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**Master of Science in Engineering and Management - M. Sc. Thesis**



## **DEVELOPMENT OF A STRATEGIC PLAN IN A FAMILY-RUN DAIRY IN BRAZIL**

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*To my mom and dad*



## **ACKNOWLEDGEMENTS**

First of all, I would like to thank my parents and my brother for all the daily support they give me. I am sure none of this would be possible without you.

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*“Your most unhappy customers are your  
greatest source of learning.”*

*Bill Gates*



## ABSTRACT

The present work has the initial objective of assisting the elaboration of a strategy for Fazenda Atalaia, a family business of artisanal products that stands out mainly for the production of authorial cheeses, many of them awarded in national and international competitions.

In order to achieve this goal, an extensive study of the company and the context in which it operates is carried out, using different tools to develop its mission, vision, and values, to identify the most relevant forces influencing its industry and to map the company's internal strengths and weaknesses, as well as potential external opportunities and threats.

The definition of Fazenda Atalaia's strategy establishes a direction for the company. Thereby, the second goal of this work begins, preparing the company for the adoption of a Performance System capable of guiding the actions of all company employees to the same direction, ensuring the alignment of all those involved. For this, a study is carried out on the concept of performance, aiming to define, among the various potential existing Performance Systems, the one which should be selected for the matter in question. At the end of this study, a hybrid model that involves the Balanced Scorecard (BSC) and the Objectives and Key Results (OKRs) is chosen.

Once the Performance System is defined, the work carries out some initial stages of its implementation, as well as a schedule for the subsequent stages of this process. As Fazenda Atalaia is a small and family-owned company, throughout the work it is necessary to constantly adapt the theories studied to the reality and limitations presented by the company, always focusing on developing a proposal that is applicable to its situation and that, in this way, is capable of generating real results for the company, respecting its particularities and adapting the strategy to its real needs.

**Keywords:** Strategy; Dairy; Handcrafted products; Family business; Performance Systems; Balanced Scorecard; Objectives and Key Results.



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## **LIST OF ABBREVIATIONS**

<b>BSC</b>	Balanced Scorecard
<b>CSF</b>	Critical Success Factors
<b>IT</b>	Information Technology
<b>KPIs</b>	Key Performance Indicators
<b>MBOs</b>	Measuring by Objectives
<b>MSMEs</b>	Micro, Small & Medium Enterprises
<b>OKRs</b>	Objectives and Key Results
<b>OPM</b>	Operational Performance Measurement
<b>SMART</b>	Strategic Measurement Analysis and Reporting Technique
<b>SWOT</b>	Strengths, Weaknesses, Opportunities and Threats



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## **1. INTRODUCTION**

### **1.1. Company history: From foundation to cheese production**

The studies presented in this document focus on the company named “Fazenda Atalaia” located in Amparo, State of Sao Paulo, Brazil. Fazenda Atalaia is an enterprise that carries the name of the property where it is located, a farm founded around 1860 by the then President of the Industrial Bank of Amparo, Pedro Penteadó. To avoid possible confusion caused by the dual use of the name, during the work the property will be treated by “Atalaia farm” or just “farm”, while “Fazenda Atalaia” or just “Atalaia” will always refer to the company, born within the property.

At the time of its foundation, the construction aimed to produce what was then the main Brazilian commodity, coffee, a fact that is clear when we analyze its original plant that follows preserved until the present day, composed of the "terreiros", large patios where the moisture of the coffee is removed by the exposure of the grains to the sun, by the "tulha", structure where the already dried product was stored and benefited, and finally by the farmhouse.

The Atalaia farm, as well as the other coffee-producing properties of the time, used, in its origin, a slave labor in its crops. However, even before the abolition of slavery in the country, the arrival of European immigrants began the process of transition from these farms from the slave model to the policy of settlements. This transition was responsible for intensifying and diversifying trade in the region, as the settlers had some purchasing power.

In parallel, the inauguration of the Mogiana Railway Company in the region in 1875, responsible for the logistic support in sending coffee bags from farms to the port of Santos city, also encouraged the intensification of trade, increasing the supply of products in the region.

This movement of intensification of commercial activity resulted in the birth of warehouses, most of them strategically located in the railway stations themselves.

The commercial relationship between the warehouse and its customers followed a particular and traditional logic of the time, each family of settlers had its bookmark in the warehouse, where were recorded all purchases made in a 12-month period, comprising a coffee harvest cycle. Such purchases were guaranteed by landowners who fulfilled the role of guarantors of settlers. At the end of the harvest, after the distribution of the results between the owners and the settlers, the colonist paid the debts with the warehouse, resetting the existing balances and starting a new cycle.

This new commercial structure opened the door to a new type of immigrant, the Arabs, native traders, who arrived in the region to manage the warehouses.

The case of Fazenda Atalaia was no different, the settlers were supplied by the warehouse located at the train stop called "Pantaleão", very close to the property, on the line that passed through Atalaia itself and connected the cities of Amparo and Serra Negra. This warehouse was managed by merchant couple Zakie and Caram José Matta who had migrated from Lebanon to Brazil with their family in the early 20th century.

After more than seventy years of coffee production in Atalaia, the drop in the value of the product resulting from the 1929 crisis caused the business to go through financial difficulties, making it impossible to pay some debts incurred, including that of its settlers with the warehouse. It was the negotiation of this accumulated debt that, in 1939, resulted in the purchase of the property by the family of the lebanese couple with their friend Gabriel Matta, who also helped financially with the purchase. After the acquisition, Caram and Zakie left the warehouse and moved to Atalaia along with the family and, a few years later, they bought the part of Gabriel, thus becoming the sole owners of the Atalaia farm.

Now living on the farm, the Matta family maintained the coffee production and, in parallel, raised some dairy cows. Around the fifties, Atalaia experienced a new development cycle with the construction of the alembic – also preserved until today – and the beginning of cachaça production, but the project did not last long and was soon closed.

Atalaia then spends a few years without a fixed initiative until, in the eighties, it is divided between the heirs of Caram and Zakie. About forty per cent of the area of the original property was inherited by the sisters Clarice and Malake Matta, including the historic buildings above mentioned. This fraction of the original farm makes up the property that remains with the heirs until the present day. In this context, Clarice changes from Sao Paulo, where she served as an educational inspector, to Atalaia and, gradually resumes coffee production with the participation of his son, Paulo José, who had just joined the course of Agronomic Engineering at the College of Agriculture "Luiz de Queiroz" of the University of Sao Paulo (ESALQ – USP) and, during the weekends and holidays, traveled to Amparo to help on the farm.

About a decade later, with the coffee production more structured, Paulo changes definitively to Atalaia with his wife, Rosana, to manage the farm along with her mother, Clarice. It was in this scenario that, in parallel with the cultivation of coffee, Rosana begins the production of fresh cheeses with the small amount of milk produced by the farm's herd, about forty liters per day. In addition, Rosana also begins the artisanal production of bread

and cakes and starts to offer them from door to door to acquaintances and friends of Amparo town, beginning the formation of a clientele.

The production of coffee in the estate was gradually becoming more difficult because the supply of labor for this work in the field was increasingly scarce and, at the same time, the mountainous topography of the land prevented the mechanization of the processes. In addition, despite the high quality of the region's grain, the value of commodities reached an extremely low level at the end of the 20th century.

Due to all these difficulties, the farm's focus was gradually shifted from coffee production to dairy production and craft products, an activity that, despite having undergone several transformations, is the focus of the property until the present day and it has led to the birth of the "Fazenda Atalaia" company, which will be the focus of study in this document.

## **1.2. Current company context**

The production of dairy products at Fazenda Atalaia has undergone several changes since its inception, the initiative came from Rosana, from the state of Minas Gerais, who since childhood experienced the production of cheese by following her father, Geraldo, who produced them on a small property in city of Unaí for their own consumption and also to supplement the family's income. Already living in Atalaia, Rosana took advantage of this experience acquired in her youth to improve her cheese skills more and more, participating in a course offered by SENAR and another taught by the "*Instituto de Laticinio Cândico Tostes – Epamig*".

In the beginning, the Farm's portfolio consisted of traditional and fresh products such as fresh cheese, ricotta cheese, yogurts, and butter, not only due to the lack of experience of the team – which was starting to work with this product line – but also because these were products which demanded less equipment and were easier to sell, since at that time the demand for national cheeses in the region was found in these most common products.

At that time, the sale of products - fresh dairy products, breads and cakes, mainly - was made by Rosana, who sold them door-to-door in the city of Amparo, mainly to friends who soon became customers.

The increase in milk production and the greater experience of the team made the portfolio of "Fazenda Atalaia" increase, initially with the addition of cheeses such as mozzarella and provolone, and then with the introduction of the first matured cheeses, such as parmesan and gouda.

At the time, the company received the Municipal Inspection Seal, SIM, which allowed

the products to start to occupy some space in the main markets of Amparo and some neighboring cities.

In 2015, three main factors caused the focus of dairy production to change, the first was the understanding by the owners that due to the small scale of production in the company, compete with large dairy producers and have supermarkets as customers – where margins were low – would not allow the company to survive in the market. The second was due to a perception that the matured products from "Fazenda Atalaia" acquired their own characteristic - visual, aroma and taste - mainly due to the particular maturation in which the cheeses were submitted, made in the natural environment of the centenary building, without adapting the humidity and temperature to the standards required by the recipes. Finally, the third factor was the notion that at that time there was a change in the national consumer public and also in the chefs of the main Brazilian restaurants, which increased the demand for national products with their own identity that valued their origin.

In this context, the Farm started to adopt a new concept in its products, no longer seeking to replicate recipes already consolidated and starting to develop its own original line of products, aiming to value the entire production process of its cheeses, from feeding and caring for the animals, which resulted in a high-quality milk, until the processing of this milk and the maturation of the cheeses. That was how the current line of authored cheeses emerged and, to complete this whole new approach to the products, proper names that refer to the characteristics of the farm and its region were assigned to each of the new recipes. At the time this work is developed, the authored line consists of more than fifteen products and are the registered trademark of Fazenda Atalaia in the market.

The first authorial cheese was named "Tulha" cheese in May 2015, honoring the centenary building where all cheeses are produced and matured. About a year later, in September 2016, Fazenda Atalaia was the most awarded dairy in the 2nd edition of the "Queijo Brasil" contest, the largest national cheese event that seeks to value and present cheeses from all over Brazil.

The cheeses aroused the interest of some specialized emporiums, mainly in São Paulo and Campinas, and the greater exposure of Atalaia in the media, with reports on widely publicized channels such as Globo Rural, UOL, Folha de São Paulo and others, soon caused several emporiums in several cities in the State of São Paulo and in the capitals of the other States of Brazil began to work with the products.

At that time, Atalaia's presence in several fairs of slow food products also became common – mainly in São Paulo – where the products were exposed to new customers,

allowing the brand to gradually become known and the demand for the products to increase. In addition, restaurants in several cities began to incorporate the products into their menus, one of the first to do this was DOM, chef Alex Atala's restaurant, considered by many as one of the best in the world, which also caused demand for the products to grow. Alex Atala himself took the Tulha cheese to an episode of the Master Chef Brazil program in which the product should be used by the participants in the creation of a recipe, an example of the visibility added by the chef to Atalaia's products.

In parallel to all of this, the sale of cheeses in the farm's own store underwent a rapid growth, tourists from several cities in Brazil – mainly São Paulo and Campinas – and even from other countries began to visit the property, which started to develop – in a process that is still evolving – a series of on-site activities, such as breakfast and lunch, guided historical tour, artistic exhibitions and product tasting. In addition to the products, the concern with preserving the property's architectural and historical ensemble – with restoration projects taking place continuously – and valuing the local culture, are also seen as factors that attract and contribute to the good experience of customers in the place.

Finally, at the beginning of the pandemic caused by the Corona Virus, Atalaia launched a new sales channel, an e-commerce through which customers from all over Brazil have access to the products, in a logistic process that is carried out in two formats, in its own fleet of the company's trucks – to the nearest cities in the State of São Paulo – and through a contracted carrier – to other regions. The channel was an important means of compensating for the drop in revenue caused by the pandemic and of increasing Atalaia's visibility, as many customers who have had their first contact with the company through e-commerce end up visiting the property in future opportunities. The initiative has also shown a new channel with good growth potential that can be exploited more and more.

As can be observed, since its creation, the company has undergone a series of changes and has experienced, especially in the last five years, rapid growth. However, despite this, little progress has been made in the management of the company, much of the decisions still fall on the owners, from simpler choices to more strategic ones, and there is no formalized long-term planning or vision to guide and assist such actions.

### **1.3. Motivation**

The demand for this work arises from the great interest on the part of the company's leadership in developing a strategy that helps decision-making at a managerial level in the enterprise. Founded as a family business, the company's current need for professionalization

is clear, as is the better definition of goals and objectives for some of its departments, to facilitate and guide the performance of its employees. All this study must be done, however, addressing the essence and current characteristics of the business, many of them considered as factors that differentiate the brand from its competitors and made it achieve current growth.

A good strategic planning must be able to raise opportunities and threats present in the competitive environment in which it operates, as well as internal strengths and weaknesses of the target company under study. Based on this, a realistic plan must be designed to assist in decision-making, both to explore the opportunities identified as the most interesting and to actively protect against the main threats.

As the author of the work is a member of the company's founding family, access to the company's data is facilitated and there is also an initial understanding of the company's operation and its main needs. It was agreed that an analysis of the current situation of the dairy would be carried out, followed by a study of the market in which it is inserted and, finally, the design of an applicable strategic plan that respects the reality and limitations of the company. It is also necessary that all these actions are easily understood by the company's team and that this document can be updated in the future in a practical and easy way, allowing the material to be continuously improved and not become obsolete.

Through this work, the result of a dense study of the company's current reality and its available options, Fazenda Atalaia will be able to adopt a series of changes aimed at transforming it into a more professional and lasting company, capable of growing in a more structured and healthy way and, at the same time, survive even in unstable and turbulent environments.

#### **1.4. Goals**

The main objective of this document is to assist the management of Fazenda Atalaia. For this purpose, this objective was divided into two main topics that address demands currently felt within the company. The first part seeks to develop a strategic positioning proposal for Fazenda Atalaia to assist its leadership in decision making, while the second part seeks to develop, within the company, conditions that allow the adoption of a performance system capable of guiding the work of the different teams that make up the company to the direction defined by this strategic positioning.

Currently, decision-making within the company is carried out without the aid of explicit long-term planning. The work proposed here seeks to provide greater clarity in relation to existing opportunities and threats and to map the available and recommended ways

of acting in this context, aiming at the company's growth in a lasting and healthy manner, without losing its essence and its differentials.

Achieving this objective, however, depends on a thorough study of the company's current reality and the environment in which it operates, allowing for a realistic diagnosis of the situation to be developed with recommendations that are applicable. In addition, to achieve this objective, it will be necessary to overcome some basic information that, so far, is not yet available by the company, either through the calculation of this information, or through approximations or adoption of some assumptions that will be made explicit during the document.

In this context, the work initially aims to carry out a diagnosis of the company's current situation, considering internal and external factors. Then, the work will develop a corporate strategy that suits the situation and objectives of Fazenda Atalaia, in addition to applying methodologies that facilitate the dissemination of this strategy among the company's departments and employees, always seeking to align the actions of these teams through of measurable goals and objectives.

During the development of the work there is the intention to implement some pilot proposals for identified and developed improvements, mainly to test the feasibility and effectiveness of such actions through concrete results. If the time available for the project makes such actions unfeasible, an implementation schedule will be delivered as a result of the work, aiming to facilitate and assist the adoption of the proposals by the company's team.

In summary, the general objective of this study can be divided into two specific objectives that will guide the development of the work, they are:

- Develop a clear strategy for the company, aiming to help achieve its long-term goals.
- Prepare the company for the future implementation of a performance system capable of, based on the designed strategy, assisting decision-making by the company's leadership, and ensuring the alignment of the other teams towards this same established direction.

a more professional and lasting company, capable of growing in a more structured and healthy way and, at the same time, survive even in unstable and turbulent environments.

## **1.5. Work Structure**

This document is divided into seven chapters, each with a function, as described

below. The first of these is the introduction, in which this section is inserted. This chapter offers a brief context on the company's history and its current context, as well as a presentation of the existing motivations for the development of the work and the objectives that are intended to be achieved during its deployment.

The next chapter consists of the bibliographical review, containing all the relevant subjects for the work, presenting all the studies, concepts, tools, and models that, in some way, support the analyzes developed during the elaboration of the work.

The third chapter is intended to present the method used in the work to achieve the proposed objectives, describing in greater detail each of the steps followed during the development of the work.

The fourth chapter consists of the development of the work, that is, the application of the method proposed in the previous chapter to the reality of the company being studied, seeking to achieve the objectives presented in the first chapter.

The fifth presents the results achieved during the development of the work, presenting a parallel with the objectives initially proposed so that it is possible to understand whether the work managed or not to achieve what it initially proposed.

The sixth chapter presents the conclusions obtained with the execution and completion of the work, also bringing the main lessons learned throughout its development, as well as suggestions for possible next steps that the company being studied should consider taking.

The seventh and last chapter is composed by the presentation of the bibliographical references that support the entire elaboration of this work.

## 2. LITERATURE REVIEW

This chapter will present the main theoretical foundations used during the development of the work, ensuring a foundation for the diagnoses and conclusions presented in the following chapters. The concepts present were, for the most part, seen during the graduation in Management Engineering, held at the University of São Paulo and at *Politecnico di Torino*. However, some of these themes were analyzed in greater depth during this study, as well as others that were studied for the first time specifically for this work, thus ensuring a more complete approach to the problem analyzed.

The literature review presented below was designed specifically for the scope defined for this work. Therefore, topics will be presented in an order that reflects the logical flow performed during their deployment. The development of the work can be analyzed as two main stages that, despite the strong relationships that exist between them, can be approached independently. Following the same division previously presented in section 1.4 Goals, the first stage corresponds to the elaboration of the company's strategy, while the second stage comprises the development of a performance system in the company. In addition to these two main steps, there is a brief initial introduction to the concept of "artisanal product", clarifying the use of the term during the work, and a small intermediate step of extreme importance that contributes to the connection of the two central parts, corresponding to the Critical Success Factors (CSF) that will define, from the defined strategy, the factors and areas that deserve more attention and must necessarily be addressed in the performance systems.

Therefore, the first topic to be addressed in the review will be Strategy Development, comprising the topics of mission, values and vision, Porter's Five Forces, SWOT Analysis and Generic Competitive Strategies. Then, the topic of CSF will be briefly discussed, presenting the concept and its importance, as well as a method of how to define them within a company. Finally, the third phase of the work encompasses the theme of Performance, initially presenting a brief introduction about the concept and then presenting traditional models and models focused on Micro, Small and Medium Enterprises (MSMEs), in addition to defining the model to be used in the development of work at Fazenda Atalaia.

To avoid unnecessary repetition, the term "product" and not "product or service" will be used in this section in reference to the final product of an industry, although the principles presented below apply equally to production and service activities, except in the cases where this non-application is explicit in the text. Furthermore, the term industry means, in this context, an industrial sector and not a single company, except again when the opposite of this

is explicitly written.

### **2.1. Artisanal Product**

This section, which starts the literature review, seeks to ensure alignment on an important concept for the development of the work, the term “handcrafted product”. It is possible to find several definitions of the term, but, for the present work, we will use the definition adopted below and presented by “Caminho do Queijo Artesanal Paulista” (2017), a group formed by several cheese producers in the state of Sao Paulo, including Fazenda Atalaia, in its manifesto of artisanal cheese.

"Small-scale cheese produced on a small scale, with a predominance of manual processes, limited use of machines and exclusive use of milk produced in each dairy or its surroundings, should be considered artisanal".

### **2.2. Strategy Elaboration**

This section aims to present a theoretical framework on the topic of Strategy, since the initial objective of the work is focused on the elaboration of a strategy for the company that is the focus of study. According to Soares (2001), the development of a company's strategy depends on a deep understanding of the company itself and the context in which it operates. In other words, to define the company's positioning, it is necessary to assess the internal and external factors that influence its performance and results. Below, some concepts, methodologies and tools used during the work for this purpose will be detailed.

#### **2.2.1. Mission, values, and vision**

The first step in the development of a strategy is the definition of the company's mission, values, and vision (SOARES, 2001), so it was decided to start this stage of the project with the presentation of these concepts and a methodology capable of develop them or, if they already exist within the company, validate them. The company's mission statement serves as the basis for building its strategy, a good definition must present the benefit generated by the company to its target audience, that is, its reason for being. It is important to make it clear that producing a certain product or providing a certain service are not sufficient reasons for a company to exist, such factors must be understood as means used by the company to bring the benefit to its target audience. A mission must also have the purpose of inspiring and challenging those involved, causing greater engagement and commitment in employees and partners. For this, it is important that the mission presents a simple and easy-

to-communicate language, as it must be easily understood by all interested parties (NAKAGAWA, 2015).

The company's vision determines the objectives that the company seeks to achieve over the next few years, including, preferably, indicators and targets that allow its measurement. Like the mission, the company's vision must also be easily communicated and must be able to inspire and motivate the teams involved in the company's day-to-day activities (NAKAGAWA, 2015).

There are several definitions for the three terms, in this work we will adopt the definition presented by Nakagawa (2015) presented below:

- Mission: Purpose of the company, its reason for being.
- Values: These are the ideals of attitude and behavior that must be present in employees and in the company's relationships with its customers, suppliers, and partners.
- Vision: It is the situation that the company wants to reach in a defined period.

If the company does not have the three defined concepts, Nakagawa (2015) elaborated an approach composed of a series of questions and provocations capable of guiding the development of terms. Below is the segmented methodology for each of the terms.

