LUGGit's innovation model: how far can a luggage start-up travel?

Francisca Cabral

Dissertation written under the supervision of professor

Nuno Magalhães Guedes

Dissertation submitted in partial fulfilment of requirements for the MSc in Business, at the Universidade Católica Portuguesa, 4th of January of 2022

Abstract

Title: LUGGit's innovation model: how far can a luggage start-up travel?
Author: Francisca Cabral
Keywords: Internationalisation, Disruptive Innovation, Born Globals, First Mover

LUGGit was founded in 2019 with the vision to "build an end-to-end travel journey without travellers ever carrying luggage". LUGGit realised there was a high demand for a market without a suitable offer and provided a unique service that allowed customers to have their luggage collected, stored, and delivered back at the time and place of their choosing.

The service was initially launched in Lisbon, then Porto. In October 2021 it was the turn of Vienna. This set the beginning for the fast internationalisation path that LUGGit was aiming for. In 2022 the prediction was of launching the service in at least 5 European capitals. Heading for a fast internationalisation seemed the right decision to try and have a first mover advantage. Nevertheless, competitors with deeper pockets could be attracted by the market potential uncovered by LUGGit and take advantage of the company's innovative idea.

The Dissertation aims to analyse how should LUGGit manage its internationalisation process. For this purpose, it includes a Case Study with relevant information about the start-up's journey, a Literature Review section on theoretical topics related to the Case issues, and a Teaching Note that analyses the key areas of the Case.

Resumo

Título: LUGGit's innovation model: how far can a luggage start-up travel?
Autora: Francisca Cabral
Palavras-chave: Internacionalização, Inovação disruptiva, Born Globals, First Mover

A LUGGit foi fundada em 2019 e a visão da start-up era de "construir uma viagem do início ao fim em que o viajante não teria de carregar a sua bagagem ". LUGGit apercebeu-se que havia uma grande procura no mercado, mas não havia uma oferta adequada e começou a prestar um serviço que permitia aos clientes terem a sua bagagem recolhida, guardada e entregue de volta à hora e no local escolhido.

Este serviço foi inicialmente lançado em Lisboa, depois no Porto. Em outubro de 2021 foi a vez de Viena. Assim ficou marcado o início da uma internacionalização rápida que a LUGGit ambicionava. Em 2022 a previsão era de proporcionar o serviço em pelo menos 5 capitais europeias. Rumar a uma internacionalização rápida parecia a decisão certa para tentar obter a vantagem de ser um first mover. Contudo, competidores com mais recursos poderiam sentir-se atraídos pelo potencial de mercado descoberto pela LUGGit e tirar vantagem da inovação da start-up.

A presente Dissertação tem como objetivo analisar como é que a LUGGit devia gerir o seu processo de internacionalização. Para esse efeito, está incluído um Caso de Estudo com informação relevante sobre a start-up, uma secção para a Revisão de Literatura sobre tópicos teóricos relacionados com os problemas do Caso, e uma Nota de Estudo que analisa os principais pontos do Caso.

Acknowledgments

Firstly, I would like to thank Ricardo Figueiredo, CEO of LUGGit, for sharing and providing me information about LUGGit’s journey and future endeavours. Without this I would have not been able to develop my Masters Thesis.

I would like to express my gratitude towards my Thesis Advisor. His detailed and constructive feedback, availability, patience, and dedication were essential during this challenging period. I am very glad and lucky to have shared this journey with Professor Nuno Magalhães Guedes.

Finally, I would like to thank my parents and siblings for their endless support, words of encouragement, and always being present in my academic and personal life.

Table of contents

I. Introduction

The present Thesis offers a case study about a real-life strategic dilemma of a start-up – LUGGit – that has developed and launched a unique service in 2019, is making efforts and decisions with the aim of launching its business globally and sustain its competitive advantage.

The aim of this Dissertation is to present a case study that can serve as a teaching tool for an in-class discussion about strategic issues. The Thesis includes three main sections: Case Study, Literature Review, and Teaching Note.

The first section provides information about LUGGit’s journey: from the beginning, covering its main challenges, to future endeavours. All the information provided on the Case Study aims to serve as guidance to the reader for the central dilemma which is the uncertainty whether the company can fully develop the potential of its own innovation or if it will leave the field open for others to explore.

The Literature Review addressed the main topics related with the central dilemma: internationalisation and disruptive innovation. The theoretical concepts and frameworks explored in this section will serve as clarification for the Case Study and as vehicle for the Teaching Note.

The third section states the learning objectives that describe the primary take-away a reader is supposed to acquire after analysing the Case. Then, assignment questions and a class plan are offered and should be used by the instructor to guide the in-class discussion. Finally, an analysis of those questions is provided. Students are invited to present their own alternatives and recommendations to enrich those proposed in this Dissertation.

II. Case Study

On a bright day of October 2021, Ricardo Figueiredo, CEO of LUGGit, a Portuguese Aveiro-based start-up, was in Vienna supervising the launch of the first international operation of the company. LUGGit was a platform that provided a service which allowed customers to have their luggage collected in their exact location by a Keeper, an independent driver from LUGGit, that would deliver them back at the place and time of their choosing. Founded in 2019, the start-up estimated 30 000 Euros in revenues in 2021.

While in Austria, Ricardo wanted to take a step further to transform his business to the point people no longer had to carry their luggage when traveling. He aimed to redefine travelling. Was Ricardo's innovative idea feasible? Should LUGGit's strategy change to pursue such a goal? With the expansion of his business, would Ricardo be able to maintain a sustainable competitive market position?

Early days

It was July 2017 when Ricardo, the owner of a tourism accommodation unit, noticed an interesting pattern. Many of Ricardo's clients had one burden in common: what to do with their luggage before the check-in and after the checkout. Ricardo was aware he had frequent requests about checking in earlier than the established time, as well as requests about checking out later, so that travellers would have a place to store their luggage and enjoy their vacation at the fullest from the arrival day until the departure.

Ricardo realised there was a high demand market out there not matched by a suitable supply. Ricardo's previous experiences at start-ups that ended up failing had taught him that the cornerstone of a business' success was the team. Therefore, Ricardo challenged his good friend Diogo Correia, presently COO of LUGGit, to quit his job at a software company, and become a part of LUGGit. Along the way João Pedro Pedrosa, CTO, and later Hugo Fonseca, Head of Software Development, who were also working for Diogo's employer, quit their jobs too and became fully focused on the creation and development of the new start-up.

LUGGit business model was based on a platform that allowed customers to have their luggage collected, stored, and returned at the place and time chosen by them.

Ricardo's project started by developing the mobile phone app whose download was free of charge (Exhibit 1) and the website for booking the service. To request the service, the customer just had to select the pickup and drop off locations, the desired time for the collection and delivery of the luggage and specify how many and what type of bags there were. The bags were sealed and secured by the Keeper and the customer was able to track the luggage in real-time.

Without any round of investment, the beginning was not easy. It was the four friends who had to do everything from developing the software for the app and the website, defining the strategy, and doing the marketing, all with very little funding. The team members were either from the University cities of Aveiro or Coimbra, and quickly understood that for LUGGit to succeed they had to launch their service in the capital city of Lisbon. Even against their family and friends' advice, Ricardo, Diogo, João Pedro, and Hugo knew it was the right strategy to move to Lisbon. They packed everything and moved to launch LUGGit in July 2019, although it was officially founded on the 23rd of January of 2019. At that time, they had to execute everything, including the operational tasks, to make the service grow. Furthermore, Ricardo's strategy to promote LUGGit and to reach out to potential clients was through some street marketing actions and the implementation of two successful partnerships with BnBird and TimeCooler. In this phase, Ricardo created a 3-euro promotional code discount for the customer, and its partners advertised LUGGit service to their customers. If customers were interested in LUGGit's service, they had to download the mobile phone app or book through the website. Furthermore, LUGGit's partners earned a commission of 10% when the promotional code was used. Only in December 2019, two months after LUGGit launched in Porto, was the company able to rise 400 000 Euros from Portugal Ventures in its first round of investment. After this investment Ricardo could recruit up to 11 more people for Head of Operations, Mobile Developer, Head of Engineering, Frontend Developer, Growth Marketing Manager, Full Stock Developer, and Design team.

To perform the operational tasks of the service, LUGGit had Keepers who were independent drivers who owned and operated their vehicles. They were responsible for collecting, storing, and delivering luggage according to the customer's needs. Moreover, LUGGit had a warehouse for storage in the locations in which it operated, and Keepers were allowed to collect as much luggage from different customers as they wanted, e.g one Keeper in one morning could collect luggage from 10 different customers and store the luggage at the most convenient time. This flexibility allowed both Keepers to fully manage how many clients they served and LUGGit to respond better to the demand and to manage the number of Keepers. LUGGit recruited the Keepers according to its needs through an outsourcing company, 1 independent driver in Porto, 3 in Lisbon, and 2 in Vienna were enough. LUGGit provided full technological and operational support 24/7, and the technological tools and materials, such as mobile app, vest, and seal tags. Keepers were entitled to 70% of each service and the remaining 30% were LUGGit's revenues.

Customers could choose from two packages: the standard package with an insurance of 500€ per luggage, and the premium package with an insurance of 1200€ per luggage. The price of each package did vary according to four components: the number and type of the luggage (small size, large size or out-of-format size), the distance between the collection point and delivery point, and the number of days the luggage was stored. The average price paid per service was 22€ in Portugal.

By October 2021 LUGGit performed 700 services, 495 of those being booked through a partner accommodation unit in Lisbon. 473 corresponded to customers that opted for the standard package and 35 customers opted for the premium package. In Porto they sold 95 services, 68 of those made through partnerships with tourism operators. 78 corresponded to the standard package and 4 to the premium package[1].Revenues for the year of 2021 were estimated to be 30 000 Euros and costs to be 320 000 Euros (Exhibit 2).

The consumer profile of LUGGit's service was a person that travelled on leisure, between 25 and 35 years old, and booked short-term rental accommodation units. With regards to consumer satisfaction, all 13 evaluations on iOs Apple Store, scored LUGGit's service with 5 stars. On the Android Play Store, it scored 4,7 with 71 reviews. On both it was possible to identify 6 common factors related to the score: safe, easy, practical, time saving, professional service, and that they would recommend to others. Nevertheless, due to the nature of this service, and despite people saying they were very satisfied, they did not repeat. For Ricardo, this pattern highlighted the fact it was more sustainable to focus on the partnerships rather than on the promotion of the mobile application itself. Since it was a service customers only used once, they were less likely to download it.

[1] In the beginning, LUGGit did not provide insurance when a customer booked the service. Therefore, the number of services provided was higher than the number of insurances.

Regarding competition, LUGGit did not have direct competition since its service was totally a unique service in the market worldwide. Nevertheless, there were some indirect competitors such as services that allowed luggage storage, although the potential clients needed to go to the storage place to drop off and pick up their suitcase, such as: Dropandlock, Luggage Storage & Cowork Center, or BagBnb.

Dropandlock was a luggage storage located near Santa Apolónia train station in Lisbon. This service offered three different size lockers. It was open every day from 7 a.m to 9 p.m. The service could not be booked in advance. The prices varied according to the size of the locker and the number of hours the luggage was stored (Exhibit 3).

Luggage Storage & Cowork at Lisbon City Center was a luggage storage and a cafe located in Chiado in Lisbon. This service offered 24 hours supervised short or long-term luggage storage. It was open from Monday to Friday from 9 a.m to 8 p.m, on Saturday from 10 a.m to 7 p.m and were closed on Sunday. A potential customer was able to book for this service through the website and buy insurance up to 5 000€. The price for this service varied according to the number of items and hours (Exhibit 4).

BagBnb was a platform that had several partners such as shops, cafes, and restaurants that stored luggage. This platform operated worldwide, for a flat rate of 5€ a day per bag without any weight or size limits and each piece of luggage was covered by a 3000€ insurance. The platform verified locations and offered 24/7 support to its customers. In Lisbon, most of the partners were in the historical city centre. To book for this service, the customer booked through the website: selecting the city and the partner whose location better fit the customer. Upon arriving the traveller had to go to the place to store the luggage.

