The impact of RBV on value creation in the pharmaceutical industry

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Telma Ferreira dos Santos graduated in Pharmacy in 2021 and it was during this course that she discovered her passion for business management. In order to reconcile these two worlds she enrolled in the Business Administration master's program, which has been an asset both academically and professionally. She is currently managing the business and team of one of the country's biggest-selling parapharmacies, with an average turnover of 5 million euros a year.

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Ricardo Correia is an entrepreneur and recognized for his work in academic terms, having published dozens of scientific articles in the main international business management journals index by scopus and Wos. Ricardo Correia completed his doctorate in the area of business strategy at ISCTE - University of Lisbon at 2013, and is actualy full professor at Universidade da Madeira, Portugal, in the management and economy department and, associate cientific at CITUR.

João Geraldes, holds a Doctorate from the Universidad da Extremadura in Management, Strategy, and Positioning, a master’s degree in management from ISG, and a Bachelor's degree in Organization and Business Management from ISCTE. He also completed a Postgraduate degree in Higher Education Teaching at the Jean Piaget Higher School of Education in Almada.
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João Geraldes has received several distinctions, including the Science Award for Contribution to Innovation from APIICIS INVENTARIUM SCIENCE in Nuremberg, Germany, in 2016. He was also honored with the "Exemplar Career 2020" award at the 4th Edition of the International Gala of Innovation 2021 and the "Award of Excellence" by the European Academy of Sciences at the same event.

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Renato Lopes da Costa is an entrepreneur and recognized for his work in academic terms, having published more than a hundred scientific articles in the main international business management journals index by scopus and Wos and, 8 books in the same scientific area. Throughout his career for several years he developed his business activity in the areas of retail and banking, developing projects of an operational nature in the areas of banking and management control in the retail area. Renato Lopes da Costa completed his doctorate in the area of business strategy at ISCTE - University of Lisbon, where he developed a pioneering work on the practices and praxis used by management consultants in the development of their work in client companies, contributing to the state of the art in scientific area of business strategy in the field of strategy-as-practice research. Renato Lopes da Costa also has the title of Aggregation in Management conferred by the University Institute of Lisbon, completed in 2022. As a university professor, he supervised more than a hundred of masters and doctorates in the area of business management, being recognized for this valence, as well as for his teaching ability in the area of business strategy in undergraduate, master's, executive master's and doctorate degrees, nationally and internationally. Having conducted several courses at Portugal universities, he is currently director of the MscBA - Master in Business Administration at ISCTE (being listed on the prestigious lists of the Financial Times as one of the best world masters in the scientific area of management) and Diretor of the Global Master Series in Business Management, Marketing and, Risk Management at ISCTE Executive Education. Between 2021 and 2023 Renato Lopes da Costa belonged to the scientific council of ISCTE as a member of the plenary.

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.

Chapter 1 - Introduction

The evolving technological landscape has heightened the emphasis on developing and managing effective strategies for long-term competitive advantage at the organizational level. This is particularly crucial in dynamic markets, such as the Pharmaceutical Industry (PI), where rapid changes demand swift adaptation. The PI, notably impacted by the Covid-19 pandemic, exemplifies the need for strategic agility in addressing societal needs (Holdford, 2018).

The Resource-Based View (RBV) theory plays a pivotal role in navigating the complexities of competitive environments, providing a theoretical foundation for assessing innovations and their impact on both the community and companies (Holdford, 2018). In the PI, creating innovative drugs or health products remains a primary avenue for gaining a competitive edge, with a focus on acquiring rare and valuable resources (Gonçalves, 2016).

PI encompasses diverse companies with varied focuses, ranging from generic drugs to specialized segments like dermocosmetics and oncology medications (Yoon et al., 2018). Implementing efficient and tailored strategies, considering both external market needs and internal company well-being, is essential for overall performance improvement. 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.

This research centers on the application of RBV in analyzing and interpreting resources to attain competitive advantage in the PI. The importance of Value, Rareness, Imitability, and Organization (VRIO) resources is emphasized, highlighting the necessity for strategic investments in resources and capabilities to exploit market gaps effectively (César et al., 2012).

RBV asserts that long-term success hinges on internal resources and their adept utilization to develop a competitive advantage (Guedelha & Friedli, 2018). The challenge lies not only in innovation but also in the difficulty of imitation, contextual factors, and benefits to both the community and the company (Holdford, 2018). Maintaining competitive advantage involves a constant struggle against competitors, emphasizing the significance of RBV in achieving and sustaining success.

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).

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.

