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## **The impact of RBV on value creation in the pharmaceutical industry.**

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Master in Business Administration

Supervisors:

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ISCTE-IUL

MSc António Ângelo Machado Matos Pereira, Invited Professor,  
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May, 2023





BUSINESS  
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Department of Marketing, Strategy and Operations

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## **Resumo**

A teoria da visão baseada em recursos aborda toda a complexidade da adoção de métodos estratégicos em ambientes competitivos, tal como a indústria farmacêutica, em que há uma luta constante para adquirir vantagem competitiva e para que as empresas se diferenciem das demais. Posto isto é importante compreender o impacto que a visão baseada em recursos pode ter na indústria farmacêutica, e como pode gerar vantagem competitiva para as diferentes empresas. A metodologia para a recolha de dados foi a realização de entrevistas semiestruturadas com base em perguntas que surgiram ao longo da revisão da literatura, onde foi usado o software MAXQDA para análise e codificação do corpus de cada entrevista. Concluiu-se que este tipo de estratégia tem diversos impactos positivos a nível interno e externo da indústria farmacêutica, desde a criação de ambientes mais competitivos através do sucesso da inovação, a alocação de recursos da melhor forma para satisfazer as necessidades da empresa e do mercado e claramente um maior conhecimento interno das fraquezas de cada empresa, apostando na melhoria contínua.

**Palavras-chave:** Estratégia, Indústria Farmacêutica; Vantagem Competitiva; Gaps de mercado;

**Classificação JEL:**

**M190** - Administração de Empresas: Outros

**I190** – Saúde: Outros



## **Abstract**

The theory of the resource-based view addresses all the complexity of adopting strategic methods in competitive environments, such as the pharmaceutical industry, in which there is a constant struggle to acquire competitive advantage and for companies to differentiate themselves from others. Having said this, it is important to understand the impact that the resource-based view can have on the pharmaceutical industry, and how it can generate competitive advantage for different companies. The methodology for data collection was the realization of semi-structured interviews based on questions that emerged throughout the literature review, where the MAXQDA software was used for analysis and coding of the corpus of each interview. It was concluded that this type of strategy has several positive impacts at the internal and external levels of the pharmaceutical industry, ranging from the creation of more competitive environments through the success of innovation, the allocation of resources in the best way to meet the needs of the company and the market, and clearly a greater internal knowledge of the weaknesses of each company, investing in continuous improvement.

**Keywords:** Strategy, Pharmaceutical Industry; Competitive Advantage; Market Gaps;

**JEL Classification:**

**M190-** Business Administration: Other

**I190** – Health: Other



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## **List of Acronyms**

**AICEP** - Agência para o Investimento e Comércio Externo de Portugal

**KPI** - Key Performance Indicators

**PI** - Pharmaceutical Industry

**RBV** - Resource Based View

**R&D** - Research and Development

**USA** - United States of America

**VRIO** - Value, Rareness, Imitability and Organization

**WHO** - World Health Organization





# Chapter 1 - Introduction

## 1.1 Context

With the evolution of technology over the years, there is an increasing focus at company level on achieving and managing to outline the best strategy that allows them to achieve a long-term competitive advantage, making the word “strategy” increasingly used and easy to understand for everyone.

Markets are constantly changing and cycles are shorter, change must quickly occur and companies must be able to adapt to it, either through structural reorganisation or by gaining new resources, understanding what resources or capabilities they must invest in and absorb to achieve success. The increase in competitiveness, the technological development of recent years and the economic and social changes that the entire world economy has undergone have forced companies to worry about their future and the instability it may bring.

An example of this is the Pharmaceutical Industry (PI), which has been growing and with the emergence of the pandemic due to Covid-19, there were huge changes in the ways various companies acted worldwide, and the PI was no exception. It was one of the most affected areas and the one that had to act fastest to meet the needs of the population, whether in terms of medical equipment, drugs or health products.

The Resource Based View (RBV) theory addresses all the complexity of adopting strategic methods in competitive environments, such as PI, where there is a constant struggle to acquire competitive advantage and for companies to distinguish themselves from others. (Holdford, 2018) It is able to provide a theoretical basis in order to assess innovations in PI, and what impact they have both on the community and on companies themselves, to what extent innovations are no longer considered an innovation, and whether increasingly achieving those same innovations becomes more difficult, expensive and rare.

Over time the molecules studied are increasingly scarce making the existence of possible new uses rare, which will impact on the creation of competitive advantage. Currently in PI the most usual way to achieve competitive advantage is the creation of an innovative drug/health product (Gonçalves, 2016). This allows companies to stand out from the rest, as they will have a medicine/health product that no other will have, either for a particular disease or to meet a need of users. This has often happened when the goal is to reduce the number of drugs taken by older people and people with various pathologies, such as the case of Triveram, which was

created by Servier in 2022 and allows users suffering from high cholesterol and hypertension to combat these pathologies with a single drug.

One should also take into consideration the fact that PI encompasses hundreds of pharmaceutical companies, where their focus diversifies greatly due to the opportunities in the pharmaceutical market. We have companies that are dedicated only to the production of generic drugs, others branded drugs. Companies that are more dedicated to dermocosmetics, others to childcare, others to oncological medication, among many more options. It is difficult to compare companies directly, as often the focus is not the same, and although they are part of the pharmaceutical industry, they are not necessarily direct competitors (Yoon *et al.*, 2018).

The implementation of efficient and adequate strategies for each company according to its needs, in external level, such as the needs of its clients and the market, as well as at an internal level, such as the well-being of the whole company and the contentment of its employees, contributes to a global improvement of its performance.

PI discovers, develops, produces and markets medicines and healthcare products and is a sector subject to extensive governance that includes a variety of laws and regulations governing all processes from the discovery of a molecule to the marketing of products. (Lai *et al.*, 2012) It is therefore important to take all regulations into account when creating a strategy in order to achieve competitive advantage.

In this research we focus on Resource Based View (RBV) and how can the PI companies use it to analyse and interpret their resources in order to obtain competitive advantage. This type of strategy focuses on the internal resources of each company, which are responsible for its performance and success (César *et al.*, 2012).

## **1.2 Research Problem**

It is important to understand the need for the existence of Value, Rareness, Imitability and Organization (VRIO) resources, discussed during the dissertation, in which will allow companies to achieve competitive advantage. It is at this stage that it becomes essential for companies in the PI to invest in resources and capabilities in order to make it easier to reach the market gaps. It is necessary understand which resources should be acquired and which capabilities are needed to be able to work in the best way with the acquired resources in order to gain competitive advantage. Competitive advantage does not only depend on the resources of each company, but on the way they are used and worked on, through the capabilities that each company also have (Guedelha & Friedli, 2018).

As previously mentioned, it is known that the competitive advantage of a company depends on the set of human and physical resources and respective capabilities of each company. It is therefore necessary that companies have heterogeneous resources and capabilities, developing specific capabilities that allow the company to compete more profitably. The focus is above all on the company's resources and on the way it acquires and manages them, making better use of them.

RBV argues that the long-term success of any business innovation is directly related to its internal resources and its ability to use those resources to develop a competitive advantage over its competitors in the marketplace. It also argues that companies achieve competitive advantage by accumulating and using resources in ways that meet the needs of their consumers and that are difficult to substitute or imitate. It is not enough just to be innovative, much more is needed, such as the difficulty in imitating, the contextual factors surrounding the implementation of the innovation, the benefits it can bring to the community and the company (Holdford, 2018).

With the use of a RBV strategy the aim is to achieve competitive advantage. This advantage occurs when the company is able to use its resources and capabilities to offer something new and valued that differentiates itself from the rest of the competition. Competitive advantage is seen as a positioning of a company inserted in the PI in relation to its competitors, describing a mental image of innovation by its consumers. When a layperson looks at a company that presents competitive advantage over others, they have a clear, distinct and valued image of that company.

In order to obtain financial benefits it is necessary for this competitive advantage to be maintained over time, something that is possible through inimitable resources and defending the efforts that its competitors make to diminish its competitive advantage. (Hunt, 2013) The competitive advantage brings with it a constant struggle between companies in the same market, because all aim to achieve the same with the use of different skills. It is here that the relevance of the theme for this research arises, understanding if the use of a RBV strategy will in fact bring competitive advantage over other companies, what is the impact of this strategy and how we can maintain a competitive advantage with its use.

As previously discussed, it is known that currently the most usual way to obtain competitive advantage is to invest in R&D in order to create an innovative medicine/health product, so this is one of the methods that more companies in PI are investing in obtaining resources that allow a deep and improved research (Apifarma, 2018). However, not all have sufficient capital for this investment, becoming imitators of others, by creating generic drugs after the fall of patents, here it is highlighted the fastest generic to be launched and its price to gain competitive

advantage (Ferreira Da Silva *et al.*, 2017). The type of resources and capacities to invest clearly differs according to the type of company, however the biggest issue is the correct and most beneficial investment for the company in question.

In the case of companies that invest in generic drugs, it is known when a drug will lose its patent, so it is easier to know when they can launch their generic and work to achieve that date with the resources and capacities they have. However, the company holding the patent knows when its loss and consequent loss of profit vis-à-vis generics will occur, so it invests heavily again in R&D of molecules with the potential to become innovative medicines and replace the old ones (Olk & West, 2020).

### **1.3 Objectives and Research Questions**

The chosen theme addresses the existence of a strategy in PI and has as its main objective to understand the impact that the RBV strategy can have on PI and how it can generate competitive advantage for the different companies within PI. Within this objective, we can define others that aim to better understand the structure and themes addressed throughout the research:

- Analyse how the RBV can improve the internal process of each company, and what are the risks inherent to the adaptation of such a strategy;
- Understand which tools should be used by different companies to bridge market gaps.

According to the objectives addressed it is necessary to define the research questions of the research, these are:

RQ1. What impacts can be expected from the use of a RBV strategy in the strategic definition of a pharmaceutical company?

RQ2. How can the RBV contribute to the success of an PI company?

RQ3. What are the benefits that the implementation of a RBV strategy can bring to a pharmaceutical company?

RQ4. What are the risks experienced by PI firms when using RBV?

RQ5. What RBV tools can companies use to bridge market gaps?

### **1.4 Dissertation Structure**

In order to achieve the objectives previously addressed, the research will have the following structure:



The first chapter is the literature review, where topics related to the problematic of the research question are discussed, through a theoretical and consistent analysis of the same, we seek to understand what has been studied so far and what the limitations are in order to overcome them during our work. The second chapter deals with the research model where a connection is made between the research objectives and the research questions, the information found in the literature review is addressed, and how the research questions were elaborated in order to answer our research objectives is explained.

The third chapter deals with the methodology of the research, where a theoretical approach will be made to the methodology of the entire research, how the data was collected, the type and number of participants in our interviews, the procedure and technique for processing the information. In the following chapter, the fourth, there is the presentation of the collected data and subsequent discussion, where there is a correlation between the bibliography and the data.

