 3D printers to serve and support their clients in a better way who are willing to make new products for their internal use or their R&D applications and also Lodestar 3D can distribute their newly developed products or spare parts for the customer across Europe quickly and efficiently.
- **Skilled Workforce:** The Czech Republic has one of the most highly educated workforces in Europe with low unemployment rates compared to other countries in the region. This makes it a great choice for companies like Lodestar 3D who are looking to hire skilled workers to manage their overseas subsidiaries. The Czech Republic also has a highly skilled workforce that can help Indian companies increase their productivity and efficiency when it comes to developing new products or services tailored specifically for the European market (Statista, 2023).
- **Low Cost of Living:** The cost of living in the Czech Republic is much lower than in other countries in Europe, making it an affordable destination for Indian companies like Lodestar 3D which is looking to set up a manufacturing services unit and sales office abroad (Guzi, 2021).

- **Thriving Manufacturing Industry:** The Czech Republic has a thriving manufacturing industry that includes many international players in automobile industries and other sectors such as Skoda Auto, Hyundai, Toyota, Jawa, Denso, Benteler, Siemens and Bosch, which makes it an ideal place for Lodestar 3D to set up machineries at customer premises inside their plant and allow corporate customers to take advantage of their existing infrastructure and resources. Lodestar 3D feels that it can help the top technological companies in Europe.
- **Access to the European Market:** Setting up a subsidiary in the Czech Republic gives an Indian company direct access to the large and lucrative European market. This provides an opportunity for greater sales, increased profits, and overall business growth.
- **Low Cost of Doing Business:** The Czech Republic has one of the lowest costs of doing business in Europe due to its attractive incentives for foreign investors. This helps companies save on their operational expenses while still being able to reach a large customer base in Europe (World Bank Group 2020).

3.3 Advantages and Disadvantages of Setting-up a Subsidiary in the Czech Republic

The following SWOT analysis is performed for the location of the subsidiary in the Czech Republic. The results of the SWOT analysis combined in the external part with the PEST analysis can be summed up into the following findings:

3.3.1 Strengths

1. The Czech Republic is part of the European Union, which provides access to a larger market for Lodestar 3D. Entire Europe has a common market, technical standards are equal with unified norms which allows the subsidiary to expand its reach and tap into new opportunities.
2. Setting up a subsidiary in the Czech Republic can be relatively inexpensive compared to other countries in Europe due to lower labour costs and taxes. Additionally, a few regulations need to be adhered too, making it easier for Lodestar 3D to get started quickly (World Bank Group 2020).

3. English-speaking talents with a good amount of technical and business knowledge who can understand and cater to the needs of Fortune 500 companies, global 1000 companies and original equipment manufacturer (OEM) customers in a better way which is operating in the international environment.
4. Lodestar 3D has a decade of experience in successfully selling and maintaining a wide range of products in the Indian market. They don't sell any product to the customer, they understand the exact needs of the customer and propose to them the best-in-class industrial additive manufacturing solution considering their budgets, requirements and applications. Czech Republic as a country with the highest share of industrial production on the gross domestic product of the country is thus a very promising market itself.
5. Since the company has very good financial strength, because of this Lodestar 3D is willing to support the employees in establishing the subsidiary for the first 3 years till the time they achieve the break-even point by creating a stable and flexible environment for them. So, there is a job guarantee and security for the employees. And the employees can focus really on the core business activities in achieving the subsidiary's top line, bottom line, sales and financial goals of the company in Europe. In the period of economic stagnation seen currently all around the European Union, the financial security of the subsidiary and stable financial sector in the Czech Republic play an important role in the entrepreneurship. The strong bounds of the Czech industrial companies to German and other European counterparts or parent corporations are a strong advantage for setting up the subsidiary in Czechia.
6. Lodestar 3D has already sold 200+ machines in past 10 years that were manufactured by Chinese manufacturers. Their relationship with the manufacturers is very good and stable and they have a high degree of control over the supply chain. The Chinese suppliers are excellent in quality, trustworthy and flexible in payments. In this way Lodestar 3D could pass the Easy Monthly Instalment (EMI) benefit to the customers who are purchasing the machine in Europe and are willing to pay the amount later each and every month. And also, there is immense support from the manufacturer in claiming warranty, repairing and spare parts replacements. This can be a huge benefit in the Czech Republic and a strong competitive advantage in other European countries.