- Questions to identify the mission
  - Define what is the main benefit that your company brings to your target audience.
  - Define the main competitive advantage (differential) that distinguishes your company from the competition.
  - Determine if there is any special interest that should be in the company's mission. Or whether interest would be a consequence of the business's success.
  - Write a short sentence that presents the benefit, the competitive advantage and, if appropriate, the interest of the entrepreneur. Then, validate with those interested in the business if this phrase could be the company's mission.
- Questions to identify values
  - If your company were a person, what attitudes should it be known, remembered, and admired?
  - Could this list of attitudes serve as your business values list? If not, redo the attitude list.

- Questions to define the vision
  - Set a planning horizon of 3-5 years. How would you like your company to be at the end of this period?
  - In the answer above, would it be possible to determine some type of evaluation indicator and numerical targets that could be achieved in this period?
  - Make a statement outlining the objective(s) that the company will achieve during the period. Then, validate with those interested in the business if it could be the company's vision of the future.

It is important that this methodology is applied in the presence of several company leaders, ensuring good internal alignment for the company. In addition, the final concepts developed must be presented, discussed, and validated with all the main stakeholders in the business, as made explicit in the methodology itself.

If the company already has the concepts defined, it is important to carry out a validation step to ensure that they really meet the necessary requirements, since, especially in MSMEs, it is quite common for such terms to be misused. This validation can be performed from the Validation Test developed by Nakagawa (2015) presented in Table 1 below, the application of the test allows possible failures to be identified and corrected.

Table 1 - Mission, Vision and Values Validation Test  
Source: adapted from Nakagawa (2015)

Mission, Vision, and Values Validation Test			
1. Is the Mission too generic?	<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input type="checkbox"/> No, it's well defined
2. Would the Mission also serve another very different business?	<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input type="checkbox"/> No, just for my company
3. Does the Mission present the benefit of the company's performance?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, that's pretty clear.
4. Do collaborators and partners find the Mission inspiring?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's inspiring
5. Do collaborators find the mission challenging?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's challenging
6. Is it easy to communicate the mission to employees, partners and customers?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, easy understanding
7. Is there at least one well-defined goal in the Vision?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's pretty clear
8. Is Vision Measurable?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's measurable
9. Do collaborators find the Vision inspiring?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's inspiring
10. Do collaborators find the Vision challenging?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's challenging
11. Does the Values list have several unnecessary items?	<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input type="checkbox"/> No, they're important items
12. Is the List of Values inspiring?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's inspiring
13. Can the list of Values be practiced by everyone in the company?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, it's challenging
14. Can the list of Values be used in the selection process?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input type="checkbox"/> Yes, along with other criteria
15. Can the list of Values be used in the evaluation of employees?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, along with other criteria

Review concepts using the methodology
Approved!

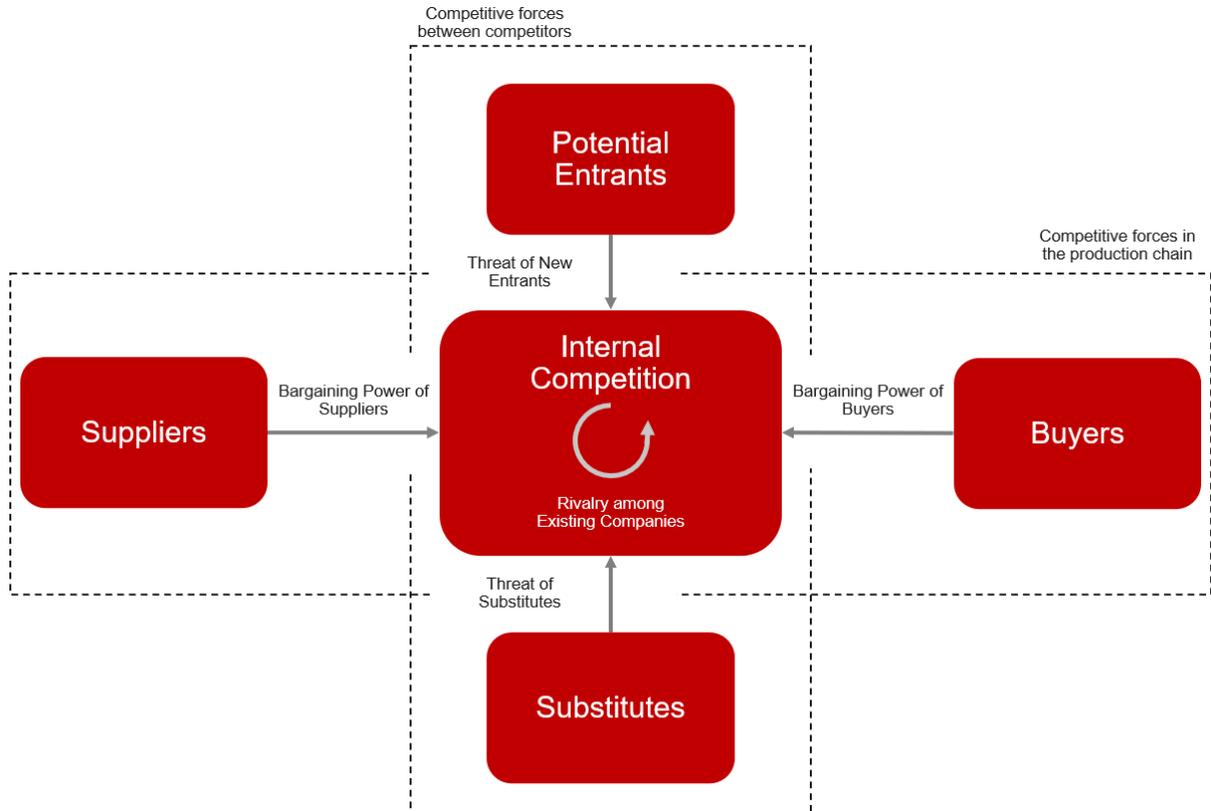
### 2.2.2. Porter's Five Forces

Relating the studied company to its environment is the essence of formulating a competitive strategy. Although this relevant environment is extremely broad, since it is composed of the most diverse social and economic forces, the main aspect of the company's environment is the industry or industries in which it operates. This is because the industrial structure directly influences the competitive rules of the game, as well as the strategies potentially available to the company, while other forces outside the industry have a relative role, as they affect not only the company being analyzed, but all companies which also make up the industry (PORTER, 2005).

The intensity of competition in an industry is a result of its basic economic structure and is not limited to the performance of current competitors that comprise it. The degree of competition can be explained by understanding the five main basic competitive forces: customers, suppliers, direct competitors, new entrants, and substitute products. The intensity of the set of these forces determines the final profit potential of the industry in an inversely proportional relationship (PORTER, 2005).

The Figure 1 below illustratively presents the forces driving competition in the industry. On the horizontal, we have the dispute for profitability within the production chain, that is, the bargaining power of customers and suppliers in the price negotiation dispute, while on the vertical, there are disputes between competitors, whether companies already established in the industry, potential entrants, or substitute products (CARVALHO; LAURINDO, 2010).

Figure 1 - Industry Structural Analysis: Porter's Five Forces  
Source: adapted from Carvalho and Laurindo (2010, p.43)



According to Porter (2005), the goal of competitive strategy for a company would be to identify and be able to position itself within its industry in a position where it can better defend itself against these five competitive forces or even influence them in its favor. It is also essential that the company understand the sources of each of these forces so that, based on this information, it can map the company's critical strengths and weaknesses, position itself better in the industry, clarify the consequences of its changes and highlight the areas where industry trends deserve more attention, whether due to the presence of opportunities or the presence of threats.

#### 2.2.2.1. Threat of New Entrants

Potential entrants to an industry are responsible for the threat of new entrants to existing companies. This threat comes from the fact that new companies always bring with them new capacity and, invariably, the desire to gain market share. Such actions can result in a reduction in the average profitability of the entire industry, either by reducing prices or by increasing participants' costs (PORTER, 2005).

Cases of acquisitions of companies already active in an industry through other companies that have not been active until then are also analyzed as new entries, since such

movement is carried out with the purpose of the acquiring company to build a position in such market, although in this case there is no real entry of a new competitor (PORTER, 2005).

The intensity of the entry threat varies from industry to industry according to two main variables, the existing barriers to entry and the reaction of existing competitors. Industry in which existing barriers are high and where retaliation to a new entrant is large usually has a small entry threat (PORTER, 2005).

Economies of scale are the main sources of entry barriers, they represent the reductions in unit costs of a product (or operation or function that goes into the production of a product), as the absolute production volume in the same period increases. These savings can come from different areas and stages of a company, including manufacturing, purchasing, research and development, marketing, network services, sales force utilization and distribution. In an industry with high economies of scale, new entrants are forced to make a difficult decision, adopt a risky position to enter the market on a large scale to experience these economies and be cost-competitive or enter on a smaller scale, but aware that it will have a cost disadvantage in relation to its already consolidated competitors (PORTER, 2005).

Companies operating in more than one industry may be able to achieve economies of scale if they are able to share operations or functions subject to economies of scale between their different businesses. In addition, another common form of entry barrier in the form of economies of scale occurs when vertical integration results in economic advantages, as the incoming company must then enter in an already integrated manner, which increases the risks and complexity of the operation, or face a cost disadvantage in relation to other competitors (PORTER, 2005).

In addition to the economies of scale already mentioned, other important sources of entry barriers are product differentiation, the need for capital, switching costs and access to distribution channels (CARVALHO; LAURINDO, 2010).

Product differentiation means that established companies identify with their customers, developing a loyalty relationship with them, through advertising, customer service or simply because they entered the industry first. The entry barrier forces new entrants to make great efforts to overcome this bond established by their competitors with customers, generating large expenses that lead to initial losses (PORTER, 2005).

Capital need represents the need for entrants to invest in a large amount of financial resources to enter the industry. This feature creates a more intense barrier to entry if capital is required for high-risk and sunk activities, such as initial advertising and research and development. Some of the main sources of capital need are production facilities, consumer

credit, inventories, or initial loss coverage (PORTER, 2005).

Switching costs are the costs incurred by a buyer when they decide to switch suppliers, including costs of retraining their employees, cost of new auxiliary equipment, cost and time to test or qualify a new source, need for technical assistance, new project product or even psychic costs of breaking up a relationship with the old supplier. High switching costs represent a barrier to entry, as new entrants need to offer a substantial improvement in cost or performance to gain market share, as buyers must decide to leave their established supplier to adopt their products (PORTER, 2005).

Access to distribution channels can also represent a barrier to entry for new entrants. Since the distribution channels are already being served by the established companies, the new company will need to create new channels, which may require a large investment, or it will have to be able to persuade the channels to accept the inclusion of its products, which may be achieved through price discounts, funds for advertising campaigns and similar actions, which generates non-existent costs for other competitors and reduces the profit margin. The barrier is greater if the available channels are more limited and/or if they are more controlled by existing competitors already established (PORTER, 2005).

Added to these barriers are other cost disadvantages that do not depend on scale, such as patents, access to raw materials, location, official subsidies and learning or experience curves (CARVALHO; LAURINDO, 2010). It is worth mentioning, however, that the constant evolution of industries and the development of new technologies can generate changes capable of creating or eliminating many of these barriers.

As already mentioned, in addition to entry barriers, there is also another factor capable of directly influencing the threat of new entrants, the expectations surrounding retaliation from competitors already consolidated in the industry. This expectation of retaliation is more present when companies that are already consolidated have excess capacity and/or available capital to maintain and sustain a direct battle (CARVALHO; LAURINDO, 2010). According to Porter (2005), the conditions that indicate a high probability of retaliation for the entry of new entrants include a past of vigorous retaliation, established companies with substantial resources for dispute, such as surplus cash and production capacity, consolidated companies with a high degree of commitment to the industry and highly non-liquid assets employed in it and slow growth of the industry, which makes the market conquest of a new entrant necessarily result in a reduction in the volume of customers of at least one consolidated company.

### **2.2.2.2. Industry Rivalry**

Rivalry between existing competitors can be analyzed as a dispute for position, using different tactics such as price competition, advertising battles, introduction of new products and expansion of services or guarantees provided to customers. This rivalry exists because one or more competitors feel pressured or see the opportunity to improve their position in the industry (PORTER, 2005).

The competitive movement of a company traditionally causes noticeable effects on its competitors, causing them to adopt reaction movements and, thus, lead the entire industry to a new reality that can be better or worse from the point of view of profitability for companies that compose it. Price competition, for example, generates price cuts that are quickly matched by rivals and, once realigned, reduce revenues for all firms, except for industries where price elasticity is high. On the other hand, advertising battles can expand the industry's demand or increase the level of product differentiation existing in it, generating benefits for all companies (PORTER, 2005).

The intensity and form of rivalry (merciless or gentlemanly) present in an industry depends on several aspects that must be analyzed, the main characteristics that can generate a hard and intense rivalry and that will be explored below are: numerous or well-balanced competitors, slow industry growth, high fixed or storage costs, lack of diversification, low switching costs, increased capacity in large increments, competitors with divergent strategies and high exit barriers (CARVALHO; LAURINDO, 2010).

The presence of a high number of companies in the industry makes the probability of dissent greater and makes some companies move thinking that, as they are only one among several that make up the industry, their movements are not noticed by the others. At the same time, the presence of a balance in terms of size and apparent resources between companies (whether they are many or few) creates instability in the industry, leaving them inclined to fight each other and all with sufficient resources to adopt retaliatory measures (PORTER, 2005).

The slow growth of the industry also increases competition among competitors, as the expansion of one company is conditioned to the contraction of another, while in fast-growing markets they allow companies to improve their results just following the growth of the industry (PORTER, 2005).

Industries in which fixed costs are high also tend to have great competition, as companies will always be seeking to satisfy their capacity so that these high costs are diluted

in an optimal volume of production, which may result in a reduction in prices to guarantee sales. It is important to understand that what must be evaluated in this case is the value of fixed costs in relation to the added value and not the representation of fixed costs in total costs. In the case of high storage costs, there may also be this temptation to reduce prices to ensure sales, which keeps industry profits at low levels (PORTER, 2005).

The lack of diversification also increases the rivalry between companies in the industry since the main decision criterion for consumers will be the price charged by each company, making there a great motivation for companies to enter a price war that will maintain a low profitability in the industry. At the same time, undiversified markets with low switching costs will make customers always willing to switch suppliers in case of lower prices, also increasing the likelihood of a price war (PORTER, 2005).

In industries in which the productive capacity is increased in large increments, something common for the maintenance of economies of scale, moments of capacity increase can cause an imbalance in the industry's supply/demand, since the increase in capacity in a large increase can result in a sudden increase in supply, causing periods of overcapacity that normally result in reductions in product prices (PORTER, 2005).

Competitors with divergent strategies can have difficulties in accurately deciphering the intentions and movements of others, making it difficult to define the "rules of the game" that will drive the industry. This difficulty can increase rivalry between companies and make the market less interesting (PORTER, 2005).

Finally, the existence of high exit barriers can keep companies in the industry that are getting low or even negative returns on their investments, increasing competition within the industry. These barriers can be economic, strategic or even emotional factors that can have as sources the existence of specialized assets, fixed exit costs, strategic interrelations, emotional barriers or governmental and social restrictions (PORTER, 2005).

### **2.2.2.3. Threat of Substitutes**

Every company in an industry is competing with the other companies that manufacture products considered substitutes for yours. After all, the same public that will consume the products of this industry can choose not to and consume the substitute products and this fact characterizes the two industries as competitors.

The potential returns of an industry are reduced and limited by substitutes, as there will be a ceiling price charged for the product that the industry must respect without all consumers choosing to substitute it. The more attractive the price-performance alternative

offered by substitute products, the greater the pressure on the industry's profits analyzed (PORTER, 2005).

Substitutes can be identified as those who perform the same function, although they are from a different technological (industry) basis. The substitutes that deserve more attention are those that can improve the price-performance ratio in relation to the products of the analyzed industry and/or are produced by industries with high profits (CARVALHO; LAURINDO, 2010).

#### 2.2.2.4. Bargaining Power of Buyers

Buyers in a certain industry are constantly competing with producers to lower prices, improve the quality offered, include more services and, not surprisingly, seek to play competitors against each other, inciting a price war between them that would increase the profitability of your industry. However, whether or not these measures will have a practical effect on the relationship between these two sides will depend on the power of each side involved in this dispute (PORTER, 2005).

The bargaining power of each important group of industry buyers depends on some characteristics related to their situation in the market, the importance of the product traded within their business and the representativeness of their purchases in the total sales of the analyzed industry (PORTER, 2005). Table 2 below represents the main scenarios in which the buyer group has a powerful negotiating position.

Table 2 - Analysis of buyers' bargaining power  
Source: adapted from Carvalho and Laurindo (2010, p.45)

Circumstances in which a group of buyers is powerful	Reason
Group of buyers is concentrated or purchases large volumes relative to seller sales	Buyers have great importance in results, so they have bargaining power
The products it purchases from the industry represent a significant fraction of the buyer's costs or purchases	Buyers will strive to buy selectively at a favorable price
The products it purchases from the industry are standard or undifferentiated	Buyers will easily be able to switch suppliers and encourage a price war
The industry's product is unimportant to the quality of the buyers' products	Buyer more price sensitive, is not willing to pay any extra value for the product
It faces few switching costs	Again, buyers will be able to switch suppliers and encourage a price war
It earns low profits	Have great incentive to reduce the costs of purchases, are price sensitive
Buyers pose a credible threat of back-ward integration	Possibility of integration acts as a threat to seller to maintain reasonable prices
The buyers has full information	Buyer will have more power for trading, facilitating bargaining of prices

### 2.2.2.5. Bargaining Power of Suppliers

The suppliers of an industry, similarly to its buyers, are also in constant dispute for the margins worked in the production chain. Threats of price increase or reduction in the quality of the products offered are periodic in the struggle for profitability. Suppliers in a favorable position can suck the entire profitability of an industry if it is not able to stop these increases or to pass them on to its own customers through the increase in marketed prices (PORTER, 2005).

Similar to what was previously seen with buyers, the bargaining power of each supplier group in the industry depends on some characteristics related to their situation in the market. Conditions that result in suppliers with great bargaining power tend to reflect those previously analyzed that make buyers powerful (PORTER, 2005). Table 3 below represents the main scenarios where the supplier has a powerful negotiating position.

Table 3 - Analysis of the bargaining power of suppliers  
Source: adapted from Carvalho and Laurindo (2010, p.45)

Circumstances in which a group of suppliers is powerful	Reason
It is dominated by a few companies and is more concentrated than the industry it sells to	They will be able to exert influence on prices, quality and conditions
It is not obliged to contend with other substitute products for sale to the industry	They will not be threatened by their buyers migrating to substitute products
The industry is not an important customer of the supplier group	They do not depend on the industry analyzed, they may impose the conditions they find interesting
The suppliers' product is an important input to the buyer's business	Supplier may impose its conditions, because industry depends on its products
The supplier group's products are differentiated or it has built up switching costs	Scenario hinders buyer's choice to throw one supplier against another
The supplier group poses a credible threat of forward integration	Possibility of integration acts as a threat to the analyzed industry

### 2.2.3. SWOT Analysis

The Five Competitive Forces model seen above addresses an analysis of the market, without a specific focus on a company that composes it. SWOT Analysis, in turn, seeks to characterize the strategic position of a company within the market in which it operates, evaluating both its external and internal environment. It is an important tool to map the context of the company, normally used in the preliminary stages of the decision-making process and as a precursor that offers greater support for strategic planning.

The term SWOT reflects the four major areas covered by the tool, Strengths, Weaknesses, Opportunities and Threats. The first two address the internal environment of the analyzed company and the last two assess the external environment in which it operates.

The SWOT analysis dates back to Sun Tzu's "The Art of War", in which the author suggests that efforts focus on leveraging strengths and recognizing weaknesses in taking advantage of opportunities and protecting against threats (TOLEDO, 2014). The four areas are divided into a matrix as shown in Figure 2 below.

Figure 2 - SWOT matrix  
Source: adapted from Carvalho and Laurindo (2010, p.64)



A good understanding of each of the four areas that make up the analysis is essential for its correct application and its subsequent use in developing a strategy. These aspects are highlighted below:

- **Strengths:** correspond to internal resources and capabilities responsible for the good performance of a company, when combined strengths can generate competitive advantages and must be well understood by the company so that they can be explored and leveraged.
- **Weaknesses:** weaknesses are points of attention that harm or have the potential to harm the performance of the company under analysis, are the vulnerable points in relation to the main competitors and need to be identified, addressed, and constantly evaluated.
- **Opportunities:** they can be trends, forces, and events in the external environment in which the company under analysis is inserted, with the potential to improve its performance, such as increasing its profitability or expanding its operations.
- **Threats:** like opportunities, threats are also events or forces in the external environment, beyond the control of the analyzed company, but in this case with the potential to harm the company's performance and must be addressed and mitigated.

Some examples of forces, events, and factors that characterize one of these four areas are mapped in Figure 3 below.