In the fifth chapter we will try to conclude our research with the key ideas that stood out the most and made sense throughout the work, in order to answer our research questions. Last but not least, it will be necessary to understand and elaborate on the limitations obtained during the completion of our work, the contributions it will make academically and professionally, and the suggestions for future relevant research.



## Chapter – 2 Literature Review

### 2.1 Resource Based View

Strategy has been gaining a greater importance in recent years, and increasingly, different organisations from various sectors have been focusing on strategy planning. (Mai, 2017). It is necessary to reflect in a thoughtful and structured way the steps of the whole process that involves building a strategy, this process starts by defining the values and vision of the organisation. The vision of an organisation describes where the company expects to be in the long term, while the mission describes the limits of the business and defines how the organisation will orient itself and focus on different areas.

Also defining what the objectives are and analysing the resources and capacities of the organisation at that time and how we can understand the environment in which we are inserted, take advantage of its weaknesses and opportunities (Andrews, 2017).

Society has changed the way they see the responsibilities of companies, which used to be accountable to their shareholders, but are now more inclusive, considering various stakeholders (Demir & Min, 2019). Companies came to realise the impact that corporate reputation had on their positioning strategy, helping to create a sustainable competitive advantage (Al-Zawahreh *et al.*, 2018). With this, large amounts of money started to be used to improve the entire corporation, either through communication and marketing strategies, or in improving resources and capabilities.

Companies have realised that their sales depend mostly on their corporate reputation, having a major impact on brand positioning in the industry. This is when we start strategic planning in order to define priorities, focus the use of resources and capabilities, strengthen mechanisms, make sure that everyone involved is heading towards the same vision and objectives and adjust the direction of the organisation to any necessary market response. Strategic planning helps to answer several questions: What are we going to do? How are we going to do it? When are we going to do it? How are we going to measure what we propose to do? (Fialho, 2019).

It is important to make clear that strategic planning is an approach where the people who engage in it need to think strategically about the process steps they will follow, the tools they will employ and who they will engage (Bryson *et al.*, 2018). There is no single approach to strategic planning, strategy must be able to adapt according to the needs of an organisation, i.e.

understanding the causes and consequences of different strategy options in order to maintain some degree of flexibility in them (George *et al.*, 2019).

This is where the RBV comes in, for a long time the focus of companies when building a strategy was on external analysis, that is, analysing the industry, understanding which was the most profitable and finding the best way to position themselves within it. However, with the advance of technology and increasingly intense competition, companies realised that the best thing would be to understand what they were really good at internally and what their resources and capabilities were that could help them get further (Salazar, 2017).

The resources of a company are precious and expensive, they can also be rare depending on what kind of resources we are talking about. These can be seen as one of the most competitive factors between companies, contributing to their development. The RBV has continued to grow and gained its prominence when it was realised that a company's resources and capabilities can affect its performance, it is a necessary and worthwhile assessment (Barney, 1996).

The RBV reinforces the need for a variety of resources and capabilities to exist within an organisation, making these distinctive from other organisations and building competitive advantage (Assensoh-Kodua, 2019). The concept of competitive advantage has undergone some changes over the years. Initially, it was stated that for a company to achieve competitive advantage, it came from its capabilities and how it was organised, how it performed its activities and how it took advantage of technologies. Later, it was defined that it was only possible to achieve competitive advantage if the company could create something innovative, different and difficult to reproduce (J. B. Barney & Hesterly, 2008).

Porter, on the other hand, defines that competitive advantage is achieved when the company manages to penetrate a new market opportunity (Porter, 2003), the so-called market gaps. Thus, competitive advantage is understood as an advantage that the company has when compared to its competitors, in order to outperform them in the market (Assensoh-Kodua, 2019).

It came to be realised that competitive advantage can be seen in two ways: *endogenous* when it is created through the resources that the company has at its disposal due to old decisions, such as training, motivation of employees, location. A motivated company with technical specializations, innovation and quality will meet the needs of its customers. The *exogenous* occurs when competitive advantages are created through the characteristics of the sector, such as the type of clients, the level of competition and the cost of investment (Louzada *et al.*, 2017).

Each organisation has its own resources, which are usually never the same as those of another company, and it is the company's responsibility to develop the appropriate resources

and capabilities. Ideally, a company should have unique resources that cannot be copied, transferred or replaced by its competitors (Maleka & Technologies, 2016). It is known that the greater the advantage of a company in raising resources, the greater will be the expected profit.

The RBV considers the capabilities, resources, competencies and skills as the basis of productive and organizational knowledge, obtaining competitive advantage through the heterogeneity and profit of each company. The main objective of the RBV is the creation, maintenance and renewal of competitive advantage, referring to the internal resources of each firm (Kretzer & Menezes, 2006).

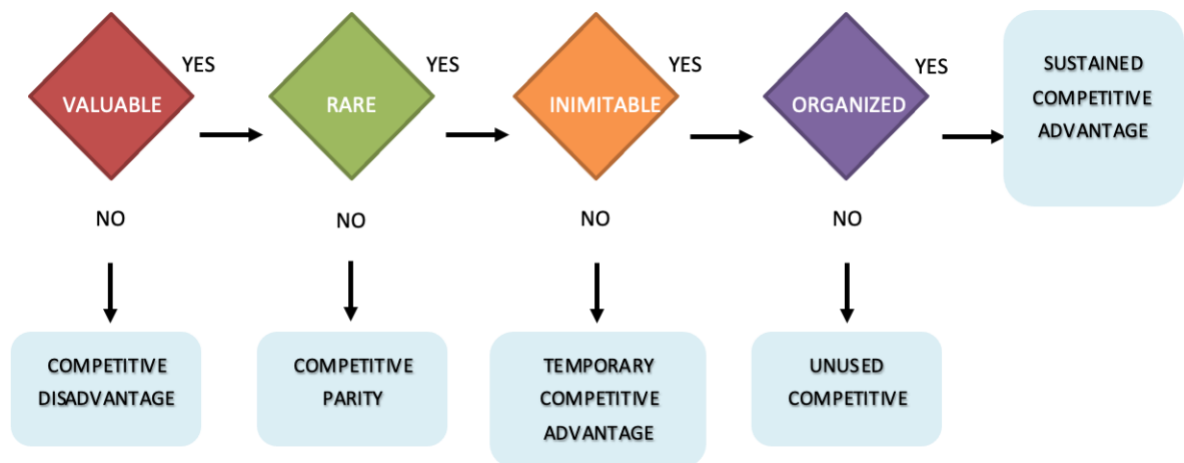
With RBV it is possible to explain and predict why some companies are able to establish positions of sustainable competitive advantage with even higher returns than others, assuming that the goal is always to maximise value through the correct use of capabilities and resources (Assensoh-Kodua, 2019).

Resources can and should be potential elements for companies, however it is not because they exist that they have fulfilled their potential, it is important for strategists to understand how to use them in the best way, this use is what allows companies to present differences from one to another in their performance. Resources become valuable when they enable a company to develop and implement strategies with various objectives, be it reducing net costs or increasing net revenues. It is also important to consider the implementation of the strategy and whether it is appropriate for the current market, thus determining the value of the resources (J. B. Barney & Arikan, 2017).

The RBV argues that there are two types of resources, the tangible ones which are considered everything that is physical, being easily bought and conferring little advantage to companies in the long term. We also have the intangible resources, that is, everything that is not physical, such as the company's reputation, competence, human resources, this type of resources is what allows companies to achieve sustainable competitive advantage. With these resources, the RBV also argues that they should be heterogeneous, i.e., different from company to company, increasing their diversity and immovable, preventing them from being acquired by their competitors (Sourkouhi, 2013).

In 1991, Barney defined resources in three other categories: physical resources, which involve equipment and technology; human resources, which include training and experience; and lastly, organisational resources, which include the corporate structure (J. Barney, 1991). To achieve the already much talked about competitive advantage, it is necessary that the resources meet the VRIO criteria, these are: (Combe, 2020)

- Valuable (V): Resources become valuable if they provide strategic value to the company that has them, helping to exploit the best market opportunities and reduce competition.
- Rare (R): Resources should be difficult to find by competing companies in the market, the fact that they are rare or unique will be able to offer competitive advantage to the company that holds them, as they provide a unique strategy.
- Costly to Imitate (I): The more difficult they are to imitate the more difficult it will be for other competitors to acquire these same resources, either because they are too specific or too expensive.
- Organized (O): What is the point of having a resource if the organization that owns it cannot use it? It is important to have resources that can be fully used (Combe, 2020; Salazar, 2017; Sourkouhi, 2013).



**Figure 2.1 – VRIO Form adapted from Salazar (2017)**

*Source: Self-elaborated*

RBV argues that sustained competitive advantage can only be achieved by exploiting internal factors, in 2012 a study was done which showed between 30-45% of organisational performance was through RBV and 20% through external effects, RBV obviously having a greater impact on business performance (Frank *et al.*, 2012). However, it is important to realise that a sustained competitive advantage does not mean that it will last forever, but that it will not be easily caught up by your competitors.

Managers get a better understanding of the skills needed and consequently the resources that will help the company to increase its performance. Resources can be considered valuable if it is used to reduce a company's cost or if it is used to increase its revenue.

It is known that RBV is one of the best performing strategies for companies that execute it in the right way, however, markets move too fast and changes are constant, so RBV may become insufficient. This is when is needed dynamic capabilities, is necessary know how to approach the fast changing environment and only with the right skills can you do that. Dynamic capabilities break the company down into three key activities to be done:

- Sensing: The company is able to see changes, paying attention to its surroundings
- Seizing: The company must be able to see the opportunity and where it can fit in
- Reconfiguring: The company must be prepared to change and to adapt, to be able to take advantage of the opportunity to insert itself in the change.

It is with the dynamic capabilities are able to solve the change, if they are used in the right way, it is through them that the strategists were able to respond to change, being able to anticipate scenarios (Wilden *et al.*, 2013). Due to the impact that the RBV can have on a company's strategy it is important to analyse its impact on PI, as it is becoming even more important than any industry and is constantly growing and innovating, however, it is necessary to first understand its evolution and what importance it gives to strategy.

Like most theories the RBV also has its criticisms, because while it is true that a firm's resources are important, they are not the only factor underlying a firm's growth and performance. One of the most common criticisms of the RBV, which presents a risk, is the fact that resources alone are not a source of competitive advantage and only their use will condition the success of the company (Lynch, 2000).

Another criticism also made is that it generalises value creation for companies, as it cannot determine which resources are really valuable and which are not (Barney & Mackey, 2016). Kraaijenbrink further argues that companies will be on a constant search for increasingly higher value resources, this is because it will influence companies to seek profit only through competitive advantage and there are other diverse ways of doing this (Kraaijenbrink *et al.*, 2010).