3.3.2 Weaknesses

1. Since the Czech Republic is a landlocked country there is no sea connectivity to export machines from China. Every time we need to rely on air freight services or ports of other countries like Germany (Hamburg port) to receive the machine and re-transport it to other country or other destination with the help of roadway.
2. Since the Czech Republic is not a part of the Eurozone, which means they are not using the currency Euro. The Czech Republic uses its currency named Czech Koruna. For example, if the machine is sold in Germany or the customer is supplied with parts in Germany. The overseas subsidiary of Lodestar 3D needs to take care of changes in the exchange rate of the Euros and Czech Korunas. Lodestar 3D would have accounting troubles and will have a need to recalculate everything to the new exchange rates.
3. Fewer air connections from China to Prague airport in the Czech Republic, when comparing connections between China and the bigger airports like Frankfurt Airport in Germany to export machines via air freight. Since there are only fewer connections from China to Prague Airport, air freight would be costlier for the customer.
4. Since there are different languages spoken in Europe, digital marketing activities like running campaigns, flyers, social media and email marketing need to be tailor-made and country-specific to their language. It leads to trouble in finding the right person who knows English, Czech and Germany at the C2 level and helps the subsidiary in preparing digital marketing content. And also, the cultural norms between India and the Czech Republic can create difficulties when trying to build relationships with locals or implement business strategies in unfamiliar territory.
5. Lack of local knowledge and market understanding, the parent company may not have the same level of insight into the European market or the Czech Republic as a local partner, which can lead to decisions that are not well-informed or suited to the current economic climate.

3.3.3 Opportunities

1. From an economic perspective employee wages and the purchasing power of customers in Europe are much higher when compared to Indian customers. European customers have enough financial means to buy the product or take

services from Lodestar 3D, which means that the sales and profit generated from the European market would be higher when compared with the Indian market (World Bank Group 2020).

2. From a political perspective, the European market is more stable and has one of the strongest democracies in the world. Since democracy is stronger changes in the political system or the regime are improbable.
3. From a social perspective, the income of the European people in the society is more equal when compared to India. So, the people living in Europe are living in better conditions. And also, socially the European market seems to be more promising in the short and middle term perspective than the market in India (Statista, 2023).
4. From a technological perspective, industries like aviation, automobiles, defence, manufacturing, space mining and oil and gas industries are using modern technologies that are very much advanced and are in the developed stage here in Europe. Many out of the Fortune 500 companies like Siemens AG, Daimler, Mercedes Benz, Skoda Auto, Porsche, Linde, Aibel, Airbus etc. from the above-mentioned sectors are located and have their R&D centres in Europe. This is the reason why the expected results from the European market are more concrete and promising.
5. Lower cost of acquisition of machines for European customers (i.e., the competition price of the very similar German machine is 120,000 Euros, whereas the Lodestar 3D machine price is 75,000 Euros. It means for the same solutions the European customers can pay a lower price if they choose the Lodestar 3D product.

3.3.4 Threats

1. From an economical perspective, currency fluctuations between India and the Czech Republic can create uncertainty when conducting business transactions across countries with different currencies. Exchange rate risks may also arise due to changing economic conditions in either country, which can affect profits margins and pricing
2. From a political perspective, the political climate of the country may also pose threats to an Indian company, especially if there is any kind of instability or tension between both countries at any given time. Political instability in the region

where the company is established could make it difficult for an Indian company to gain access to resources or markets. The prevailing war-like situations in Ukraine can also trigger fear in the parent company which is located in India.

3. From a social perspective, the difference in the wages of the people (i.e., wages in the Czech Republic is 4 times higher than the median Indian wage). As per the Jobted Report of India average salary in India for the year 2023 is 3,87,500 Rupees per year, which equates to 101,018 Czech Korunas per year. Whereas the average salary in the Czech Republic is 40,324 Czech Korunas per month based on platy.cz salary report 2023. Which equates to 40,324 Czech Korunas per year. So, Lodestar 3D needs to pay a 4 times higher salary when compared to India (LMC s.r.o., 2023).
4. From a technological perspective, setting up operations in a new country often involves adapting to different technology systems and standards, which can be expensive and time-consuming for companies unfamiliar with them.
5. Czechia is a member of the European Union, which can raise regulatory and legal compliance issues for an Indian company setting up a subsidiary there, moving temporarily managers and other staff from India to Czech Republic, or proving the electromagnetic compatibility compliance with the standards of the EU.
6. Language barrier can be a major challenge for an Indian company in setting up a subsidiary in the Czech Republic as most people do not speak English and prefer to communicate in the Czech language. And also, there are cultural differences between India and the Czech Republic that could create difficulties for employees from both countries when working together or communicating with each other.