In conclusion, this research aims to understand the impact of RBV on the PI and its potential to generate competitive advantage. The subsequent chapters will delve into a literature review, research model, methodology, data presentation and discussion, main conclusions, limitations of the investigation and contributions for the academia as well for the PI corporations, providing also suggestions for future 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, as the resource-based view theory is a generally accepted strategic management theory, particularly within private sector organisations (Kosiol *et al.*, 2023). 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 RBV theory focus on the effects that the resources of corporations have and in their ability to use those resources in their business performance and in achieving competitive advantage, relying on the characteristics of the owned resources and capabilities that companies should have to achieve constant and superior performance and therefore to conquer a sustainable competitive advantage (Uyanik, 2023) and has as final result the creation of value to an organizations by the generation of benefits for all stakeholders (patients, healthcare providers, and shareholders among others) through the optimization of the use of those resources.

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 (Salsabila *et al.*, 2022). 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).

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 (Grant & Yeo, 2022). 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)

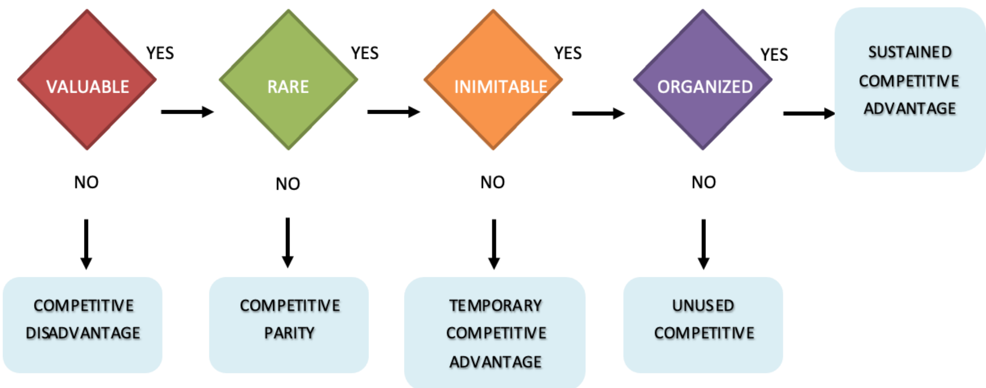

Figure 2.1 – VRIO Farm adapted from Salazar (2017)

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 (Patricio *et al*., 2022).

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).

Following the study of Jung *et al.* (2023), for PI companies "*value is typically created in one of four business modalities: (1) disease solution providers, (2) breakthrough innovators, (3) commercial optimizers and (4) value players*", and they involve delivering innovative and effective healthcare solutions that contribute to improved patient outcomes, addressing unmet medical needs, and enhancing overall well-being.

Alongside those 4 business modalities, different types of metrics are presented in order to measure it from a PI perspective: clinical efficacy and safety; patient-centric outcomes; innovation and unmet needs; cost-effectiveness; market access and affordability; research and development productivity; brand reputation and patient satisfaction and intellectual property and market exclusivity (Selker *et al.*, 2019).

Value creation in the pharmaceutical industry encompasses a broad spectrum of factors, ranging from clinical efficacy and safety to economic considerations and patient-centric outcomes. A comprehensive assessment involves considering the various dimensions that contribute to the overall value proposition of pharmaceutical products.

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 (Costa & 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 (Pereira *et al*., 2023). 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.

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 Portugal, 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). According to Avelar *et al.* (2022) "*the Portuguese pharmaceutical market primarily relies on modifications in chemical composition and related therapeutic class* *rather than major innovations*". 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 (Asad & Popesko, 2023).

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 (Li, 2023).

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 (Yu *et al.,* 2023). 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.	**Q1** - What impacts can be expected from the use of a RBV strategy in the strategic definition of a pharmaceutical company? **Q2** - How can the RBV contribute to the success of an PI company?	(Mai, 2017) ;(Salazar, 2017); (Assensoh-Kodua, 2019); (Combe, 2020); (Kosiol *et al.*, 2023); (Grant & Yeo, 2022); (Uyanik, 2023); (Yu *et al.*, 2023)
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.	**Q3** - What are the benefits that the implementation of a RBV strategy can bring to a pharmaceutical company? **Q4** - What are the risks experienced by PI firms when using RBV?	(Porter, 2003); (Assensoh-Kodua, 2019); (Maleka & Technologies, 2016); (Patricio *et al.*, 2022); (Jung *et al.* (2023); (J. B. Barney & Arikan, 2017); (Salazar, 2017); (Salsabila *et al.*, 2022); (J. B. Barney, 1996); (Al-Zawahreh *et al.*, 2018); (Asad & Popesko, 2023).
Understand which tools should be used by different companies to bridge market gaps.	**Q5** - What RBV tools can companies use to bridge market gaps?	(Wilden *et al.*, 2013); (Selker *et al.*, 2019).