Figure 3 - SWOT Analysis example events and factors  
Source: adapted from Carvalho and Laurindo (2010, p.64)



#### 2.2.4. Generic Competitive Strategies

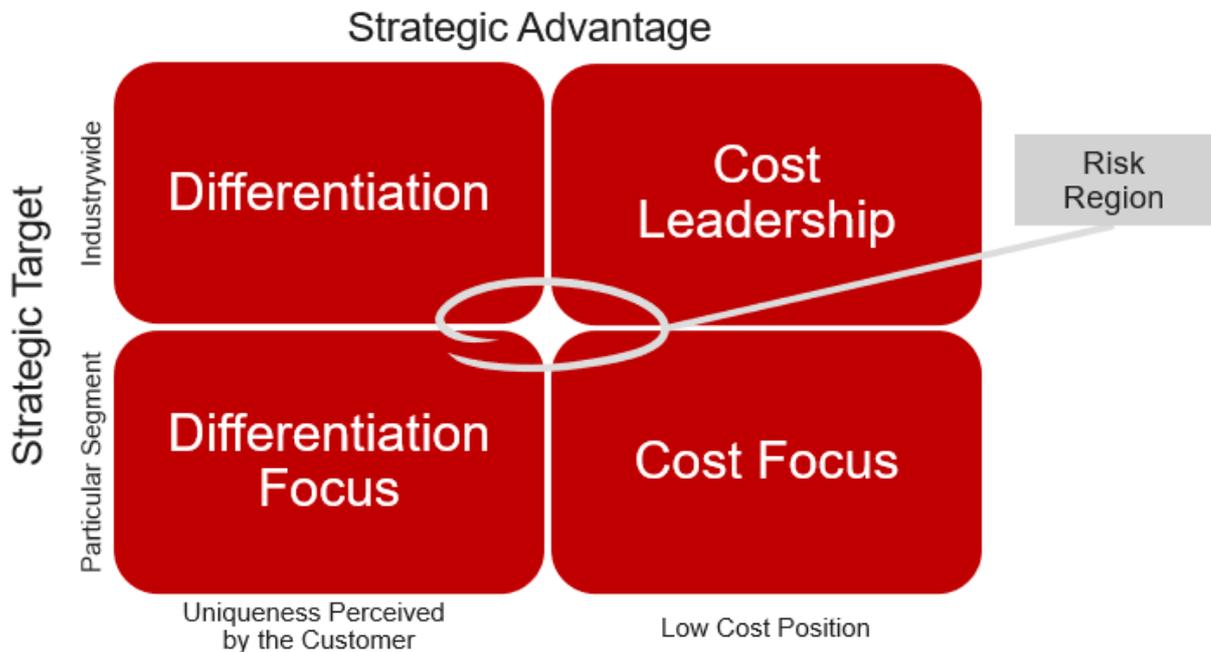
Having addressed the topics of internal analysis of the company and the context in which it is inserted, it is necessary to understand how this information can be used to define a strategy for the company, that is, how it is possible to use such data in defining a position strategy that generates advantages for the company. For this, we will study below the concept of Generic Competitive Strategies developed by Porter (1979).

Generic Competitive Strategies are a set of positions that can be adopted by a company in relation to the market in which it operates, defined from two dimensions: competitive advantage and strategic target. According to Porter (1979), there are two basic forms of competitive advantage: cost leadership and differentiation. At the same time, it is necessary to define the scope of the company's activities, and it can have a broad performance, with various segments as a target, or restricted, focusing on a specific segment (CARVALHO; LAURINDO, 2010).

The four generic strategies are, as illustrated by the quadrants in Figure 4 below, Cost

Leadership, Differentiation, Cost Focus, and Differentiation Focus.

Figure 4 - Matrix of Generic Competitive Strategies  
Source: adapted from Carvalho and Laurindo (2010, p.64)



Adopting a generic competitive strategy aims to boost the company's performance, pressured by the competitive forces operating in the industry in which it operates. The lack of a clear positioning, the oscillation between different positions over time or the simultaneous positioning in more than one of these quadrants are actions that can present a great risk to the company, as they can cause confusion about its image. Such actions, when practiced, must always be very well planned, and carefully executed to mitigate these risks (CARVALHO; LAURINDO, 2010).

However, it is necessary to pay attention to avoid misinterpretation of Porter's theory on Generic Competitive Strategies. The most common mistake is called the "commoditization trap" in which the differentiation strategy is automatically associated with small and specialized companies that operate in specific market segments or niches and, in parallel, it associates the adoption of strategies with large companies. cost leadership (CARVALHO; LAURINDO, 2010).

A good application of Generic Strategy depends on the analysis of the external context in which the company is inserted and its unique internal conditions, with no strategy intrinsically better than another. Each positioning requires a series of internal characteristics to be successful, a fact that makes the internal look essential for a good decision, as well as the analysis of the positioning of the main competitors in the industry can bring greater clarity on the subject, since a good positioning involves the differentiation of the company in relation

to its peers (CARVALHO; LAURINDO, 2010).

#### **2.2.4.1. Cost Leadership**

The company that adopts the Cost Leadership posture must have a culture of low costs and waste reduction at all levels of the organization, in addition to paying special attention to the cost positions of its competitors. To achieve these goals, the company is often forced to reduce the variety of its portfolio or make other adaptations that result in lower costs, which does not mean that the company must start to have poor quality products (CARVALHO; LAURINDO, 2010).

It is also necessary to pay attention so that the company does not reduce its profit margins in the process of offering a final price below the market average, which would not be advantageous. The objective of the positioning is the opposite of that, the company must work with a level of costs much lower than that of its peers, but a final price only slightly lower than that adopted by competitors, which allows an increase in profitability (CARVALHO; LAURINDO, 2010).

A Cost Leadership position places the company in a strategic position to defend against the main forces analyzed in the previous section. A company that has lower costs than its direct peers is protected from rivalry from its competitors, as it will have returns even after its competitors have consumed all its profits by competition. At the same time, the low-cost position protects the company from buyers, as they will only have the power to bargain the product price up to the price level of the most efficient competitor. A defense against suppliers will also be created, as the company will have more flexibility to face rising input costs. Factors leading to a low-cost position also create barriers to entry against new entrants in terms of economies of scale and cost advantages. Finally, this position also creates an advantageous scenario against substitute products, as the company will have a better position in the price-performance analysis (PORTER, 2005).

#### **2.2.4.2. Differentiation**

The Differentiation positioning has the same final objective as the Cost Leadership positioning, that is, increasing the company's profitability margin. The difference is because in the first model this is mainly achieved by the reduction in the cost variable, while in the second case the variable that will suffer the greatest variation will be price (CARVALHO; LAURINDO, 2010).

However, the success of this positioning depends on the company's ability to increase

its customers' willingness to spend on its products. This will be achieved if the product satisfies more customer needs than its peers or satisfies the same needs but better or more completely than its competitors, so that the customer is willing to pay a premium price. However, companies that compete in this generic strategy cannot overlook the cost variable either, after all, an equivalent increase in this variable would be responsible for maintaining the margin at the original levels, which would detract from the attractiveness of the stock. The concern with costs and waste must also exist, only the costs necessary to achieve differentiation must be absorbed (CARVALHO; LAURINDO, 2010).

This strategy implies greater risks if the differential chosen by the company is not able to convince its consumers to pay the premium price, which would reduce the company's margin in relation to its peers since it would have higher production costs that would not be compensated for higher selling prices. In addition, the company must always follow environmental trends to constantly increase the performance of its products according to the new needs of its customers and not remain static in the same differentiation, as it can be copied by the rest of the industry or lose the importance to its customers (CARVALHO; LAURINDO, 2010).

When achieved, differentiation creates viable conditions for the company to obtain an above-average return in its industry, as the company will be in an interesting position to face the five competitive forces. The loyalty of consumers to the brand and the lesser price sensitivity this entails insulates the company from the competitive rivalry of other companies in the industry. Consumer loyalty also creates a barrier to entry for new entrants as they would have to overcome this preference through additional expense. Substitutes also need to deal with customer loyalty, and they also need to perform differently to compete equally with the product. Finally, the higher margins allowed by differentiation also offer better conditions to deal with the power of suppliers and ease the power of buyers, as they are less price sensitive and find fewer options with product differentiation (PORTER, 2005).

#### **2.2.4.3. Cost Focus and Differentiation Focus**

The two Generic Strategies that seek Focus, either on Cost or on Differentiation, are extremely similar to the previously seen strategies of Cost Leadership and Differentiation, respectively, as they follow their same philosophy, but focusing on reaching a specific group of consumers, or that is, the difference is only in the competitive scope dimension (CARVALHO; LAURINDO, 2010).

The target segment can be defined as a function of a geographic cut, scale or any other

relevant characteristic that differentiates it from the others, but it is important that the company be able to offer a more personalized product for the specific needs of this segment, so that they choose these products instead of those offered generically to everyone. That is why the neediest segments should be prioritized when choosing the target segment by the company, as in this case this migration to products developed specifically for their needs will be more likely to occur (CARVALHO; LAURINDO, 2010).

### **2.3. Critical Success Factors (CSF)**

Once the strategy elaboration topic is concluded, we will move on to the intermediate topic of this literature review, the Critical Success Factors (CSF), a topic that will be extremely important to help the connection between the strategy topic, already discussed, and the performance topic, presented later in this chapter.

According to Rockart (1979), for any business that is the focus of the analysis, CSF are a limited number of areas in which the results, if satisfactory, necessarily guarantee successful competitive performance for the organization. These are the few areas considered key where results need to be achieved for the business to be perpetuated. Therefore, management must pay special attention to areas considered CSF, constantly monitoring these activities.

Also according to Rockart (1979), the main sources of CSF are: structure of the industry in which the company is inserted; competitive strategy, industry positioning and geographic location; the environment; and circumstantial factors. The identification of these CSF is possible by the methodology proposed by Rockart (1981), consisting of three main questions that must be asked to at least five of the main leaders of the company. The proposed questions are:

- Could you tell, in whatever order comes to mind, what are the things you see as critical success factors for your work right now?
- Which areas, in case of failure, would bring more damage to the company, in your view? Where would it bother you the most to see something going wrong?
- Assume you have been in a dark room for three months, with no access to the outside world, except for water and food. What would you like to know about the business after leaving the room?

It is important that the questions are presented to those involved in individual meetings, preventing the first to speak from influencing others. After collecting the responses,

a new meeting with all those involved must be held to consolidate the information collected in the company's CSF (ROCKART, 1979). According to Carvalho and Laurindo (2010), it is necessary that the relationships between the CSF and the goals set for the business are made explicit, as well as the definition of their respective indicators, whether quantitative or qualitative, and, finally, the mapping of the systems information to monitor them.

The entire process described must be periodically repeated at different levels of the company, since the CSF are not static and are in constant change, in addition to being different for different employees in the organization (ROCKART, 1979).

## **2.4. Performance**

Once the revisions on the elaboration of the Strategy and definition of the Critical Success Factors are concluded, the approach to the theme of Performance begins, which is the central topic of the second objective proposed for this work, already presented in the previous chapter. This topic will be divided into different topics that, in general, aim to introduce the subject, present the main systems available and, finally, select the model that will be used during the development of the work.

Before delving into the topic, it is essential to distinguish three concepts: performance measures, performance measurement and performance measurement systems. Performance measures is treated as a metric used to quantify the efficiency and/or effectiveness of a particular action analyzed. Performance measurement, in turn, refers to the process of calculating the efficiency and effectiveness of the action. Finally, the performance measurement system is defined as the set of performance measures used to quantify both the efficiency and effectiveness of actions (BOURNE et al., 2003). As the three concepts are closely related to each other, it is natural that they are all dealt with during the work, a fact that makes it necessary to understand each one of them.

### **2.4.1. The Importance of Measuring Performance**

According to Franco-Santos and Bourne (2005), it is extremely difficult to control what is not measured. Therefore, for leaders to be able to control their organizations, there is a need to measure, monitor and evaluate the performance of the various departments and stages that make up the company, so that decisions are based on facts, not just empirical arguments.

The performance of a business is the result of decisions taken by its managers and, in turn, the quality of that decision is related to the information available, in terms of quality and quantity. A well-applied performance measurement system allows such decisions to be

supported, as it provides the necessary basis for the company's performance management, substantially reducing subjectivity and increasing the consistency of decisions (BITITCI et al., 2005 and KAYDOS apud PANDOLFI, 2005).

In addition to providing the necessary information for managers to make decisions, measuring performance also plays an important role in implementing the strategy designed by these same managers across all levels of the organization, guiding all employees towards a common goal, aligning the strategic and operational objectives. To achieve this, however, in addition to being well developed, the system must be well communicated to the entire corporation, it must be easy to compress for all employees and must be able to translate the objectives and strategic measures into measurable goals to be achieved (BORTOLUZZI et al., 2011 and KAPLAN; NORTON, 1997).

Finally, it is also important to point out that there is no direct correlation between the number of indicators that make up a management system and its quality, as the number of indicators used must be sufficient to allow a comprehensive assessment of the business performance, without excluding essential analyses, but also without losing a sense of prioritization that can lead to confusion in decision-making by managers.

#### **2.4.2. Key Performance Indicators (KPIs)**

Addressing the topic of Performance, it is necessary to mention a very widespread term that has an essential role in measuring and monitoring the performance of organizations.

Good strategic planning defines the company's priority objectives and outlines ways to achieve them. However, monitoring these actions is only possible if the main attributes involved are measured and regularly monitored in the form of indicators suitable for each level of the organization. These core indicators are traditionally known as Key Performance Indicators (KPIs).

KPIs play an essential role in transmitting the strategy between the different areas of the company, allowing each sector to understand what is expected of its performance, in addition to making it easier for each team to see its importance within the company's global objectives. According to Neely (2002), such indicators also allow continuous monitoring of the performance level of each of the topics identified as relevant, facilitating the identification of failures, the elaboration of correction plans and the monitoring of the consequences of such plans.

### 2.4.3. Characteristics of Performance Measurement Systems

Martins (1999), based on a review of the existing literature on performance measurement systems, highlights the main characteristics that must be present in a performance system consistent with the current environmental conditions faced by companies. In his view, the system should:

- Be aligned with the company's competitive strategy.
- Cover financial and non-financial aspects.
- Direct and support continuous improvement.
- Identify trends and progress.
- Assist in understanding cause and effect relationships.
- Cover the entire production process.
- Make real-time information available to the entire organization.
- Be dynamic.

Although there are different approaches to the subject, it is possible to see that all of them have a central concern to integrate information from all areas defined as relevant to the desired objective, even if, for this, they adopt different methods to choose the factors and indicators that should be included in the system (ROCKART, 1978).

According to Rockart (1978), the indicator systems used by senior executives as a basis for decision making can be classified according to their source of information into four basic approaches: by-product method, null approach, key indicator method and total-study method. The four approaches are briefly explored below:

- **By-product method:** the information already existing in the databases due to the needs of the company's various administrative, accounting, financial and operational systems are used in the development of condensed reports of aggregated indicators that are delivered to managers, usually addressing the information that the levels operational evaluation as useful and information requested directly by one of the managers.

- **Null approach:** prospective and future-oriented information collection, quickly and often subjectively grouped and from informal sources, is based on the fact that executives' activities are dynamic and changeable and, therefore, it is not possible to predict what types of information will be needed in the future decision making.

- **Key indicator method:** the technique initially consists of selecting a set of indicators that provide the manager with a diagnosis of the company's current situation, then

the indicators that suffered very marked variations in the period analyzed are added and, finally, all these data are made available in a visually clear and accessible through charts, reports, dashboards, or other means.

- **Total-study method:** the management team is interviewed to define the information necessary for decision making, a mapping study is then carried out to identify which of the necessary data is already available and which still need to be generated. The main objectives of the study are to obtain a global view of the business, to know the information necessary for the management of the business and to verify which of this information is already available and which is not available for use.

Table 4 below presents a summary of the different indicator systems according to information sources and the main advantages and disadvantages of each one.

Table 4 - Indicator Systems According to Information Sources  
Source: adapted from Pandolfi (2005, p. 23)

Method	Description	Advantages	Disadvantages
By-product method	Leverages information already present in existing databases	<ul style="list-style-type: none"> <li>- Quick implementation</li> <li>- Low cost</li> </ul>	<ul style="list-style-type: none"> <li>- Does not include real needs of managers</li> <li>- Low-objective reports</li> </ul>
Null approach	Collection of prospective and non-systematic information from indirect sources	<ul style="list-style-type: none"> <li>- Information focused on the future</li> <li>- Focused on environmental trends and changes</li> </ul>	<ul style="list-style-type: none"> <li>- Does not allow monitoring and control of the implementation of functional plans</li> </ul>
Key indicator method	Monitors set of key indicators plus indicators that have undergoing significant variation	<ul style="list-style-type: none"> <li>- Prioritizes the indicators analyzed</li> <li>- Restricts number of indicators monitored</li> </ul>	<ul style="list-style-type: none"> <li>- Very focused on finance</li> <li>- Difficult to define indicators</li> <li>- Difficult to define relevant margins of variation</li> </ul>
Total-study method	It consists of obtaining from managers the real needs of information and, from this, create the necessary bases	<ul style="list-style-type: none"> <li>- Addresses the needs of managers</li> </ul>	<ul style="list-style-type: none"> <li>- Does not guarantee alignment between objectives and indicators</li> <li>- High cost and time</li> <li>- Can generate low-objective reports</li> </ul>

#### 2.4.4. Dimensions of Indicators

In the period from the mid-19th century to the mid-1970s, known as the “industrial age”, the operations of the main companies were guided by the search for economies of scale and scope. The construction of competitive advantages was based on the rapid allocation of new technologies that emerged in physical assets and on the excellence in managing financial

liabilities. In this context, the indicators developed and used were, for the most part, financial. Corporate strategies were based almost exclusively on financial models and sought to improve indicators such as Return on Investment (ROI).

Lorino (apud Martins, 1999) identifies four principles that guide the typical Taylorism production system:

- **Stability:** performance mechanisms are stable over time.
- **Perfect information:** the decision maker has perfect information about the relevant processes.
- **Productive performance identified as cost minimization:** efficiency resulting from the subtraction “Value – cost”.
- **Global cost equivalent to the cost of one of the factors of production:** existence of a dominant factor that commands the company's costs.

The arrival of the so-called “information age” at the end of the 20th century, marked by the emergence of new technologies, made obsolete some of the main premises in force during the industrial age. The rapid allocation of new technologies in physical assets together with the excellence in managing financial liabilities are no longer sufficient to build sustainable competitive advantages that would position the company strategically in relation to its competitors. The new reality has transformed some intangible assets into an essential part for business success so that companies are able to: retain their customers, serve new markets effectively and efficiently, launch innovative products, produce goods with some customization and use new technologies available to improve the relationship with their customers and, at the same time, improve prospecting for new markets (MARTINS, 1999).

Lorino (apud Martins, 1999) identifies in the Table 5 below the main conflicts generated between the Taylorism principles indicated in his work and the new demands created during the information age.

Table 5 - Conflicts generated by the new demands of the information age  
 Source: Adapted from Martins (1999, p. 20)

Taylorism Principles	New Demands
Stability	Technology innovation has caused greater complexity with reduced product lifecycle and increased global competition
Perfect Information	Increased technological complexity, increased complexity of tasks and emergence of specialists
Productive performance identified as minimizing costs	Emergence and adoption of differentiation strategies due to increased competition, which reverses the logic of the market, starting to be governed by demand
Overall cost equivalent to the cost of one of the production factors	Increased costs of indirect labor, equipment and materials means that there is no longer a dominant factor

These conflicts made clear the need to include new perspectives in the assessment of organizational performance. Martins (1999) cites several problems regarding the excessive focus on the financial perspective, some of which are listed below:

- Greater attention paid to short-term vision.
- Optimization of local rather than global performance.
- Monitoring focused inside the company.
- Unsatisfactory evaluation of investments in new technologies.
- Focus on efficiency, at the expense of effectiveness.
- Monitoring only the final results achieved.
- Description of past performance.
- Overly synthetic results.
- Preventing the adoption of new management philosophies and methods.

Several models were then developed, adding new perspectives to the traditional financial view of performance analysis. Among them, some stand out, such as the Balanced Scorecard (BSC) system developed by Kaplan and Norton (1997) in which, in addition to the financial perspective, the perspectives of the customer (how the customer sees the company), of internal processes are considered (which processes the company should focus on) and learning and growth (how to sustain the ability to change and effectively change).

Hudson et al. (2001) cite other dimensions related to those analyzed in the BSC

model, they argue, after an extensive review of the existing literature on the subject, that time, quality and flexibility are the operational dimensions most commonly cited as essential to be measured, while finance, in different forms and definitions, it is also considered a critical dimension for performance evaluation, and customer satisfaction and human resources are areas traditionally cited as measurement criticisms and, therefore, should also be included in the analysis. These six dimensions raised must then be able to cover all the main aspects of the business, addressing financial results (finance), operational performance (time, quality and flexibility), the external perception of the company (customer satisfaction) and cultural aspects the work environment (through the human resources area).

Elkington (apud Souza, 2011) explores in his model called the Triple Bottom Line (3BL) the social and environmental dimensions of the company, together with the traditional economic dimension, arguing that the three pillars are essential for a business to be successful, profitable and generate value for its shareholders.

In addition to those mentioned here, numerous other models were developed encompassing the most diverse perspectives to the analysis, enabling a more complete and more sustainable analysis for administrators. The need to align the system of indicators used with the organization's strategy and vision is also clear, since it must be guided by these factors and will serve as an important tool for disseminating these concepts among the different levels of the corporation.

In general, companies use performance indicators in managing their businesses from two main macro approaches: a qualitative and a quantitative one. The qualitative approach explores in its analysis basis factors such as arguments, considerations, statements, and reasons, while the quantitative measurement is based on numerical performance indicators. Because they are more easily controlled and because they allow consensual analyses, there is currently a preference to focus on quantitative measurement (MARTINS, 1999).

#### **2.4.5. Performance in Micro, Small and Medium Enterprises**

There is no defined and standardized way to classify those considered Micro, Small, and Medium-sized Enterprises (MSMEs), some studies assess the profile of each company according to the revenue generated, others use the number of employees directly involved in the business and there are also which are based on more subjective criteria, such as business operation characteristics. Going deeper into this issue is beyond the scope defined for this work, so what will be done is a simple listing of some of the main characteristics commonly present in MSMEs, because, for the purpose of the work, it is more important to understand

how these companies work than to be precise in classifying them. As Souza (2011) defined from the study of several articles that address the topic, the main characteristics present in MSMEs that identify them are:

- Management of companies, most of the time, family owned.
- It does not have a specialized information system.
- Centralized decision making.
- Lack of time on the part of administrators to prepare a goal plan.
- Do not produce on large scales.
- Informal relationships between owners, employees, customers, suppliers, and the community itself.
- Predominance of informal communication.
- Lack of strategy or not explained.
- Limited financial resources.
- Little investment in technological innovation.
- Lack of specialist professionals.
- Essential segment for economic and social inclusion.
- Dependence on a small number of customers.
- Operate in a limited market.
- Flexible structures.
- Reactive mentality.
- Difficulty in obtaining credit, even in the short term.
- Less dependence on external technology sources.