3.4 Interview Results of Lodestar 3D's Representative

The following interview was conducted using the means of online communication during the months of March and April 2023. The answers are based on the expertise of Pradeep Nagalapur and Chandan Mishra, the co-founder and director of the Lodestar 3D company.

1. What are the greatest strengths of the Lodestar 3D?
 - *We recognize the following aspects of Lodestar 3D as strengths:*
 - a. *Customer-centric approach, business case analysis, benefit-based matrix.*

- b. Quicker adaptability to the situation.*
- c. Teamwork.*
- d. Product mix and customer success.*
- e. Lower cost of operation.*
- f. Following higher standards in promoting additive manufacturing technology.*
- g. Reputation and Business Ethics.*
- h. Machine breakdown time is less.*
- i. Adhering to commitments given to the customer.*
- j. Handholding and providing 24×7 support to customers.*

2. What are the weaknesses of the company?

- a. Market reach is low and has a less structured sales process. Non-efficient lead management.
- b. Lack of hands-on experience in certain application areas like aerospace, CAD modelling and analysis.
- c. Structured time and cost-driven activity management.

3. Why Lodestar 3D is trying to enter the European market?

- a. More value proposition, ability to create tailor-made solutions.
- b. We aim to focus on Small and medium-sized companies in the EU market and help them to enhance their capabilities with better ROI.
- c. Better profitability.

4. What are the benefits for the company after entering the European market?

- a. We will have more exposure to EU regulations and practices.
- b. Help attract EU-based companies in India to replicate those practices.
- c. Gain more mature business cases.

5. What are the risks considered? If you have considered any?

- Risks are many:
 - a. Acceptability of Lodestar 3D skill sets by EU companies.
 - b. Cash Burn or overspending of money.

- c. Defocus the company, instead company could have focused on other important areas of work.
 - d. Risk related to the establishment of companies, free movements, local taxations etc.
6. Barriers to entering the European market?
- a. Acceptability of customers, language barriers, consumer mindset.
 - b. Regulatory approvals for foreign entities and higher cost of start-ups (for example, any tariff, non-tariff barriers, technical barriers, regulations, manuals and instructions for the machines and electronic mobility).
 - c. Manpower and labour market restrictions.
7. Cost to the company?
- a. Man hours (we would need to invest close to 500 hrs @ 20 Euro for market studies, and travel. For doing a feasibility study, identifying location, target companies and their location etc. Lodestar 3D is willing to invest on its own or either by hiring an agency to do the background study. (500×20 = 10,000 Euros).
 - b. Set up initial cost (company registrations etc).
8. What are the investment plans of Lodestar 3D in terms of money?
- a. Find a suitable company in a specific market for a buyout (100–200 thousand Euros investment) like companies engaged in reselling, technical services or engineering services.
 - b. Setting up core team, business practices, and market reviews (100 thousand Euros).
 - c. Other business development/local regulatory cost will be 200 thousand Euros.
 - Total: 500 thousand Euros initial Capital required.
9. Cost devoted to entering the European market (for example: rent + labour expenses)?
- Not aware of costing in certain markets so would not know.

10. What Sales are you expecting from the market for a particular year?

- In the first couple of years 1.5 – 1.8 million Euros business with a Gross Profit (GP) ratio of 20%.

11. What is the Return on Investment you are expecting from the market?

- 6–10% per annum.

12. Expectation of Break Even in terms of how many years?

- Approximately 1000 days (3 years).

13. Sales commission to employees?

- We will have a 50% commission and 50% fixed salary structure, the business development the team will work on the framework of benefits selling, a value-driven business that is long-term.

14. Salaries for the employees?

- We will focus on skill development and acquire business development and a technical team based on a median salary for example 20,000 – 30,000 Czech Korunas. Median salary is the average salary being paid for the factory workers in the Czech Republic for the European market.