The impact of Covid-19

In the beginning of 2020, and after the round of investment, LUGGit had already begun analysing how to expand the business internationally when the unexpected happened. Covid-19 spread globally and by March 2020 the borders between countries closed, travelling was no longer possible. Not only was this a setback for the business' growth but also LUGGit had to completely stop providing the service. LUGGit already had contracts with independent drivers that would be highly affected as they did not have a steady income. Therefore, Ricardo decided to implement a social initiative called

#Wemoveit, a service that used LUGGit infrastructure to facilitate the transport of goods between families and friends. Thus, during the state of emergency implemented in Portugal it was possible to use safe transportation, complying with the quarantine rules imposed. The revenues of the service reverted fully to the Keepers. In this way, the independent drivers were able to earn income and stay active. #Wemoveit was initially available in Greater Lisbon and Porto, where LUGGit services had already been launched, but quickly expanded to other regions.

During the Covid-19 pandemic, with the aim of analysing how to grow LUGGit's business, Ricardo got the support of Portugal 2020[2] to develop two R&D projects.

SCALUM (scalable, efficient, and abstract luggage mobility infrastructure) with the University of Aveiro that contributed 470 000 Euros for the funding. This project aimed to develop a solution that allowed to disruptively reformulate the way people and entities dealt with their luggage while travelling. The R&D focused on areas such as scalability, logistics and interoperability.

SSEAA (Seamless Luggage All-around Solutions) an individual project which got 1 million Euros of national funding after having received the Seal of Excellence by the European Commission. This second project aimed to develop an innovative solution to improve the comfort of travellers related with the luggage journey and to solve last-mile problems related with logistics and goods distribution.

These two projects allowed LUGGit to aim at creating a Luggage-as-a-Service (LaaS) solution, an all-around innovation where every tourism-related stakeholder, such as airline companies and travel agencies were connected.

Through Portugal 2020, Ricardo was also able to get a fund of 78 000 Euros for human resources.

The pandemic had a clear negative impact on the start-up's activity, although it had a positive effect as well. Not only Ricardo felt a stronger connection with his team, but he also had time to analyse and rethink their service.

[2] Portugal 2020 was a partnership agreement between Portugal and the European Commission that funded relevant projects with scientific, technological, and economic specialisation. This initiative was promoted in Portugal between 2014 and 2020.

Future opportunities

June 2020 marked the beginning of the uplift of the restrictions and the reopening of the borders between European Union's member-states. Although this process was not homogeneous among state-members, LUGGit could finally see its business working again.

With the aim of sustaining LUGGit's growth, Ricardo understood it was important to perform an analysis on the pandemic and post-pandemic scenario and identify the opportunities that could arise. Ricardo and his team had time to rethink and analyse the market, and what could be the needs of people after things returned to normal, when traveling would be permitted again. Ricardo and his team envisioned a service that could be more than customer oriented. Ricardo understood that to reach out to a wide range of potential customers and grow its business, he had to provide the service to the tourism sector, e.g, hotels, tourism accommodation units.

In July 2020, LUGGit established its first partnerships with different tourism operators based on a new feature that LUGGit had developed. LUGGit developed a personalised website that would be linked in the partner website after a client booked a stay, enabling customers to book for the LUGGit service directly. Additionally, it was also possible for the tourism unit to send a direct link to their guests in pre-check-in or late check-out communication either by e-mail, SMS, WhatsApp, or any other channel. With this, the start-up became more visible and was able to create a stronger sense of trust for potential customers. With this feature, the client could request the service even before being in one of the locations where LUGGit was available, while previously with the app it was only possible to do it upon arrival at the destination e.g, Lisbon, or Porto. By October 2021, LUGGit was able to establish 60 partnerships with companies, accounting for more than 100 accommodation units. The tourism operators earned a fixed commission of 5 Euros for each time a customers used LUGGit's service through them.

LUGGit's growth strategy

Ricardo's growth's strategy was to scale his business and reach the goal of redefining how people travel. For him it was clear he had to continue establishing partnerships with tourism accommodation units and companies to have more visibility, recognition, and direct contact to potential customers. Moreover, the next step to expand his business was the internationalisation of LUGGit. After being forced to postpone this step due to Covid-19, Ricardo finally saw it happening. In October 2021 LUGGit internationalised and became available in the Austrian capital of Vienna. Several reasons justified this choice: the city had just one airport, relatively close to the city centre; the seasonality of Austrian tourism complemented the Portuguese tourism, and there were few regulations regarding the number of short-term rental accommodation housing. The price per service in Vienna was approximately 10€ more than in Portugal. This increase was necessary to meet the expected gain from the independent driver.

One of the main challenges Ricardo faced was the difficulty to establish the partnerships with tourism accommodation units. The same happened when he launched the service in Lisbon and Porto. Creating agreements with short-term rental property managers played an essential role in advertising and extending out LUGGit services to potential customers. According to Ricardo, the tourism operators were always a bit sceptical to establish a partnership with LUGGit because it was a start-up fresh in the market. From Ricardo's experience, the hospitality industry was based on good reviews, therefore the property managers were concerned with the fact that being associated with LUGGit could harm their reputation. Nonetheless, Ricardo was able to establish good partnerships both in Lisbon and Porto, and in Vienna as well. Ricardo signed two partnerships: one with one of the main Austrian short-term accommodation booking platforms, Apartment.at, and the other with a short-term rental company called Appartements Fechergasse. These partnerships allowed LUGGit to be more visible for potential clients and, most importantly, worked as a door opener for future partnerships with other Austrian tourism accommodation units and companies.

Furthermore, for Ricardo the internationalisation process was very demanding and gave him a better overview of the needs associated to the business' growth. Prior, but especially after the launch of LUGGit in Vienna, Ricardo had to travel frequently to Austria with the aim of contacting property managers to create potential agreements, monitoring and supporting the independent drivers, as well as having a better overview of the city and its life. The need to have a representative of LUGGit in the city in which it operated became clear. Therefore, with the business's growth and the launch of LUGGit in other cities, Ricardo believed that a city manager was going to be necessary.

Moreover, for the internationalisation process, Ricardo also got a fund of 68 000 Euros from Portugal 2020 that enabled the company to invest in critical areas for its growth, namely in terms of strengthening its commercial and communication capacity in digital media. The company was already planning the launch of LUGGit in at least 5 European capitals in 2022. Total fixed costs per city for launching of LUGGit were 5 000 Euros per month.

The next step

Ricardo's vision was to "build an end-to-end travel journey without travellers ever carrying luggage". Ricardo's goal of redefining how people travel started as a mobile phone app. Quickly he understood that to grow his business, to gain more exposure and to have direct contact with potential customers he had to establish partnerships with tourism accommodation units that would recommend LUGGit's service. Then the internationalisation process began, first Vienna in Austria, soon other cities would follow. With the aim of reinforcing its business growth, in the next years Ricardo's next step was to create the Luggage-as-a-Service solution and establish partnerships with airline companies which would be an important step in achieving his goal of completely redefining the way people travel.

Additionally, with the geographic expansion, it was likely that companies, possibly with more resources, would try to offer the same service as LUGGit. Ricardo believed that LUGGit could benefit from a rapid expansion and gain a first mover advantage. Moreover, an opportunity to explore in the near future was for LUGGit to try to establish partnerships with those companies that would enter the market providing the same service but with less technological capability. These companies were likely to have strong logistics (cars, drivers, and warehouses) and could use LUGGit's platform to increase their revenues. This way they would become LUGGit's partners instead of direct competitors.

But for the moment, Ricardo was analysing the internationalisation of LUGGit in Vienna and focused on the planning of the launch of LUGGit in the new European destinations for 2022. Heading for a fast expansion seemed the right decision for Ricardo.

III. Literature Review

The Literature Review will address theoretical concepts and frameworks related with the main topics of the Case: Internationalisation and Disruptive Innovation. Moreover, the topics discussed in this chapter will be useful for the development of the Teaching Note.

1. Internationalisation

The geographic expansion is a common growth strategy for many small firms. This strategy is usually used when a firm cannot expand in their current location and have a product or service[3] that is appealing to foreign markets. Nevertheless, for an effective geographic expansion, this process is subject to challenges and requires planning for growth, managing growth, reasons for growth, expansion site characteristics, a set of moderator variables, and expansion performance (Greening & Barringer, 1998) (LR Exhibit 1).

Another topic in the small business literature is that with the growth of the business, the principal owner or manager is no longer able to fully control every aspect of the business, therefore hiring or developing other managerial talent to support the firm's management is necessary (Buchele 1967; Clifford and Cavenaugh 1985).

Moreover, when the business is in a single location it is possible to have sufficient knowledge of customers and market which can minimise planning. However, knowledge can only be transferred to a new location site if there are similarities between the initial and the expansion site.

One of the first researchers to draw a connection between learning and internationalisation processes was Carlson (1966). He discussed that firms would enter international markets cautiously due to lack of experience and knowledge. Carlson argued that firms internationalise incrementally, and this process was based on experience gained in another market to reduce risk. This phenomenon led Johanson and Vahlne (1977) to develop the internationalisation theory known as Uppsala model. This explains internationalisation as a process in which firms need to gain foreign market knowledge for internationalisation, and that this knowledge is obtained through experiential learning.

Thus, later research by Rennie (1993) through the discovery of early internationalisation and Oviatt and McDougall (1994) theory of International New Ventures (INVs) have

[3] For simplification, I will refer to products or/and services as products.

provided meaningful insights about how the geographic expansion of small and medium enterprises (SMEs) can occur. On the one hand, SMEs can opt for an incremental internationalisation, to expand to other foreign sites at a slow pace, focusing initially "on developing their domestic markets before entering a psychically close offshore markets", and later enter more distant markets (Johanson & Vahlne, 1997). In contrast, other SMEs internationalise early and rapidly, such as:

- INVs are "business organizations that, from inception, seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries" (Oviatt and McDougall, 1994);
- Born Globals (BGs) are firms that aim to become global and to rapidly expand geographically, without a previous long term domestic period, since its foundation (Oviatt and McDougall 1994, Rennie 1993; Knight and Cavusgil 1996);
- Born-again global are enterprises which internationalise quickly after focusing on their domestic market for a long period (Bell et al. 2001,2003).

These types of business begin geographic expansion since founding or soon after, "and offer specialized products that target niche markets through flexible distribution arrangements" (Bel et al., 2003). Moreover, they have identified patterns of behaviour of the internationalisation process between "knowledge-intensive" and "traditional" firms (LR Exhibit 2).

Knight & Cavusgil (2004) defined BGs as "entrepreneurial start-ups that, from or near their founding seek to derive a substantial proportion of their revenue from the sale of products in international markets". The increase of BGs in recent decades is mostly due to globalisation, the internet, and other communications innovations. These factors have contributed to the decrease in the cost of the internationalisation process and foster the geographic expansion of small and resource-poor enterprises (Knight & Cavusgil, 2009).

Moreover, BGs are characterised by being small companies with limited tangible resources, insufficient economies of scale, inexperience in international business, and usually scarce in resources (Knight & Cavusgil, 2009; Freeman, Edwards & Schroder, 2006).

The early and rapid internationalising firms represent a new era of internationalisation. McDougall & Oviatt (2000) have described these phenomena of creating, discovering and exploiting opportunities in foreign markets with the aim of gaining competitive advantage as "international entrepreneurship". This entrepreneurial orientation supports early internationalisation and superior international performance among BGs (Jones & Coviello, 2005).

Mort et al. (2012) argued about four BGs strategies which allow them to enhance their performance internationally: opportunity creation, customer intimacy-based innovative products, resource enhancement and legitimacy.

Knight and Cavusgil (2004) suggested that BGs that enter foreign markets, from or near founding, will succeed in distinct markets through the leveraging of distinctive mix orientations and strategies, despite the scarce resources.