At the moment this work is developed, there is not an extensive literature focused on the analysis of performance measurement systems in MSMEs. However, Bititci et al. (2005) identified, from studies related to this theme developed in different countries around the world such as Australia, Finland, United Kingdom and Denmark, the presence of five common characteristics in companies in this profile that seek to measure their performance:

- The difficulty in involving MSMEs in performance measurement projects. Furthermore, companies of this kind that get involved in projects rarely continue to the last stage, mainly due to the lack of time available for non-operational activities and the low involvement of the company's entrepreneurs or leaders.

- Studies indicate that MSMEs either do not use performance measurement systems or use them incorrectly. Many companies only implement parts of a model, while others modify the models without carefully considering the changes made, compromising the results. Furthermore, studies indicate that even if the models were applied correctly, many would not have the expected return, as they are inadequate for MSMEs because they do not correctly address their specificities. The Balanced Scorecard model itself that is commonly applied in MSMEs is not suitable for this company profile. There are few and recent models developed specifically for this company profile.

- Performance measurement systems implemented in MSMEs rarely take a holistic approach. MSMEs that implement models usually opt for alternatives focused on some specific areas, in general financial and operational, not adhering to integrated models that consider the company as a whole. Areas such as innovation, human resources, work atmosphere, research and development, and training and capacity building are rarely measured.

- MSMEs' approach to performance measurement systems is often informal, unplanned, and not based on a previously defined model. Measurement is often introduced to solve a specific problem identified by the team, it is not part of an elaborate plan. As a result, there is poor alignment between what is measured, and the strategy outlined by the team's leadership. Furthermore, the focus of systems is usually on past activities, aiming to support the control of some activities, without looking to the future.

- MSMEs have limited capabilities for data analysis, causing existing data to not have an accurate and uniform analysis. In addition, both the information collected and the analyzes carried out in relation to them are usually presented in a poorly optimized way, often through simple tables, making it difficult to interpret the information and extract large conclusions, consequently generating few practical results of a strategic nature.

Although the importance of developing specific performance measurement systems for MSMEs is recognized, there is still a significant gap between theory and practice, since there are practically no tools and models that coherently address the specificities existing in companies of this profile (BITITCI et al., 2005).

According to Bititci et al. (2005), the specific characteristics of MSMEs themselves can represent obstacles in the implementation and use of performance measurement systems. Such characteristics raised by the authors are briefly explored below:

- **Lack of human resources:** MSMEs have limited human resources, causing all employees to be involved in daily activities, with no time available for additional activities such as system implementation.
- **Management capacity:** excellence in products and operational processes are often seen as the only critical success factors for MSMEs, causing such activities to have an excessive focus, while the company's management culture is often overlooked for not see great benefits from these activities. It is common for some employees to occupy different positions at the same time, often mixing operational and managerial positions, reserving little or no time for management activities.
- **Limited financial resources:** an MSMEs will feel more the financial impact of implementing a performance measurement system than larger companies.
- **Reactive posture:** MSMEs are marked by weak strategic planning and unstructured decision-making processes. The lack of structured planning and methodologies that support process control causes a short-term orientation and a reactive posture in the management of the company's activities.
- **Tacit knowledge and little attention to the formalization of processes:** one of the biggest barriers in the development of an organizational structure in MSMEs is the lack of a management system and a culture of formalization of processes. Furthermore, as the existing knowledge is often tacit and context-specific, it is difficult to bring together the data needed to implement the system.
- **Mistakes in performance measurement:** a performance measurement system can only be successfully implemented and used if the team involved believes that the effort needed in this process will be rewarded by benefits arising in the future, and it is therefore essential that those involved see value in the system, thus adhering it to their routines.

After analyzing the main obstacles to the implementation of performance measurement systems present in MSMEs, it is important to explore the necessary or at least interesting characteristics that must be present in a generalist performance measurement system. According to Bortoluzzi et al. (2011), there are some different aspects that a system needs to contain to be considered adequate, addressing both financial and non-financial issues. Table 6 below, adapted from his work, gathers these aspects, adding information raised by the authors from the study of numerous articles by recognized authors.

Table 6 - Essential elements for performance measurement system  
 Source: adapted from Garengo, Biazzo and Bititci (2005)

Aspect	Description
Strategic Alignment	System should ensure coherence between the strategy and the measures taken
Development of the Strategy	Performance evaluation helps develop predefined objectives and strategies
Focus on Stakeholders	Alignment with the various groups involved
Financial and non-financial measures	Presence of financial and non-financial measures
Dynamic adaptability	Systems should be able to react quickly to changes in internal and external contexts
Process-driven	Organization should not be seen as a hierarchical structure, but rather as a coordinated set of processes
Depth/Detail	Performance measures developed in a deep manner, covering in detail all organizational areas
Scope	System addresses the entire organization
Cause-and-effect relationship	Ensure a relationship between strategic and operational objectives
Certainty and simplicity	Methodology should be clear and easy to understand, allowing understanding by all involved

A performance measurement system suitable for MSMEs must be able to respect the specificities and difficulties commonly present in these companies, while satisfying the good practices that must be followed by any good performance measurement system. The challenge is, therefore, to develop a system capable of balancing some points that, at first glance, seem to be difficult to coexist, and, at the same time, reinforcing some characteristics that normally already exist, but that need to be even more present to work in MSMEs. To cite some examples, it is observed that it is necessary to have a strategic alignment in companies that often at first barely have an explicit strategy and, in addition, it is even more important to have clarity and simplicity, as there is a shortage of human resources since most of the available time is allocated to operational functions.

#### 2.4.6. Performance Measurement Models

Several performance indicator systems have been developed, especially after the beginning of the information age, a period in which it became necessary to adopt systems capable of including non-financial criteria in their evaluation. As the focus of this work is not to make a broad bibliographic study about the existing performance evaluation models, some

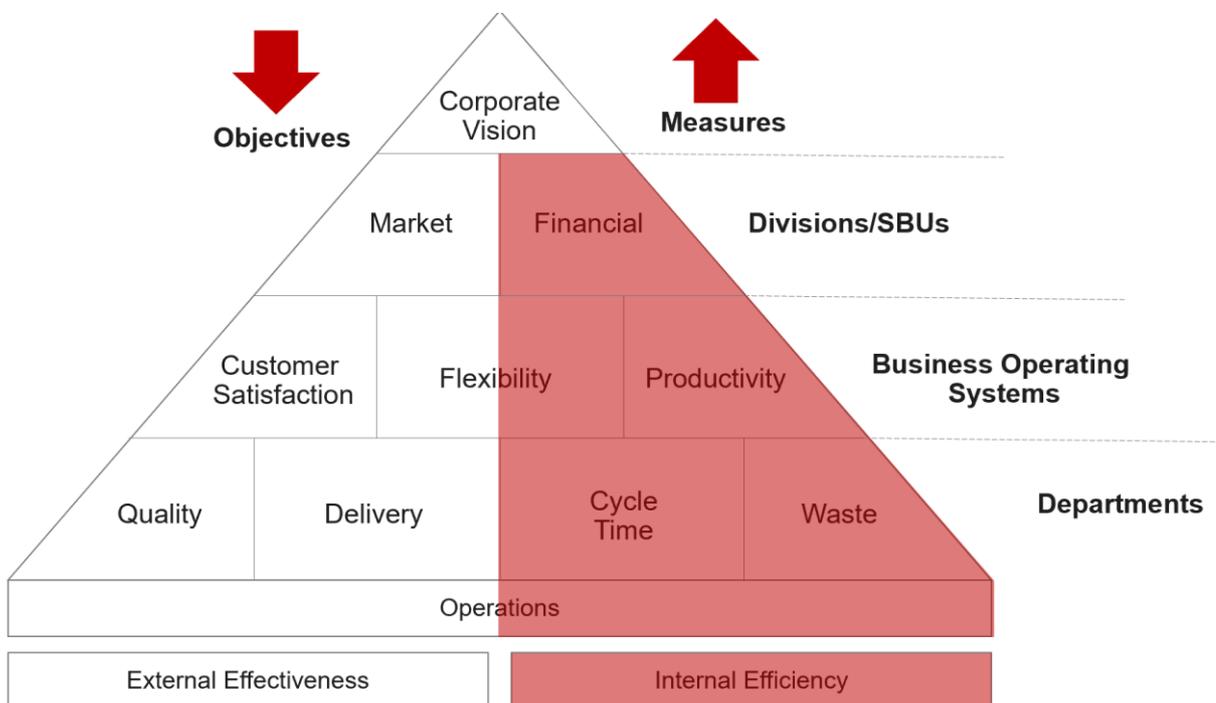
models were chosen among the several existing ones, through a crossing between the material that was consulted for the accomplishment of the work. The selected models that will be explored below are: Performance Pyramid-System (SMART), Performance Prism, Corrêa Model and Balanced Scorecard (BSC) and Objectives and Key Results (OKRs).

#### 2.4.6.1. Performance Pyramid-System (SMART)

The Performance Pyramid-System is a performance measurement model developed based on a management control system called SMART (Strategic Measurement Analysis and Reporting Technique) motivated by dissatisfaction with traditional performance measurements (CROSS; LYNCH apud SOUZA, 2011).

The model developed is customer-oriented and related to the company's global strategy, complementing the traditional financial values commonly explored with other dimensions of a non-financial nature. As shown in Figure 5 below, strategic objectives are translated into consumer needs, from top to bottom, through the hierarchical pyramid of the organization, while operational measures take the opposite path, from bottom to top, providing vertical integration (SOUZA, 2011).

Figure 5 - Performance Pyramid  
Source: adapted from Martins (1999, p. 79)



The corporate vision, in the form of financial and market objectives, is transmitted to the company's departments and work centers, where the day-to-day workflow takes place. The central issue of the model is the integration between the different workstations, so that they

manage the operational performance measures that support the vision of the corporation. The intermediate levels of divisions and business operation systems are responsible for the link between departments and senior management (MARTINS, 1999).

A critical part of the model is the definition of performance measures applied to the hierarchical levels of the business operation system and departments. This is because performance measures must have a cause-and-effect relationship with the strategic objectives so that they can induce the desired attitude in routine activities (MARTINS, 1999).

As shown earlier in Figure X, there are two types of performance measures: on the right are those that measure the internal efficiency of activities and departments expressed in financial terms for senior management and in physical terms (cycle time and losses) for the operations; and, on the left side, those that measure the external effectiveness in terms of the market (MARTINS, 1999).

The form of dissemination of information must be simple and visually appealing. It is important that all measures from the same hierarchical level are presented together, making clear the trade-offs that exist between them. The authors do not say anything about the sharing of results between the different hierarchical levels, as well as do not specify the frequency of collection, processing, and dissemination of information, which must be at the discretion of each hierarchical level (CROSS; LYNCH apud MARTINS, 1999).

#### **2.4.6.2. Performance Prism**

According to Neely et al. (2011), Performance Prism, a three-dimensional model that has five faces and was developed at the Cranfield School of Management, is a solution for measuring performance in corporations, developed to replace the old models that were limited to financial measures to assess performance, being, therefore, a more adequate model for the existing environment in the so-called "New Economy", in which financial performance is not enough for a good long-term positioning. In this new context, choosing the correct indicators is an essential step for the good functioning of the model and Performance Prism was created exactly to assume the role of a tool to choose or create the correct measures.

According to Neely et al. (2001), the developed model consists of five faces, following the five faces of a prism. The first one, corresponding to the top of the prism, concerns the satisfaction of stakeholders, raising the following question: "Who are the company's stakeholders and what do they want and/or need?", because to be successful an organization must focus their strategies in the satisfaction of individuals who are interested in it, that is, the stakeholders (investors, customers, intermediaries, employees, suppliers,

regulatory agents, community and others).

According to Neely et al. (2001), the three lateral faces of the prism correspond to the strategy, the company's processes, and the competences that the organization has and, as will be presented, there is a relationship of proximity and dependence between the three. The first of them, the strategy, represents how the wishes and needs of stakeholders will be met, identified from the question: "What strategies are required to ensure that the needs and desires of stakeholders are satisfied?". The processes, in turn, are necessary for the company to be able to implement the outlined strategies, and it is also necessary to measure the performance of these processes to assess whether they are acting as expected. The third, competencies that the organization possesses, represents the combination of people, practices, technology, and infrastructure, the four factors that together will enable the creation of adequate processes within the company.

Neely et al. (2001) show that the fifth and last face of the prism, its base, corresponds to the contribution of stakeholders, as, in the authors' view, there must be a symbiotic relationship between the company and its stakeholders, as it is not only the company that should create value for the stakeholders, but the stakeholders must also create value for the organization.

#### **2.4.6.3. Corrêa Model – MADE-O**

The Operational Performance Assessment Model, or simply MADE-O, is a model created in 1986 by Professor Hamilton Luiz Corrêa of the Faculty of Economics and Administration of the University of São Paulo. It seeks to measure organizational performance as a whole, considering both the company and its interrelationships with the environment in which it operates. For this, the model takes as its starting point the concept of global performance assessment, that is, the assessment of organizational performance including all variables and dimensions that affect the objectives, and then the organizational performance, as well as the relationships of cause and effect existing between them (SOUZA, 2011).

The importance of the global performance assessment lies in the fact that, when evaluated as a management instrument of internal control, it allows the anticipation of problems, risks, and opportunities and, in addition, it is a possible external tool for shareholders and other stakeholders (CORRÊA apud SOUZA, 2011).

The model, as shown in Table 7 below, has a logical sequence of five steps: description of the company; module definition; formulation of indicators; definition of

standards; and evaluation and feedback.

Table 7 - Corrêa Model Phases  
Source: Adapted from Souza (2011, p. 85)

Company Description	Module Definition	Formulation of Indicators	Definition of Standards	Evaluation and Feedback	Verification of performance causes
Mission and Objectives	Economic - Financial	Hierarchy of Indicators	Comparison Parameters	Problem Identification	Cause-and-effect relationships
Area of Expertise	Operational	Data Collection	Benchmarking	Identification of Causes	
Consumer market	Human Resources			Diagnosis	
Goods	Customer Satisfaction			Process review	
Culture	Environment				
Structure	Technology				
Strategies	Social Benefits				

The use of the aforementioned dimensions seeks to eliminate the emphasis on a single area, and the emphasis on the course-term, bringing a more integrated vision of the organization also aligned with a proposal for a long-term vision, necessary for the new competitive reality faced by companies (SOUZA, 2011).

The first stage of the model requires in-depth knowledge and study of the company, as some internal data such as mission and objectives, area of operation, consumer market, products and others must be filled in, creating a kind of technical file of the company, presenting a diagnosis of the current situation of the business (CUNHA, 2011).

The next step corresponds to the definition of the modules, that is, the relevant areas into which the company will be divided in the model analysis, not necessarily the different departments existing in the company. Corrêa's Model proposes the following modules (not all of them present in the previous illustrative representation, as they are not fixed and must be adapted from company to company): (a) Economic-financial: financial economic performance of the company; (b) Operational: measures productivity; (c) Human Resources: evaluates the performance of employees; (d) Customer Satisfaction: assesses how satisfied consumers are with the product; (e) Technological innovation: measures the degree of innovation of internally generated innovation; (f) Adaptation / Environment: measures the ability to adapt to

the present and future environment; (g) Technical evaluation: evaluates the quality level of the company's equipment, machines and technologies; (h) Organizational Climate: assesses the quality of interaction between people and sectors; (i) Social benefits: measures the benefits generated to society; and (j) Managerial potential: measures the capacity and potential of the company's managers (CUNHA, 2011).

Once the modules are defined, it is necessary to define a hierarchy among them based on the importance of each one of them in the company's performance (CORRÊA, 2007). Measuring the importance of each of the modules can be done using statistical methods, but, in addition to being very laborious, they also require the presence of data from several years, which are hardly available, which often makes the use of such methods unfeasible. In this way, the hierarchy is commonly done based on qualitative criteria provided by company directors or specialist consultants (SOUZA, 2011).

The third step is to define the most relevant indicators to be measured that will guide performance evaluations. Once defined, it is necessary to rank the indicators and map and gather the necessary data for their measurements. The respective areas are responsible for inserting these data into the model (CUNHA, 2011).

The fourth step defines the standards that will be adopted in the model. This is because it will be necessary to define comparison parameters, often based on benchmarks of national and international companies that are similar to the company focused on in the study (CUNHA, 2011).

In the fifth stage, an assessment of the company itself must be carried out, identifying the level of performance of the areas and of each of the defined indicators. After the evaluation, the areas and indicators of low performance are highlighted and, if necessary, a new hierarchy of modules and indicators is made, following their calculated contributions. An analysis of the results can identify areas for improvement and what should be reviewed. However, there is no definition of the cause of the problems, and a diagnosis is needed based on the points raised as the most worrying. At this stage, the feedback scheme is adopted, making the Corrêa MADE-O model dynamic, encouraging the review of processes and the discussion of ways to improve, generating a more efficient management focused on the search for better results (CUNHA, 2011).

The sixth and final step consists of identifying the cause-and-effect relationships, evaluating, based on the performance and the evaluation made, which relationships exist between the various points and variables evaluated (CUNHA, 2011). This stage is essential for establishing a systematic and integrated relationship between the various indicators and

modules defined during stages two and three (CORRÊA apud CUNHA, 2011).

#### **2.4.6.4. Balanced Scorecard (BSC)**

According to Kaplan and Norton (1997), the concept of Balanced Scorecard (BSC) is the result of a study that encompassed several companies called "Measuring Performance in the Organization of the Future", having as main motivation for the study the perception of several executives that the changes in the competitive environment at the time required a new form of performance measurement, since the models used until then were restricted to accounting and financial indicators, which, alone, were no longer sufficient to represent health and the future of companies.

The BSC met this demand from executives, as it approached companies in a broader way, with long and short-term goals; internal and external performance indicators that explored dimensions other than the financial one, such as quality and customer satisfaction; and financial and operational measures, which contained the results of the company's past actions, creating a cause-and-effect relationship between the indicators worked through strategic maps (KAPLAN; NORTON, 1992).

According to Kaplan and Norton (1992), the BSC is based on four different perspectives: financial; customers; internal business processes; and learning and growth. Each of these perspectives carries one of the questions below:

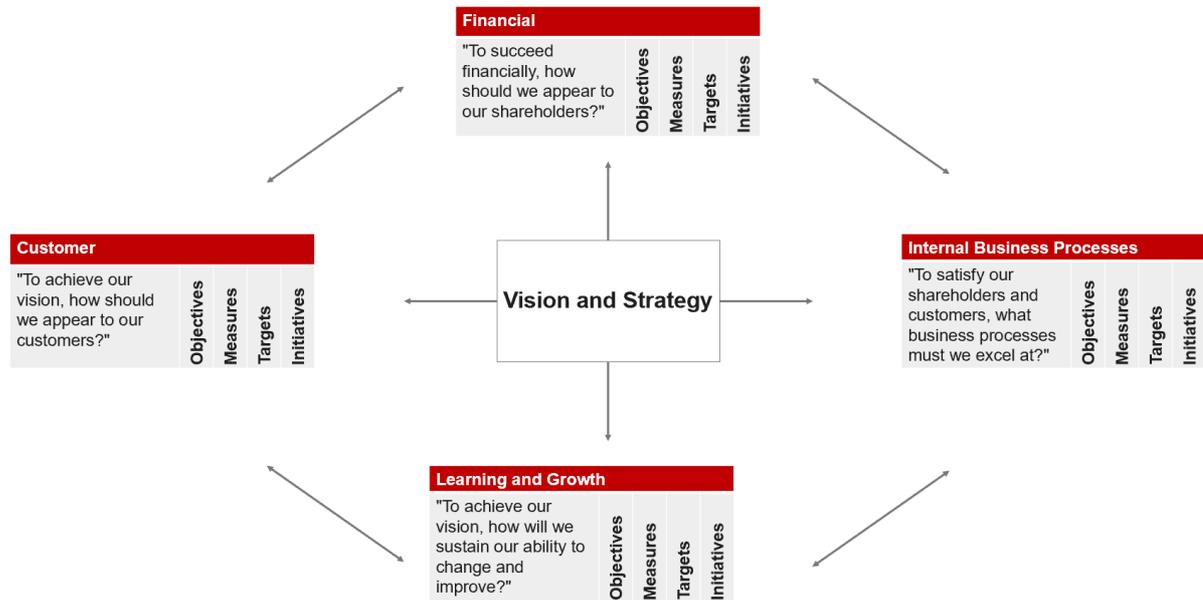
- “If we succeed, how will we look to our owners?”
- “To achieve our vision how must we look to our customers?”
- “To satisfy our customers, what management processes must we excel at?”
- “To achieve our vision, how must our organization learn and improve?”

In addition to providing ample information to managers from four different perspectives, the BSC maintains an important characteristic of focus, prioritization, and simplicity by limiting the number of measures analyzed, a fact that forces the leadership to focus on what really matters and, at the same time, simplifies the implementation and use of the tool by not requiring data from several different fronts (KAPLAN; NORTON, 1992).

Figure 6 below illustratively shows the four perspectives covered by the model and the interrelationships that exist between them and the relationships that exist between them and the company's vision and strategy.