15. What kind of strategies you are planning to implement in the European market?

- Focus on Companies that are smaller and need intangible support and benefits for example, in AM, build validation, simulation services, procurement support and local stock of consumables to help them establish references in some segment and then take those experiences to other markets
- Markets: Sweden, Czech Republic (for Germany/Austria)
- Turkey/Spain/Italy (SME companies like engineering and jewellery)

3.5 Step-by-step Guidelines

The guidelines for setting up an overseas subsidiary in the Czech Republic include:

1. **Researching the Czech market:** Before starting an overseas subsidiary in the Czech Republic, it is important to research and understand the potential market opportunities available in this country. This includes understanding its economic climate, political system, consumer preferences, cultural norms and legal environment.
2. **Identifying the core business structure:** Before starting an overseas subsidiary in the Czech Republic, it is important to identify the business structure that will be used for the company. Options include forming a Limited Liability Company (LLC), setting up a branch office or forming a Joint Venture (JV) with another local entity. In the case of Lodestar 3D, the parent company found a company in the additive manufacturing industry for sale, Lodestar 3D pays the agreed amount and buy-out the Czech company.
3. **Obtaining necessary licenses and permits:** Once the business structure has been established, obtain all necessary licenses and permits required to operate in the Czech Republic. This includes registering with local tax authorities and obtaining any other relevant licenses such as those related to labour laws or health regulations. In the case of Lodestar 3D, the buy-out company is willing to transfer the board of director's names, Register of Corporation certificates, trade licenses and permits to Lodestar 3D. In this way, overseas subsidiary obtains the necessary permits and licenses to do business in the Czech Republic without any trouble.
4. **Choosing an office location:** Select an appropriate location for your overseas subsidiary which should have easy access to resources, customers and suppliers as well as good infrastructure facilities like transportation links, communication networks etc. In the case of case Lodestar 3D, Prague is considered to be the best location to start business activities. since there is good rail, and air connectivity and also there are many industrial areas or towns like Mladá Boleslav, Pilzen which is 60 km away from the future Lodestar 3D office location in Prague. So that client meeting can be carried out easily by travelling for 1 hour. Since Prague is the capital city of the Czech Republic, finding customers, and

employees would be easy and also there would be no trouble in finding the necessary things which are required for doing business with ease.

5. **Deciding on the business model:** Once the buyout is successful, the company decides on the business model for the European market. In the case of Lodestar 3D, it exports the demo industrial-grade SLA 650 3D printer to serve industrial customers like Skoda Auto, Rheinmetall, Digitec Automotive, Siemens, Bosch etc by undertaking their job works and by becoming their suppliers. And also, parallelly, Lodestar 3D promotes industrial-grade additive manufacturing solutions to the target market. In this way, Lodestar 3D can generate revenues by serving customers with job work and also by selling machines.
6. **Establishing the banking facilities:** Setting up banking facilities including opening corporate bank accounts needs to be done before commencing actual operations in the Czech Republic.
7. **Registering your company with local tax authorities:** It is mandatory for businesses operating in any jurisdiction to register with their respective tax authorities to pay taxes properly and legally operate within that region's laws. Similarly, when setting up your subsidiary abroad you must register with the relevant tax authority of that country which is usually done through filing an application form online or via post/courier services provided by some countries like the Czech Republic where they offer e-registration services as well.
8. **Accountancy services:** Engage professional accountancy services who can handle accounting tasks such as filing taxes, preparing financial statements etc. Based on current rules & regulations applicable in this country. Get help in applying for incentives if anything is applicable as per Czech Laws.
9. **Legal structure:** To ensure compliance with all statutory requirements, engage legal representatives who are familiar with laws governing foreign investments & businesses operating within this jurisdiction.
10. **Recruiting Local and international staff:** It is important to recruit staff who are familiar with local culture and language so that they can help facilitate operations smoothly within the country's legal framework. Depending on the roles needed for the smooth functioning of the subsidiary, recruitment may include hiring executives from India or locally sourced engineers and business graduates from the Czech Republic itself for their sales and maintenance positions. Since external communication is language dependent in Europe. Lodestar 3D hires international employees who can speak multiple languages like ENGLISH, GERMAN, and