Early and rapidly internationalising firms need to leverage capabilities that will help them achieve superior international performance in global markets. A key benefit for small firms to succeed in foreign markets is the flexibility that it is inherent to them. Additionally, there are two external facts that drive entrepreneurial firms to internationalise from inception: the globalisation of markets, which is associated with the homogenisation of buyers' preferences leading to a simplification of the product development and positioning in international markets; and the technological advances, whether in terms of information and communication technologies or the diffusion of the Internet, and related technologies that made the internationalisation process a more feasible and cost-effective option.

Knight & Cavusgil (2004) explored the linkage between the role of innovative culture and organisational capabilities as a path to obtain superior international performance in the BGs. Nelson and Winter (1982) argued that a firm's resources, especially in competitive or challenging environments allow them to achieve a superior performance. Regarding innovation, two major sources were identified: internal R&D and imitation of the innovation of other firms. Dosi (1998) and Nelson & Winter (1982) discussed that new forms of doing business emerged when the innovative culture of a firm is combined with the appropriate accumulated knowledge. These new methods can be internationalisation or entry in new markets overseas that are described as innovative act (Casson, 2000; Schumpeter, 1939; Simmonds and Smith, 1968). Therefore, BGs can be characterised as innovative.

The resource-based view, that "is a managerial framework used to determine the strategic resources a firm can exploit to achieve sustainable competitive advantage", guides enterprising firms to develop and leverage knowledge and organisational capabilities, in an innovative culture. Knowledge is "capacity of the firm to apprehend and use relationships among international factors to achieve intended ends" (Autio et al. 2000) and the knowledge resources are unique, inimitable, and immobile (Dierickx and Cool, 1989; Grant, 1991, 1996). The uniqueness enables profitable pricing that reduces competitors' offerings, inimitably ensures that "profit will not be competed away", and immobility minimises the threat of proprietary knowledge spreading to competitors (Nelson and Winter, 1982).

Lewin and Massini (2003) studied the effect of firm size and age on innovation and have drawn a positive relationship between firm size and R&D activities. The relationship between innovation and R&D is less proportional than size, consequently, R&D declines with size. The flexibility of entrepreneurial firms is one of the factors to achieve a superior performance. Moreover, it implied that organisational performance, in an innovative culture, is driven by the acquisition of knowledge and development of capabilities.

BGs possess these characteristics which allow them to acquire intangible knowledge-based capabilities to enter foreign markets at an early stage and achieve a superior international performance. Superior performance "is an outcome of the firm's entrepreneurial and managerial knowledge" (Autio et al., 2000; Penrose, 1959). "Knowledge about international markets and operations, as well as the efficiency with which such knowledge is acquired, is a critical determinant of superior international performance in entrepreneurial firms" (Autio et al., 2000).

As BGs are typically scarce in tangible resources, capabilities-based resources are paramount when dealing with environments across different sites (Lou, 2000). Acquiring these capabilities attenuate a firm's liabilities of foreignness and newness (Oviatt and McDougall. 1994).

Autio et al. (2000) suggested that firms must unlearn embedded routines, and this process is easier for young BGs as they have little or no existing organisational routines to unlearn, allowing them to better develop new knowledge.

Young entrepreneurial firms adopt types of knowledge and capabilities, such as international entrepreneurial orientation and international marketing orientation, that are the cornerstone of the organisational culture. Managers of BGs have recognised the need to be internationally, entrepreneurial, and innovative oriented when entering foreign markets. This orientation enables firms to expand to different geographic markets because of "unique entrepreneurial competences and outlook" (Autio et. al., 2000; McDougall et al., 1994). Additionally, international entrepreneurial orientation reveals the overall innovativeness and proactiveness of a firm pursuing geographic expansion. "It is associated with innovativeness, managerial vision, and proactive competitive posture" (Covin and Slevin, 1989; Dess et al., 1997; Lumpkin and Dess, 1996; Miller and Friesen, 1984).

The most common business strategies of BGs are:

- *Global technological competence* corresponds to the technological ability of a firm to associate firms in its sector, and the capability of leveraging "information and communications technologies to interact more efficiently with channel members and customers, and to obtain various other benefits" (Clark, 1987; Zahra et al., 2000*)*.
- *Unique product development* refers to the creation of unique products, and is in line with the product differentiation strategy, with the endeavour of creating a customer loyalty base through meeting a particular need. Innovative products are associated with certain characteristics, such as excellence customer service, or patented know-how, which allow the firm to be distinguished from its rivals (Miles and Snow, 1978; Miller and Friesen, 1984; Porter, 1980).
- The development of products that meet customer expectations taking into consideration its features and performance is known as *quality focus*.
- The propensity of BGs to depend on foreign independent distributors to maximise outcomes associated with down-stream business activities in foreign markets refers to *leveraging foreign distributor competences*.

BGs internationalise from inception, despite the scarce resources. The main characteristic of BGs is its accelerated internationalisation. Moreover, BGs are described as successful international SMEs across industry sectors (Knight & Cavusgil, 1996) in both high-tech and low-tech industries (Rennie, 1993), and "the path-breaking strategic choices of internationally-oriented entrepreneurial owner-managers that leads to accelerated internationalisation" (McDougall, Shane, & Oviatt, 1994; Knight & Cavusgil, 1996).

Weerawardena et al. (2007) created a conceptual model of the international BGs firms. It aimed to "draw on the dynamic capabilities view of competitive strategy and the organisational learning literature" (LR Exhibit 3). This theory intertwines innovation and international entrepreneurship. Knight & Cavusgil (1996) and Oviatt & McDougall (1997) suggested that the main factor determining the speed of geographic expansion is the international entrepreneurship orientation of the business' founder. Additionally, the dynamic capabilities theory highlights the need to develop new capabilities aiming to identify opportunities and respond quickly to them (Jarvenpaa & Leidner, 1998). This will accelerate the internationalisation of BGs.

Einsenhardt & Martin (2000) definition of dynamic capabilities is "the organisational and strategic routines by which firms achieve new resource configurations as market emerge, collide, split, evolve and die".

The proposed dynamic capability model (LR Exhibit 3) explains that the capability building process of BGs is driven by an owner/manager who has an international entrepreneurial orientation, a geocentric mindset, prior international experience, and learning orientation. They balance and nurture three capabilities: market-focused learning, internally focused learning, and network. Moreover, BGs have a strong marketing capability and knowledge intensive products. These combined dynamic capabilities lead to an accelerated internationalisation.

Concerning the owner/manager profile, in BGs, they are distinguished by their international entrepreneurship orientation, according to McDougall & Oviatt (2000) "a combination of innovative, proactive, risk-seeking behaviour that crosses national borders and is intended to create values in organisations". The owner/manager either have a geocentric or a global mindset. Global mindset was described as "the propensity of managers to engage in proactive and visionary behaviours in order to achieve strategic objectives in international markets" (Harveston, Kedia and Davis (2000). Additionally, prior international experience of the owner/manager has shown to be one of the drivers to accelerate internationalisation and to distinguish between BGs and exporting firms (Harveston et al., 2000; Madsen & Servais, 1997; Oviatt & McDougall, 1997).

The market focused learning is the capability of acquiring and disseminating the market information. Requires unlearning through the review of unsuccessful knowledge-based practices (Day, 1994). Moreover, it integrates market information to help achieve the firms' goal in international markets (Knight & Liesch, 2002). BGs are niche market oriented (Madsen & Servais, 1997) and most successful BGs tend to maintain a market focused learning capability as it is an important characteristic of entrepreneurial firms (Weerawardena, 2003). Acquisition and dissemination of technological or non-technological information developed within the company is known as internally focused learning capability. BGs operate in all industries (high-tech, low-tech, or non-tech) and must be innovative in technological and non-technological areas of value creation. According to Liesch et al. (2002) networks are an integral part of a successful internationalisation process, therefore BGs tend to "seek partners who complement their competences" (Johanson & Mattsson, 1988; Oviatt & McDgougall, 1944). Networking capabilities contribute to acquire knowledge and develop complementary resources leading to lowering risk and uncertainty (Nerkar & Paruchuri, 2005; Selnes & Sallis, 2003).

The marketing capability is a firm's ability to formulate effective marketing strategies (Weerawardena, 20003) contributing to the identification and access to international opportunities. Moreover, BGs are characterised by operating in niche markets, hence the dynamic marketing capabilities will allow BGs to penetrate in global markets effectively and rapidly with their innovations.

Knowledge intensive products are characterised by "innovation and personal creativity, cutting edge product design, technological know-how or in-depth understanding of markets" (Van de Ven, 2004) allowing these products to have a positional advantage in global markets.

The performance of a firm can be analysed through profitability, sales growth and return on investment (Cavusgil & Zou, 1994). Nevertheless, young entrepreneurial firms that internationalise early do not have the ability to meet these conventional performance expectations. Therefore, to assess BGs' performance, one should consider speed of the first internationalisation (e.g exporting and sourcing), the extent of exports as a percentage of total revenues, and the scope of the firm's internationalisation as the number of countries entered.

In a nutshell, the conceptual framework emphasizes that for BGs to have an accelerated internationalisation and gain competitive advantage in global markets, each of these dynamic capabilities must be developed in association with each other.

Efrat and Shoham (2012) argued that BG's performance success in the short-term is driven by environmental factors, contrary to long-term performance that is affected mostly by internal factors. BGs present a high level of risk concerning its operations (Gabrielsson, Kirpalani, Dimitratos, Solberg & Zucchella, 2008) because of their rapid internationalisation and its dynamic environment. The characteristics of BGs of operating in niche markets, small size, flexibility and tendency to originate in high technological markets (Knight & Cavusgil, 1996; Knight et al., 2004) have contributed to the increase of these type of firms in the marketplace (Knight & Cavusgil, 1996; Knight, Madsen & Servais, 2004; Madsen & Servais, 1997). Additionally, these young entrepreneurial firms lack in tangible and intangible resources (Knight & Cavusgil, 1996; Rennie, 1993; Rialp et etl., 2005) and this contributes to higher risk and uncertainty because of the lack of accumulated experience resources (Zaheer, 1995). Moreover, Zaheer (1995) argues that, although the manager/owner might have prior international experience, this experience comes from a different company and environment, therefore it can only be applied until a certain extent (Freeman, Hutchings, Lazaris, & Zyngier, 2010).

Nordman & Melen (2008) distinguished prior founder's personal experience and organisational knowledge. This organisational knowledge is related with organisational capabilities (OC) that are the capabilities that intertwine the operation of the firm and its environment conditions (Knight & Cavusgil, 2004). Teece et. al. (1997) discussed that a firm can enhance its performance advantage by strategically adapting to the changing environment.

BGs expand since inception, nevertheless the first target market serves to create the knowledge base for future expansion and has an impact on the strategic performance of BGs (Gabrielsson et al., 2008; Moen, 2002; Moen & Servais, 2002). Regarding BGs' performance and to assess the survival[4] of the firm, there are two measures: entering international markets within 3 years since founding and maturing the service two years after its inception. According to Fontana & Nest (2007) the acquisition of a firm reflects its "inability to maintain independent operations due to lack of the capabilities needed to confront hostile market conditions".

There are factors that affect BGs' performance. BGs tend to operate in niche markets which are less competitive and allow them to sustain a competitive position and increase their future growth potential (Knight & Cavusgil, 2004). Moreover, technological

[4] "Survival refers to firm's ability to maintain independent operations" (Agarwal, 1998; Audretsch, 1995; Segarra & Callejón, 2002).

turbulence decreases the likelihood of its products to be imitated which helps them to gain competitive advantage. BGs are characterised by spreading to various geographic sites within a short period, which in the long-term can have a negative impact on its ability to cope and perform and increases risk. To achieve a strong short-term strategic performance, BGs should invest on R&D and develop high-quality technology allowing them to create innovative products in niche markets. Weerawardena et al. (2007) and Zander & Kogut (1995) discussed that market knowledge is an utterly factor to reduce risk associated with the internationalisation process through the enhancement of the dynamic capabilities and ability to enter rapidly foreign markets. Additionally, these capabilities allow BGs to assess actively their marketing strategy and adjust to necessary improvement which also leads to a positive performance. Finally, network alliances have proven to be an important aspect for BGs survival, therefore higher management capabilities lead to higher performance.