## **2.2 Pharmaceutical Industry**

Since man has always sought to know more about the use of medicine for his health, the production of medicine has undergone significant changes with the technological improve, this has increasingly made the pharmaceutical industry a mass production industry, using chemical compounds to cover all the needs of the world's population. It was in the 20th century that several laboratories appeared in PI, leaving the production of drugs in community pharmacies

completely behind and the first international companies appeared in Portugal, such as Bayer (Santos, 2014).

The legislation that has been passed in recent years has brought numerous changes to the pharmaceutical sector, including the sale of drugs not subject to prescription outside pharmacies, price reductions that lead to automatic reductions in margins, increased fixed costs and the expansion of the generic drugs market by reducing its prices (Freitas Da Rocha E Costa & Fernando Pessoa, 2014). It was when Louis Pasteur and Robert Kock revealed that diseases were caused by micro-organisms that the field of health took a turn. It was then that the scientific fields such as bacteriology and biochemistry, which gave rise to the modern pharmaceutical industry, began to be unleashed and developed (Cabral & Pita, 2015). Bayer became the first company in the pharmaceutical industry to design, develop, test and sell a drug in 1888 (Li, 2014).

The World Health Organization (WHO) came into being in 1948 with the aim of promoting the universal right to health. (WHO, 1948) However, it was only after the Second World War that the pharmaceutical industry gained its true reputation, discovering insulin and the treatment of diabetes. In the early years the research was called "random screening" because thousands of compounds were tested in the hope of finding one which would have a therapeutic purpose (Malerba & Orsenigo, 2015).

The PI is one of the most strategic sectors worldwide due to its size and global impact on the promotion of Public Health. Besides being a business, it is also important for the entire world population, as it is through it that we contribute to improving quality of life and saving lives, (Business & Research, 2019) with this increased responsibility it also becomes a highly regulated industry (Al-Zawahreh *et al.*, 2018). The pharmaceutical market is currently one of the most heavily weighted in the world, according to IQVIA - Institute for Human Data Science (2019) the PI has seen significant growth globally, in recent times. It is estimated to have an average annual growth rate of 3-6% by 2025.

### **2.3 Pharmaceutical Industry in Portugal**

Banco de Portugal – BPstat has prepared an analysis of companies in the pharmaceutical sector, taking into account the evolution of economic and financial indicators (Banco de Portugal, 2021). The number of existing companies in 2021 in the pharmaceutical sector totalled 4158, 74.96% micro companies and 0.99% large companies, showing a positive growth in the number of companies over the last 10 years which meets the previously spoken, the need for diversification by pharmaceutical companies in order to diversify business areas and lower



exposure to risk like Novartis.

Having said that, the sales volume has also grown substantially, reaching 14M in 2021, 4M more than in 2011, some of these values clearly due to the increase of the state contribution and Covid-19 (Banco de Portugal, 2021). In Portugal, 167 companies producing pharmaceutical products were registered in 2019, and the pharmaceutical industry is the one that invests the most in R&D of all the other national industries, even standing out at European level (Apifarma, 2020).

However, the Portuguese market is small, which has led to a rapid demand from national companies to internationalise, in order to achieve more revenues, becoming a very strong industry for multinational companies. Some companies in the Portuguese industry have dedicated themselves to the production and marketing of generics, such as Farmacêutica Generis, while others, such as Bial, have focused on the in-house development of their own drugs (Apifarma, 2014). The above data really makes us understand that diversification of companies to become more specific in one field of business positively benefits them.

In promoting activities, such as hiring Medical Information Delegates, samples, sponsorships in educational events, television advertisements, in order to increase the prescription and consequently the sale of their products of each company, approximately 60 billion is spent in the total pharmaceutical industry in the United States of America (USA) (Price *et al.*, 2021). However, the PI has strict legislation when it comes to the issue of marketing, in the promotion of its products.

PI involved in various areas of healthcare, because drug production involves four key stages from the research and development (R&D) of new drugs, industrial production of the drugs, formulation and final processing of drugs, and marketing and distribution. Allows the world population a wide access to medicines that treat and prevent diseases. Currently facing great external pressure to improve its operational performance, both national and multinational companies in their respective countries need to reorganise and improve their management, due to the specific requirements and characteristics of each stage and their complexity, pharmaceutical companies tend to specialise in certain therapeutic areas.

Healthcare systems as a whole are indeed in transition, and this has been proven with the emergence of Covid-19, facing several disruptions and a major technological change. The significant increase in prices, the aging business models already present for several years in the various laboratories are factors that contribute to significant threats to the entire PI (Moretti, 2019). All PI is highly fragmented, including research laboratories, distributors, pharmacies, regulatory departments, hospitals, among others, which involves a highly complex interaction.

New technology has been accelerating the speed of innovation and change in companies, making market cycles shorter and at the same time hindering long-term competitive advantage.

With the increase in average life expectancy and the ageing of the population, patients invest more in their health and become more selective and informed, giving preference to generic drugs and opting in most cases for self-medication, making more considered decisions regarding their health and financial situation (Moretti, 2019). It is important to focus on short-term performance and to improve product marketing capabilities.

Therefore, laboratories are forced to adapt to this new reality, to be able to anticipate changes, because it is in changes that we can achieve the desired competitive advantage. In addition to challenges, PI also faces a number of obstacles in decision making. An industry that increasingly becomes digital and competitive, needs to be able to analyse any kind of data quickly. This analysis is made more difficult due to impending data protection worldwide, preventing the construction of Key Performance Indicators (KPI) (Dukart,2022).

One of the strategies that arise most in PI is the development of new products, principally when there is little opportunity for growth, when the market is saturated for example. PI came to realise that the degree of competition between companies was in acute medication, i.e. in cases of urgency as the doctor will have total openness to prescribe whatever he wants to the patient in question, which is not the case in chronic therapy (Kalotra, 2014). This is where we come into a segmentation present in PI, prescription and non-prescription medicines, where in the first type of drugs the medical prescription is related to their sale, while the second type also depends on pharmacies and the final consumer (Aitken *et al.*, 2014).

Another important segmentation with a great impact on PI is the division of the different laboratories by type of products, that is, there are laboratories that are more dedicated to the development and commercialisation of drugs with their own brand, and others that are dedicated to the commercialisation of generic drugs, in order to compete with branded drugs. It was in 1987 that Grabowski and Vernon defined for the first time these two strategies within the pharmaceutical industry, defining the pioneer model and the imitative model. The pioneer involved R&D with a high risk/high reward, however, the imitative strategy incorporates a lower risk and revenue (generic drugs), depending on already known R&D (Grabowski *et al.*, 1987).

While generics continue to play an important role in PI success, several companies have begun to invest in the discovery and development of new products and services. With high quality research, low-cost manufacturing facilities and trained staff, the companies present a competitive threat. Investment in R&D involves a great deal of time, cost and risk for

companies, but the return also increases in these cases. It is important to bear in mind that investing in innovation is a lengthy process and that companies that do so seek to gain competitive advantage through the innovations they are able to bring to the market, and end up specialising in specific therapeutic areas, such as Novartis, which invests mainly in cancer (EFPIA, 2020).

Today, PI has relied on its reputation and success in product communication, focusing on the right audience, i.e. contact before end consumers, alerting and raising awareness of the diseases their products are intended to treat (Shakeel *et al.*, 2019). Doctors become the main targets of the campaigns that the different laboratories carry out, receiving important information with the objective of capturing their attention for the need of prescribing that product.

The strategic planning at PI was concentrated in four parts: regulatory affairs, market access, prices and government/medical affairs. However, it is known that it is important and fundamental that the different laboratories adapt to demographic, political and technological changes in order to compete in the market (I Agoulnik, 2018). As it turned out during the pandemic due to Covid-19, there was a need for the creation of a new section in a company's strategy, that is, the extensive use of the internet to communicate, to relate to the customer and through it to be able to incorporate its marketing strategy.

It is important to understand which international markets currently leading PI and what characteristics are given them the leading position. It is known that within PI there are small start-ups up to multinationals, which usually lead the market (Guedelha & Friedli, 2018) and which make it difficult for new companies to enter, as there is an extreme need for a large initial investment and uncertainty of its return (Olk & West, 2020).

Small and medium companies are the most common in PI, and more vulnerable compared to multinationals, which usually have more resources and capabilities to effectively exploit the economy (Sieckmann *et al.*, 2018). It was through this disadvantage within PI that the alliance between start-ups and multinationals regarding R&D, where small companies contribute their technical expertise in exchange for resources from large companies in order to achieve some prestige in the pharmaceutical market (Yoon *et al.*, 2018). These partnerships happen because start-ups usually take a more central role in research, due to their relationship with academia (Le Deu & Santos Da Silva, 2019), while multinationals due to their time in the market assume a leading position, where there is a higher level of resources (Olk & West, 2020).

In 2016 Moderna (medium-sized company) and Merck (multinational) partnered to develop a vaccine for cancer treatment, Moderna received €200 million from Merck to invest in production infrastructure (Business Wire, 2016).

In national terms, according to a report prepared by Agência para o Investimento e Comércio Externo de Portugal (AICEP) it is known that the pharmaceutical industry represents the largest share of turnover in the health sector, due to its competitiveness, production and investment in human resources and research (AICEP, 2020). With all of the above, we conclude that it is important that companies maintain their competitive advantage, especially at the R&D level, in order to grow more and more in the market. It is therefore necessary to understand what strategies have been used by companies to date to ensure their success and longevity in the PI.

Up to the present day the industry has adopted strategies to search for and market products that set their company apart from the rest, above all innovative and pioneering products capable of making them grow and leverage their success in the industry (Olk & West, 2020). When they lose their patent and inevitably lose profit (because generics appear) it is important for companies to bet again on another innovative product, in this sense it is necessary to bet on a small number of molecules.

Despite the success of this type of strategy, over the years the number of innovative products has been decreasing and this is the trend for the coming years, for this reason companies are choosing to adopt diversified product portfolios in order to increase their profits (International, 2017). That said, two strategies emerge: mergers / acquisitions of companies and operation / partnership between companies (Malerba & Orsenigo, 2015).

The main objectives of mergers of companies are to increase resources, research capacity and portfolio diversification, so as not to depend so much on innovative and pioneering drugs (Yoon *et al.*, 2018). Cooperation between companies, on the other hand, involves sharing knowledge and resources in the short term, to the benefit of both companies, mitigating the risks of scientific development (Yoon *et al.*, 2018). Above all it is important that any business within PI should have a great capacity for flexibility and change, in order to be able to manage spending in the best way possible.