CZECH with a business fluency of at least C1 level for trouble-free operations and providing the best support to their customers. And Lodestar 3D is also willing to send an employee from their home country branch for a deputation project for 3 to 5 years depending on the company's needs, to set up the establishment, train employees in supporting processes, carrying out technical and commercial training to hired employees and take care of the allotted revenues in the region for a stipulated timeline. In the case of Lodestar 3D, the company invests money in the employee who is about to be sent on a deputation work with a mandatory C1 level of language skills that is used in the host country. In the Lodestar 3D case, it's the "German language" in C1 Level which falls in the advanced category. In the beginning, Lodestar 3D is willing to expand in the central European market by targeting the following countries like the UK, Germany, Switzerland, Austria, Luxembourg, Sweden, Czech Republic, Turkey, Spain and Italy for achieving the company's overseas goals. As discussed already Lodestar 3D is willing to invest in talent enrichment by supporting their employee in learning the host country's language at the required level and deputing them to the European (Czech Republic) sales office to handle the technical issues if any arises in the future. Since 3D printers (Machines) are to be used in the production-ready environment, learning the language can help a company in clarifying customer doubts in their native language for their better understanding. Customers often feel connected when somebody trains, explains and understands their challenges in their own language (host country language). Once the capital equipment sale is made, an application engineer needs to install the machine on the customer site and train, explain the working of the machine to the customer and get his technical doubts clarified fully. Application engineer needs to support till the time customer runs the machine confidently without any build crashes or build failures during the printing of parts in the production or on job orders environment which is given by their customers. By doing this Lodestar 3D can achieve a better customer satisfaction rating and in future, it might help Lodestar 3D when their old clients refer new customers to buy Lodestar 3D machines (so-called word of mouth) or it can make existing customers buy another bigger or more advanced machine. In the case of Lodestar 3D the deputed person reports the progress via email, voice calls and Skype meetings.

11. **Insurance coverage:** Secure insurance coverage against potential risks associated with running operations in this new market by engaging suitable

insurers both domestically & internationally. In the case of Lodestar 3D, the company takes domestic insurance for the prevention of any accidental damage to machines. And provides health insurance for their employees. And also, it takes international insurance to avoid any damage to machines that occurs during the transit when the machine is imported from China to the Czech Republic or the destination country of the customer within Europe (World Bank Group 2020).

12. **First 1000 days:** Focus on undertaking job works from all major OEM customers, engaging in digital marketing in the local language (Country specific), and Pitching the machine to Fortune 500, Global 1000 and Small and Medium-Sized companies located in different parts of Europe in the below-mentioned sectors like oil & gas, defence, aerospace, automotive, jewellery, food & beverages, medical and heavy industries etc. Developing solid business cases and achieving the allotted revenue in the particular region and reaching the break-even point in 3 years as per the company's financial projection.

Conclusion

The parent company Lodestar 3D is a company based out in Bangalore (Karnataka, India) established in 2013. Lodestar 3D is India's premier 3D Printer and 3D Scanner solution company. They are engaged in providing B2B solutions of 3D printers and 3D scanners to specialized industry customers. This diploma thesis focused on developing a business plan with a market entry strategy to enter the European market by buying-out a company in the Czech Republic and turning it into a new subsidiary company by transferring the licenses and permits.

Thus, this thesis should help the Lodestar 3D to successfully start and gain benefits from overseas business activities. The thesis also analyses the theoretical gaps and obstacles of the research and suggests an array of new possibilities for future research work. This chapter concludes the three research questions set in the introduction.

Research Question 1: Why do companies want to go global and what are the expectations of the company after going global?

The literature review concludes that each company goes global for a different set of reasons such as a brand presence, financial gains and obtaining a good competitive advantage over the competitors who are present in the home market. Companies think that going abroad is the best way to rapidly develop the business by acquiring a new customer base in advanced markets, such as Europe, where many business opportunities arise for the parent company (for example parent companies can get good financial benefits from the currency difference between the countries Europe and India, they can utilize the wage difference between the Indian and European workers or the purchasing power difference between Indian and European customers). Thus, companies reduce their dependencies on their home markets and focus more on the foreign, international or global market. Companies get new streams of revenues from the sales of the products or by providing services to their customers abroad. They acquire a new competitive edge and empower themselves with hands-on experience with the new production techniques and technologies, managerial skills, negotiation practices, standards and regulations available in the advanced foreign markets. The parent company's expectations after going abroad include

making effective use of the strengths and skills which they have obtained by doing business in the home market, and this helps them to attain the top-end business goals and to multiply the brand presence in terms of size, brand values and add reputation in the host country. They leverage the advanced technology capabilities which they obtained from the host country to serve both, the home and host country in a better way.

Research Question 2: What are the main difficulties faced by the company during its global expansion?