Table 3.1 - Relationship between literature review, the objectives, and the research question
Source: Self-elaborated

Chapter 4 – Research Methodology

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).

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 (Morgado, 2013).

4.1 Methodology and Data Collection

Semi-structured interviews were chosen to this research and they are composed of guided questions with a single purpose of guiding the interview, as the questions have some flexibility of response from the interviewee (Morgado, 2013).

15 semi-structured interviews were conducted to professionals (Managers, Directors or Board Members) of the PI sector. The script was 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.

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, after the interview #15 this phenomenon of repeated information appears in a regular basis, 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.

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).

4.2 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, 20% in big companies, and the others in SME.

Although we are only talking about companies within PI, there are several sectors where these are included, such as pharma, consumer health, geneics and dermocosmetic.

Most of these companies are currently more than 75 years old, 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.

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

4.3 Method and Procedure

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 selected based on their professional curriculum and 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.

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.

4.4 Content analysis technique

The literature argues that content analysis aims to provide a critical analysis of the interviewees' collected content 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

Main Category	**Generic Category**	**Subcategory**
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
	1.3 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 maket 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 make 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 maket 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 entrategy 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.

Generic Category	Subcategory	Text	Interviewees	Times Mentioned
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

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 adress 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

In conclusion, this study underscores the highly regulated nature of the Pharmaceutical Industry (PI), governed by demanding laws and protocols, yet remains a significant area of investment due to its profitability. The strategic choices made by companies in this sector play a pivotal role in determining their success. The Resource-Based View (RBV) strategy emerges as highly beneficial for PI, offering internal and external contributions that enhance the industry comprehensively.

The RBV strategy proves advantageous for PI by fostering competitive environments, promoting innovation success, optimizing resource allocation to meet market needs, and enhancing internal awareness of company weaknesses for continuous improvement. Companies adopting this strategy can navigate market gaps more efficiently, particularly in short and medium-term scenarios, such as restructuring or navigating market crises.

Furthermore, the RBV strategy enables the formulation of robust strategies, emphasizing the value of resources in developing and implementing diverse business objectives. It facilitates companies to reach untapped market segments, fostering business opportunities and reinforcing the capacity to achieve objectives and sustain results.

The study reveals that effective preparation and optimization of resources and capacities significantly mitigate the impact on company performance during periods of substantial change, as evidenced during the COVID-19 pandemic. The industry's evolution and increasing segmentation lead to more companies engaging in spinoffs, optimizing resources and capacities, promoting specialization, and enhancing work profitability (Assensoh-Kodua, 2019).

However, the RBV strategy in PI is not without risks, both strategically and commercially, as companies risk deviating from outlined business plans and losing focus on critical contributing factors. To address various market gaps, the study identifies strategies such as product development, portfolio diversification through partnerships, and the significance of possessing resources like process automation, digital information, and training for personnel (Kalotra, 2014).

In summary, the study emphasizes the centrality of people as the most critical resource for a company's success, maximizing its profitability and productivity. The study successfully achieves its objectives by providing insights into the impact of RBV on PI and its role in generating competitive advantage for diverse companies within the industry.

6.2 Theoretical and practical implications

This research significantly contributes to academia, science, and the business world by advancing understanding of the Resource-Based View (RBV) strategy in the Pharmaceutical Industry (PI). Addressing a sensitive and underexplored subject, the study sheds light on the diverse strategies employed by companies, aiming to identify those with the most positive impact.

In the constrained yet innovative PI sector, crucial for public health, the adoption of innovative strategies becomes imperative for constant improvement and meeting evolving market demands. This study facilitates companies' comprehension of the need for resource optimization and its impact on overall results.

Exploring various research questions, the study extends existing knowledge, emphasizing the importance of heterogeneous resources and capabilities for enhancing PI competitiveness. Companies are encouraged to invest in innovation, unique resources, and diverse capabilities, fostering market segmentation tailored to customer needs.

Noteworthy findings include the expediency, cost-effectiveness, and ease of strategy formulation through in-house resource optimization, promoting solid and aligned strategies across the organization. The study underscores the strategic benefits of aligning company elements, fostering a shared focus and enhanced productivity to achieve objectives.

Additionally, the investigation highlights the advantages of spinoffs in optimizing resources and capacities, enabling swift responses to market demands and diversified investments based on revenue. A key takeaway is the emphasized importance of people as the most valuable investment resource, driving profitability and productivity across all other resources, thereby maximizing overall company performance.

6.3 Limitations of the investigation

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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