## Chapter 3 - Research Model

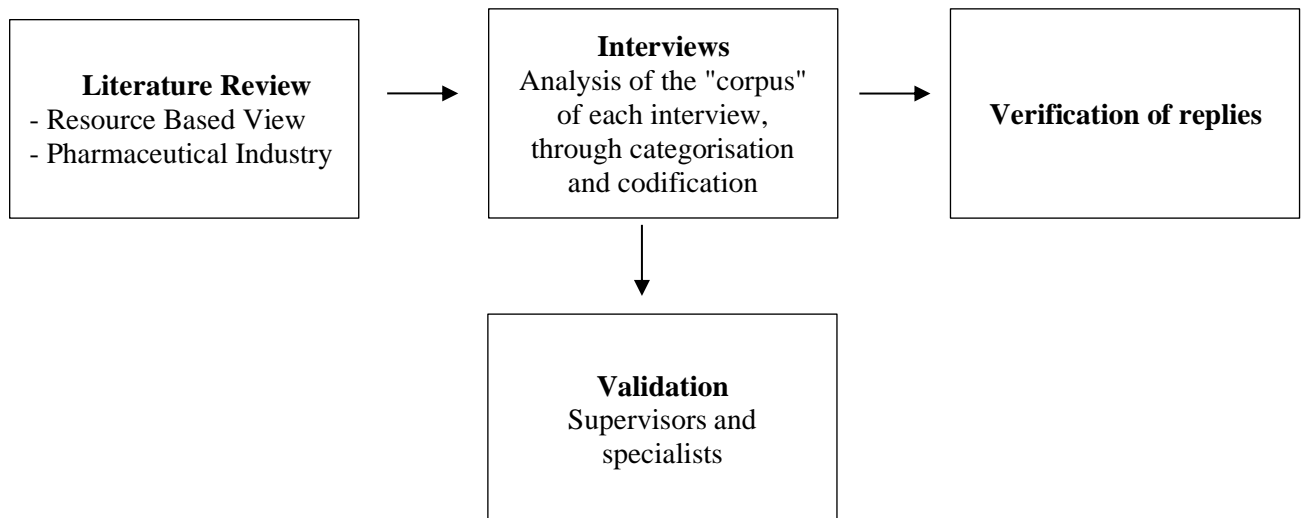
Research methodology involves a set of practices used by the scientific community to expose a given theory. In this sense, considering the research classification criteria proposed by Vilelas (2009), there are two ways in which we can classify the methodology used in the design of research documents: as to the ends and as to the means. On the one hand, the ends refer us to applied and exploratory research, while the means are linked to both the field study and the bibliographic research. This research refers us to research as to means.

In Table 1, it is possible to observe the relationship between the research objectives, the research questions elaborated in the theoretical approach chapter that derived from the literature review conducted before and so, the respective link to the literature review.

Objectives	Research Questions	Literature Review
Understand the impact that the RBV can have on PI and how it can generate competitive advantage for the different companies within PI.	<p><b>Q1</b> - What impacts can be expected from the use of a RBV strategy in the strategic definition of a pharmaceutical company?</p> <p><b>Q2</b> - How can the RBV contribute to the success of an PI company?</p>	(Salazar, 2017); (Assensoh-Kodua, 2019); (Combe, 2020)
Analyse how the RBV can improve the internal process of each company, and what are the risks inherent to the adaptation of such a strategy.	<p><b>Q3</b> - What are the benefits that the implementation of a RBV strategy can bring to a pharmaceutical company?</p> <p><b>Q4</b> - What are the risks experienced by PI firms when using RBV?</p>	(Porter, 2003); (Assensoh-Kodua, 2019); (Maleka & Technologies, 2016); (J. B. Barney & Arikan, 2017); (Salazar, 2017); (J. B. Barney, 1996).
Understand which tools should be used by different companies to bridge market gaps.	<b>Q5</b> - What RBV tools can companies use to bridge market gaps?	(Wilden <i>et al.</i> , 2013).

**Table 3.1** - Relationship between literature review, the objectives, and the research question

*Source: Self-elaborated*



**Figure 3.2** – Research Model

*Source: Self-elaborated*

### **3.1 Understand the impact that the RBV can have on PI and how it can generate competitive advantage for the different companies within PI.**

The next questions addressed aim to answer the first objective defined for this research, where it is necessary to understand the impact that the RBV can have on PI and how it can achieve competitive advantage, whether through the use of resources or capabilities that it possesses.

**RQ1** - What impacts can be expected from the use of a RBV strategy in the strategic definition of a pharmaceutical company?

It was noticed that the focus of companies in the construction of a strategy was changing with the evolution of technology and with the increasingly demanding competition. Companies realized that the best way to build a competitive strategy was through an internal analysis, based on their resources and capabilities in order to get further in the competitive environment (Salazar, 2017). Having said this, the RBV can allow companies a better internal analysis, understanding what their needs are at the level of resources and capabilities, building a solid strategy with a greater chance of success, so besides a deeper internal analysis, it is important to understand what other impacts are expected, starting from there our first research question.

**RQ2** - How can the RBV contribute to the success of an PI company?

By using a RBV strategy, we can alert companies to the need for a variety of resources and capabilities within the company, where these must be rare, precious and expensive. The use of resources and capabilities with these characteristics will allow the company to become distinct

from other organisations and build competitive advantage (Assensoh-Kodua, 2019). It follows that using VRIO resources, as Combe describes them, will enable companies to gain competitive advantage (Combe, 2020). However, it is important to understand in what other varied ways the RBV can contribute to a firm's success in PI, emerging our second research question.

### **3.2 Analyse how the RBV can improve the internal process of each company, and what are the risks inherent to the adaptation of such a strategy.**

The next research questions presented will help to understand how the RBV is able to improve the internal process of a company and what risks it may take when adapting such a strategy and whether it will pay off in the end.

**RQ3** - What are the benefits that the implementation of a RBV strategy can bring to a pharmaceutical company?

Our third research question arises in order to gather the maximum benefits that the use of an RBV strategy can bring to an PI company. As already mentioned by Salazar in 2017, companies started to focus on understanding where they were already really good and which resources and capabilities could help them to go further (Salazar, 2017). Porter defined that a company's competitive advantage is achieved when it manages to reach a market gap that no other company has yet managed to reach, thus gaining an advantage over all others (Porter, 2003; Assensoh-Kodua, 2019).

Each organisation has its own resources, and with the use of a RBV strategy the focus on developing and improving them is even greater, it is important that they are used in the best way, since it is known that the greater the investment in improving resources, the greater the expected profit (Maleka & Technologies, 2016; J. B. Barney & Arikan, 2017). It is then that our research question arises, in addition to benefits in terms of resources, which others are likely to occur, will there be a decrease in net costs and consequently increase the value of revenue or will there be an improved team, especially in terms of human resources.

**RQ4** – What are the risks experienced by PI firms when using RBV?

RBV has increasingly gained its prominence and made a difference mainly when it was realised that a company's resources and capabilities can affect its performance, it is a necessary and valuable assessment (J. B. Barney, 1996). This may occur due to a misuse of them, unnecessary investments, outdated resources, among others. It is then important to understand

the need for a correct use of the resources of each company, and that the RBV does not only have benefits, but there are also several risks associated with its use as Barney has already described them, and it becomes necessary to understand what others may exist when a company in PI adapts a RBV strategy, arising our fourth research question.

### **3.3 Understand which tools should be used by different companies to bridge market gaps.**

As previously spoken, it is known that the RBV strategy is one that performs better for companies that adopt it in the best way, however, with the evolution of technology and the constant uncertainty, the market has been moving faster and faster and RBV may not be enough. It is then important to understand which tools are known and used so far to reach market gaps.

#### **RQ5 - What RBV tools can companies use to bridge market gaps?**

It is already known that dynamic capabilities arise with the need for a quick response to market changes, allowing companies to have three key activities.

- Sensing: The company is able to perceive changes by paying attention to its surroundings
- Seizing: The company must be able to see the opportunity and where it can fit in
- Reconfiguration: The company must be prepared to change and adapt, in order to seize the opportunity to insert itself in the change (Wilden *et al.*, 2013).

It is through these that companies have so far been able to anticipate change scenarios, however it is necessary to understand what other RBV tools are currently used by PI companies.



## **Chapter 4 – Research Methodology**

The whole art of research involves a series of choices that must be well thought out. The choice of the most appropriate methods is one of the most relevant steps of the whole research process, it is through them that we can build a strategy to answer the research questions (Alvares, 2021). The entire research process follows a set of terms, which are method, instrument and techniques for data collection. Method refers to the set of operations required to achieve a given result, (Coutinho, 2011) already the instrument is considered a tangible objective used in the various research techniques while the data collection technique refers to the procedure to reach the end of the research, that is, they seek to make the research possible (Pardal & Lopes, 2011).

There are two types of methods, quantitative and qualitative. The quantitative analysis is used for large samples, where questionnaires are used to collect limited information and its analysis is through relationships between variables, whereas the qualitative analysis can be used in small samples as a collection of information in continuity, where interviews can be conducted to collect information. Having said that, it was decided that the qualitative study would be the best technique to carry out this research because it contributes with greater rigour to the collection of detailed information, Vilelas argues that “qualitative research is a form of study of society that focuses on how people interpret and make sense of their experiences and the world in which they live” (Vilelas, 2020).

The survey is a data collection technique that aims, through a systematised set of questions, to obtain responses from a given sample under study. (Hill, 2014) Expressed responses are expected from the study participants, which may arise through questionnaires or interviews. In this particular study, we will use interviews, as the degree of interaction between the researcher and interviewee is much higher compared to other methods, which allows them to be essentially interpretative, as they provide the researcher with detailed and in-depth information on certain perceptions. Interviews may be classified as structured, semi-structured or unstructured (Morgado, 2013).

### **4.1 Methodology**

Structured interviews follow an established script, are easy to quantify, and have some similarities with a questionnaire because binary responses can be used. Semi-structured interviews are composed of guide questions with a single purpose of guiding the interview, as

the questions have some flexibility of response from the interviewee. The unstructured interview, on the other hand, is more flexible, since the questions arise throughout the interview and according to the previous answers, and there is no script on the part of the interviewer (Morgado, 2013).

The type of sample in the interviews is carefully selected and not probabilistic, i.e. the sample is not representative of the population because the elements of the population do not have the same probability of being part of the sample (Carmo & Ferreira, 2008; Coutinho, 2011). Therefore, through the interview we will be able to achieve more detailed information, which would not be possible with the use of questionnaires.

In this study, the technique used to obtain results was the conduct of 15 semi-structured interviews based on questions that emerged throughout the literature review, contributing to a fluid interview, with time and opportunity to ask new questions that were not previously planned in the interview script.

In table 4.1 it is possible to observe the relationship between objectives, research questions and interview questions.