Figure 6 - BSC Model

Source: adapted from Kaplan and Norton (1997, p. 10)



The first perspective analyzed is the financial perspective. This perspective is preserved in the BSC because, although they are no longer seen as sufficient for a holistic analysis of the company, financial measures are extremely valuable to summarize the immediate economic consequences of the actions taken (KAPLAN; NORTON, 1997).

There is a dual role played by the objectives and financial measures, defining the expected financial performance of the applied strategy and serving as the main goal for the objectives and measures of all three other perspectives of the BSC (CARVALHO; LAURINDO, 2010).

According to Carvalho and Laurindo (2010), the financial perspective plays an important role in defining the long-term goals of the business unit, not restricted to profitability goals. There are three financial themes commonly explored by companies in this perspective: revenue growth and mix; cost reduction/productivity improvement; and use of assets/investment strategy. The first, revenue growth and mix, focuses on developing new sources of revenue and profitability, such as franchising or increasing value to customers. The second topic, cost reduction/productivity improvement, aims at the efficient execution of the company's operational activities, reducing direct and indirect costs in the products, sharing common resources between the different business units, and increasing the efficiency of operations, always based on current customers. The third and last theme, use of assets/investment strategy, has as its main objective the reduction of the levels of capital investment necessary to support a given volume and mix of the business unit. It is also necessary for each business to design the indicators most appropriate to its peculiar

characteristics and its stage of maturity.

The second perspective that underlies the model, the customer perspective, aims to establish a clear vision of the market segments and customers that the company will adopt as a focus for its operation, also defining the expected performance of the business unit in these segments. A performance below expectations in this perspective indicates a future decline in the company's performance, even if such consequences are not yet reflected in the financial perspective, as satisfying its customers is the first step to converting the company's activities into financial success (CARVALHO; LAURINDO, 2010).

Customer satisfaction, customer retention, new customer acquisition, customer profitability and market share in target segments are some of the generic measures that are traditionally analyzed from this perspective, often in an integrated manner with other perspectives (CARVALHO; LAURINDO, 2010).

The perspective of internal processes makes it possible to identify the critical processes in which the business unit must operate with excellence, enabling the business to generate value for customers in the target segment and meet the expectations of its shareholders. The internal processes that most impact consumer satisfaction and the achievement of financial goals must therefore be prioritized (CARVALHO; LAURINDO, 2010).

There needs to be a critical analysis of the company's processes, not limited to those that already exist, but often redesigning the flows and mapping new processes that can positively contribute to achieving the defined objectives (CARVALHO; LAURINDO, 2010). There are four levels of processes of interest to this perspective: building the business through product innovation and penetration into new markets and customer segments; achieve operational excellence through managing supply, costs, quality, and cycle time; and use of assets and management capacity (KAPLAN; NORTON, 1992 apud CARVALHO; LAURINDO, 2010).

According to Carvalho and Laurindo (2010), process improvement usually results in financial benefits in three stages, each related to a time horizon: for the short term, we have control and improvement of existing processes; for the medium term, we have an increase in revenue due to an improvement in the relationship with the client; and for the long term, we have innovation processes. A complete strategy must involve returns in all three areas.

The fourth and final perspective addresses learning and growth. For the goals defined in the other perspectives to be achieved, the company needs to build an infrastructure capable of providing the internal learning and growth necessary for this. Therefore, achieving the

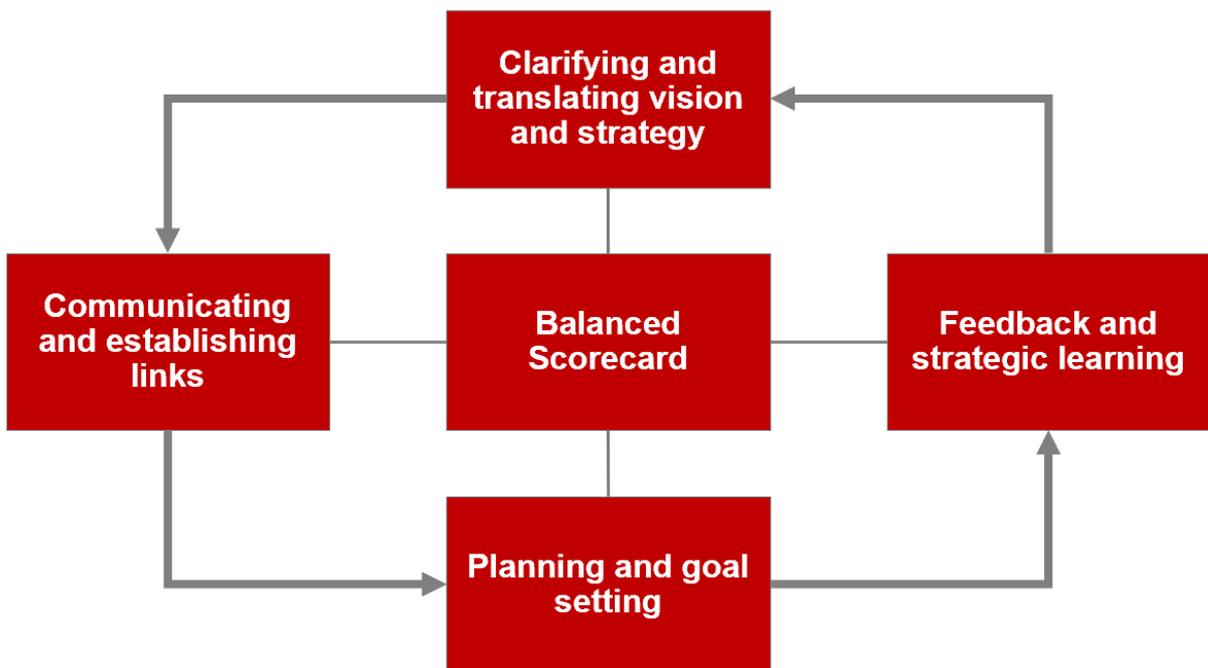
objectives in this perspective is essential to create the necessary basis for the other perspectives seen above (CARVALHO; LAURINDO, 2010).

There are three basic points for defining the measures of learning and growth that make up this perspective: personal; systems; and procedures (KAPLAN; NORTON, 1996 apud CARVALHO; LAURINDO, 2010). Such objectives allow the company to align its human resources, information technology with the outlined strategy (CARVALHO; LAURINDO, 2010).

The implementation of the BSC is a long process, as it encompasses not only the simple definition of the four perspectives explored above and their consequences in terms of objectives, indicators, and targets. To be converted into results, the implementation of the model depends on involvement, knowledge of internal processes and a robust information system, capable of providing the necessary bases (CARVALHO; LAURINDO, 2010).

Figure 7 below presents the four managerial processes identified by Kaplan and Norton (1996) which, in combination with the four perspectives already analyzed, contribute to linking the defined long-term strategic objectives with the company's short-term actions.

Figure 7 - Balanced Scorecard with Framework for Strategic Action  
Source: adapted from Kaplan and Norton (1997, p. 12)



Starting with the upper process and following the iterative sequence of actions until the fourth and last process positioned farthest to the right in the figure, the first one has the role of building a consensus around the organization's vision and strategy, eliminating possible doubts or misinterpretations and, for that, they must be expressed integrated to easily

understandable performance objectives and measures (CARVALHO; LAURINDO, 2010).

The second process allows the communication of the BSC at all different levels of the organization, creating a link between departmental and individual objectives, generating a cascading process within the company. It is necessary that individual incentives are aligned with the organization's strategy, always aiming at the long term (CARVALHO; LAURINDO, 2010).

The third process allows for the integration of the company's financial and business plans, establishing goals that should guide the actions of everyone involved. This process aims to integrate the changes that constantly occur in companies to their long-term strategies (CARVALHO; LAURINDO, 2010).

Finally, the fourth and last process provides the organization with the capacity for strategic learning, evaluating its short-term results from all four perspectives and, if necessary, modifying ongoing strategies, generating a culture of continuous learning and improvement, nurturing the cycle that then restarts with the first process, in an iterative way, until a managerially stabilized system is reached (CARVALHO; LAURINDO, 2010).

#### **2.4.6.5. Objectives and Key Results (OKRs)**

The OKR methodology was developed during the 1970s at Intel and its creation is attributed to Andy Grove, then president of the company, responsible for the implementation and internal dissemination of the system. However, it was John Doerr who was responsible for directly spreading the concept among dozens of the best-known companies in the world, including Google, which has been applying the system since 1999, Twitter and Amazon. At the time this work is developed, the methodology is applied in numerous companies from different countries and different industries (DOERR, 2018).

It is a management methodology that helps ensure that all levels of the company focus their efforts on the same issues defined as priorities. As the name implies, the basis of the idea is in the definition of Objectives (O) and Key Results (KRs). Both concepts are briefly explained below based on the definition developed by Doerr (2018):

- **Objectives:** simply encompasses what must be achieved. By definition, they should be meaningful, concrete, action-oriented, and ideally inspiring.
- **Key Results:** establish and monitor how the objective will be achieved, the how. The KRs must be specific and limited in time, being necessarily aggressive and challenging, but without becoming unrealistic, they must also be measurable and verifiable, because at the end of the designated period it must be possible to determine whether it was

fulfilled or not, without having room for discussion or different interpretations. When all KR's linked to an Objective are fulfilled, the Objective is necessarily achieved.

Doerr (2018) states that in companies like Google there are OKRs from two different categories, those with committed objectives and those with ambitious objectives. Ambitious objectives are also called challenging, but as ideally all OKRs should be challenging, we will use the term ambitious in this paper to address this category of objectives. Both are presented in more detail below:

- **Committed objectives:** these are objectives and goals that the company fully expects to achieve within the defined period, such as sales and revenue goals.
- **Ambitious objectives:** encompass larger ideas, greater risk, and greater inclination towards the future, starting from any scope and seeking to mobilize the entire organization. Due to these characteristics, they are also more difficult to achieve, with partial rather than full reach being expected.

Doerr (2018) also mentions that the weighting between these two categories of goals varies from company to company according to the culture of each organization and the moment each business is experiencing. A more agile and bold posture requires a higher percentage of ambitious objectives, capable of mobilizing the entire organization, while more conservative moments require more committed objectives capable of focusing the company's performance on important achievements and improvements.

According to Doerr (2018), when properly applied, the OKRs allow the company to acquire four “superpowers”: Prioritize and Commit; Alignment and Communicate; Track for Accountability; and Stretch for Amazing. The four themes are briefly explored below:

- **Prioritize and Commit:** by defining the Objectives that will be the focus of the defined period, the OKRs ensure clarification from the entire company on which topics should be the focus of their actions, as well as clarification on which topics should not be the focus of their work. This clarification at the level of departments, teams and individual employees is essential for the company to consciously walk with a focus in the same direction.
- **Alignment and Communicate:** the OKRs defined at all levels of the company are openly shared across the entire company, allowing everyone in the corporation to see the link between their goals and the overall strategy of their team, department, and company-wide, identifying in certain cases even a dependence between the achievement of its objectives and the general objectives of the company. By connecting each employee with the

organization's success, OKRs bring meaning to the work and encourage participant engagement.

- **Track for Accountability:** because they are data-driven and periodically verified, OKRs allow for objective classification and continual re-evaluation, all in a spirit of responsibility but without judgment. A KR in danger triggers actions to recover it, either to review it or, when necessary, to replace it.

- **Stretch for Amazing:** OKRs are challenging and motivate the team to do more than they normally think possible, testing people's limits and, most importantly, ensuring the freedom to fail. Such characteristics unleash the creative and ambitious abilities in people.

The OKRs Method emerged as an evolution of the then adopted "Management by Objectives (MBO)", but, as can be seen in Table 8 below, few features of the previous method have been preserved, since the new method denies the old in almost all its main aspects (DOERR, 2018).

Table 8 - APOs versus OKRs  
Source: adapted from Doerr (2019, p. 37)

MBOs	OKRs
"What"	"What" and "how"
Annual	Quarterly or monthly
Private and limited	Public and transparent
Top to bottom	Bottom up or side (~50%)
Linked to remuneration	Mainly separate from remuneration
Risk-averse	Aggressive and determined

According to Doerr (2018), the company must be able to define a few goals that will be the focus of the organization in the given period. Just ask yourself what are the most important things for this period, but it is important that the company focus on few things, thus ensuring the necessary focus for success, since no company can solve all its challenges at

once. The few defined objectives will act as a compass and a basis for evaluation to the teams during the following months, besides being used as a basis for the OKRs of the following levels, in a ripple effect. An objective, when properly framed, needs three to five key results to be achieved. Too many key results can dilute focus and hamper progress. Furthermore, each of the key results should be a challenge, because if there is no doubt that a key result will be achieved, it is certainly not defined and it is probably not motivating the person to deliver their maximum.

The duration of a cycle of OKRs must be defined from company to company, considering its specificities, the characteristics of the environment in which it operates and how adapted its teams are to the system. There are also cases of companies that adopt a double and parallel cadence, with short-term OKRs, supporting other annual and long-term strategic OKRs. However, keep in mind that the actual work performed on a day-to-day basis is usually guided by short-term goals, not longer ones. In addition, the cycles cannot be too long so as not to compromise the feedbacks, as efficient feedbacks are received soon after the occurrence of the activity being measured, facilitating understanding and correction (DOERR, 2018).

According to Doerr (2018), it is necessary that the people involved make an effort to define the OKRs, as the success of the application depends on a good initial definition of its parameters. However, you need to be careful with exaggerations and perfectionism, and it is important to remember that an OKR can be modified or even undone or replaced at any point in its cycle, having cases where the “right” key results emerge weeks or months after a goal is set.

Figure 8 - Example of OKR in a microprocessor company  
 Source: adapted from Doerr (2019, p. 115)

OBJECTIVE
Establish the 8086 as the highest-performing 16-bit microprocessor family as measured by:
KEY RESULTS
<ol style="list-style-type: none"> <li>1. Develop and publish five benchmarks showing superior performance in the 8086 family</li> <li>2. Change the packaging of the entire product family 8086</li> <li>3. Get the 8MHz part in production</li> <li>4. Show the arithmetic coprocessor by June 15</li> </ol>

OKRs are not discarded with the completion of work or the end of the period allotted for completion. Much of the value added by the method is exactly after this period, in the stage of review and evaluation of the results obtained. In individual and team meetings, the stage consists of three parts that will be explored below: objective classification of the results achieved; subjective self-assessment; and reflection (DOERR, 2018).

- **Classification of results:** the step consists of marking what was achieved and discussing what could be done differently in future cycles. In case of low scores, it is necessary to reassess whether the objective should still be pursued in the following cycles and, if so, what should be changed to reach it. There are platforms that automatically calculate the results, but the traditional thing is that this step is done manually by the teams. The simplest way to rate an objective is to average the percentage completion rates of its associated top outcomes and then rate it using a predefined scale (typically 0 to 1.0 being 0.0 to 0.3 corresponding to “we have not been able to make real progress” and receiving the color red, 0.4 to 0.6 referring to “we made progress, but it fell short of completion” pegged to yellow and, finally, 0.7 to 1.0 in cases in which the result was delivered, receiving the color green). The final ranking of the key results for the objective is then calculated by simply averaging the scores. No department is expected to achieve 100% as the goals are likely to be challenging.

- **Self-assessment:** the step consists of a self-assessment of the acquired results, being recommended the classification of a grade (not necessarily the same as the progress grade seen in the previous step) and a written reflection on the motivation of such grade. The most important part of the step is not the grade or color classification, but rather to force a clear reflection on the performance of each one. A facilitator or team leader should act on the recalibration, as some people tend to be more severe in their self-assessments, while others need to be challenged. As in all stages of the methodology, there is no room for judgment, only for learning.

- **Reflection:** stage for reflection, with the main objective of learning from the results achieved in the period under analysis, aiming at an improvement for the cycle that is about to start. Some common reflections that can guide this step are: Did I meet all my goals? If yes, what contributed to my success? If not, what obstacles did I encounter? If you could rewrite a completed goal, what would you change? What learning did I have that was able to change my approach to the next cycle's OKRs?

#### 2.4.7. Models Developed for Micro, Small and Medium Enterprises

As previously explored, MSMEs have specific characteristics that can often compromise the implementation and/or the functioning of the main performance models. This topic explores two models developed specifically for companies in this profile, considering the peculiarities of this niche of organizations.

##### 2.4.7.1. Organizational Performance Measurement (OPM)

According to Chennell et al. (2000), the OPM Model is based on three principles:

- **Alignment:** the performance measures selected must support the alignment between people's actions and the strategy designed for the company.
- **Systems thinking:** the measurement system refers to systems for monitoring, controlling, and improving processes, organizational processes must be designed in such a way as to unfold the company's strategy and create value for stakeholders.
- **Practicality:** at any level of the company, there is a consistent process to identify the measures that must be considered and to guarantee the quality and adequacy of the data.

The framework developed is based on two management constructs called "Zone of management" and "Open systems theory". The first divides the management of companies into three zones, called strategic, tactical and operational, creating a kind of administrative

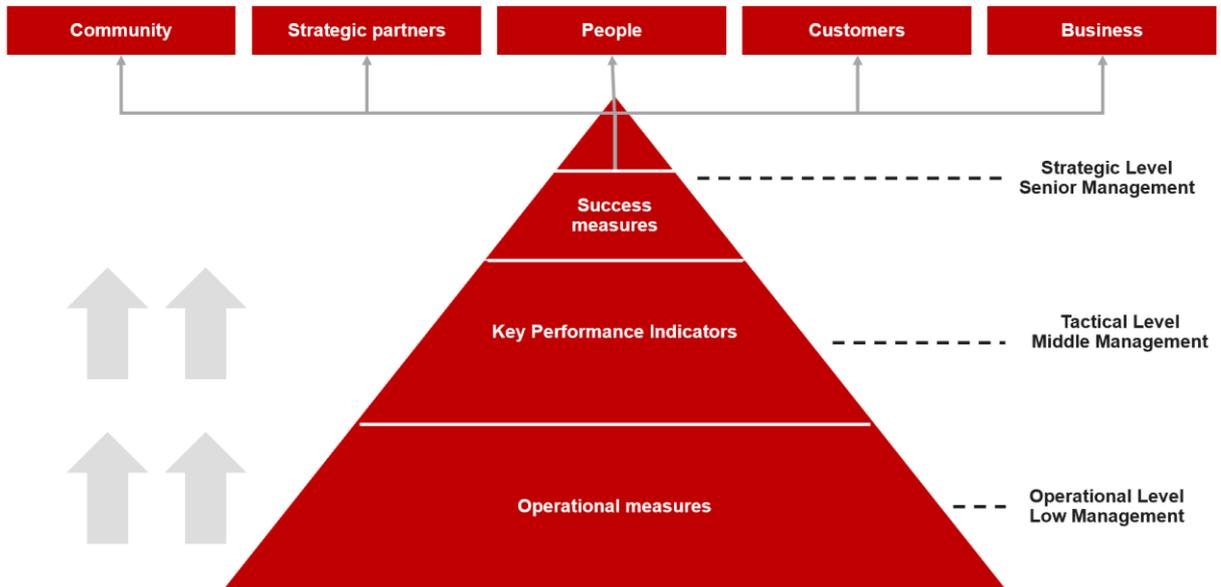
pyramid, each zone with different authorities, responsibilities and accountability. The second describes companies as productive systems that make up a larger system, called the environment, thus establishing a close and dynamic relationship between the company and the environment in which it operates (CHENNELL et al., 2000).

According to Chennell et al. (2000), the OPM Model proposes five areas of value addition in which an organization must succeed to be able to survive and prosper, they are:

- **Business:** usually including stakeholders such as owners or shareholders.
- **Consumers:** typically segmented into a series of stakeholder groups that may have conflicting interests.
- **People:** representing the employees who work in the company.
- **Strategic partners:** main contractors, suppliers, or collaborators whose long-term support is essential for the project's viability.
- **Community:** variety of professional, industrial, and local groups.

The OPM Model does not define success in absolute terms but makes a specific analysis for each of these five areas, seeking to assess the additional value delivered by the company to its stakeholders. Recapitulating the proposed administrative pyramid, the Strategic-level Success Measures indicate to the company whether the value was delivered, while at the tactical level the Key Performance Indicators represent the probability of the value being delivered and reflect the main results that the production should deliver and, finally, at the operational level, the Operational Measures reflect the activities and results of the operational level, being able to indicate the expected results for the key performance indicators (CHENNELL et al., 2000). Figure 9 below illustrates the three management levels and their relationships.

Figure 9 - OPM Model  
Source: adapted from Chennell et al. (2000)

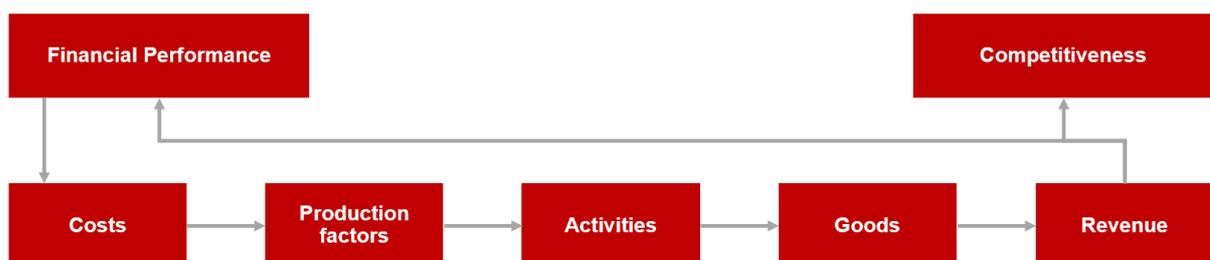


#### 2.4.7.2. Integrated Performance Measurement for Small Firms

The Integrated Performance Measurement Model for Small Businesses (IPMS) developed by Laitinen (1996) is defined by the author as a hybrid accounting system that connects the traditional view and the Activity Based Cost (ABC) Model through a chain causal, designed specifically for MSMEs (GARENKO et al., 2005).