Additionally, the relation between internationalisation and technological tools that has been discussed by many scholars. Oviatt & McDougall (1995,1997) argued that one pivotal contributor to the rapid rise of international enterprises (IE) was the globalisation and technological developments such as internet and high technology. This advance on the information processing technology has contributed to the acceleration of SMEs (Etemad, 2007). Etemad et al. (2010) suggested that the internationalisation process was accelerated using the Internet. They proposed the term internetisation "to refer to the process of increasing adoption, diffusion, and deployment of internet-based technologies and processes that increasingly serve as the backbone of internationalisation, especially in the innovative entrepreneurial firms".

The internetisation is the ability to use information that allows the firm to gain competitiveness and growth through internationalisation expansion. The information that is transmitted and received combines factors such as: learning, access to networks, and risk-controlled expansion. These factors can influence and stimulate a faster internationalisation process.

Cronin (1996) created a conceptual model of Internet business uses. This model explains how the Internet's competitive value is constraint by internal factors and external factors (LR Exhibit 4).

Quelch & Klein (1996) defend that the Internet can lead to a fast internationalisation of SMEs because Internet influences the dynamic of international commerce. Moreover, SMEs tend to develop products that operate in niche markets. Through the worldwide reach of the Internet, these SMEs will reach out a higher number of potential customers.

Furthermore, the Internet has implications such as: leading to a standardisation of prices, connect the end-users and producers directionally, strengthen networks internally and externally, and is an efficient tool to have fast feedback from customers and track individual customer behaviour.

2. Disruptive Innovation

Two types of innovation exist: sustaining and disruptive innovations. On the one hand, sustaining innovations that are the most common ones, are distinguished by developing products in line with what the mainstream customer is seeking. This innovation allows incumbents to increase sales and achieve higher margins and profitability. In contrast, disruptive innovations tend to initially be inferior to the incumbents' products. Thus, incumbents tend to not develop their own disruptive innovation and this type of innovation expand market boundaries.

Christensen, Raynor, and McDonald (2015) described disruption as "a process whereby a company with fewer resources is able to successfully challenge established incumbent businesses. Specifically, as incumbents focus on improving their products for their most demanding (as usually most profitable) customers, they exceed the needs of some segments and ignore the needs of others. Entrants that prove disruptive begin by successfully targeting those overlooked segments, gaining a foothold by delivering more-suitable functionality – frequently at a lower price. Incumbents, chasing higher profitability in more-demanding segments, tend not to respond vigorously. Entrants then move upmarket, delivering the performance that incumbents' mainstream customers require, while preserving the advantages that drove their early success. When mainstream customers start adopting the entrants' offerings in volume, disruption has occurred".

According to Garcia and Calantone (2002) innovation is a key factor for a firm to obtain competitive advantage leading to an increase in profit, market share or reduction of costs. Nonetheless, most innovations are not successful despite the firm effort in resources

(Cagan and Vogel, 2002; Diederiks and Hoonhout, 2007; Basole and Rouse, 2008). Disruptive innovation tends to create new customers and change the markets' dynamic by expanding it. These firms will create a different performance metrics (Danneels, 2004; Sun et al., 2008) and can profoundly change how the industry operates. Additionally, disruptive innovation will lead to a new performance trajectory (LR Exhibit 5) in comparison to the trajectory of sustaining innovation (LR Exhibit 6).

Sustaining innovation performance will continue to improve by mainstream customers and incumbent who serve them. In contrast, disruptive innovation will have new features that will continuously improve and become attractive to most customers. The trajectory performance of the disruptive innovation leads to higher profits in the long-term (Kim and Mauborgne, 2005; Govindarajan and Kopalle, 2006) and few or non-existing competition at the early stage (Heiskanen et al., 2007) because incumbent tend to disregard this type of innovation as they are considered of low quality or unrelated to the industry (Christensen and Raynor, 2003; Hang et al., 2011; Denning, 2016).

It is also argued that companies that develop disruptive innovation tend to offer an innovation that the customers do not yet seek which can make these products too expensive, complicated, or sophisticated (Christensen, 1997; Christensen et al., 2002; Kenagy and Christensen, 2002; Markides, 2006; Christensen et al., 2009; King and Baatartogtokh, 2015). The path of over-serving customers had been successful in the past (Utterback, 1994; Christensen, 1997) leading to firms managing most of its resources to develop new features of products that have a high demand, consequently leading to high profitability. Nevertheless, this strategy also has a negative impact on consumers because they pay a higher price for new features that they did not request (Assink, 2006; Govindarajan and Kopalle, 2006; Yu and Hang, 2010; Kohlbacher and Hang, 2011). Consequently, these unsatisfied costumers become non-customers and seek alternatives, and this is where the market is opened for disruptive innovations. To respond to disruptive innovations, Assink (2006) and Yun & Hang (2010) argued that incumbent need to create separate units to develop disruptive solutions. Other scholars like Christensen et al. (2011) proposed that incumbents should analyse the market closely and have resources available to acquire new entrants with disruptive innovations.

Scholars have described disruptive innovations in a rather broad way which led to the usage of this concept wrongly. The development of a service can only be classified as disruptive if originated in two markets that are neglected by incumbents: low-end or new-market footholds. Low-end footholds are an open door for disruptors because incumbents are focused mainly on their high-end consumer (most profitable) and disregard the low-end consumer (less profitable). New-market footholds are a market that was non existing, therefore it needs to reach out to non-consumers with their service and turn them into consumers. Additionally, disruptors serve the low end of the market and later move upmarket to serve the mainstream market. Christensen (1997) developed a disruptive innovation model that reflects the evolution of the performance trajectory of the two types of innovation and its correlation between time and product performance (LR Exhibit 7).

In the disruptive innovation model, the performance trajectory of both type of innovation increases with the customer willingness to pay trajectory. Moreover, it shows us that the incumbent aim to satisfy high-end consumers, with high-quality products or services. As they dismiss the mainstream and low-end market, this allows a foothold for new entrants. Furthermore, the reason for both trajectories to move upmarket is related with the firms' profitability strategy. New entrant pursues low price and are motivated to invade, whereas incumbents are motivated to respond and invest to serve the high-end market (Ander & Zemsky, 2006).

There are four factors that help identify a disruption. Firstly, a *disruption is a process* in which the service first serves the low-end or new-market foothold and then process to the mainstream market, it is important to follow the evolution of the innovation to better assess which type of innovation is. Then, *disrupters tend to create a different business model from the incumbents*. Another factor is *success is not a reflection of being disruptive*, some ideas thrive and are disruptive and the contrary also occurs. The idea of "*disrupt or be disrupted*" is misleading. Incumbents should respond to disruption but continue to invest in their sustaining innovations. Moreover, if the opportunity to develop a response to the disruptive innovation arises, incumbent should separate their core business from the development of the innovation.

Regarding the response of the incumbents towards a disruption, the theory of disruption argues that when a new entrant offers a better product or service, the incumbent firms will accelerate the development of their innovation to respond quickly. Nevertheless, Christensen (1997) found that "incumbents outperformed entrants in sustaining innovation context but underperformed in a disruptive innovation context".

Many scholars argue that innovation allow firms to create competitive advantage. Nevertheless, companies battle to develop and introduce products in the markets that are innovative (Bayus, Griffin, and Lehmann, 1998). Scholars found some characteristics in the realm of innovation such as new product development process (Mahajan and Wind, 1992; Urban and Hauser, 1993; Rao, 1997; Bajaj, Kekre, and Srinivasan, 2004), product design and customer feedback (Griffin and Hauser, 1993; Srinivasan, Lovejoy, and Beach, 1997; Wittink and Cattin, 1989), diffusion of innovations (Bayus, 1993; Gatignon, Eliashberg, and Robertson, 1989; Golder and Tellis, 1997, 2004; Mahajan, Muller, and Bass, 1990; Sultan, Farley, and Lehmann, 1990), consumer innovativeness (Steenkamp, Hofstede, and Wedel, 1999), and the impact of firm capabilities on innovation (Gatignon and Xuereb, 1997; Chandy and Tellis, 1998; Dutta, Narasimhan, and Rajiv, 1999; Moorman and Slotegraaf, 1999; Srinivasan, Lilien, and Rangaswamy, 2002; Souza, Bayus, and Wagner, 2004).

Danneels (2004) argues that there is a lack of research regarding the measurement of the disruptiveness of innovations and that previous research have not assessed two other innovative characteristics: technology based and competency based. Radicalness was described by Gatignon et al. (2002) as technology based that evaluates if a performance of an innovation is faster than the existing one. Competency based assess up to what extent an innovation does not destroy competition, but strengthens it (Tushman and Anderson, 1986).

In the context of radical innovations and disruptive innovations, Rogers (2003) identified two types of consumers: early adopters and niche customer. The early adopter is "respected by peers, a more integrated part of the social system, opinion leaders, role models for other members of the social system, and less price sensitive than the rest of the market" and it is targeted by radical innovations. Whereas niche customer segment is associated with the target of disruptive innovations and is described as not being able to "influence the rest of the mainstream market, either via their opinion leadership or by being role models and are typically more price sensitive than the rest of the market".

Rasool et al. (2017) developed a five-step framework (LR Exhibit 8) to help firms identify potential disruptive products or services. The first step to assess if an idea is disruptive is to *observe the market*. Ulrich & Eppinger (2008) studied that the process for the development of traditional innovation begins with the observation of problems or dysfunctionalities in a certain service with the aim of solving them to improve customer experience. Whereas disruptive innovation tends to offer a product that is different from the one existing in the market (Danneels, 2004; Sun et al., 2008; Bass, 2012). Likewise, understanding the demands of consumers and non-consumers allows firms to offer a service that will serve their need effectively (Christensen & Raynor, 2003; Kim and Mauborgne, 2005; Schmidt & Druehl, 2008). To have this understanding, the customer base was divided into four levels: your industry (level one), in this case the customer buys the product and uses it on daily basis. The disruptive idea does not replace incumbents, the incumbent can still have a profitable niche market at the high-end foothold without being overcome by disruptive innovation (Schmidt & Druehl, 2008). Closely related industry (level two) represents the consumer that due to lack of resources or not liking the product does not buy the existing product, consequently, seeks alternatives (Danneels, 2003). The third level, related industry, represents the consumer that does not purchase the product. In the fourth level, unrelated industry, refers to the consumers that a firm never tried to offer its product (LR Exhibit 9).

The second step is referred as *latent needs*. A disruptive innovation does not offer products similar to those existing in the market. It aims to offer products for consumer needs not fulfilled by existing offers (Kohlbacher & Hand, 2011). One of the main reasons for disruptive innovation to fail is inability of the disruptors to efficiently assess the consumers' needs (Floyd & Spencer, 2004; Ogawa & Piller, 2006).

The third step *is Customer value*. Kim & Mauborgne (2005) argued that a firm needs to realistically understand which need can be satisfied and prioritise the one that will serve more customers. To examine the performance of a product compared to its rivals is used the strategic canvas commonly. Nevertheless, as disruptive innovation does not exist in the market, there is no competition nor prototype to compare with which makes this difficult for firms to assess (Gustafsson et al., 2012).

The fourth step is *idea generation* and according to Edison et al. (2013) "idea generation is the most important activity during the innovation process". Many ideas that enter the market are not successful because they were "wrong or immature ideas" (Mattson, 1985; Cooper, 1990). Hage et al. (2015) recognised nine patterns of disruption, whose insights serve as guidance for the development of disruptive products (LR Exhibit 10). Additionally, a product that features one or more of these patterns is more likely to succeed.