Objective	Research Questions	Interview Questions
<p>1. Understand the impact that the RBV can have on PI and how it can generate competitive advantage for the different companies within PI.</p>	<p><b>Q1</b> - What impacts can be expected from the use of a RBV strategy in the strategic definition of a pharmaceutical company?</p> <p><b>Q2</b> - How can the RBV contribute to the success of an PI company?</p>	<p>The use of a RBV strategy involves an analysis of the resources and capabilities that the company currently possesses, and how it can improve them, how can this strategy contribute to the pharmaceutical industry?</p> <p>The use of an RBV strategy allows a greater reach of the market GAPS, what type of GAPS do you think will be easier to achieve with this type of strategy?</p> <p>By improving your resources and capabilities, what impacts can these have on improving your strategy and achieving the defined objectives?</p> <p>Times of change, such as Covid-19, the start of the war in 2022, are moments of change, how have companies managed to anticipate the scenario to achieve a competitive advantage over others?</p>

<p>2. Analyse how the RBV can improve the internal process of each company, and what are the risks inherent to the adaptation of such a strategy.</p>	<p><b>Q3</b> - What are the benefits that the implementation of a RBV strategy can bring to a pharmaceutical company?</p> <p><b>Q4</b> - What are the risks experienced by PI firms when using RBV?</p>	<p>What are the benefits that using an RBV strategy can bring to a pharmaceutical company?</p> <p>In your opinion, what are the possible risks for a company in focusing on an RBV strategy?</p> <p>Do you think that the fact that some multinationals have split into several companies, diversifying business areas, has contributed to an improvement in resources and capabilities, thus decreasing the exposure to risk?</p>
<p>3. Understand which tools should be used by different companies to bridge market gaps.</p>	<p><b>Q5</b> - What RBV tools can companies use to bridge market gaps?</p>	<p>How can resources be invested in the pharmaceutical industry? Do you see the partnership between multinationals and small companies as a way to invest in resources?</p> <p>What resources do you think make the most sense for the company to invest / own in order to achieve a market GAP?</p> <p>What are the resources that in your opinion are most important to achieve success?</p>

**Table 4.1** - Relationship between objectives, research questions and interview questions

*Source: Self-elaborated*

## 4.2 Data Collection

It is necessary to take into account the two existing types of information collection: secondary information, collected with the contribution of scientific articles and books that contributed to the construction of the interview script, and primary information are those collected through semi-structured interviews, not forgetting the freedom that exists in this type of collection by the interviewee and the interviewer in the answers and questions asked throughout the conversation, even though there is an initially planned script. With this openness, it is easier to explore certain topics in a better way, and the interviewee's opinion is captured with greater interest.

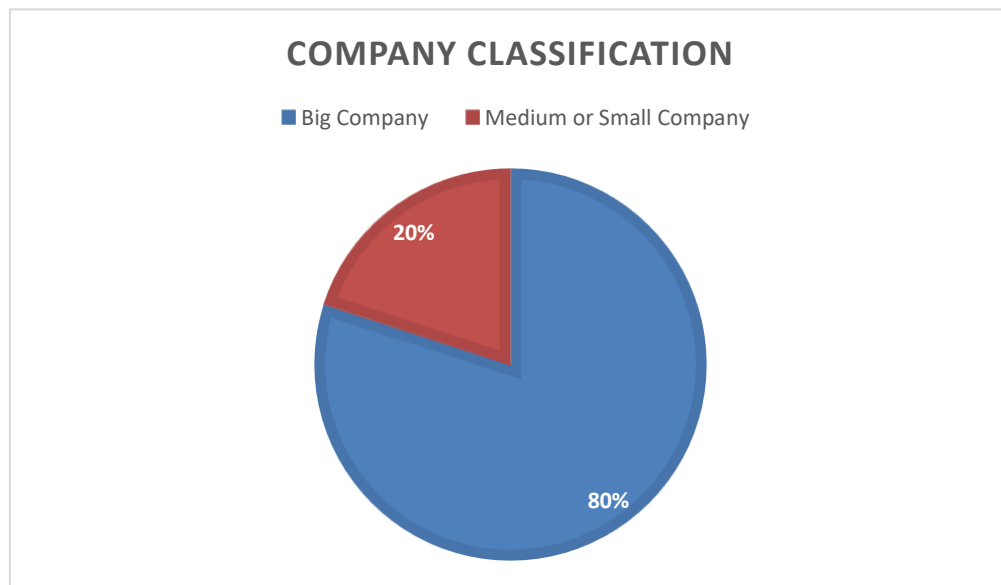
According to Vilelas, for any study to be reliable it should have a minimum of 15 and a maximum of 20 interviews so that there is no exhaustion and repetition of information (Vilelas,

2020). Having said this, we chose to conduct 15 interviews because we had in some questions quite a lot of repeated information, however it is necessary to take into consideration that the conclusions of this study should be analysed with caution because they represent a small sample.

### 4.3 Participants

The type of sample used during the study was a non-probability sample, that is, the various elements of the population do not have the same probability of being part of the sample, so it is not a representative sample of the population, and its results cannot be generalised and must be analysed with great caution.

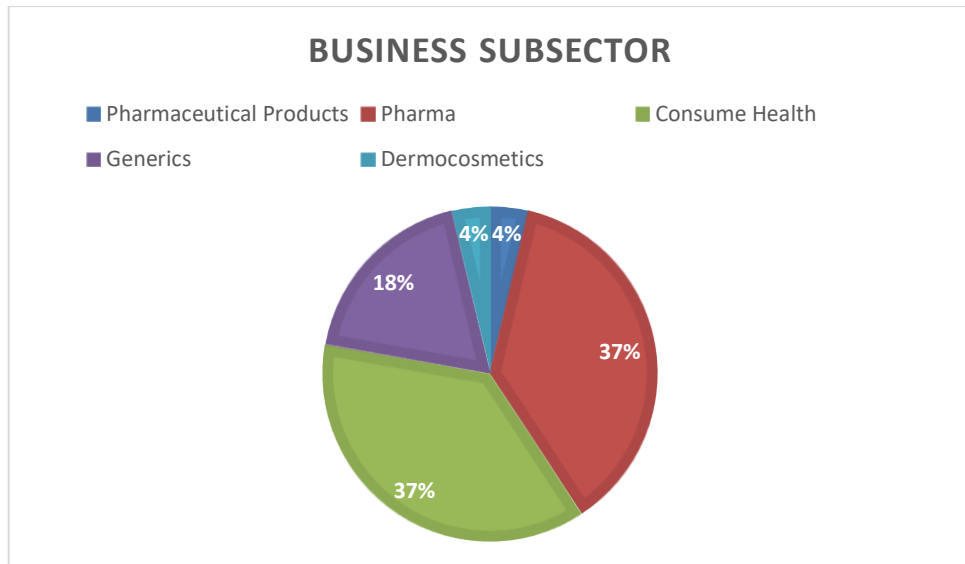
This sample is made up of 15 elements working in large and medium or small companies operating in the Portuguese and international market, as shown in Figure 6.



**Figure 4.1 – Company classification**

*Source: Self-elaborated*

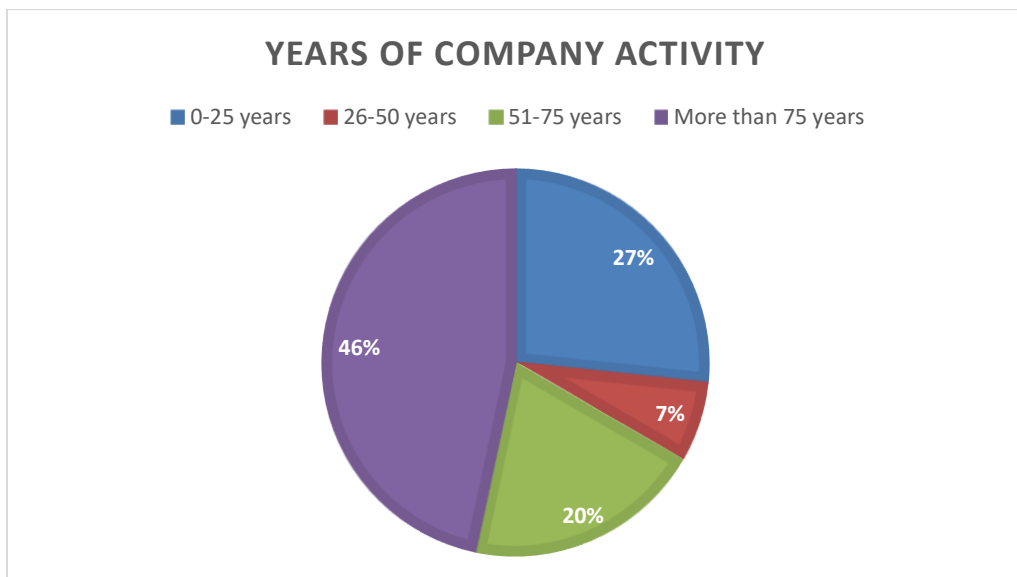
Although we are only talking about companies within PI, there are several sectors where these are included, such as pharma, consumer health, generics and dermocosmetic, these can be seen in Figure 7.



**Figure 4.2 – Business subsector**

*Source: Self-elaborated*

Most of these companies are currently more than 75 years old, as shown in Figure 8, and one of them has more than 300 years of activity, making it one of the oldest companies in the pharmaceutical industry. The majority of companies that are less than 25 years old are Portuguese and have an excellent growth rate, which shows that the business activity of companies in Portugal is also evolving and succeeding.



**Figure 4.3 – Years of company activity**

*Source: Self-elaborated*

Within these companies, the interviewees worked in management and strategy positions, positions which are differentiated among themselves, as can be seen in Figure 8, and the majority of them were male (60%).



**Figure 4.4 – Interviewees' job positions**  
*Source: Self-elaborated*

**4.4 Method**

The whole research process began with the construction of the interview script in a clear and objective way, so that we could conclude the objectives we set ourselves in this research. The interview script was composed of 10 questions, where the first four were related to the first objective outlined, to understand the impact that the RBV strategy can have on PI and how it can generate competitive advantage for the different companies within PI. Already questions 5,6 and 7 intended to understand how the RBV can improve the internal process of each company and what are the inherent risks when adapting this type of strategy and the last three questions wanted to understand which tools should be used by the different companies to achieve the market gaps.

All interviewees were contacted via LinkedIn in order to make the study in question known and to ask for their participation in it, stressing that the aim was to gather their opinion based

on their professional experience within PI. The interviews were conducted online, through communication platforms such as Zoom and Teams, and it was explained to all interviewees the relevance of the study and how important their opinion could be. It was also conveyed that the interviews and the information collected would be totally anonymous and confidential both in terms of personal information and the companies to which they belonged.

#### **4.5 Procedure**

At the beginning of each interview, the subject and the importance of the interview were discussed in greater detail, while all possible doubts on the part of the interviewees were removed. The conversation itself began with the first question of the interview guide, which was answered and the conversation flowed on both sides, always directing the interviewee's answers towards the objectives of the research.

At the end of the interview there were two questions aimed at understanding what the interviewee's opinion was on the resources and capabilities that a company should possess in order to achieve a market gap and success in the business environment, this is because throughout the interview ideas and opinions were shared on both sides and the interviewees were made aware of some definitions that the literature advocates.