According to Laitinen (1996), the model is based on seven main dimensions of measures, classified into two external dimensions (financial performance and competitiveness) and five internal dimensions (costs, production factors, activities, products, and revenues) linked by the causal chain already discussed (see Figure 10 below). While the internal dimensions monitor the entire production process of the company, the external dimensions are responsible for monitoring the company's position in its competitive context.

Figure 10 - IPMS Model  
Source: adapted from Laitinen (1996, p. 79)



#### 2.4.8. Definition of the Model to be Adopted

After analyzing the different models of performance measurement systems, some of

them being developed especially for MSMEs, it is possible to identify a certain alignment between the different proposals on some topics. The inclusion of non-financial dimensions in the analysis, the need to ensure easy communication of the model between all levels of the company and the concern to include different parts of the company are some of the common topics in the vast majority of the systems presented.

This similarity indicates that possibly all the proposed systems would be able, if well implemented and monitored, to assist Fazenda Atalaia in achieving its strategic objectives, as they all value the same holistic approach focused on the company's internal alignment towards the established strategy. However, it is necessary in this section to define which system will be used in the continuity of the project, and for this purpose, Table 9 below was developed to assess the different options according to some established criteria.

Table 9 - Comparative table of the models presented

Source: elaborated by the author

	SMART	PRISM	MADE-O	BSC	OKR	OPM	Integrated
Financial dimensions	✓	✓	✓	✓	✓	✓	✓
Non-financial dimensions	✓	✓	✓	✓	✓	✓	✓
Adaptability				✓	✓		
Causaus relationships	✓	✓	✓	✓	✓		✓
Team development		✓	✓	✓	✓	✓	
Model agility					✓		
Clarity and simplicity	✓	✓		✓	✓	✓	
Experience (by the company)							
Experience (by the author)					✓		

As can be seen in the comparative table, the two models that best fit the project's expectations are the OKR and the BSC, the only differences between them being the fact that OKR is considered a more agile model and the particularity that the author of the work has already been an intern at a company that adopted the system, a fact that is not considered a decisive point for selection, but it was raised for being a facilitator, since the author will have an important role in the development of the model and its future implementation in the company in question.

Once these points were presented, it was decided to select the two models in a complementary way, with the BSC being used to define the company's strategic map and,

consequently, the corporate-level strategic goals, while the OKR would be used to, using the strategic map of the company as a base, develop goals and key results of the teams, thus ensuring a strong alignment between the company's leadership and all its other areas.

This combination of two methodologies offers several benefits, as it explores the strengths of both in a complementary way. A major difficulty in implementing the OKR model is to start defining the company's objectives, which, within the model, are normally cascaded to the other teams. This difficulty occurs because these goals do not start from a set of pre-established perspectives, which commonly generates some confusion for the leadership. By using the BSC for this first step, this issue is resolved, as there is greater support for defining this initial step within the model. At the same time, a point of attention for the BSC is to ensure that all areas involved identify their performance within the company's map and align with the established objective, which is guaranteed when we use OKRs at the department level, as all areas will have their own objectives and key results, but because they are developed from the company's strategic map, they are necessarily aligned with the long-term goals. In addition, OKR can follow a shorter cadence than BSC, which allows that, if it is in the company's interest, during the same cycle of corporate objectives, teams have more than one cycle of OKR, something positive given that teams' objective priorities and goals often change more often than the company's strategic goals.

Once the models that will be used in the continuity of the work have been defined, it is necessary to present the implementation methods of the two chosen methodologies.

#### **2.4.9. BSC Implementation**

According to Kaplan and Norton (1997), the BSC construction process must be developed and adapted based on the characteristics and desires of each organization. However, the authors present a systematic plan already used in dozens of companies that can be applied as described or at least used as a basis for companies that wish to work with the methodology. This process is divided into four steps, each step being composed of more than one task, as we will see in a simplified way below.

The first stage of the plan is described as “Defining the Measurement Architecture”, consisting of two tasks, the first named “Select the appropriate organizational unit” and the second “Identify the SBU/Corporate linkages”. In short, the first step aims to reduce the initial complexity of developing a BSC for a large corporation and, for that, it is recommended to select a specific business unit within the company to which the system will be applied. This business unit must have a strategy to carry out its mission, in addition to having its own

products, customers, marketing operations, distribution channels and production facilities, thus enabling the definition of a coherent and independent strategy. Once the business unit is defined, the second and last task of this step begins. This task consists of analyzing the relationship of the chosen unit with the others, ensuring that the objectives and measures chosen for the unit do not compromise the performance of other units, in addition to allowing the identification of limitations and opportunities arising from these relationships (KAPLAN; NORTON, 1997).

The second stage of the process is called “Building consensus around strategic objectives”, consisting of the tasks “Conduct the first round of interviews”, “Synthesis session” and “Executive workshop: first round”. The first task is to organize a series of interviews with the company's executives in which the model and its objectives are presented, information is collected on the company's organizational strategy and its translation into objectives and measures for the BSC covering the four perspectives of the model. In addition, this task is important to initiate the habit of translating the company's strategy into measurable operational measures, as well as mapping possible stakeholder concerns and identifying existing internal conflicts in the company. The second task of this step is to anonymously synthesize the objectives collected in the four perspectives, generating a list of statements for each of them. In the third stage, this list is then presented in a new meeting containing all the executives, followed by a guided discussion that should aim to transform these statements into the company's strategic objectives for each of the perspectives, in addition to the causal relationships between them. In this task, it is recommended to divide the executive team into four subgroups so that each one can focus specifically on one of the perspectives, resulting in three or four strategic objectives for each of them (KAPLAN; NORTON, 1997).

The third stage, called “Select and Design Measures”, is composed of two tasks, “Subgroup meetings” and “Executive workshop: second round”. The first task is to define indicators that best capture and communicate the intention of each of the proposed objectives and, for these indicators, define the data sources and actions necessary to collect this information. Finally, the second task consists of the presentation of the results by the executives themselves to a larger group of the company, collecting perceptions and comments from these people. This meeting guarantees the company's greater commitment to the proposed model, creating a greater sense of ownership and contribution on the part of those involved (KAPLAN; NORTON, 1997).

The fourth and last step is called “Build the Implementation Plan” and it really consists in defining a plan capable of taking the proposed model off the ground. For this, the

team will formalize an implementation plan that includes how the chosen indicators are linked to the company's databases and information systems, as well as communicating the BSC to the entire organization and validating these decisions with the entire team. It is recommended that executives start using the BSC within 60 days, even if all adjustments have not yet been carried out, as it is possible to constantly improve the model during the process (KAPLAN; NORTON, 1997).

#### **2.4.10. OKRs Implementation**

From the corporate strategic map designed by the BSC, the OKRs methodology will be applied to ensure the establishment of objectives and key factors for the company's departments, thus ensuring the dissemination of the strategy among the teams, the definition of clear directions for all departments of the company and the alignment between these teams and the company's leadership, ensuring that everyone is moving in the same direction.

According to Doerr (2018), the implementation of the OKRs must start with the alignment of the company's strategy among its team, presenting the company's mission, vision, and CSF, in addition to other topics of the kind that may be necessary. In the case proposed here, at this stage the strategic map and all the result of applying the BSC should also be presented, even if a good part of the team has already participated and is aware of this information. The idea is that every company has a clear understanding of the current situation, where the company wants to go, and which are the most priority topics for the next period.

Then, an individual meeting should be held with each of the departments to define their Objectives and Key Results. At the beginning of this meeting, the department's leadership and the company's leadership should discuss and define the period that will be covered in this OKR cycle, which should correspond to a period of three to twelve months, which may, in some cases, not be uniform between departments (DOERR, 2018).

According to Doerr (2018), the definition of OKRs can be facilitated from a discussion provoked by the following questions, already adapted to the context of departments proposed here:

- "What are the main objectives of the department?"
- "What is the most important thing for the department for the next term?"
- "What should people in the department focus their efforts on?"

From these questions, participants should be able to generate a list of potential objectives, even without their respective key outcomes. After that, such objectives must be

ordered according to the company's priorities, always keeping in mind the strategic map designed by the leadership. When the number of objectives is less than five and all are considered of high importance, participants must define the key results capable of measuring and monitoring each of the objectives, following the characteristics already presented during the methodology presentation.

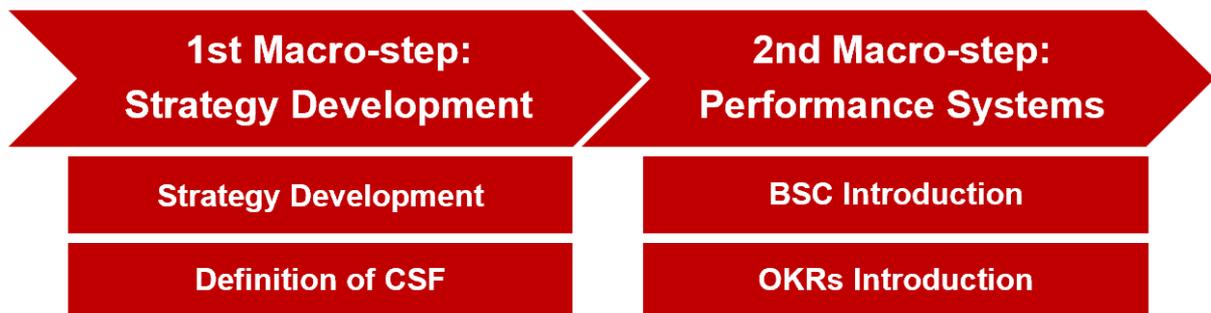
### 3. METHOD

This chapter aims to present the method used in the development of this work, presenting each of the stages that compose it and indicating, for each one of them, the motivations involved, and the approaches and tools adopted.

Based on a mix of approaches from different authors, the method employed follows a well-defined system designed specifically for the study in question. The development can be divided into two large macro-steps that, despite being able to be analyzed independently, complement each other to reach the general objective proposed for the work, that is, to elaborate a strategy for the study focus company and prepare it for the future implementation of a performance system capable of guiding the company in the direction established by this same strategy.

As will be seen in more detail below, each macro-step of the work consists of two main tasks. The first macro-step encompasses the elaboration of the company's strategy and the definition of its CSF, while the second comprises the translation of this strategy into a corporate-level BSC and the beginning of the development of an OKR model in the departments of Fazenda Atalaia. Figure 11 below briefly illustrates the system adopted throughout this work.

Figure 11 - Systematic adopted for the work  
Source: elaborated by the author



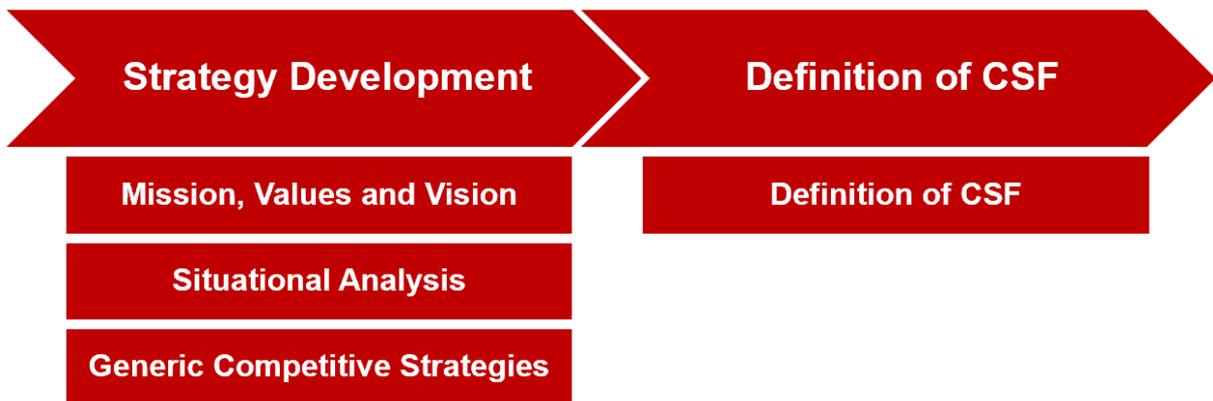
#### 3.1. Strategy Elaboration

The first macro-step begins with the elaboration of the company's strategy, an essential step because, at the time this work is developed, Fazenda Atalaia does not have an explicit strategy capable of assisting in decision-making. Furthermore, it is important that this is the starting point of the work, as this strategy will guide many of the subsequent steps. In addition to preparing the strategy, the first macro-step also includes the definition of the business CSF, that is, aligning what are the key factors that must exist and work in the organization so that it achieves its goals and is able to apply its strategy.

The elaboration of the strategy of Fazenda Atalaia begins with the application of the tool by Nakagawa (2015) to define and validate the company's mission, values, and vision. Then, a situational analysis is performed, seeking to understand the external factors and the context in which the company is inserted, such objectives are achieved through the application of Porter's Five Forces and SWOT Analysis. Finally, together with the company's leadership and based on previous studies, it was defined in which of the Generic Competitive Strategies already presented in Chapter X of this work the company fits.

Once the strategy is elaborated, the task of defining the CSF of Fazenda Atalaia begins through the methodology developed by Rockart (1981), already presented in Chapter X of this work. This step is essential to clarify which areas of the company need to be constantly monitored by the leadership, as good performance in them is something necessary to achieve the company's long-term goals. Figure 12 below illustrates the different steps that make up this macro-step and the main tools used in each of them.

Figure 12 - Stages of Strategy Development  
Source: elaborated by the author



### 3.2. Performance Systems

The second macro-step aims to prepare the company for the implementation of a performance system capable of translating this strategy to the daily life of Fazenda Atalaia, helping its development. As defined in Chapter X of this work, at this stage two methodologies will be applied in a complementary way, the BSC at a corporate level and the OKRs at the company's departments. Thus, this macro-step will also be addressed following this division, starting with the design of the BSC and continuing with the introduction of the OKRs in the departments.

The design of the BSC was carried out from the systematic process developed by Kaplan and Norton (1997). Therefore, the first step was to design the company's Strategic

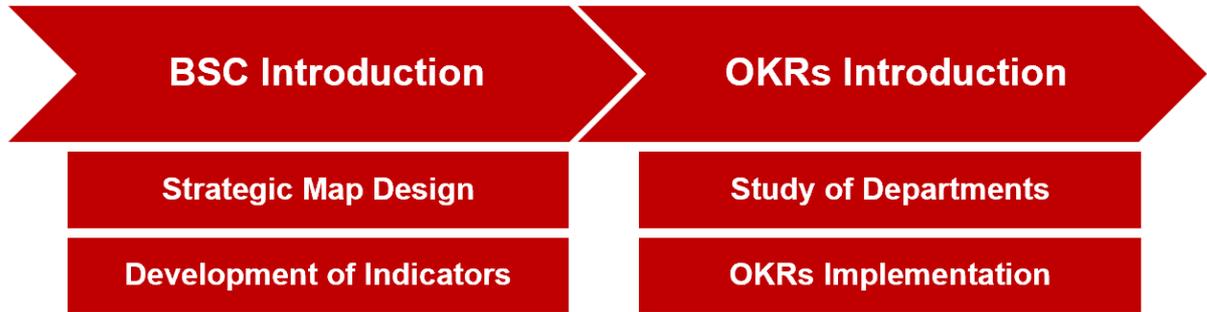
Map, defining the main strategic objectives already divided into the four perspectives addressed by the methodology and the causal relationships between them. With the Strategic Map developed, a first discussion was carried out on the indicators capable of guiding the company towards achieving these strategic objectives, as well as the data sources and the desired frequency for each one of them. These discussions resulted in the elaboration of an initial plan of indicators that will be presented in the development stage.

Then, the OKRs model was applied to ensure that the different departments of the company walked in the direction defined by the company's leadership in its Strategic Map. However, as the company did not have a formal division of departments, the stage began with a study of these teams, aiming to define the existing division, as well as the main functions of each of the areas and the main challenges faced by each one of them. Once this study was completed, Doerr's methodology (2018) was applied in departments that presented a minimum necessary level of structuring for this, while in the case of the other departments, some indicators and processes were defined that must be implemented to prepare the company for a future expansion of the OKRs to all teams.

It is important to point out that possible limitations identified during the development of this macro-step due to the absence of data or other possible factors should be overcome through adjustments and adaptations to the methodology. For this, it is always necessary to focus on the objective of this topic to allow the company to prepare for the future implementation of a performance system applicable to its reality that can facilitate the company's management, offering data in an intelligent way that helps decision-making and guide the teams that make up Fazenda Atalaia in the same direction, ensuring the company's internal alignment. If the application of the models is not possible at the company's current moment, it is necessary to create conditions for this to be achieved in the future, preparing the company for this reality and this objective.

Figure 13 below shows the different steps that make up this macro-step, as well as the main tools used in each of them.

Figure 13 - Stages of development of the Performance System  
Source: elaborated by the author



## 4. DEVELOPMENT

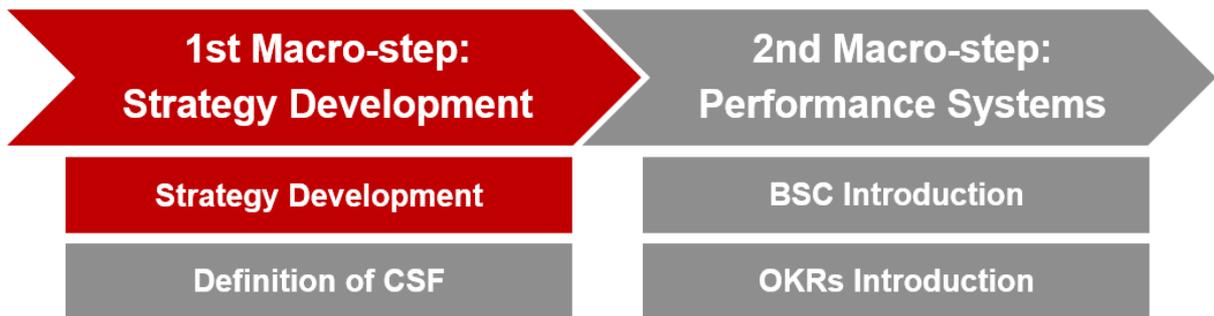
This chapter is intended to apply the system explained in Chapter X for the case of Fazenda Atalaia. The theories presented in Chapter X of this work support all the analyzes and solutions presented here.

### 4.1. Strategy Development

The first stage of the work's development is dedicated to the elaboration of the strategy of Fazenda Atalaia since the company does not have an explicit strategy and such definition is essential to guide several decisions in the subsequent stages. Strategy development begins by defining the statement of three essential terms: mission, values, and vision. In addition, a Situational Analysis is necessary, which will be carried out by a set of complementary approaches, such as SWOT and Porter's five forces analysis. Next, the company's strategy fits into one of the Generic Competitive Strategies, defining its position in the market.

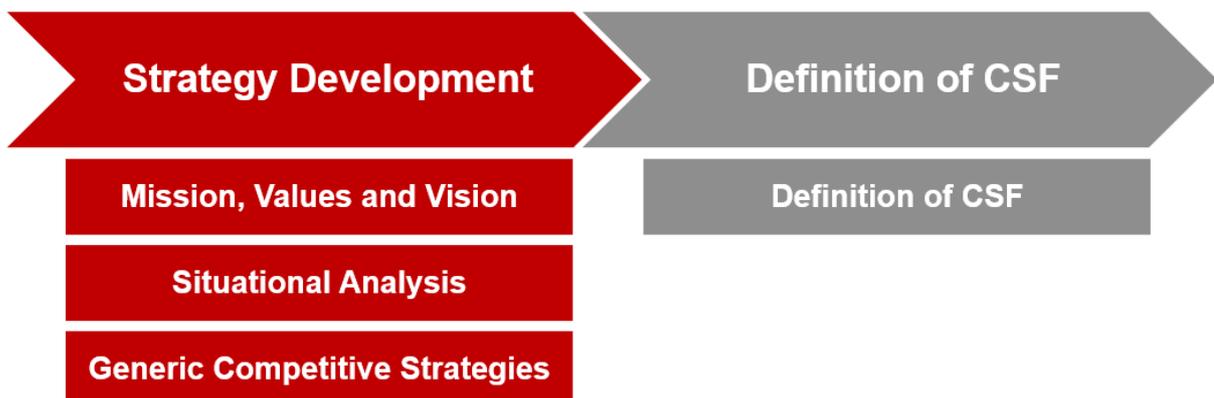
Figure 14 below helps to visualize this step within the systematic of this project.

Figure 14 - Strategy Elaboration Stage within the work systematic  
Source: elaborated by the author



In addition, Figure 15 below shows the division of this part into its different stages, as we will see below.

Figure 15 - Stages of Strategy Development  
Source: elaborated by the author



#### 4.1.1. Mission, Values and Vision

Fazenda Atalaia did not have a declared mission, values, and vision, neither for the purposes of internal communication, nor for presentation in its external communication vehicles, such as a website or social networks. Therefore, a meeting with the company's leadership was called to present and define the three topics following the tool developed by Nakagawa (2015), already presented in Chapter X of this work.

The meeting began with the presentation of the topic, ensuring alignment between all those present on the importance of the subject and the potential benefits that its discussion could generate for the company. After this introduction, the three terms were defined, starting with the mission and moving on to values and vision, always starting with the provocations suggested by Nakagawa (2015) and following with the brainstorming technique among all participants. Such provocations and questions are again presented below.