The fifth step is *disruptive potential scale*. Unfortunately, the tool available to assess the disruptive potential can only be used when the product is launched (Christensen et al., 2002; Anthony et al., 2008; Hang et al., 2011).

Thomond & Lettice (2002) identified three characteristics of innovation: *radical functionality, discontinuous technical standards*, and *innovation's ownership*. *Radical functionality* refers to the ability of the consumer to have a new behaviour or perform a certain task that was impossible before the development of the innovation (Abernathy & Utterback, 1978; Anderson & Tushman, 1990; Dahlin & Behrens, 2005). *Discontinuous technical standards* occurs when a firm develops an existing product but with new less costly materials or new more efficient processes. Lastly, *innovation's ownership* is an "innate but abstract characteristic, it does not have a physical manifestation" such as patents, copyrights, and trademarks. Ownership influences internally and externally the business. On the external environment, it "affects resources utilisation and development, forms of sale and products associated with innovations" (Stam, 2009). Internally, "ownership influences costs, employee, motivation, and organisational performance" (Huang, 1997). Bower & Christensen (1995) studied that disruptive innovation that enter low-end markets require adjustment in technical standards or ownership because these types of innovation aim to lower costs through the usage of new materials, new processes, or ownership structures.

Incumbents have abundant resources, high margins and loyal consumers which allow them to lead industry (Christensen and Raynor, 2003) and tend not to invest in disruptive technologies (Christensen & Bower, 1996; Christensen, 1997; Tripsas & Gavetti, 2000). Instead, incumbents prefer to innovate incrementally and invest in the development of new features for products in the high-end market. On the contrary, SMEs incur in the development of disruptions due to their flexibility, strategy development and strategic barriers. Nevertheless, even with this tendency, not many SMEs are able to succeed when they introduce the disruptive innovation into the market. There have been some internal and external factors that influence the disruptive innovation on SMEs. Regarding the external constraints, *government support* is a key element to encourage SMEs to develop disruptive innovation through providing access to external resources (Stemberg, 1999). Moreover, *external knowledge sources* are also critical because SMEs lack in resources and struggle to complete technological advances without external support. SMEs tend to engage in disruptive innovation when they have a high degree of cooperation with universities and other research institutions (Bonaccorsi & Piccaluga, 1994; Hoffman, Parejo, Bessant & Perren, 1998; Chesbrough, 2003; Zhu & Chen, 2012), and are able to collect feedback from consumers and suppliers (Davenport & Bibby, 1999; Christensen & Raynor, 2003; Von Hippel, 2005; Govindarajan, Kopalle & Danneels, 2011; Reinhardt & Gurtner, 2011; Zhu & Chen, 2012; Reinhardt & Gurtner, 2015). Likewise, *cooperation with venture capitalists* allows SMEs to engage in disruptive innovation through funding (Hoffman et al., 1998). Nevertheless, through private funding there are usually clauses leading to sudden divestment resulting in the interruption of the development of the idea (Zhang, Wu, and Chen, 2005). Venture capitalists "like to invest in high-risk, high investment, and high-yield projects, which are a core driving force of economic growth and innovation" (Kortum & Lerner, 2000; Gou & Doing, 2014). Additionally, Hallen (2008) defends that venture capitalists not only provide financing but also business experience, stable networks, and reputation.

Regarding the internal factors, one of them is the *entrepreneurs' innovation willingness* because, as Rogers (2003) and Vowels, Thirkell & Sinha (2011) defended, an entrepreneur needs to be a "charismatic individual who throws his or her weight behind an innovation to overcome resistance to ideas within the firm" contributing to the successful implementation of the innovation idea and its strategy (Bao, Yang, and Xie, 2006). As SMEs lack resources, the usage of its *internal innovation resources* will influence the success of the innovation (Cooper, 1979; Maidique & Zirger, 1984; Cooper & Kleinschmidt, 1987). "Adequate investment in R&D and innovation creates not only new products and services, but also new knowledge" (Nonaka, 1994; Grübler, 1998) "and increasing absorptive capability" (Cohen & Levinthal, 1990; Zhu & Chen, 2012) positively impact the implementation and success of the disruptive innovation. Another topic is the *independence of organisational structure for innovation*, Christensen and Overdorf (2000) defended that the organisational structure of a firm should be independent, flexible and liberal to create disruptive innovations. Lastly, the *strategic support* influences the speed of the innovation. The ability to draw an innovation strategy and successfully implement it is a critical factor for SMEs' innovation to succeed (Georgellis, Joyce, and Woods, 2000; Beaver and Prince, 2002; Slavou, Baltas, and Lioukas, 2004). Moreover, a "clear, long-term, and flexible strategy for development of technology and innovation" is also a key characteristic.

IV. Teaching Note

Statement of learning objectives

The topics that can be addressed within the discussion of this case include strategy, niche markets, and first mover issues. Subjects such as BGs, the role of the internet in the internationalisation process and disruptive innovation, will allow the students to develop meaningful insights that will enable them to analyse a real-life dilemma.

Moreover, this case can be used as the ground for in-class discussion about areas of interest such as blue ocean strategy, franchising and first mover advantage.

Additionally, the topics discussed should provide students with tools to properly evaluate the company's decision. Students are also encouraged to provide plausible justifications for alternatives beyond the ones presented.

Suggested assignments questions

These questions are offered to help students prepare for the in-class discussion.

1. What is your assessment of LUGGit's strategy?
2. What is the main driver of LUGGit's internationalisation process?
3. How do you classify LUGGit's innovation?
4. What are your recommendations for LUGGit's management?

Class Plan

1. Identify LUGGit's strategy since its foundation.
2. What is the role of the internet in its internationalisation process?
3. How do you evaluate the decision of LUGGit to expand quickly to other geographic sites?
4. How disruptive is LUGGit's innovation?
5. What are LUGGit's main problems?
6. What are the alternatives for the future development of LUGGit?
7. What are your recommendations for the management of LUGGit?

Analysis

1. Identify LUGGit's strategy since its foundation.

LUGGit's objective was to create a service totally new in the market. Its strategy was to provide a unique service to a niche market and expand quickly with the aim of having first mover advantage. LUGGit intended to serve the special needs of customers that did not want or could not carry their luggage for a given time during the day of arrival or departure in their journey. So, its business consisted of collecting, storing, and delivering luggage where and when the customer wants.

LUGGit started with the development of a website and mobile phone app which allowed customers to book for their service. Additionally, LUGGit also established two partnerships with two short term rental platforms. Every time a customer would book for LUGGit service through them, a commission was given. Quickly the LUGGit's team understood that the app had two strong drawbacks: the likelihood of potential customers to download an app they would use only once was rather small and the customer was only able to book for LUGGit's service when he/she had arrived at the destination. Therefore, to expand the business and become more visible to potential customers LUGGit established partnerships with relevant partners to be able to reach a higher number of potential customers and achieved a good reputation which eased the potential agreements with other tourism units' managers. Furthermore, the flexibility of the Keepers also plays a crucial role in the strategy of LUGGit. Keepers were allowed to collect as much luggage from different customers as they wanted. Consequently, LUGGit could increase the number of customers it served without proportionally needing to recruit more Keepers.

LUGGit's decision to offer a service that was totally unique in the market and very convenient is the cornerstone of its strategy. The customer could choose the time and place for the luggage to be collected and stored and it would be delivered back at the time and place chosen. That, aligned with cheap prices (the average price for the service in Portugal was 22€) and the option of having an insurance in the amount of 500€ or 1200€ per luggage, which transmitted a sense of security, became an appealing service to customers.

The decision of Ricardo aiming to launch LUGGit in at least 5 European capitals created a chance for them to benefit from being first mover. This advantage aligned with the establishment of partnerships intended to create conditions for LUGGit to have a high market share and brand recognition.

2. What is the role of Internet in its internationalisation process?

The Internet was the backbone for LUGGit's service, particularly in the internationalisation process. In the first instance, the Internet was the main source for reaching out and gaining customers. The customer had three options to book for the service: LUGGit's website, the mobile app or the website created by LUGGit to be linked to the website of the tourism accommodation units or short-term rental platforms. On the other hand, the Internet provided LUGGit access to network (digital media presence and access to tourism units' managers) which was a crucial step for LUGGit's growth strategy since they must establish partnerships to expand the business. Consequently, the network would lead to the access to a higher number of customers, and growth opportunities which were critical for its internationalisation and its ambition to rapidly expand to other European geographic sites during 2022.

The use of Internet was particularly helpful in the acceleration of the internationalisation process because this type of business can grow and expand to foreign markets without having a physical presence in the new geographic sites. The monitorisation of the business could be mainly done using Internet and only requires frequent dislocation of the CEO to the different geographic sites in the beginning of entering a new market with the aim of establishing partnerships and supporting the Keepers. Even the Keeper's support and training was just needed in the beginning because the flexibility of the Keepers, not only LUGGit did not need to frequently recruit more, but also the Keepers that worked for them are known already. Moreover, the support that the Keepers needed could be given 24/7 even at distance.

The Internet provided other significant advantages. According to the literature review, the Internet provides information that can be used to obtain competitive advantage and have a risk-controlled expansion. These factors contribute for a faster internationalisation.

Moreover, the Internet also provides meaningful insights such as, tracking the consumer's profile, consumer's behaviour and fast feedback from customers. These not only mitigate potential problems but also provide an understanding of where the service can be ideally launched in the future.

3. How do you evaluate the decision of LUGGit to expand quickly to other geographic sites?

The decision of LUGGit to internationalise rapidly can be evaluated in three different ways. On the one hand, the decision to expand quickly can be considered a good decision due to the characteristics of the service. A firm with more resources can develop a similar software and combined with the existence of good logistics (cars, drivers, and warehouses) will allow the company to easily imitate LUGGit's service and provide a similar service. By entering several foreign markets quickly, LUGGit wants to benefit from being the first mover. LUGGit is the first in the market to offer a service with these characteristics. A fast internationalisation effort enables them to establish a strong brand name recognition and have substantial market share before rivals enter the market. Moreover, when competitors will try to offer the same service, LUGGit is prepared to establish partnerships with competitors, therefore eliminating the possibility of having direct competitors.

On the other hand, the fast expansion can be evaluated as too ambitious because LUGGit is a clear example of a born global firm. Consequently, one of the common characteristics is the lack of resources. The lack of financial resources can be a strong disadvantage for LUGGit to be able to expand quickly enough to obtain an advantage from being a first mover. LUGGit might be constraint by it and can be forced to have a more sustainable internationalisation process. In this scenario, a firm with more resources can then develop a similar software and offer the same service. Thus, the possibility of these competitors to establish partnerships seems farfetched. These firms will be interested in overcoming LUGGit and gain competitive advantage and market share.

Furthermore, an alternative perspective can be one in which the market responds unfavourably to the launch of this service. If for different reasons, such as the pandemic, demand does not materialise as expected, the market might not expand as LUGGit is planning and later entrants can benefit from LUGGit's failure.

4. How disruptive is LUGGit's innovation?

To be classified as disruptive an innovation needs to originate in one of two markets: low-end or new market. When disrupters can enter the low-end market, it is because incumbents are mainly focused on serving and developing new product features for the high-end consumer (most profitable) and dismissing the low-end market consumer (less profitable). The new market is a market that does not have any competition. In this case LUGGit provided a unique service that was non existing.

Furthermore, a disruptive innovation tends to create new customers and change the market's dynamics which leads to the creation of a different performance metrics and a change in how the industry operates. LUGGit provided a service that was new in the market, therefore it had to create new customers for its offer. Additionally, before the launch of LUGGit, the existing offer for luggage storage required the customer to bring the luggage to the storage facility. Since LUGGit collected, stored, and delivered the luggage back to the customer we can say that it changed how the industry operates.