All interviews had an average duration of 30 minutes and in some interviews there was the possibility of recording, after permission was given by the participants and total confidentiality was guaranteed as explained above.

#### **4.6 Content analysis technique**

The literature argues that content analysis aims to provide a critical analysis of the interviewees' collected content in order to overcome linguistic and emotional barriers. (Vilelas, 2017) Content analysis must comprise three phases: firstly, a pre-analysis where the answers from each interview are organised, then the exploration of each content and its codification, and finally the treatment of the results obtained and their interpretation. (Bardin, 2018) The content analysis of the interviews was carried out using the professional software MAXQDA, which was created with the purpose of analyzing qualitative data and allows categorizing the content of each interview. This is able to mark coded segments, i.e., parts of the interviews' text, and assigns labels or colours according to the author's choice, making it easier to visualise them. Although it is possible to use audio files to analyse, we chose to carry out the transcription of

the interviews we had because we thought it would provide a more detailed analysis of the data. Therefore, word files containing the content of the interviews were loaded into the software.

In a first moment, a document was created for each interviewee and the entire interview content was transcribed for subsequent content analysis. After that, it was categorised all interviewees according to their professional position, company categorisation, years of company activity, geographical dispersion and subsector.

In a second phase, all answers were gathered by objective and consequent research question and their coding was initiated. Initially, the whole corpus was organised into main category, generic category and subcategory. The codification was divided into three major themes according to the objectives and research questions of this research. The first theme aims to understand the opinion of the interviewees about the impact that the use of a RBV strategy can have on PI and how it manages to generate competitive advantage, already the second theme seeks to analyze how the RBV manages to improve the internal processes of each company and finally, the third theme, aims to understand which tools to be used by companies to achieve the market gaps. These categories were divided into generic category and in some cases into subcategory in order to classify the entire text in a readable, comparable and systematic way among all interviewees.

In 2014 Bardin argued that thematic analysis is used to study opinions, attitudes and values, and that allows to discover the presence or frequency of appearance of certain situations and thus compose all the information contained in the interviews, put this, the generic category were coded according to segments of the interviews because it was considered the most appropriate technique for coding the interviews. (Bardin, 2014) After completion of this process of coding and categorisation, we proceeded to the analysis and respective interpretation of the results



<b>Main Category</b>	<b>Generic Category</b>	<b>Subcategory</b>
1.The impact that the RBV can have on PI and how it can generate competitive advantage for the different companies.	1.1 Contributions to PI	1.1.1 Internal contributions
		1.1.2 External contributions
	1.2 Achievable market gaps	1.2.1 Types of market gaps
		1.2.2 Types of market gaps
	1.3 Impacts on the company	1.3.1 Impact on strategy improvement
		1.3.2 Impact on the achievement of defined goals
	1.4 Anticipating change scenarios	1.4.1 Ways to anticipate a scenario
		1.4.2 Benefits that the moments of change (Covid-19) brought to the company
2.Ways the RBV can improve the internal process of each company, and what are the risks inherent to the adaptation of such a strategy	2.1 Benefits of using an RBV strategy for the company	2.1.1 Strategic benefits for the company
		2.1.2 Commercial benefits for the company
	2.2 Spinoffs and their contribution to improving resources and capabilities	2.2.1 Resource improvement
		2.2.2 Capabilities improvement
	2.3 Risks of using an RBV strategy for the company	2.3.1 Strategic risks for the company
		2.3.2 Commercial risks for the company
3.Types of tools should be used by different companies to bridge market gaps	3.1 Ways to invest in resources	3.1.1 Internal ways
		3.1.2 External ways
	3.2 Resources that make the most sense to have to address a market gap	3.2.1 Physical capital resources
		3.2.2 Human capital resources
		3.2.3 Organizational capital resources
	3.3 Resources more important to achieve the success	

**Table 4.2** – Relationship between the research objectives, the interview questions and their answers

*Source: Self-elaborated*



## **Chapter 5 – Presentation and Discussion of Results**

The main objective of this research was to understand the impact that the RBV strategy can have on PI and how it can generate competitive advantage for the different companies within PI. To achieve this objective we chose, in a first phase, to understand how the RBV can improve the internal process of each company and what risks are inherent in adapting this type of strategy; in another phase we went on to understand which tools should be used by the different companies to achieve the market gaps. We reached several conclusions that will be presented below.

### **5.1 Expected impacts of using a RBV strategy in the strategic definition of a pharmaceutical company**

In the first research question we want to understand what impacts are expected from the use of a RBV strategy in the strategic elaboration of a company in PI and how one manages to achieve competitive advantage through the use of this type of strategy, thus it was necessary to understand the contributions that this type of strategy could bring and which market gaps became easier to achieve with it.

#### **5.1.1 Contributions to the Pharmaceutical Industry**

The first step was to find out the contributions to the pharmaceutical industry, both internally and externally. Internally, Holdford concluded in one of his studies that companies can obtain competitive advantage when they use heterogeneous and unique resources and capabilities in a profitable manner, using the RBV strategy, to meet the needs of their consumers. (Holdford, 2018) During this research, as can be seen in Figure 11, it proved that this type of strategy has enormous weight and importance internally and that the management of resources and capabilities and their allocation becomes much easier when using an RBV strategy. It is also possible to conclude that it will bring much more internal knowledge to companies that use this type of strategy, knowing their strengths and weaknesses in depth, and the strategy will be much more aligned between all elements of the company and according to the resources that each one possesses.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
1.1	1.1.1	Greater internal knowledge, both of their weaknesses and strengths	1, 2, 4, 7, 10, 12, 13, 14	8
		Allocating resources in the best way	4, 8, 11, 13	5
		Strategy well aligned according to the resources that the company has	1, 2, 11	3

**Table 5.1** – Answers collected from the interviewees about the internal contributions

*Source: Self-elaborated*

At the external level, we can highlight that PI will become a more competitive innovative industry since companies will seek to invest in innovation and in unique resources that only they possess and heterogeneous capabilities, as Holdford advocates, always seeking competitive advantage, such conclusions can be seen in Figure 12. One of the interviewees highlights the ease of market segmentation, also making the company more focused on its type of customer, segmenting its portfolio to the needs of the market. Another interviewee highlights the importance of external analysis after internal analysis, which will enable greater knowledge of competitors. (Holdford, 2018)

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
1.1	1.1.2	Companies in constant search for innovation and to become different from the rest, seeking to gain competitive advantage, making the environment much more competitive.	1, 3, 5, 6, 10, 12, 15	7
		Industry more focused on segmenting the market, being more customer-focused.	9	1
		Better knowledge of competitors	1	1

**Table 5.2** – Answers collected from the interviewees about the external contributions

*Source: Self-elaborated*

### 5.1.2 Achievable market gaps

It was sought to understand which market gaps became easier to reach with the use of a RBV strategy, Assensoh-Kodua argues that the variety of resources and capabilities that a firm possesses allows it to maximize its return and reach various market gaps. PI is a highly regulated industry and requires a number of regulations which makes it difficult to reach market gaps quickly as one of the interviewees concluded. (Assensoh-Kodua, 2019)

As can be seen in Figure 13, most of the interviewees argue that using an RBV strategy makes it much easier to reach market gaps in the short and medium term if we have our resources and capabilities improved, such as restructuring, focus on a business area, market crises. It was also possible to conclude that it becomes easier to understand the size and needs of the market, being able to analyse which market gaps will bring more revenue to a company, it is always important to make this type of analysis, because companies always seek to maximise their investment.

Another type of market gap that can be achieved is the launch of new products in the pharmaceutical market, especially if we already have our resources in place and the unpredictability of the market, especially in terms of stock management. We conclude then that there really is a need to have varied resources and capabilities that allow us to think outside the box, to be able to innovate in this type of industry, as Assensoh-Kodua argued in 2019 its importance. (Assensoh-Kodua, 2019)

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
1.2	1.2.1	Easier to reach market gaps in the short and medium term essentially, i.e. restructuring in the company, focus on a business area, moments of change, market crisis, mainly if we have the necessary and worked on skills and resources.	6, 7, 10, 11, 12, 14	6
		With this type of strategy we will be able to improve and use the right resources and capabilities, also allowing us to understand the size and needs of the market, and we will then analyse which opportunities will bring us the most revenue.	1, 4, 5, 15	4
		With the improved resources and capabilities it will enable us to launch new products on the market, especially in innovative areas.	3, 13	2

		It is a highly regulated industry and it is difficult to reach market gaps quickly.	2	1
		It will make it possible to overcome the unpredictability of the market, in terms of stocks, product failure.	9	1

**Table 5.3** – Answers collected from the interviewees about the type of market gaps able to achieve  
*Source: Self-elaborated*

## 5.2 Ways in which the RBV can contribute to the success of a pharmaceutical company

With the second research question the focus and objective was to understand what impacts the use of an RBV strategy could have on a company in PI and how it could contribute to its success, taking into account moments of change and anticipation of change that end up shaking companies to a great extent.

### 5.2.1 Impacts on the company

There are several impacts that this type of strategy can have on a company, and these can be differentiated in impacts on the improvement of strategy or in the achievement of defined objectives, both are related, and with the improvement in both fields will clearly allow the company to achieve success. The literature argues that resources are elements of strength for a company, however, it does not mean that this will allow companies to achieve success, it is the way managers incorporate them in their strategy and in the achievement of objective that condemns the results. Resources become valuable when they allow the company to implement strategies with various objectives as Barney and Arikan concluded in 2017. (Barney & Arikan, 2017)

In a first phase we went to understand what impacts the improvement of resources and capabilities has at the strategy level, strategy planning was divided into four parts according to Agoulnik concluded in 2018, these are: regulatory affairs, market access, prices and government/medical affairs. It is in these different fields that RBV entstrategy can have an impact.

As mentioned before, with the use of this type of strategy it will be easier to understand a company's shortcomings and how it can improve them, for the elaboration of an assertive strategy and prone to succeed, as a good part of the interviewees concluded, as we can observe in Figure 14. It will also be possible for the company to be more prepared to face any adversity that may arise because we will always be in processes of improvement and optimization of our

resources and capabilities, allowing them to adapt to changes in the external environment to compete in the market, as Agoulnik also argued in 2018. (Agoulnik, 2018)

It is also concluded that it will become faster, cheaper and easier to elaborate a strategy, because you will be optimising in-house resources and you will have a greater internal knowledge that will allow you to build solid and aligned strategies between all elements of the company.