- Questions to identify the mission
  - Define what is the main benefit that your company brings to your target audience.
  - Define the main competitive advantage (differential) that distinguishes your company from the competition.
  - Determine if there is any special interest that should be in the company's mission. Or whether interest would be a consequence of the business's success.
  - Write a short sentence that presents the benefit, the competitive advantage and, if appropriate, the interest of the entrepreneur. Then, validate with those interested in the business if this phrase could be the company's mission.
- Questions to identify values
  - If your company were a person, what attitudes should it be known, remembered, and admired?
  - Could this list of attitudes serve as your business values list? If not, redo the attitude list.
- Questions to define the vision
  - Set a planning horizon of 3-5 years. How would you like your company to be at the end of this period?
  - In the answer above, would it be possible to determine some type of evaluation indicator and numerical targets that could be achieved in this period?

- Make a statement outlining the objective(s) that the company will achieve during the period. Then, validate with those interested in the business if it could be the company's vision of the future.

The result of the meeting is presented below:

- Mission: Offering unique and pleasurable experiences to our customers through products and services that value the culture, the environment and the region in which Fazenda Atalaia is located.
- Values: Authenticity, Ethics, Simplicity, Respect, Responsibility and Transparency.
- Vision: To become, within the next five years, a company widely known in Brazil for the quality of the experiences offered.

As this is an essential step for the development of the strategy and will have a great impact on the next stages of the project, the three themes were submitted to the verification tool also developed by Nakagawa (2015). This application was an extra precaution due to the relevance of the topic, since the methodology followed already foresees adequacy in the topics evaluated by the tool used below. After application, it will be evaluated whether any of the topics need to be revised and, if so, new meetings will be called with the company's leaders so that this alignment can be carried out.

Table 10 below shows the application of the three topics to the tool:

Table 10 - Nakagawa (2015) tool application  
Source: adapted from Nakagawa (2015) with author modifications

Mission, Vision, and Values Validation Test			
1. Is the Mission too generic?	<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> No, it's well defined
2. Would the Mission also serve another very different business?	<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> No, just for my company
3. Does the Mission present the benefit of the company's performance?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, that's pretty clear.
4. Do collaborators and partners find the Mission inspiring?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's inspiring
5. Do collaborators find the mission challenging?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's challenging
6. Is it easy to communicate the mission to employees, partners and customers?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, easy understanding
7. Is there at least one well-defined goal in the Vision?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's pretty clear
8. Is Vision Measurable?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's measurable
9. Do collaborators find the Vision inspiring?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's inspiring
10. Do collaborators find the Vision challenging?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's challenging
11. Does the Values list have several unnecessary items?	<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> No, they're important items
12. Is the List of Values inspiring?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's inspiring
13. Can the list of Values be practiced by everyone in the company?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, it's challenging
14. Can the list of Values be used in the selection process?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, along with other criteria
15. Can the list of Values be used in the evaluation of employees?	<input type="checkbox"/> No	<input type="checkbox"/> I don't know	<input checked="" type="checkbox"/> Yes, along with other criteria

Review concepts using the methodology
Approved!

The mission, values and vision fit the criteria established by the tool by Nakagawa (2015). Therefore, the work proceeds with the concepts defined in the meeting, without the need for adjustment or revision.

#### 4.1.2. Situational Analysis

After defining the company's mission, values and vision, the diagnostic stage of its strategic situation begins. According to Soares (2001), the analysis of the situation comprises the evaluation of internal and external factors capable of influencing the company, positively or negatively, in the fulfillment of its mission and objectives.

##### 4.1.2.1. Porter's Five Forces

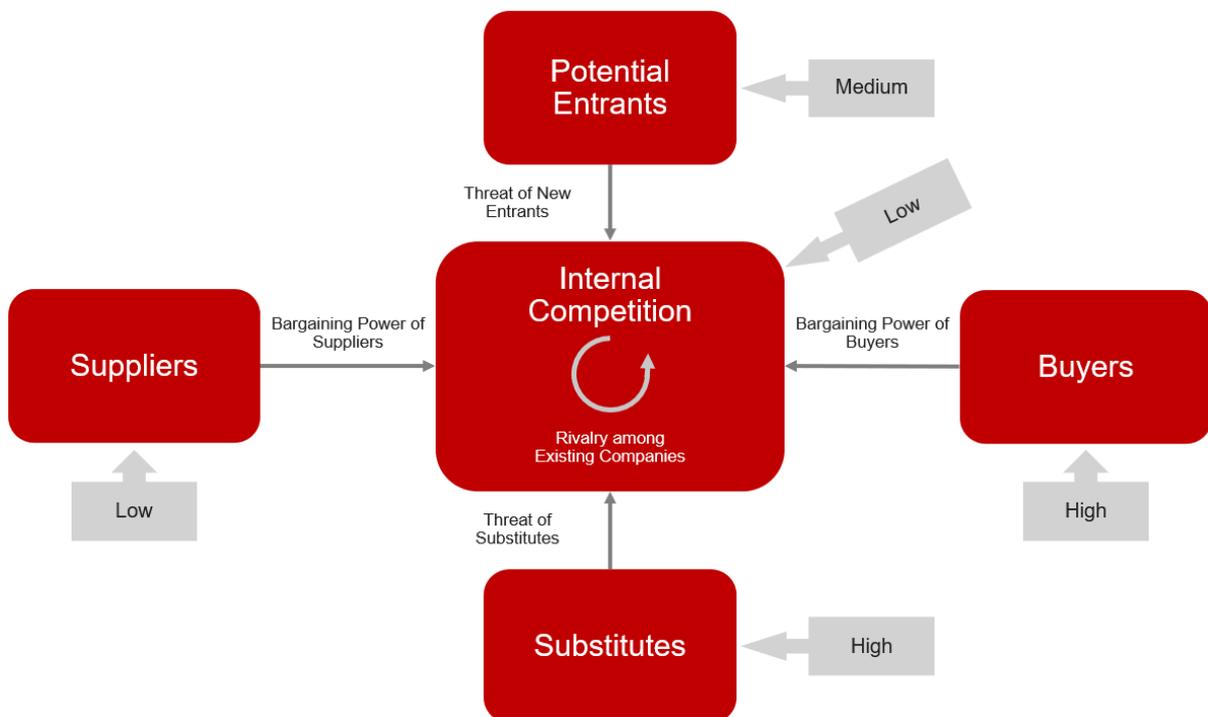
After understanding the internal characteristics of Fazenda Atalaia, the second stage of the analysis of the company's situation begins. In this step, we seek to understand the intensity of competition in the industry in which the company is located based on the understanding of the five main basic competitive forces: customers, suppliers, direct competitors, new entrants, and substitute products. For this, Porter's Five Forces Model, already presented in Chapter X of this work, was applied.

It is important to clarify here that the tool will be applied to a specific part within the dairy industry that corresponds to the artisanal cheese industry. As the dairy industry is

exceptionally large and diverse, this adjustment is important to facilitate the identification of the acting forces and for the result to be really applicable to the situation of the company that is the focus of this work.

To determine the model for Fazenda Atalaia, a meeting was held again with the main leaders of the company, using the brainstorming technique and after a brief explanation by the author of the work about the tool, a discussion about the competitive forces was carried out. After the discussion, each of the participants presented a personal answer and then the group consolidated all the information into a final answer. Figure 16 below summarizes the results obtained from the meeting to assess Porter's Five Forces.

Figure 16 - Porter's Five Forces applied to the artisanal cheese industry  
Source: adapted from Carvalho and Laurindo (2010, p.43) with modifications by the author



Below is a brief explanation for each of the five competitive forces discussed at the meeting:

– **Buyers**

Emporiums and e-commerces specialized in cheese that buy dairy products and resell to final consumers will be treated as customers in this analysis, as they are currently the main customer group for artisanal cheese producers in Brazil, since these products hardly have space on the shelves of traditional markets and dairy products with the structure to sell directly to customers located in large urban centers are still rare.

Even so, it is important to emphasize that the diffusion of e-commerce tools has the power to change this second point, making direct sales to final consumers increasingly representative in the reality of Brazilian artisanal producers. If this occurs, it is expected that the bargaining power of the reseller customer class will decrease, but it is also expected that the end consumer class will have a high bargaining power, as they will have access to cheeses from various producers directly from their mobile phone.

That said, we begin by presenting the points raised during the discussion of competitive forces. Analyzing the situations favorable to the buyer presented in Chapter X of this work, it is possible to identify some situations that occur and others that do not occur in the context of artisanal cheeses. For example, customers are more focused than producers, which gives them greater bargaining power. However, the profits currently practiced by resellers are admittedly high and there is no concrete threat of backward integration in the chain.

Despite this lack of consensus in the situations, there was a consensus among the meeting participants that currently the customers of these emporiums and e-commerces have a great bargaining power in relation to the producers. According to those present, this is mainly because there is still no strong identification between the final consumers who visit these emporiums and e-commerces and the products they end up purchasing.

In other words, few consumers enter the emporium already decided on which artisanal cheese they want to buy. Usually the person enters, explains the flavor they are looking for and decides between the options the seller ends up offering for tasting or simply indicating, thus making the retailers have a great influence on which cheese will be sold and, ultimately, increasing the bargaining power of these retailers in relation to the producers. In this scenario, if a dairy tries to increase the sale price of its products to resellers, resellers can simply stop buying such products without having big losses in their business, as it will hardly lose a sale to another emporium for not having that specific product.

In summary, currently the dealer's bargaining power is strong, because, despite the great differentiation that already exists between the products, they are still treated as standardized by the final consumers and, consequently, can be treated as standardized by the resellers. However, it is expected that the future consolidation of this market will change this scenario, making more and more customers turn to resellers already aware of what they are looking for and which dairy products they want to buy, which would reduce the intensity of the competitive force imposed by resellers, which is currently high.

### – Suppliers

Brazilian artisanal cheese producers are traditionally also responsible for the production of their main raw material, milk. Therefore, there is no major strategic role controlled by the suppliers, they are usually responsible for the supply of yeasts, rennet, packaging and other products of the kind, materials without great differentiation or switching cost, offered by several companies and without threat of forward integration. Thus, the intensity of competitive force imposed by suppliers can be considered low.

### – Internal Competition

It can be said that there is little rivalry between artisanal cheese producers in Brazil, the market is marked by a large dispersion, with a low average production volume and that in many cases focuses on a local market, without national scale. Many of these producers even join together in specific or long-term actions, as is the case with the cheese factories participating in the "Caminho do Queijo Artesanal Paulista", an action that aims to strengthen the entire artisanal producer industry at state and national level.

### – Potential Entrants

When the assessment falls to the specific artisanal cheese industry, a medium intensity strength is identified in relation to new entrants. The main barriers to entry mentioned by Porter (2005) for the case of the evaluated industry are discussed below.

Regarding product differentiation, it is possible to say that the techniques of original cheeses commonly adopted in the artisanal cheese industry result in differentiated products, a fact that is clear when we analyze the diversity of products existing in the main specialized emporiums, but the industry is not yet sufficiently consolidated to affirm that there is already an identification and a relationship of loyalty between producers and consumers.

Regarding the need for capital, this is an industry that requires considerable investment, especially if we consider that to be considered artisanal, a new producer will need to have a rural property, a herd to produce the milk and a minimum dairy structure to produce the products. Furthermore, there is a considerable learning cost during the development of new recipes, a process that requires time, knowledge, and many tests before the first results.

Access to distribution channels – here considered specialized emporiums – and switching costs do not generate major barriers to new entrants either, since resellers are always looking for new products as long as they have interesting features. As can be seen,

there are not many barriers to entry, but we consider the issue of capital needed and the learning curve to be relevant and, therefore, the strength intensity was defined as medium.

#### – **Substitutes**

As already explained, a specific niche of artisanal cheeses is being considered in the analysis as an evaluated industry. Therefore, all other cheeses that do not fit this definition will be considered here as substitute products, especially those imported from other countries and those from large national industrial dairies that play an important role in this relationship. There are also other substitute products besides cheeses, such as sausages and other products that have a similar role in the consumers' routine, but they will not be dealt with in detail because the dispute with other cheeses is currently considered more intense.

The cheeses considered here as substitutes come from industries that are more consolidated and much more capitalized than the artisanal cheese industry, which offers them great power, since investments in advertising and scale-up can be greater. Furthermore, such companies enjoy greater scalability, which results in a lower average production cost than artisanal producers. Finally, by following an industrial production style, they are able to better fit the existing legislation in the country and, therefore, have access to supermarket chains, important distribution channels as they concentrate most of the population's food consumption.

The great counterpoint in this dispute is due to a greater appreciation by consumers of local and artisanal products, in a search for products with unique quality and origin. This trend is seen as the main responsible for allowing artisan producers, even in the unfavorable position presented above, to conquer a market share. However, even with this trend, the intensity of force generated by substitute products is identified as high due to the factors mentioned initially.

#### **4.1.2.2. SWOT Analysis**

After understanding the forces that act in the industry in which the company is inserted, the SWOT Analysis, already presented in Chapter X of this work, seeks to map the internal strengths and weaknesses of the analyzed company and the opportunities and threats present in the context in which it is inserted, thus guiding the company's strategy towards a position that leverages its strengths, recognizes its weaknesses and allows, at the same time, the use of opportunities and protection against the main threats (TOLEDO, 2014).

As it fits with the proposed objectives for situational analysis, it was decided to follow this step with the application of SWOT Analysis. A meeting between the author of this work and three of the company's main leaders was organized. During the meeting, after a brief presentation of the tool to the others present, the author of the work proposed to everyone that they identify, using the brainstorming technique, which are the strengths, weaknesses, threats, and opportunities of the company. After a period of conversation, everyone presented an answer to the question. These responses were, during the meeting, consolidated into a final mapping, as shown in Figure 17 below.

Figure 17 - SWOT Analysis of Fazenda Atalaia  
Source: adapted from Carvalho and Laurindo (2010, p.64) with modifications by the author



Below, the main factors considered during the discussion and that support Figure X presented above are explained in greater detail:

- **Strengths**
  - **Brand:** Despite not being widely disseminated, it can be said that Fazenda Atalaia already has one of its main strengths in its brand. Strengthened by several awards, the company has been building a brand recognized for the quality of its products and for

its unique and authorial identity. Such recognition began in the gastronomic world, especially after the "Tulha" cheese received the gold belt classification at the World Cheese Awards in 2016, becoming the first Brazilian cheese to achieve such a feat, but its increasing dissemination among the general public is already noticeable.

- **Line of authorial cheeses:** Fazenda Atalaia started its line of authorial cheeses more than five years ago, no longer limiting its production to the replication of already consolidated recipes to risk developing new recipes and flavors, seeking to produce new products that carried its identity. This movement can currently be seen as one of the main strengths of the company, since the consolidation of its author cheeses increases the differentiation of products from other dairy products, in addition to encouraging a constant search for innovation.
- **Verticalization of the preceding stages ensuring product quality:** In its quest for quality, Fazenda Atalaia has always sought to verticalize its production, acting not only in the process of transforming milk into its derivatives, but also in the preceding stages. Currently, the company is responsible for producing a large part of the inputs that feed its herd, in addition to using only milk produced by its own herd, which is entirely born and raised on the property. This set of characteristics helps ensure the high quality of its products, as it is responsible for the quality of its most important raw material, milk.
- **Verticalization of subsequent steps ensuring greater margin:** The same verticalization trend also applies to the steps subsequent to cheese production. Over the past few years, the share of sales sold directly to end consumers has been growing at an accelerated pace, boosted by the increase in the volume of customers who visit the property and make their purchases at the company's store and by the creation of an e-commerce in the first half of 2020 that allowed customers to buy products directly from the farm in any city in Brazil. This change in the sales profile allows the company to increase its margin, since the prices charged to resellers are lower than those charged to final consumers. In addition, this change generates a closer relationship between the company and its customers, allowing the loyalty of consumers and, finally, it also reduces the company's dependence on the conditions imposed by resellers.
- **Location:** The location of the property closes to the São Paulo - Campinas axis is also seen as one of its main strengths, providing two great advantages to the company. The

first advantage comes from facilitating the distribution of its products among the large urban centers existing in the region, nationally known for the presence of award-winning restaurants and the presence of an economically powerful population. The second advantage is that the location makes it easier for these customers to visit the property, , an important fact because it allows the sale of products directly from its own store, where the company enjoys the highest sales margins and where it is able to explore the sale of products and services with higher added value, such as meals, tasting boards and guided tours. However, there is a consensus among the company's leadership that the biggest advantage offered by this second point is, in fact, customer loyalty, as it is, according to their own experience, noticeable that customers who visit the property and know the company's history and proposal are more easily loyal, in many cases even becoming friends of the owners.

- **Historic structure of the property:** Located on a 19th century farm, Fazenda Atalaia has one of its main strengths in its property. By maturing its products in the original rooms of the farm in natural conditions, without temperature and humidity control, the products acquire a set of original characteristics that are almost impossible to be copied. In addition, the constant concern with the preservation of historical heritage, marked by constant investments in restoration and maintenance of buildings, also offers the property an architectural complex that attracts more and more customers to the property and allows for new sources of income such as historic visits and even school and college excursions.
- **Media exposure and presence in award-winning restaurants:** Despite being a small company, Fazenda Atalaia receives interesting media exposure and is present in well-recognized and established restaurants, which helps in the dissemination of its proposal and reinforces the quality of its products. The company has already been the focus of documentaries on wide-ranging national channels. In addition, the cheeses have already appeared in episodes of the Masterchef program and in several reports in the most popular newspapers in the country. Fazenda Atalaia's products are present in several renowned restaurants spread across several Brazilian states, always carrying their author's names and often accompanied by the company's name. Such characteristics reinforce the quality of the products and help in the dissemination of the company's brand and its products, since many customers visit the property or buy its products after having contact with the company in one of these ways.

- **Leadership involvement:** The company's leadership involvement is seen as one of its strengths. Paulo and Rosana, the couple who started the production of milk and dairy products on the property and lead the actions of the Farm, have great involvement in the daily production, allowing for close monitoring of processes, facilitating the dissemination of the company's culture among employees and also allowing dialogue with customers who visit the site daily, facilitating the understanding of their wishes and receiving their recommendations and feedbacks. As they live on the farm, both are present literally every day of the year at the Farm, from Monday to Monday, with emphasis on weekends and holidays, days with the busiest customer traffic, when both act in the reception and presentation of the company's proposal to consumers.
- **Weaknesses**
  - **Poorly designed or non-existent internal processes:** Due to its family origin and rapid growth, it is known that the company has a delay in structuring its processes. Many of the processes are fragile, poorly standardized, and very susceptible to errors, and there are cases of essential processes that so far are not formally defined, as in the case of after-sales services.
  - **Costs and difficulties linked to the adopted production method:** The production style adopted by Fazenda Atalaia causes a reduction in the company's productive efficiency, below some of the facts that justify this situation are mentioned. When looking for new recipes, many test batches end up resulting in unwanted tastes that end up being lost, there is a development and learning cost for each new product that is higher than dairy products that only bet on already consolidated recipes. In addition, products without preservatives have a shorter shelf life, which makes stock control difficult and facilitates losses if production and sales control is not well aligned. Finally, the maturation of cheeses in a natural environment can also lead to difficulties in the standardization of products and, in certain cases, even losses, since the company is susceptible to the environmental conditions existing on the farm. It is important to make it clear that this analysis does not consider the benefits arising from this same approach chosen by the company, only some additional costs and difficulties that are generated by this characteristic are being highlighted.
  - **Municipal Inspection Seal:** Despite having close monitoring of the municipal sanitary surveillance and carrying out, on its own, quality analyzes of its products in laboratories aligned with federal standards, Fazenda Atalaia does not have, until this

work is carried out, an Inspection Seal that allows the sale of its products outside its municipality, that is, a State or Federal Inspection Seal. In the view of the company's leadership, this characteristic is mainly due to the delay in Brazilian legislation, which is still designed for the commoditization of products, always seeking the standardization of all processes and the industrialization of the food industry, a movement contrary to what is currently seen in more developed markets around the world. This factor is characterized as a weakness, as it has already prevented the company from accepting some partnerships with interesting potential.

- **Lack of scale and low scalability in current models:** Fazenda Atalaia has a small production volume and, for that volume, a diversified product portfolio. As a result, the company cannot scale production on its lines, causing its production costs to be higher than those of its competitors. In addition, the company's current model has some barriers that make it difficult to scale. One of these barriers is the maturation of the products in the historical structure of the farm, which is not replicable, and which is currently almost entirely used, and the second is the use of own milk, which hinders a rapid increase in production that could be achieved by purchasing milk from other producers.
- **Difficulty in accessing labor:** The location of the farm reduces the company's access to labor. The location in a small city in the interior of the State of São Paulo makes it difficult to hire people from large urban centers such as São Paulo and Campinas. In addition, the company's location in the rural area also ends up making it difficult to hire people from the region in which it is located, since some people prefer to work in urban areas, especially if they already live in the city.
- **Involvement of the leadership in the day-to-day activities of the company's processes:** While the proximity of the company's leadership in the processes generates some strengths, this characteristic can certainly be identified as the cause of some weaknesses for the company. Because it is very involved in issues related to the day-to-day production, constantly solving unforeseen events and making tactical and even operational decisions, there is a deficiency in the company's leadership in focusing on strategic issues at Fazenda Atalaia which often end up being left aside without due attention, as the owners, currently responsible for such decisions, spend a very considerable part of their time on these other issues.