Additionally, Rasool et al. (2017) five step framework helps to identify the disruptive potential of an innovation. A firm should initially *observe the market* and when an innovation is disruptive it tends to create and offer a product that is different from the existing in the market. In this regard, LUGGit developed and offered a service that was totally new in the market. Moreover, the disrupters aim to offer a service that the customers need but it is not fulfilled by the existing offers in the market (*latent needs*). Taking into consideration the service that LUGGit provided, not only it offered a service that was convenient and with high demand but also the existing products that provided storage luggage did not totally fulfilled the customer's needs. The framework also provides insights on the importance of realistically assessing the need of the customers to satisfy and prioritise the customer needs to serve a higher number of customers (*customer value*). LUGGit was also able to realistically assess the needs of the customer and adapted the service to serve a higher number of customers through focusing mainly on the implementation of agreements with tourism unit's managers and platforms. Then, the most important step in the framework is the *idea generation*. Scholars have drawn the attention to the fact that many ideas are not successful when entering the markets because of "wrong or immature ideas", consequently a patterns framework (LR Exhibit 10) was developed to evaluate the disruptive potential of an innovation and its likelihood of succeeding when entering the market. Likewise, regarding the idea of LUGGit, it matches three out of the nine patterns: expand market reach, shorten value chain, and turn product into platform. Consequently, it is possible to assess that the there is a high likelihood of this idea and business strategy to succeed in the market. The last step is *disruptive potential scale*, nevertheless this tool can only be used when the service has already been launched in the market. At the date of the case, it is not possible to conclude on whether

LUGGit successfully launched its service or not. Although the internationalisation process has begun, and in the beginning of 2022 they planned to provide the service in at least five European cities, only time will give us the answer.

In conclusion, after performing this analysis, it is correct to classify LUGGit's innovation as disruptive.

5. What are LUGGit's main problems?

It is possible to identify three main problems in the case study of LUGGit. The first problem is the clear lack of resources, especially financial ones. As previously said, LUGGit is a born-global firm and one of the common characteristics of such firms is the lack of resources. This is still a fragile dimension, although LUGGit was able to obtain financial support from the Portuguese government, the EU and private entities and was preparing for another round of investments. On the one hand these investments and support might not come when planned which will highly influence the pace of the geographic expansion. Additionally, it might not be sufficient to support the growth of the business. As presented in the case study, the fixed costs of entering new markets are of 5 000 Euros per month which are considerably high fixed costs. If the service becomes present in additional five cities, they will have fixed costs around 30 000 Euros per month.

Another perspective is that LUGGit's idea is a good idea. There is a high demand and growth opportunities which makes this type of business very appealing to other companies. Besides, a firm with more resources than LUGGit might enter the market and be able to expand faster than LUGGit, which would not allow LUGGit to obtain first mover advantage. Consequently, LUGGit might fail, and other companies will benefit from LUGGit's idea.

The third problem is the dynamics of the markets. LUGGit's idea has what it takes to succeed in the market, but one can question whether this is the right time to launch the service or not. There are examples of first movers that, due to the reacting of the markets, end up failing. Following Rogers (1962) adopters' categories, only 2.5% are more willing to take risk and adopt a new idea just because it is new (TN Exhibit 1). In this scenario, once again the late entrants can benefit from the idea and the feedback about the service. Also, a higher capacity to invest on R&D and launch a successful service when the market is prepared to expand may be a key advantage for stronger competitors.

6. What are the alternatives for the future development of LUGGit?

There are three main options for the future development of LUGGit: to pursue a blue ocean strategy, to develop a franchising model or to sell the business. Two of the main problems identified previously were the lack of financial resources and the possibility of being outperformed by future competitors.

On the one hand, a way to overcome these problems is to pursue a blue ocean strategy. LUGGIt has already created an uncontested market and created and captured new demand. It now has the endeavour of making competition irrelevant, break the value-cost trade-off and go for differentiation and low cost simultaneously.

By differentiating and creating a cost advantage, LUGGit will make the competition irrelevant and break the value-cost trade-off. LUGGit can create a service that is seen as a Premium service with a low cost. At the date of the case, the service provided by LUGGit can be considered of high quality because the service is always on time, flexible, and no customer service problems have arisen. Additionally, the strategy of establishing partnerships with well-known tourism accommodation units or with short-term rental platforms allowed LUGGit to have a good reputation in the markets it operates. Moreover, the current price of the service can be considered low. On the short-term it can be challenging to sustain the prices, but on the long-term this can be a very important competitive advantage.

The partnerships aligned with the differentiation and cost strategy will allow LUGGit to obtain sufficient market share and brand awareness which will be entry barriers for potential competitors. Moreover, by providing a Premium service at a lower cost it will break the stigma of value-cost trade-off.

Franchising can be an alternative. The franchising consists in a business that provides a licensing agreement to a franchisee. The franchisee will have access to the business name, process, and business knowledge in exchange for an initial fee and ongoing royalties. One can think that preventing rivals from entering the market is a challenging task, especially when the type of service can be implemented globally. Therefore, LUGGit should be interested in franchising its service which will help them to have a faster geographic expansion.

The franchise model establishes rigid regulations for the franchisee, this way the franchisor, LUGGit, will be able to guarantee that a service provided under its name will be of high quality and consequently will strengthen positively its brand awareness and its presence globally. Additionally, the franchise initial fee and ongoing royalties would give LUGGit an additional source of income and will lead to more financial stability.

The third alternative would be for LUGGit to be sold. This option could be considered in case the other alternatives do not work or if LUGGit wants to play safe and allow a firm with more resources to acquire LUGGit. By selling LUGGit to a company with big pockets it is probable that the service can grow as envisioned. Consequently, there would be a materialisation of the value of the idea and this service would continue to expand under LUGGit's name and would not be outperformed by a competitor.

7. What are your recommendations for the management of LUGGit?

From my perspective there are two recommendations for the management of LUGGit: one related with the European market and another for the other markets. Regarding the European markets there were two possible paths: a more sustainable expansion or a more ambitious one. As presented in the Case and Literature Review, born-global firms are scarce in resources. Therefore, from the perspective of the company's structure and resources, it is more realistic to opt for a sustainable growth by launching the service in fewer cities per year. However, this decision might not be viable from the commercial point of view. A slower pace in the internationalisation process can dictate the failure of the company if LUGGit is being overtaken by other firms. On the other hand, a faster internationalisation pace will allow LUGGit to obtain a higher market share and create entry barriers for potential competitors. Therefore, even with the lack of financial resources, I would recommend LUGGit to continue with its fast internationalisation path. Additionally, the fast internationalisation process in the European market should be aligned with the pursue of the blue ocean strategy. This way, LUGGit would be focused in taking advantage of being the first mover in a market where it is already operating and use the scarce resources they have in only one market.

LUGGit is planning to establish partnerships with companies in the near future. Thus, concerning the other markets, my recommendation is for LUGGit to follow the franchising model. This ownership business model seems more suitable taking into consideration the structure and resources of LUGGit. Moreover, there is a high possibility for competitors to try to enter this market and overtake LUGGit. Also, it is very unlikely that LUGGit will be able to reach markets outside European before a rival.

Therefore, with the aim of sustaining a competitive advantage, LUGGit should implement the franchise model. Firstly, as LUGGit can be described as high-quality convenient service for accessible prices, this business ownership model will appeal to companies that want to enter this market they can do it more easily because this agreement will give them access to LUGGit's name and business model. Moreover, as this model typically establishes strict and detailed rules, LUGGit would assure that a service performed under LUGGit's name is of high-quality and would strengthen its global position and brand awareness. Likewise, LUGGit would be able to grow faster internationally in every market. Finally, the franchise fees tend to be high, which would give LUGGit more financial stability.

To conclude, my recommendation is for LUGGit to follow a mix strategy: on the European market it should pursue a blue ocean strategy and on the other markets it should pursue the franchising. The LUGGit team would still be focused on the rapid launch of their service in Europe to benefit from being the first mover. On other markets that they would not be able to reach early, LUGGit could prevent direct competitors and still be present globally at a lower cost through the franchise model. By pursuing these two strategies simultaneously, LUGGit will sustain a competitive advantage, create high entry barriers for potential competitors and hopefully succeed.

V. Conclusion

The development of this Dissertation provided several insights on the difficulty for a small firm to be a first mover in a niche market. Additionally, this difficulty increases when the unique service provided is very convenient, generates high demand, and can be easily imitable. All this makes it attractive for potential competitors to enter the market.

The Case Study offered an overview of the company's journey and its future objectives. With the information available it is possible to assess that LUGGit understands that its service is appealing to future competitors, and that their idea has growth potential if successfully launched.

Additionally, the Literature Review allowed me to intertwine theoretical topics with the main focus of the case study, namely born-global firms, the impact of internet on the internationalisation process and disruptive innovation. The interconnection of these theoretical concepts allowed me to better understand the challenges LUGGit might face due to its structure and resources.

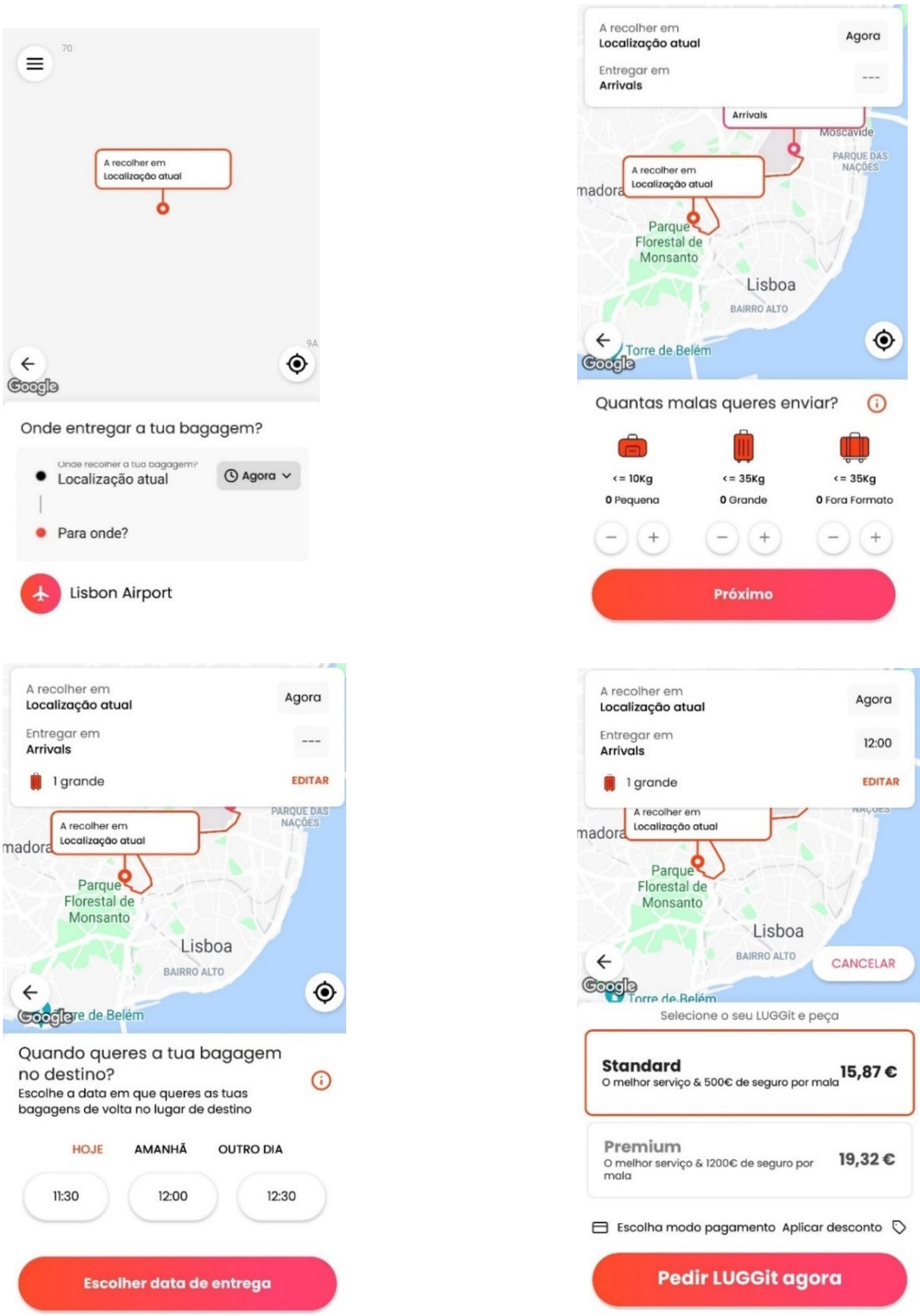
Furthermore, the theoretical topics discussed in the Literature Review offered me sufficient tools to explain my reasoning behind each class plan question and, more importantly, allowed me to present other alternatives and recommendations beyond the ones that are being explored by LUGGit at the date of this Case Study.