<b>Generic Category</b>	<b>Subcategory</b>	<b>Text</b>	<b>Interviewees</b>	<b>Times Mentioned</b>
1.3	1.3.1	Greater understanding of where our shortcomings lie and how we can improve them, we will have improved resources and work towards a more assertive design of our strategy and be more likely to succeed.	1, 8, 10, 11, 13, 14	6
		It becomes easier, faster and cheaper to develop a strategy because we will have more internal knowledge, building more solid strategies.	3, 5, 12, 13, 15	5
		Better prepared to face adversity by constantly improving and optimising our resources and capabilities	2, 9	2
		Strategies aligned between all elements and business areas of the company.	1	1

**Table 5.4** – Answers collected from the interviewees about the impact on strategy improvement  
*Source: Self-elaborated*

We cannot forget the relationship that exists between improving the strategy and the achievement of the defined objectives, the greater the rigour, soundness and assertiveness of the strategy, the greater the probability of achieving the proposed objectives. The most prominent impact, as can be seen in Figure 15, is the one that directly relates the strategy with the objectives, i.e., aligned strategies will allow everyone to work with the same focus and with greater productivity, making it easier to achieve the objectives.

With greater internal and external knowledge and improved resources and capabilities, it will allow the company and the business to reach market segments that it could not reach before, increasing business opportunities and reinforcing the ability to achieve objectives and maintain results, as some of the interviewees argue, while others believe that it will allow them to achieve more promising objectives and allow greater revenue for the company.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
1.3	1.3.2	Aligned strategies make it easier to achieve defined objectives, because everyone is working towards the same goal and there is greater productivity.	1, 8, 9, 14	4
		It allows more promising objectives to be achieved and allows greater revenue for the company.	11, 13, 15	3
		With a greater internal and external knowledge and improvement of resources and capacities, it will allow us to reach market segments that we could not reach before, increasing the business opportunities and reinforcing the capacity to reach objectives and maintain results	6, 7	2

**Table 5.5** – Answers collected from the interviewees about the impact on the achievement of defined goals

*Source: Self-elaborated*

### 5.2.2 Anticipating change scenarios

As Wilden concluded in 2013, it is through dynamic capabilities that companies are able to anticipate adverse scenarios (Wilden, 2013), being able to respond to moments of change as it happened in Covid-19 and at the beginning of the war in 2022. During the pandemic it was necessary to create a section of the company's strategy, that is, the technological section, to be able to communicate and relate to the customer. (Price *et al.*, 2021)

It was possible to understand how to anticipate the scenario and what the company retained with the change in terms of learning, in the opinion of the interviewees. It is known then that the optimisation of resources allows a faster response to change, as we could observe during the research, since the only response obtained in this question was that the diversity of resources and their differentiation between companies was what allowed them to respond quickly and better adapt to change, in line with what Combe describes, that is, the use of VRIO resources will allow companies to acquire competitive advantage. (Combe, 2020)

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
1.4	1.4.1	From an internal perspective, with resources differentiated and fully optimised, it will allow a quick response and a better adaptation to change.	3, 5, 7, 9, 10, 11, 12, 15	8



**Table 5.6** – Answers collected from the interviewees about the ways to anticipate a scenario

*Source: Self-elaborated*

During the interviews it became clear that the companies that had already carried out an internal preparation, which had people focused and motivated with their competences developed and heterogeneous among all, were the ones that adapted better to the new reality and in an easier way, it was not possible to be fully prepared for all the adversities of a change. However, covid was a huge moment of change and therefore brought several learnings for the companies, being the ones that stand out the most the resilience and reactivity that the companies started to have, becoming more competitive and knowing how to prioritize the needs.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
1.4	1.4.2	Companies have learned to optimise, prioritise what is needed most and resilience has been gained	2, 6, 14, 15	4
		It has made companies more reactive and competitive, thinking outside the box and innovating with what they have in house	8, 13, 14	3
		Understanding the strength of a company and its need in the marketplace, and discovering its weaknesses	1, 3	2

**Table 5.7** – Answers collected from the interviewees about the benefits that the moments of change (Covid-19) brought to the company

*Source: Self-elaborated*

### 5.3 Benefits that implementing a RBV strategy can bring to a pharmaceutical company

#### 5.3.1 Benefits of using an RBV strategy for the company

Implementing an RBV strategy in a company provides it with several strategic and business benefits in its management, Luján Salazar concludes that companies increasingly focused on understanding their strengths and what resources and capabilities they could acquire to help them go even further, and this was only possible with an internal analysis, where they were able to get a better sense of allocating resources more profitably. (Lujan Salazar, 2017)

Each company has its own resources and the more diversified they are and the harder they are to copy, the more important they become, by using the RBV strategy the focus on developing these same resources increases, since it is known that the greater the investment in improving resources, the greater the expected profit. (Maleka & Technologies, 2016; J. B.

Barney & Arikan, 2017). This type of strategy will bring a number of strategic benefits that we can see in Figure 18, either in building solid strategies because as Lujan Salazar concluded will allow us to have greater internal knowledge and allows us to act on the unpredictability of the market, which especially after Covid-19 has become increasingly unpredictable.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
2.1	2.1.1	It allows to act on unpredictability, we have optimised resources and capacities that allow us to respond to unpredictability more quickly and effectively.	2, 3, 6, 7, 9, 11, 13, 14	8
		Greater internal knowledge that allows a better construction of a solid strategy.	4, 5, 10, 12, 14, 15	6

**Table 5.8** – Answers collected from the interviewees about the strategic benefits for the company

*Source: Self-elaborated*

In terms of business benefits, we know that resources become valuable when they allow the company to develop and implement strategies with various business objectives. (J. B. Barney & Arikan, 2017) The impact is expected to be positive, the only benefit highlighted by the interviewees was the allocation of profitable resources in order to comply with the budget plan and invest in what will bring more revenue for the company, this will allow us to better manage financial resources because there is no unnecessary spending and the investment in resources will be made in the business area that is expected to increase revenue.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
2.1	2.1.2	Allocate resources cost-effectively in order to meet the budget plan and invest in what will bring the most revenue.	1, 4, 8, 10, 14, 15	6

**Table 5.9** – Answers collected from the interviewees about the commercial benefits for the company

*Source: Self-elaborated*

### 5.3.2 Spinoffs and their contribution to improving resources and capabilities

With the growth of PI in recent years (Banco de Portugal, 2021), there are more and more large companies dedicated to various areas, such as precision medicine, consumer health, generics, which ends up bringing some disadvantages in the long term, and therefore there are more and

more divisions of these same companies by business areas, namely spinoffs, which contribute to reducing the associated risk exposure. These spinoffs allow companies to become more specific in a certain business area, benefiting it positively, mainly in terms of financial return. (Apifarma, 2014)

It is known that spinoffs contribute to the optimisation of the company's resources and capacities. As can be seen in Figure 20, spinoffs allow the company to specialise more in its business area, allowing a better and faster response to customers and the market in which it operates. They also allow different investments in each resource according to its revenue and, last but not least, a greater agility in resource management.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
2.2	2.2.1	It will allow a better response to customers and the market, because there will be a greater specialisation of the company	7, 8, 9, 14, 15	5
		It allows different investments to be made in resources and their profitability to be achieved with greater rigour in their allocation	4, 6, 10, 14	4
		Greater agility in the management of resources and autonomy in their use	2, 14, 15	3

**Table 5.10** – Answers collected from the interviewees about the resource improvement

*Source: Self-elaborated*

In terms of capabilities, these are also optimised and improved with spinoffs, allowing a higher profitability of work since employees will also be more focused on that business area, they will become specialists. This spinoff will also have an impact on the internal structure of the company, allowing for cleaner organisations with faster and more agile decision-making processes, giving more autonomy and responsibility to a smaller number of people.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
2.2	2.2.2	It allows a greater focus of the company and greater profitability of the work, as the company will be specialising people and making them capable of achieving better objectives	1, 5, 6	3

		Cleaner organisations, faster and more agile decision-making	3, 6, 13	3
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**Table 5.11** – Answers collected from the interviewees about the capabilities improvement

*Source: Self-elaborated*

## 5.4 Possible risks faced by PI companies in using the RBV

### 5.4.1 Risks of using an RBV strategy for the company

In the PI small and medium enterprises are the most vulnerable compared to multinationals when using this type of strategy, this is because multinationals have a greater flexibility of resources and capacity to exploit the market. (Sieckmann *et al.*, 2018)

So far only the positives of using the RBV strategy have been addressed, and it is known that a company's resources and capabilities can affect its performance due to misuse of them, unnecessary investments, outdated resources. (J. B. Barney, 1996) This type of strategy will influence companies to constantly seek valuable resources and capacity that will bring them competitive advantage and will end up losing focus on other factors that also underpin a company's growth and performance. (Kraaijenbrink *et al.*, 2010; Barney, J. and Machey, A., 2016)

The objective would be to understand what risks exist with the use of the RBV strategy according to the interviewees, which allowed us to divide the risks into two categories: strategic and commercial. The strategic risks are those that affect the preparation and/or implementation of our strategy, and the most frequently mentioned risk was actually the loss of focus on other factors that also contribute to the development of the company. By observing Figure 22 it is possible to understand that there is some risk of loss of creativity and heterogeneity, these interviewees argue that we may always be seeking to optimise in-house resources and actually forget about new investments and clearly there is also a concern with moving away from the business plan that was previously outlined.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
2.2	2.3.1	There may be a loss of focus on other strategies previously outlined, because we are optimising some other procedure / resource	2, 4, 9, 11, 14, 15	6
		Waste of time because excessive internal analysis may be being carried out that may not be a priority at the moment	4, 8	2

		Loss of creativity and heterogeneity because we will tend to optimise / use in house resources	3, 12	2
		Departure from the previously outlined business plan	9, 13	2

**Table 5.12** – Answers collected from the interviewees about the strategic risks for the company

*Source: Self-elaborated*

The commercial risks will affect the return of the company by decreasing profit or increasing expenses. The risks highlighted include the fact that it may financially affect other business units because we are not focused on optimising them at that moment, and also the fact that there is less productivity in these units and therefore a lower positive return. Another major concern is the loss of money by investing in people who end up leaving the company or in outdated/unnecessary resources.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
2.2	2.3.2	Affecting other business units in budgetary terms	1, 9, 10	3
		Lower productivity in other projects at the moment	2	1
		Loss of money, by investing in people for example, they can walk away and were a loss.	7	1

**Table 5.13** – Answers collected from the interviewees about the commercial risks for the company

*Source: Self-elaborated*

## 5.5 Tools that RBV enables companies to use to fill market gaps

### 5.5.1 Ways to invest in resources

There are various forms of investment in resources and capabilities and it is important to understand which ones make most sense within PI. Dynamic capabilities are known to have emerged with the need for rapid response to market changes, and companies have adopted three behaviours: **sensing**, the company is able to see changes, paying attention to its surroundings, **seizing**, the company must be able to see the opportunity and where it can fit in and

**reconfiguring** the company must be prepared to change and to adapt, to be able to take advantage of the opportunity to insert itself in the change. (Wilden *et al.*, 2013)