This research question concludes the most important challenges and difficulties faced by the parent company. The main challenges include: availability of resources, import and export procedures, knowledge of the host market, lack of funds, changes and instability in the political climate, lack of correct and factual information, logistics issues, payment difficulties, exchange rate fluctuations etc. The major problems related to the global expansion of the company include: managing international team of employees, technical support issues, language or cross-cultural barriers and also the managerial, technical and interpersonal issues associated with leading the global team from the home country. Keeping track of these challenges and problems in advance will help the parent company to avoid any unnecessary financial loss and loss of time which can be effectively utilized for the development and growth of the company.

Research Question 3: How to implement the best practices and innovative ideas during the market expansion?

A detailed case study was conducted on Lodestar 3D, which made it possible to analyse the strengths, weaknesses, opportunities and threats of setting-up the subsidiary in the Czech Republic as a base for starting the business in Europe. After analysing different countries in Europe, the reasons for choosing the Czech Republic were presented including the comparison of various relevant indicators and selected factors. Some of them are related to the political climate, economic situation, social conditions and technological advancement of the Czech Republic. An interview was conducted with the director of Lodestar 3D to find answers to most of the questions related to starting a subsidiary in the Czech Republic.

After conducting the SWOT analysis combined with the PEST and with the interview results, the Lodestar 3D is furnished with a step by step guidelines to be followed for setting up an overseas subsidiary in the Czech Republic (Europe) by keeping an eye on the company's financial strength, support, ease of doing business and also other parameters.

Obviously, when it comes to doing business, there is no right or wrong solution to any problem. It only depends on how well and thoroughly the situation is assessed and how well the business intention is executed. And also, solutions are only tailor-made after considering the interests and expectations of the company. For these reasons, there is a huge knowledge gap between the theory and practise, because each and every company is different in its operations, technology, sector and business model. Therefore, one solution does not apply to every company which is expanding internationally. Since each country has different rules and regulations, laws, taxation methods etc., there are always many aspects that one needs to consider (like market selection, opportunities, strengths and weaknesses) before entering the foreign market. And there is always a scope for improvement. The future research potentials can be related but not limited to the following areas:

- How different is setting-up the business in the North America and in the South America when compared to Europe?
- How to start a contract manufacturing unit with a production facility based out in Asia?
- How is the business affected by the colonial past of the host country or of the home country?
- How a sourcing business can be started from abroad to support the needs of the host country market?
- Would it be possible even for such a medium-sized company as the Lodestar 3D to starting a new R&D company or a joint venture firm in a foreign country?

List of References

- CAMPBELL, Ian, Olaf DIEGEL, Ray HUFF, Joseph KOWEN, and Terry WOHLERS, 2023. *Wohlers Report 2023* [online]. Washington, D.C., USA: Wohlers Associates. [cit. 2023-04-26]. Available from: <https://wohlersassociates.com/product/wohlers-report-2023-printed/>
- DANCIU, Victor, 2012. Models for the internationalization of the business: A diversity-based approach. *Management & Marketing challenges for the knowledge society* Vol. 7 Issue 1, p29-42. 14p.
- FONTANA, Andrea and James H. FREY, 2000. The interview from structured questions to negotiated text. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 645-672). Thousand Oaks, CA: Sage.
- GÜREL, Emet, 2017. SWOT Analysis: A theoretical review. *Journal of International Social Research* [online]. 10(51), 994-1006. ISSN 1307-9581. Available from: DOI: 10.17719/jisr.2017.1832
- GUZI, Martin, 2021. Cost of living, living wages, and minimum wages in EU-27 countries. *GUE/NGL* [online]. 5 July 2021. [Accessed 28 April 2023]. Available from: <https://left.eu/issues/publications/cost-of-living-living-wages-and-minimum-wages-in-eu-27-countries/>
- JOHANSON, Jan and Jan Erik VAHLNE, 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* [online]. 40(9), 1411-1431. ISSN 00472506. Available from: DOI: 10.1057/jibs.2009.24
- JOHANSON, Jan and VAHLNE, Jan-Erik, 1977. The internationalization process of the firm - a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*. 1977. Vol. 8, no. 1p. 23-32. DOI: 10.1057/palgrave.jibs.8490676.
- KEDRON, Peter and Sharmistha BAGCHI-SEN, 2012. Foreign direct investment in Europe by multinational pharmaceutical companies from India. *Journal of Economic Geography* [online]. 12(4), 809-839. ISSN 14682702. Available from: DOI: 10.1093/jeg/lbr044