Finally, my Dissertation provides sufficient practical and theorical tools to be applied to different scenarios and will hopefully help students develop decision-making skills valuable for their academic path and management career. On what the future success of LUGGit's idea is concerned only time will tell.

VI. Appendixes

Case Study Exhibits

Exhibit 1. Steps to book LUGGit's service through the mobile phone app.



Source: LUGGit's mobile phone app.

Exhibit 2 – Estimated costs, year 2021.

	€	%
Human Resources	200000	63%
Infrastructure (Tech and physical)	20000	6%
Marketing	20000	6%
Others	80000	25%
Total costs	320000	

Source: company information.

Exhibit 3 - Prices from Dropandlock.

	Small	**Medium**	**Large**
First Period / 1st Hour	1.50€	2.00€	2.50€
Second Period / 2nd Hour	0.50€	0.50€	1.00€
Third Period / 3rd to 6th hour	2.50€	3.00€	4.00€
Fourth Period / 7th to 24th Hour	3.50€	4.50€	5.50€
Per day / After 24h	8.00€	10.00€	13.00€

Cumulative Values

Source: Dropandlock website.

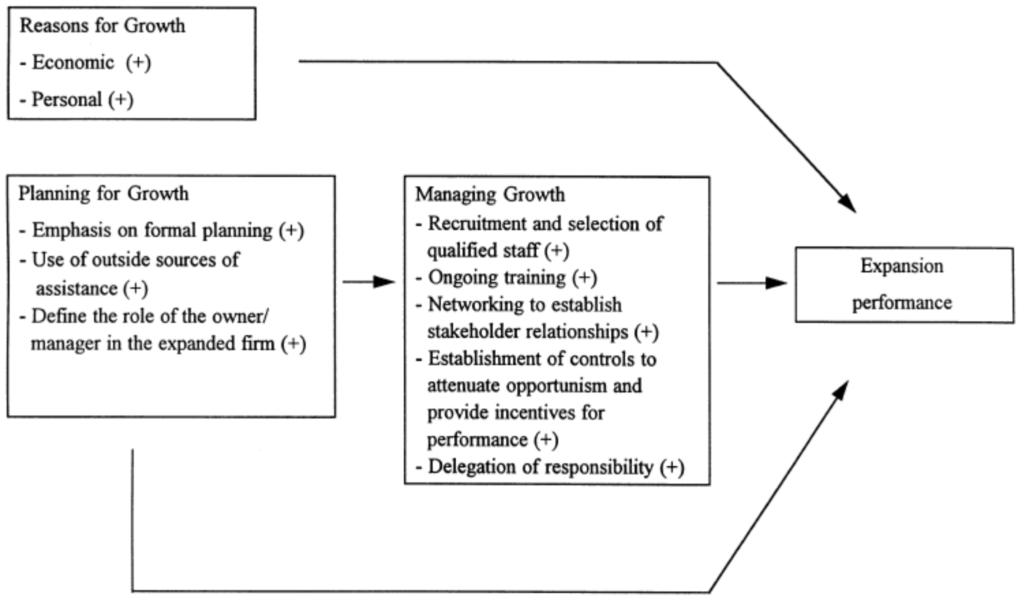
Exhibit 4 - Prices from Luggage Storage & Cowork at Lisbon City Centre.

Time	**Cost**
Up to 3 Hours	3.50€
From 3 to 7 Hours	6.5€
From 7 Hours to 12 Hours	8.00€
Per day	10€
Weekly storage	35.00€
Monthly storage	100.00€
Extra day fee	5.00€
Price per item	2.5€

Source: Luggage Storage & Cowork website.

Literature Review Exhibits

LR Exhibit 1 – Preliminary theoretical model of the antecedents of effective small business geographic expansion.



Source: Greening & Barringer (1998).

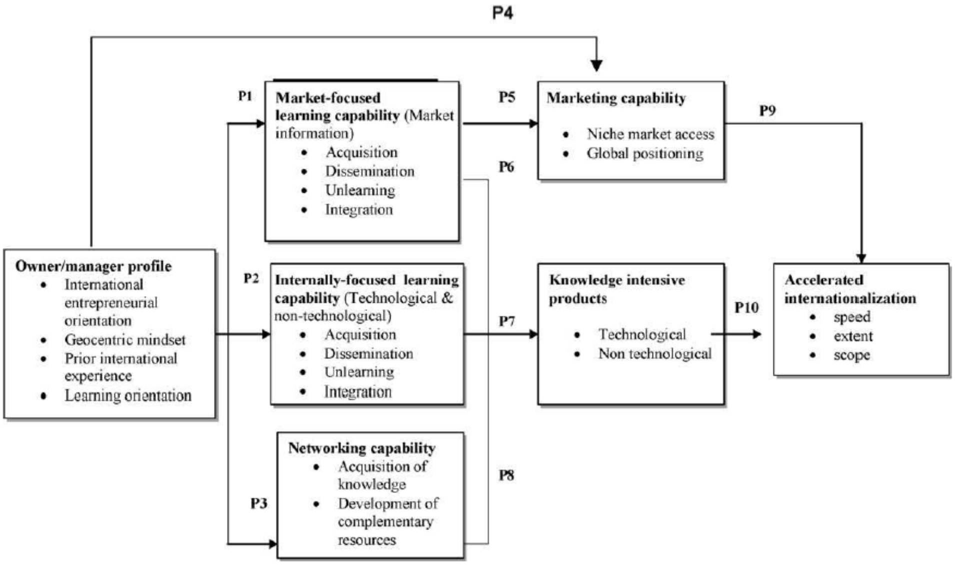
LR Exhibit 2 – Patterns and difference in the internationalisation process.

	Traditional	**Born global**	**Born-again global**
Motivation	Reactive, adverse domestic market conditions, unsolicited orders, need to generate revenues, product management	Committed management, pursue niche markets, more proactive	Infusion of new human and/or financial resources, access to new networks, acquisition of new products knowledge, critical incident
Objectives	Survival by increasing sales volume, higher	Gain "first-mover" advantage, achieve rapid entrance in	Appear to exploit new networks and resources

	market share, extend product life cycles	niche markets or segments	
Pattern and Pace	First focus on domestic markets, enter psychically markets, concentrate one small number of key markets, adapting their product to the need of the market	Domestic and international expansion concur, enter foreign markets that are not psychically close, undertake global products development, maintain strong intellectual property rights	Explore the domestic market for a long period and then proceed to a rapid internationalisation
Market entry	Conventional approach with agents or distributors, direct to consumers	Networking with suppliers and other channel-partners, integrate client's existing channels, licensing agreements, joint ventures	Network Existing channels
Strategic approach	Ad hoc reactive	Structured approach	Systematic approach
Financing	Bootstrap into new markets	Venture capital and Initial public offering	Capital by parent company

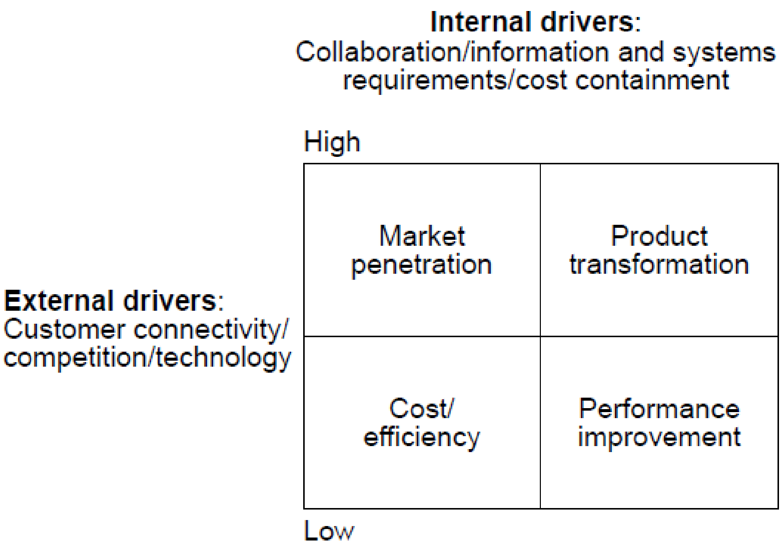
Source: Bell et al (2003).

LR Exhibit 3 –The proposed dynamic capability model of born global firm accelerated internationalisation.



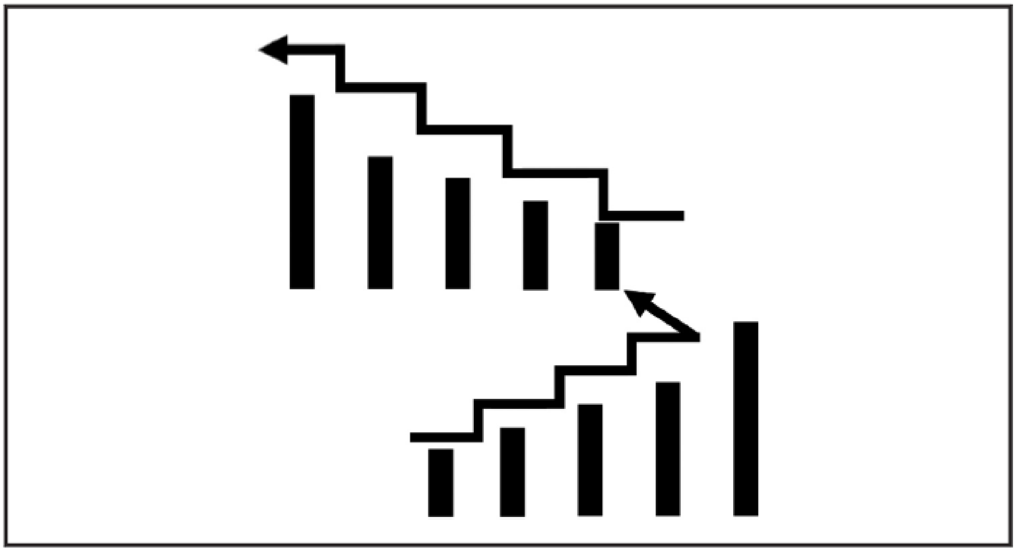
Source: Weerawardena et al. (2007).

LR Exhibit 4 – Conceptual model of internet business uses.



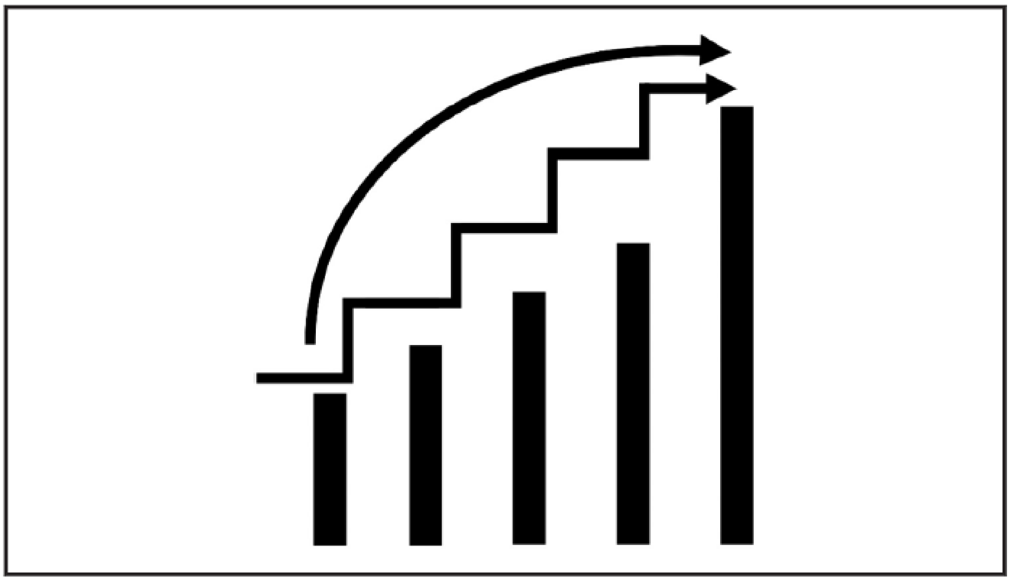
Source: Cronin (1996).