Through these behaviours it is possible for companies to invest in resources internally and externally. Internally, the two ways of investing identified by the interviewees was the diversification of the product portfolio through innovation, as Kalotra concluded that one of the strategies that arise most in PI is the development of new products mainly when there are few opportunities for growth. (Kalotra, 2014) It is a slow process and interviewees agree with this feature, but as Shakeel argues it involves a lot of time and risk but the return is worth it. (Shakeel *et al.*, 2019) Another way of investing internally was training people and their working conditions, motivated and happy people in their workplace contribute to the success of the team and the company.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
3.1	3.1.1	Portfolio diversification, with innovation and the launch of new products through the use of technology.	2, 6, 15	3
		Investment in people through training and working conditions	7, 12, 13	3

**Table 5.14** – Answers collected from the interviewees about the internal ways to invest in resources  
*Source: Self-elaborated*

One way of investing externally in resources is the constant search for the best people, in professional and personal terms, companies look for heterogeneous teams focused on the team's strategy and objectives. As previously mentioned, the fact that small and medium-sized companies are the most vulnerable, originated the beginning of the partnership between start-ups and multinationals in order to increase their investment in R&D, because the small company has a greater proximity to the academic world while the multinationals, due to their position in the market and leadership, have a greater potential for resources. (Olk & West,2020) (Yoon *et al.*, 2018)

Despite the success of this type of strategy, the trend is for a decrease in the number of new innovative products, so companies are choosing to adopt diversified product portfolios in order to increase their profits. (International, 2017) That said, two strategies emerge: mergers/acquisitions of companies and operation/partnership between companies. (Malerba & Orsenigo, 2015) The partnership between companies is really what was most

highlighted by the interviewees, allowing companies to share knowledge and resources in the short term, benefiting both, mitigating the risks of scientific development and increasing the product portfolio of both.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
3.1	3.1.2	Partnerships between companies in order to diversify the portfolios of both, the so-called co-marketing to create or promote product	3, 4, 8, 9, 10, 11, 13, 14, 15	9
		Constant search for the best people, in professional and personal terms, for employment	1, 5	2

**Table 5.15** – Answers collected from the interviewees about the external ways to invest in resources

*Source: Self-elaborated*

### 5.5.2 Resources that make the most sense to have to address a market gap

Porter defined that a company's competitive advantage is achieved when it manages to reach a market gap that no other company has yet managed to reach, thus gaining an advantage over all others. (Porter, 2003; Assensoh-Kodua, 2019) There is a diversity of resources that allows a company to reach a market gap, and Barney divided these resources into three categories: physical, human and organizational resources.

Physical resources are resources at the level of equipment and technology, and it was highlighted by the interviewees that investment in technology, i.e. process automation, digital information, analysis tools would allow companies to reach market gaps.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
3.2	3.2.1	Investing in technology, more automated processes, digitalized information, above all tools dedicated to market analysis and technological evolution	8, 9, 10, 11, 14, 15	6

**Table 5.16** – Answers collected from the interviewees about the physical capital resources

*Source: Self-elaborated*

The human resources highlighted by the interviewees were indeed the training of people both professionally and personally, and focusing this same training on the digital area, which ends up being in line with the physical resources mentioned above.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
3.2	3.2.2	Investment in employee training: personal training, scientific training, how to relate to customers, and training dedicated to the digital area: data analysis, campaign manager, content development, designers.	1, 9, 10	3

**Table 5.17** – Answers collected from the interviewees about the human capital resources

*Source: Self-elaborated*

In terms of organizational resources, the interviewees highlighted the investment in a solid business base, to build strong strategies that optimize action plans and the achievement of pre-defined objectives. These three types of resources will clearly help in building a solid competitive advantage by achieving various market gaps.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
3.2	3.2.3	Invest in resources that allow you to build a solid business structure with good strategies, in order to optimize the logistics, the action plan, and the achievement of objectives.	1, 2, 13	3

**Table 5.18** – Answers collected from the interviewees about the organizational capital resources

*Source: Self-elaborated*

### 5.5.3 Resources more important to achieve the success

This is one of the points where there was a unanimous response from the interviewees, since they all agree that the most important resources for achieving success is in fact people, as they are the ones who allow the profitability and productivity of all the other resources and maximise the company's performance. (Gruman J.A & Saks, 2010)

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
3.3		People are the most important resource a company can have to achieve success	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	15

**Table 5.19** – Answers collected from the interviewees about the resources more important to achieve the success.

*Source: Self-elaborated*



## Chapter 6 – Final Considerations

### 6.1 Conclusions

It is understood throughout the study that IP is a highly regulated area that follows several demanding laws and protocols for its operation, however it is one of the areas with greatest investment due to its profitability, which makes the strategy used by the company even more important for its success. As we can see, the RBV strategy is very beneficial for PI, having various internal and external contributions that improve PI as a whole, from the creation of more competitive environments through the success of innovation, the allocation of resources in the best way to meet the needs of the company and the market and clearly a greater internal knowledge of the weaknesses of each company, investing in continuous improvement.

This will enable companies to reach market gaps much more easily, as Assensoh-Kodua (2019) argued, that it is through improving resources and capabilities and increasing their variety that makes that task much easier, however due to the specificity of PI, it is important to understand that it becomes easier to achieve short and medium term gaps, i.e. restructuring, focus on a business area, market crisis, because the company will be able to act much faster as it will be a task that only depends on itself, unlike the product launch, which requires the participation of several stakeholders.

Every improvement in resources and capabilities will impact the company's strategy and the achievement of objectives, and they become valuable when they allow the company to deploy strategies with various objectives, as Barney and Arikan concluded in 2017, through the research it was possible to conclude that the strategic impact really has a great weight, the company will be more prepared to face moments of change as AgoulNIK also argued in 2018. It will allow companies to build solid strategies, we know that resources become valuable when they allow the company to develop and implement strategies with various business objectives which is in line with one of the conclusions of the study, i.e., the allocation of profitable resources in order to comply with the budget plan and invest in what will bring more revenue to the company. We also concluded that it will allow companies to reach market segments that they could not reach before, increasing business opportunities and reinforcing the capacity to reach objectives and maintain results.

It was really understood that the preparation and optimisation of resources and capacities allows a lower impact on the performance of a company in scenarios of great change, this came to be understood with covid, it was concluded that the companies that already had their

capacities and resources improved, were the ones that better adapted to the new reality. With the evolution of the industry and the need to focus and segment it, more and more companies carry out spinoffs, contributing to the optimisation of the company's resources and capacities, allowing for a specialisation of the company in each business area, allowing for different investments in each resource, and also allowing for greater work profitability as the employees will also be more focused on that business area. The RBV strategy also carries some risks for PI both at a strategic and commercial level, there is a concern about moving away from the business plan that was previously outlined and a loss of focus on other factors that also contribute to the development of the company.

There are several tools that allow the company to reach the various market gaps, Kalotra (2014) concluded that one of the strategies that arise most in PI is the development of new products mainly when there is little opportunity for growth, is what really happens in the PI, another way to diversify the portfolio has been through partnerships between companies, at the level of co-marketing of products, allowing companies to share knowledge and resources in the short term, benefiting both, mitigating the risks of scientific development. It was also concluded that the resources that make more sense for a company to possess are process automation, digital information, analysis tools, and the training of people both professionally and personally.

In summary, there is general agreement that the most important resource for a company to achieve success and maximize its profitability and productivity are people, as they allow maximizing the company's performance, becoming the solid business base that all companies need for the construction of strategies. Given the results obtained, the objectives proposed by this study are considered to have been met, having answered the initial question about the impact that the RBV can have on PI and how it can generate competitive advantage for the different companies.

## **6.2 Theoretical and practical implications**

This research work is considered to be a new contribution to the academic, scientific and business world, expanding knowledge on the use of a RBV strategy in PI, since it is a delicate subject that involves sensitive areas where there is no clear and succinct approach to the type of strategy that each company uses and which one has the greatest positive impact on the company.

PI is a restricted but innovative business, it is what allows the health and well-being of people and people contribute to the well-being of pharmaceutical companies, it is necessary to adopt innovative strategies that allow constant innovation and improvement, in order to meet

the increasingly demanding needs of the market. This study will help companies understand the need for and importance of their resources, and what their optimisation will allow the company in terms of results.

With the different research questions it was possible to extend the knowledge already existing in the literature, in a first instance the RBV strategy in addition to the importance of having heterogeneous resources and capabilities to be able to leverage their use in the best way, it is now known that it will make PI more competitive since companies will seek to invest in innovation and in unique resources that only they possess and heterogeneous capabilities, also highlighting the ease of market segmentation, making companies more focused on their type of customer, segmenting their portfolio to the needs of the market, i.e., better reach of market gaps. Another conclusion that we can draw, in addition to what was already in the literature, was the speed, cheaper cost and ease of drawing up a strategy, because the company will be mostly optimising in-house resources, obtaining greater internal knowledge that will allow solid and aligned strategies to be built among all elements of the company.

The strategy of a company when aligned among all its elements will allow everyone to work with the same focus and with greater productivity, making it easier to achieve the objectives. With this dissertation it was possible to understand that the realization of spinoffs allows companies a greater optimization of their resources and capacities, allows a faster response to customers and to the market in which it operates, also allows different investments in each resource according to its revenue and a greater agility in the management of resources.

The importance of people as a way of investment resources was something that was highlighted with great emphasis in the dissertation, people become the most valuable and important investment resource, they are the ones that allow the profitability and productivity of all other resources and allow maximizing the performance of the company.

### **6.3 Limitations**

It is important to bear in mind that the findings presented result from some limitations in terms of sample size not reaching data saturation, which leaves other possible conclusions open. Although this study reinforced some of the existing theory concerning the use of the RBV strategy, this was only an exploratory study that cannot be generalised or representative, nevertheless, it was interesting to conclude that the interviewees saw the RBV strategy as something positive and that it contributed greatly to the internal development of the company, although they did recommend changes/suggestions.

However, the coding of the data could not be carried out optimally, having two researchers coding the corpus, so it was the same researcher coding the corpus in two time periods. Since it is a non-probabilistic and reduced sample, with only 15 elements, it is not possible to generalise the conclusions to the whole pharmaceutical industry, which may be misleading.

#### **6.4 Suggestions for Future Research**

It is important to remember that the sample used is non-probabilistic, i.e. the various elements of the population do not have the same probability of being part of the sample, so it is not a representative sample of the population and its results cannot be generalised and must be analysed with great caution. Therefore, a longer study time for this category would be necessary and recommended, given that it is quite specific. It is also recommended to diversify the companies per study, i.e., in one study analyse only dermocosmetic companies, in another study only generic companies, because the regulations also vary according to the marketed product, the strategies also change because the investments in marketing for example are not the same in the dermocosmetic and generic categories, the technological investment is the same, so it is necessary to divide the different studies by categories in order to try as much as possible to standardize the environment and working methods to avoid fewer players in the conclusions, allowing to have clearer and more succinct conclusions.

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