- LALL, Sanjaya, 1981. Developing countries as exporters of Industrial Technology. *Developing Countries in the International Economy*. 1981. P. 228–256. DOI: 10.1007/978-1-349-07680-2_8.
- LUO, Yadong and Rosalie L. TUNG, 2007. International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies* [online]. 38(4), 481–498. ISSN 00472506. Available from: DOI: 10.1057/palgrave.jibs.8400275
- MARSCHAN-PIEKKARI, Rebecca, 2015. *Language in international business: the multilingual reality of global business expansion*. ISBN 9781848449893.
- MINBAEVA, Dana, Torben PEDERSEN, Ingmar BJÖRKMAN, Carl F. FEY and Hyeong Jeong PARK, 2003. MNC knowledge transfer, subsidiary absorptive capacity, and HRM. *Journal of International Business Studies* [online]. 34(6), 586–599. ISSN 00472506. Available from: DOI: 10.1057/palgrave.jibs.8400056
- MUNSCH, Maximilian, 2023. Ampower Additive Manufacturing Report. AMPOWER Report on Additive Manufacturing [online]. 17 March 2023. [Accessed 28 April 2023]. Available from: <https://additive-manufacturing-report.com/>
- NEUPERT, Kent E., C. Christopher BAUGHN and Thi Thanh LAM DAO, 2006. SME exporting challenges in transitional and developed economies. *Journal of Small Business and Enterprise Development* [online]. 13(4), 535–545. ISSN 14626004. Available from: DOI: 10.1108/14626000610705732
- PAUL, Justin, Sundar PARTHASARATHY and Parul GUPTA, 2017. Exporting Challenges of Smes: A Review and Future Research Agenda. *Journal of World Business* [online]. 52(3), 327–342. ISSN 10909516. Available from: DOI: 10.1016/j.jwb.2017.01.003
- S.R.O., LMC, 2023. Salaries in Czech Republic. *Paylab - Salary survey, Compare salary, Salary data* [online]. [Accessed 28 April 2023]. Available from: <https://www.platy.cz/en/salaries-in-country>
- SAMMUT-BONNICI, Tanya and David GALEA, 2015a. PEST analysis. In: *Wiley Encyclopedia of Management* [online]. B.m.: John Wiley & Sons, Ltd, s. 1–1. Available from: DOI: 10.1002/9781118785317.weom120113

- SAMMUT-BONNICI, Tanya and David GALEA, 2015b. SWOT Analysis. In: *Wiley Encyclopedia of Management* [online]. Chichester, UK: John Wiley & Sons, Ltd, s. 1–8. Available from: DOI: 10.1002/9781118785317.weom120103
- SHAH, Fayaz Ali, Rosman MD YUSAFF, Altaf HUSSAIN and Jawad HUSSAIN, 2012. *A critical review of multinational companies, their structures and strategies and their link with International human resource management* [online]. Available from: ISSN: 2278-487X Volume 3, Issue 5 (Sep-Oct. 2012), pp 28-37.
- STATISTA, Eurostat, 2023. EU unemployment rate by country 2022. *Statista* [online]. 28 February 2023. [Accessed 28 April 2023]. Available from: <https://www.statista.com/statistics/1115276/unemployment-in-europe-by-country/>
- SUGRE, Hiroshima, 2017. Innovation through internationalization: A case study analysis of Indian firms. *Journal of Global Economics*. 2017. Vol. 05, no. 04. DOI: 10.4172/2375-389.1000276.
- TODA, Gendai, 2017. Developing a theoretical framework for the consideration on university internationalisation and its application of an analytical matrix to case study on the management practice at two scottish universities [online]. Available from: DOI: 10.13140/RG.2.2.31699.86563
- TWAROWSKA, Katarzyna and Magdalena KAKOL, 2013. International business strategy - Reasons and forms of expansion into foreign markets [online]. Available from: Active citizenship by Knowledge management & Innovation: Proceedings of the management, Knowledge and learning, International Conference (pp. 1005-1011).
- UNCTAD, 2023. *Population Statistics* [online]. United Nations Conference on Trade and Development. [cit. 2023-05-03]. Available from: <https://unctadstat.unctad.org/>
- WORLD BANK GROUP, 2020. *Doing Business 2020* [online]. 2020. [Accessed 28 April 2023]. Available from: <https://archive.doingbusiness.org/en/data/exploreeconomies/czech-republic>
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