LR Exhibit 5 – Rasool et al. (2017) performance trajectory of disruptive innovations.



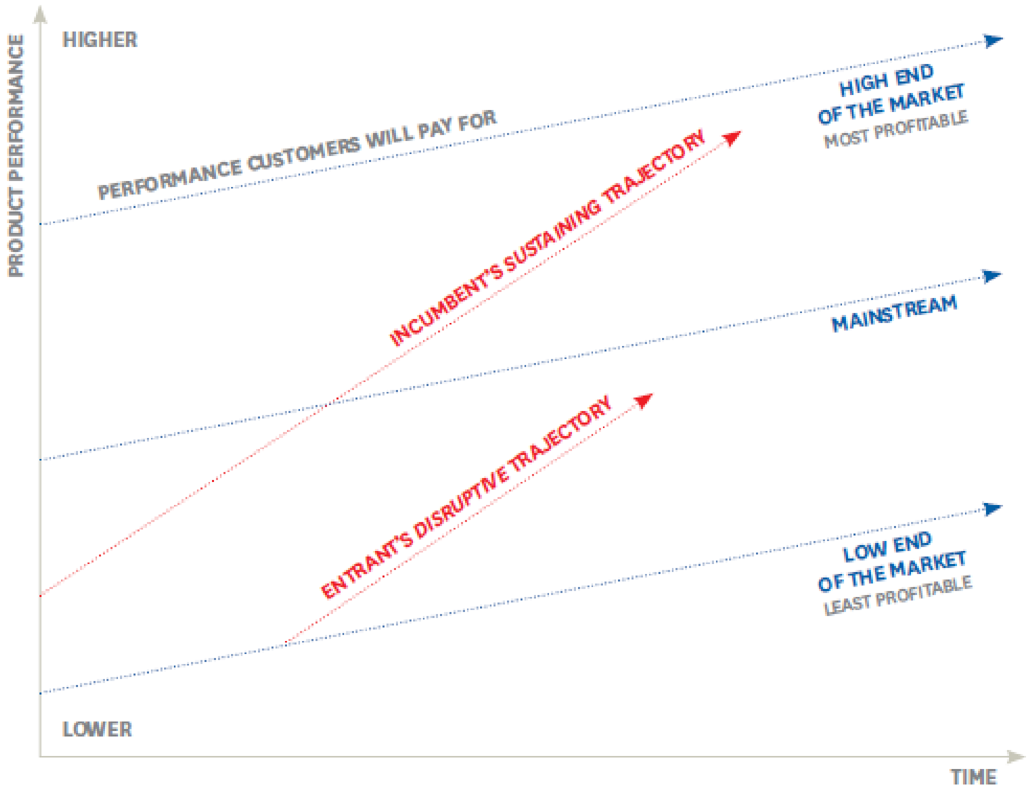
Source: Rasool et al. (2017).

LR Exhibit 6 – Performance trajectory of sustaining innovations.



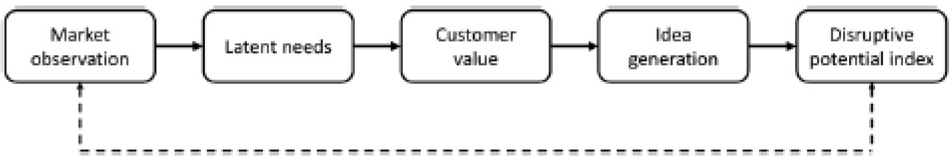
Source: Rasool et al. (2017).

LR Exhibit 7 – Disruptive innovation model.



Source: Christensen (1997).

LR Exhibit 8 – Proposed framework.



Source: Rasool et al. (2017).

LR Exhibit 9 – Example of the four levels of customers: the fitness tracker industry.

Customer level	Example
Level one: Your industry	Fitness device users, athletes, fitness enthusiastic
Level two: Closely related industry	Mobile phone users who use apps for fitness tracking
Level three: Related industry	Outdoor sports player, people on diets
Level four: Unrelated industry	Heart/diabetic patients, people in late 40s, everyone else

Source: Rasool et al. (2017).

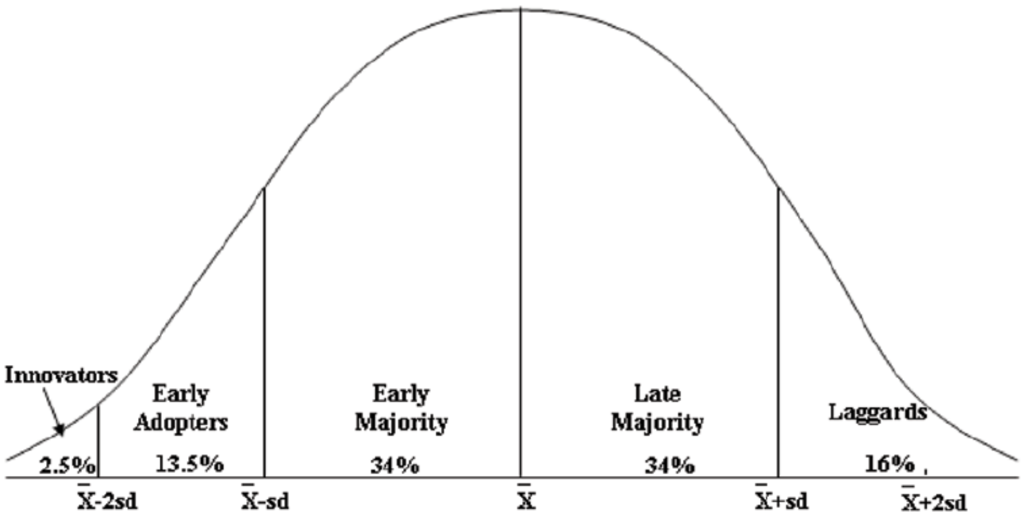
LR Exhibit 10 – Patterns of market disruption.

Pattern	Explanation	Example
Expand market reach	Connecting fragmented buyers to sellers	Amazon, eBay, Netflix
Unlock adjacent assets	Cultivating opportunities on the edge	Uber, Airbnb
Turn product into platform	Providing a foundation for others to build upon	Open Bazaar, Blockchain, Ujo Music
Distribute product development	Mobilising many to create one	TripAdvisor, Wikipedia
Unbundle product and service	Giving you just what you want, nothing more	Craigslist, iTunes, Kindle
Shorten value chain	Transforming fewer into greater value outputs	Ikea, Dell Computers, digital cameras, Airlines
Align price with use	Reducing upfront barriers to use	Salesforce.com, Netflix
Converge products	Making 1+1 > 2	Smartphones, iPad, Nintendo Wii

Source: Hagel et. al. (2015) and Denning (2016).

Teaching Note Exhibits

TN Exhibit 1 – Adopters' curve.



Source: Rogers (1962).

VII. References

Articles

Greening, D. W., Barringer, B. R. 1998. "Small business growth through geographic expansion: a comparative study", *Journal of Business Venturing*, vol. 13, pp. 467-492.

Pellegrino, J. M., McNaughton, R. B. 2016. "Beyond learning by experience: The use of alternative learning processes by incrementally and rapidly internationalizing SMEs", *International Business Review*, vol. 26, no. 4, pp. 614-627.

Pellegrino, J. M., McNaughton, R. B. 2015. "The Co-evolution of Learning and Internationalization Strategy in International New Ventures", *Management International Review*, vol. 55, pp. 457-483.

Barkema, H. G., Drogendik, R. 2007. "Internationalising in small, incremental or larger steps?", *Journal of International Business Studies*, vol. 38, pp. 1132-1148.

Greening, D. W., Barringer, B. R., Macy, G. 1996. "A Qualitative study of managerial studies facing small business geographic expansion", *Journal of Business Venturing*, vol. 11, pp. 233-256.

Knight, G. A., Liesch, P. W. 2016. "Internationalization: From incremental to born global", *Journal of World Business*, vol. 51, pp. 93-102.

Weerawardena, J., Mort, G. S. Liesch, P. W., 2007. "Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective", *Journal of World Business*, vol. 42, pp. 294-306.

Knight, G. A., Cavusgil, S. T. 2004. "Innovation, organizational capabilities, and the born-global firm", *Journal of International Business Studies*, vol. 35, pp. 124-141.

Efrat, L., Shoham, A. 2012. "Born global firms: The differences between their short- and long-term performance drivers", *Journal of World Business*, vol. 47, pp. 675-685.

Freeman, S., Edwards, R., Schroder, B. 2006. "How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization", *Journal of International Marketing*, vol.14, no.3, pp. 33-36.

Bell, J., McNaughton, R., Young, S., Crick, D. 2003. "Towards an Integrative Model of Small Firm Internationalisation", *Journal of International Entrepreneurship*, vol. 1, pp. 339-362.

Etemad, H., Wilkinso, I., Dana, L.P. 2010. "Internatization as the necessary condition for internationalization in the newly emerging economy", *Journal of International Entrepreneurship*, vol. 8, pp. 319-342.

Hamill, J. 1997. "The Internet and international marketing", *International Marketing Review*, vol. 14, no. 5, pp. 300-323.

Sinkovics, N., Sinkovics, R. R., "Bryan" Jean, R. 2013. "The internet as an alternative path to internationalization?", *International Marketing Review*, vol. 30, no. 2, pp. 130-155.

Christensen, C. M., McDonald, R., Altman, E.L., Palmer, J. 2016. "Disruptive Innovation: Intellectual History and Future Paths", *Harvard Business School*.

Rasool, F., Koomsap, P., Afsar, B., Panezai, B. A. 2018. "A framework for disruptive innovation", *Foresight*, vol. 20, no. 3, pp. 252-270.

Patel., P. C., Criaco, G., Naldi, L. 2018. "Geographic Diversification and the Survival of Born-Globals", *Journal of Management,* vol. 44, no. 5, pp. 2008-2036.

Sundström, A., Hyder, A. S., Chowdhury, E. H. 2021. "Market-oriented business model for SME's disruptive innovation internationalization", *Marketing Intelligence & Planning*, vol. 39, no. 5, pp. 670-686.

Christensen, C. M., Raynor, M., McDonald, R. 2015. "What is disruptive innovation?", *Harvard Business Review*.

Nagy, D., Schuessler, J., Dubinsky, A. 2016. "Defining and identifying disruptive innovations", *Industrial Marketing Management*, vol. 57, pp. 119-126.

Chen, J., Zhu, Z., Zhang, Y. 2017. "A study of factors influencing disruptive innovation in Chinese SMEs, *Asian Journal of Technology Innovation*, vol. 25 no. 1, pp. 140-157.

Govindarajan, V., Kopalle, P. K. 2006. "Disruptiveness of innovations: measurement and an assessment of reliability and validity", *Strategic Management Journal*, vol. 27, pp. 189-199.

Guo, J., Pan, J., Guo, J., Gu, F., Kuusisto, J. 2019. "Measurement framework for assessing disruptive innovations", *Technological Forecasting & Social Change*, vol. 139, pp. 250-265.

Websites

https://luggit.app/