- **Opportunities**
  - **Valuing local and identity products:** There is a global trend in the food industry of valuing, by consumers, local products with their own identity, a fact that can be easily noticed when analyzing already more consolidated markets such as Italy and France, in which supermarket products almost always try to attract consumers by indicating the location close to their production, showing that this is in fact a decision criterion considered by their consumers. In Brazil, this trend took a little longer to appear, but it is already present nowadays. In the view of Fazenda Atalaia's leadership, the Brazilian dairy market has changed a lot in recent years, with consumers no longer limiting their purchase of national cheeses to everyday cheeses, they are currently making room for national cheeses also for special occasions that were previously limited to cheeses imported from other markets.
  - **National consumer more willing to new experiences:** The company's leadership sees the Brazilian cheese consumer more willing to try new flavors and experiences, straying from the more traditional cheeses sold in the country. This movement can be seen as an opportunity to offer more and more products to consumers, exploring new techniques and processes. A clear example of this is the greater willingness of people to taste goat and sheep milk cheeses, which traditionally have a less consolidated taste in Brazilian culture than cow's cheese. Thinking about positioning itself in this trend, Fazenda Atalaia started in 2020 its herd of goats and sheep, learning to work with the animals in order to develop new product lines in the future.
  - **Greater recognition of São Paulo cheese:** The Brazilian state with the greatest identification in cheese production has always been and still is Minas Gerais. However, more and more we have other states in the country standing out with good products, becoming recognized and being valued by consumers, further strengthening the Brazilian dairy market. São Paulo is, without a doubt, one of those states, betting on innovation and quality, developing new recipes and conquering new consumers. Atalaia Farm itself founded, along with nine other producers in the state, the group "Caminho do Queijo Artesanal Paulista", an initiative that, with the support of the Department of Agriculture and Supply of the State Government of São Paulo, aims to strengthen the artisanal producers of São Paulo.
  - **ARTE Seal:** In 2019, a decree was enacted that allows the interstate sale of artisanal food products as long as they are subject to inspection by public health agencies of the

States and the Federal District. The measure shows the government's interest in making the current legislation more flexible to better serve small artisanal producers in Brazil, such as Fazenda Atalaia.

- **Strengthened rural tourism:** Strengthening rural tourism in Brazil can be seen as an opportunity for Fazenda Atalaia, since the company is located in a historic property and currently offers experiences in this line for its consumers.
- **Consolidation of digital sales channels:** The pandemic caused by COVID-19 accelerated the consolidation of digital sales channels, making consumers even more used to shopping in virtual stores. This movement creates an opportunity for companies to reach their final consumers, allowing for greater proximity and lower costs with intermediaries. Fazenda Atalaia launched its e-commerce also at the beginning of the pandemic and can take advantage of this movement to leverage this channel even after the end of the pandemic, establishing a new relationship with its consumers.
- **Threats**
  - **Brazilian legislation:** Despite recent changes, Brazilian legislation still poses a threat to the style of production developed at Fazenda Atalaia. This is because the Brazilian food legislation is designed for industrial production, so it does not accept, for example, the maturation of products in the place currently used by the company. However, if it chooses to adopt the measures imposed and build a new structure for your dairy, it is necessary to assess whether the identity that currently values the company's products would not be lost, since the structure used today is responsible for many of the characteristics of the products. In addition, the legislation also makes the nomenclature of products difficult, forcing the author's cheeses to be classified among types of cheeses already consolidated – usually from outside Brazil – a fact that discourages and mischaracterizes the search for Brazilian own recipes.
  - **New competitors:** One of the main threats existing in the industry is the presence of an increasing number of competitors. Such competition originates from two main fronts: small artisan producers that stop selling fresh milk or cheese and start producing artisanal special cheeses, and large cheese producers that begin to develop special products, aiming at this same market share.
  - **Brazilian economic instability:** Considering the context of Brazil, the industry is subject to all the economic crises existing in the country. In addition, the specialty

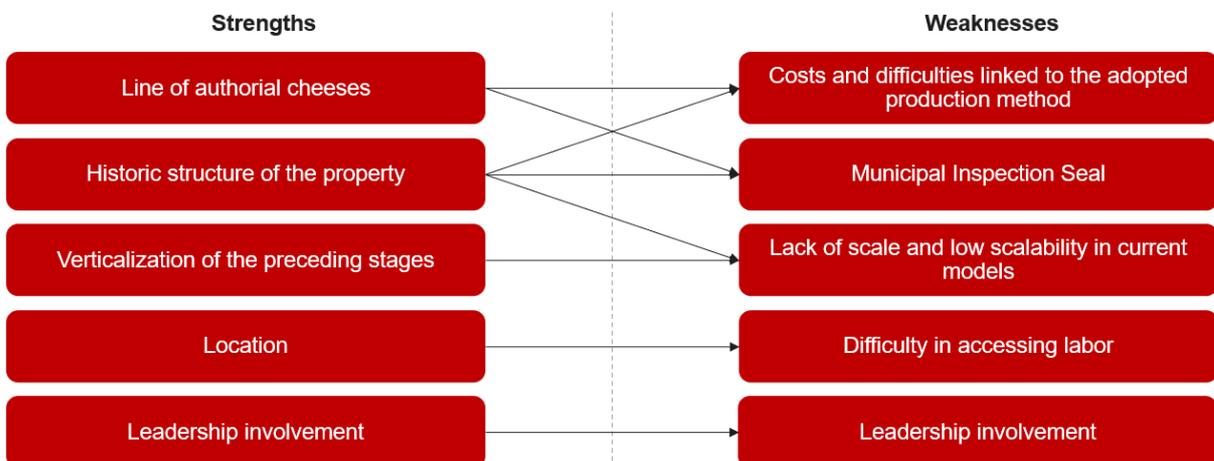
cheese market ends up suffering an even greater impact than that of more traditional cheeses that are consumed on more routine occasions, as it can be considered a more superfluous product, more sensitive to this type of instability.

- **Relationship between Strengths and Weaknesses**

Before moving on to the next analysis, it is interesting to analyze the complexity of the situational assessment carried out by the SWOT Analysis. Fazenda Atalaia, like many companies, has in some of its main strengths the cause of some of its main weaknesses. For example, the company's choice to use the original historical structure dating from the 19th century to mature its products is seen as one of its main strengths, since such a process in a natural environment provides the products with a set of characteristics that greatly influence their flavors. However, the same choice resulted in a series of complexities and weaknesses for the company, such as greater difficulty in standardizing products, difficulty in having a state or federal inspection seal and low production scalability, since the building used is not an easily replicable environment and is currently used almost in its entirety.

There are several other case examples of related strengths and weaknesses, some of which are shown in Figure 18 below. It is important to emphasize that we could also go deeper and establish relationships also involving opportunities and threats, but it is beyond the scope of this discussion. The idea here is, before moving on to the next tools, to exemplify in a simple way how complex situational analyzes of a company are and how, even adopting a renowned and consolidated model such as the SWOT Analysis, some essential relationships for the discussion are still not so explicit in the evaluation.

Figure 18 - Relationship between strengths and weaknesses  
Source: elaborated by the author



#### **4.1.2.3. Generic Competitive Strategy**

Once the SWOT analysis and the analysis of competitiveness through Porter's Five Forces are concluded, the stage of framing Fazenda Atalaia in one of the generic strategies discussed by Porter (2005), already presented in Chapter X of this work, begins.

At a meeting with the company's main leaders, it was jointly defined that Fazenda Atalaia fits into the generic competitive strategy known as a Focus with Differentiation.

Regarding the strategic advantage pursued by the company, the choice for differentiation happens because the company is currently seeking to develop unique and authorial products, services and experience that stand out for their quality and, therefore, increase their customers' willingness to spend. This position was gradually adopted during the company's development, in a movement considered by the leadership as natural, which is mainly due to its small scale and low scalability, which made it difficult to compete without differentiation with the large industrial dairies that enjoy lower production costs.

Regarding the strategic target, Fazenda Atalaia focuses its activities on consumers who are looking to acquire more than a cheese, but an experience through a product or service with an identity and origin. The company's portfolio is currently diverse, including fresh and matured cheeses, other dairy products, a bakery line, meals served on the farm, cultural activities such as the guided historical tour and others. However, even with this current diversity, it is possible to notice that all the products and services offered fit into the same line already mentioned. The same can be seen when analyzing the company's communication on its social networks, there is a clear focus on a consumer niche and seeks to communicate directly with them.

Figure 19 below demonstrates the company's framework within its generic competitive strategy:

Figure 19 - Fazenda Atalaia's Framework in the Generic Strategies Matrix  
 Source: adapted from Carvalho and Laurindo (2010, p.64) modified by the author



**4.2. Definition of Critical Success Factors**

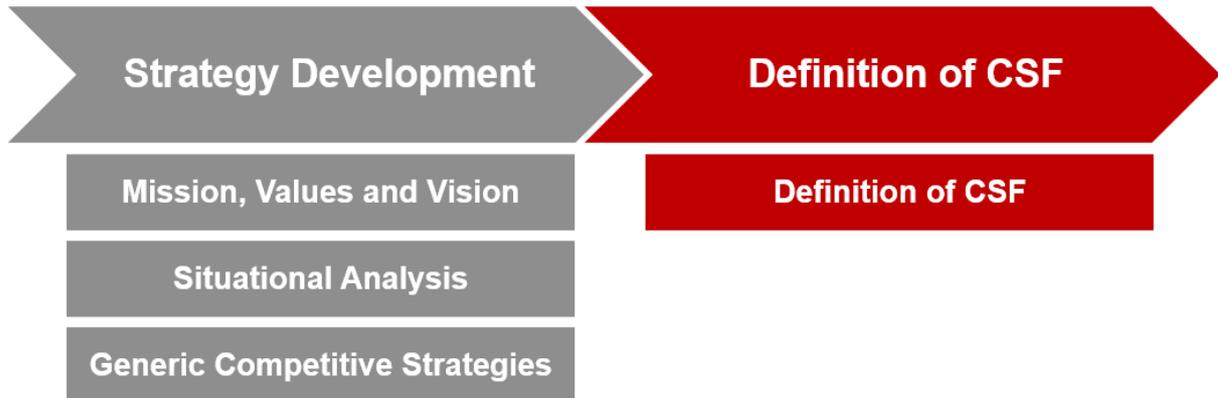
Having defined the company's strategy, it is necessary to map the Critical Success Factors (CSF) of the business. The term, already presented in Chapter X of this work, refers to a limited number of areas whose good performance is considered sufficient and mandatory for the achievement of its competitive objectives. Figure 20 below helps to visualize this step within the systematic of this project.

Figure 20 - CSF Definition step within the work systematic  
 Source: elaborated by the author



As illustrated in Figure 21 below, this phase of the first macro-step is composed of a single activity, the definition of the CSF itself.

Figure 21 - CSF Definition steps  
Source: elaborated by the author



For the definition of the CSF of Fazenda Atalaia, the approach presented by Rockart (1981) will be used, also presented in Chapter X of this work. In this approach, three questions are asked to the company's main leaders and, based on the answers obtained, it should be possible to consolidate the company's CSF. The three questions were presented to the company's main leaders in individual conversations and a period of one day was set for each one to think about their answer. After this time interval, all the answers were presented in a new meeting, this time with the whole group, in which the information was discussed and consolidated in the CSF defined for the company. The initial answers are shown in Table 11 below, together with the questions, excluding only those that were repeated or that addressed similar points, while the already consolidated CSF are presented below.

Table 11 - Answers obtained in the questionnaire to define the CSF  
Source: elaborated by the author

Question	Answers
<p>Could you tell, in whatever order comes to mind, what are the things you see as critical success factors for your work right now?</p>	<ul style="list-style-type: none"> <li>- Valuing and respecting the historical heritage of the property through the preservation of its structure and the dissemination of its history</li> <li>- Respect the animals that live on the farm, offering well-being, optimal nutrition and proper management</li> <li>- Satisfy our customers by the quality of the products and services offered</li> <li>- Ensure a good shopping experience, product delivery and after sales to our customers in all available sales channels</li> <li>- Constantly innovate, improving existing products, services and processes and offering new experiences that meet the demands of our customers</li> <li>- To be able to transmit our proposal and our values to our customers and employees</li> <li>- Being able to share our proposal with an increasing number of customers</li> <li>- Establish lasting partnerships with companies aligned with our values</li> <li>- Lead and enable regional development, developing partnerships capable of boosting our business and other local initiatives aligned with our values</li> <li>- Act responsibly in an environmental and social vision, preserving nature and creating better opportunities and conditions for the local population, especially the rural population</li> <li>- Valuing our employees, offering conditions for them to develop professionally and, with the help of the Farm, achieve their personal goals</li> </ul>
<p>Which areas, in case of failure, would bring more damage to the company, in your view? Where would it bother you the most to see something going wrong?</p>	<ul style="list-style-type: none"> <li>- Errors in animal welfare, nutrition and management processes</li> <li>- Offer products and services outside the quality standard expected by the company and our customers, either by failures in production processes or complementary processes</li> <li>- Do not offer a charming experience to our guests, especially those who visit the property</li> <li>- Do not serve our customers well before, during and after sale, regardless of the sales channel</li> <li>- Product loss due to production errors or lack of alignment with sales sector</li> <li>- Loss of sales due to lack of product inventory</li> <li>- Achieve poor results – in terms of quantity or quality – in the agricultural management of the farm</li> </ul>
<p>Assume you have been in a dark room for three months, with no access to the outside world, except for water and food. What would you like to know about the business after leaving the room?</p>	<ul style="list-style-type: none"> <li>- Volume of milk production</li> <li>- Sales volume per channel and product</li> <li>- Volume of discarded products in the period, divided by reasons</li> <li>- Number of clients served at the property</li> <li>- Number of customer complaints, divided by sales channel and by reasons</li> <li>- Number of new customers per channel and average ticket variation</li> <li>- Number of wholesale customers who stopped buying the products</li> <li>- Customer delinquency control</li> <li>- Changes in staff and number of absences per person</li> <li>- Number of followers on our social networks</li> </ul>

The CSF are presented below in no defined order:

- **Satisfy more and more customers through high quality products and services capable of transmitting the concept and identity of Fazenda Atalaia:** The public

served by the company seeks a high level of quality in the company's products and services and, more than that, products that carry the company's concept and identity. We must be able to satisfy this demand from our customers and continually increase our customer base.

- **Innovate by developing new high-quality experiences for our customers:** Our customers are always looking for new experiences, it is important to be able to meet this demand through the development of new experiences.
- **Offer a good experience for our customers beyond the product or service:** Regardless of the sales channel, it is important that the complementary steps that influence the customer experience are also well executed. Among these steps, the following stand out: service, product separation, packaging used, product shipment and after-sales service.
- **Respect the history of the farm and the animals that live on it:** Two of the great differentials of Fazenda Atalaia are its history and the quality of its milk. Aiming to maintain and expand these differentials, it is necessary to constantly work to preserve and enhance the property's historical heritage and to improve the well-being, nutrition, and handling of animals.
- **Having a team aligned with our proposal, with good working conditions that allow for constant learning:** The quality of the products and services offered by Fazenda Atalaia directly depend on the training and involvement of its employees. Therefore, it is essential that the company is able to convey its proposal to its employees. Furthermore, it is also important that these people are motivated by good working conditions and opportunities for learning.
- **Build partnerships that value our region:** Use the space and visibility of Fazenda Atalaia to promote local initiatives and projects aligned with our purposes. Build partnerships with companies and initiatives that are aligned with our purposes and values.
- **Promote social and sustainable actions:** Create better opportunities and conditions for the local population, especially children and young people living in rural areas. Acting responsibly with the environment, adopting practices aligned with sustainability.

#### 4.3. BSC Introduction

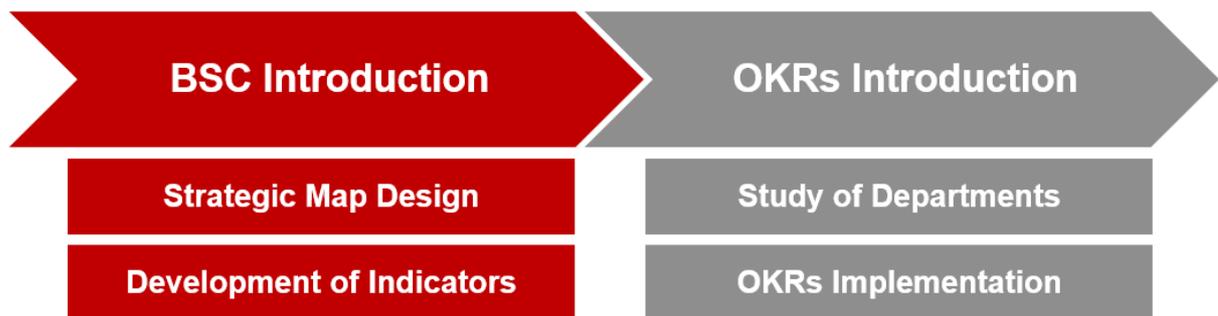
After discussing and aligning the company's CSFs, the Strategy Development macro stage is concluded and it is possible to start the macro stage that addresses the topic of Performance Systems, initiated by the introduction of the BSC to Fazenda Atalaia. The positioning of this phase within the work systematic is illustrated in Figure 22 below:

Figure 22 - BSC Introduction step within the work systematic  
Source: elaborated by the author



Figure 23 below illustrates the division of this BSC Introduction phase into its different stages, as we will see below.

Figure 23 - BSC Introduction Steps  
Source: elaborated by the author



#### 4.3.1. Strategic Map Design

During this stage of the work, the first two steps of the systematic process developed by Kaplan and Norton (1997) for the construction of a BSC will be applied: the definition of the measurement architecture and the consensus around the strategic objectives.

##### – Define the Measurement Architecture

The two tasks that make up the first step of Kaplan and Norton's (1997) methodology for building a BSC involve selecting an appropriate organizational unit and identifying the linkages between the chosen business unit and the corporation.

The first task seeks to reduce the initial complexity of building a BSC, since in the case of large corporations it is difficult and even risky to start implementing a model like this

approaching the entire company at once, and it is more interesting to start with a specific area as long as it meets the necessary requirements for construction.

The second task seeks to map the relationship of the selected unit with the corporation and with the other units, in this case, the objective is to facilitate the identification of limitations and opportunities caused by these relationships, avoiding, for example, the definition of objectives and goals that negatively interfere in the performance of other units or the entire corporation.

Fazenda Atalaia, as already presented in the course of this work, is a small company, composed of few employees and an activity that is concentrated in a single business unit, even though it encompasses different stages of its production chain. Therefore, it was aligned during a meeting with the company's leadership that the BSC should cover the entire organization from the beginning of its development.

#### – **Building Consensus around Strategic Objectives**

This stage began with a round of interviews with the company's main leaders and some employees appointed by the leadership itself, the purpose of which was to collect the main strategic objectives of Fazenda Atalaia. As not everyone present at this meeting participated in the previous meetings where the strategy and CSF were developed, the two concepts were reviewed and presented, ensuring alignment between the entire team involved. In addition, a brief presentation on the concept of the Balanced Scorecard was prepared, also ensuring the alignment of all those present on the model and its potential benefits for the company. Then, questions were asked that sought to unfold the strategy defined for the company in the four perspectives of the BSC, the results obtained during this stage were then noted and, at the end of the discussions, synthesized into a set of strategic objectives that make up the strategic map designed for Fazenda Atalaia.

Starting from the perspective of Customers, the main answers to the question "To achieve our vision, how should we appear to our customers?" were:

- "Customers must see us as a company that offers very high-quality products with its own identity."
- "We need to meet the demand of our customers, which is constantly evolving. It is not enough to have a quality product, we need to offer products with the company's identity through a pleasant experience at all stages, from the moment of purchase to post-sales."

- “Customers must see Fazenda Atalaia as a place to enjoy unique and pleasant moments and experiences, not just a place to buy our products.”.
- “We must be seen as a company with purpose, which respects our employees, the animals that live here, society, the environment, the artisanal production method and our region.”.
- “We must be seen as a professional and organized company that they can trust, capable of maintaining a high-quality standard both in the final products and in other stages that influence the consumer's experience, such as product availability and delivery time.”.
- "We must be able to serve an increasing number of customers, increasing the reach of our channels and improving customer prospecting without sacrificing our quality and our proposal."

After collecting the responses, the results were consolidated into the following strategic objectives for the Customers perspective:

- Customer satisfaction in all sales channels.
- To be able to disseminate our proposal to an increasing number of customers.

Regarding the Internal Business Processes perspective, the participants answered the question “To satisfy our shareholders and customers, what business processes must we excel at?”.

The main answers are listed below:

- "We must be able to increase our production of dairy products without giving up our proposal, which depends on an increase in milk production."
- “We must establish lasting partnerships that value our brand, our products and our proposal.”.
- "We need to be able to collect internal information about our production and our customers' impressions and suggestions so that we can use the data to our advantage to identify our flaws and our strengths."
- “We must have a strict quality control, guaranteeing a standard in the products offered to our customers.”.
- "We must provide excellent support to our customers across all sales channels throughout their entire shopping experience, including after sales."
- "To ensure product availability, we must have alignment between final product inventory control, input inventory control, production planning and demand forecast."

- "We must have an excellent innovation sector, capable of developing new experiences for our consumers, through new products, new services or other forms of innovation."
- "We must have excellent logistics, capable of meeting deadlines, reducing delivery times and expanding our coverage area."
- "We must have excellent control in the separation of products, avoiding errors in deliveries that disappoint our consumers and generate new expenses to be corrected."

The answers presented above address many of the stages of the company's production process, which is expected since the leaders of all the company's departments were present. As a result, many of the answers needed to be condensed, but will again be specifically addressed later in the work when departments are analyzed individually. The strategic objectives defined for the Internal Business Processes perspective are:

- Offer products with the identity of Fazenda Atalaia that meet the demands of our customers.
- To be able to convey our proposal to our current and potential customers.
- Offer good service and support to customers.
- Achieve operational efficiency.
- Optimize product availability.
- Increase our production while maintaining the current quality level.
- Increase the reach of our products and our proposal while maintaining quality standards.
- Optimize collection of internal and customer information.

Regarding the Learning and Growth perspective, the question "To achieve our vision, how will we sustain our ability to change and improve?" was presented to those present. The main answers obtained are listed below:

- "In order for us to make progress, it is necessary that all employees understand the company's proposal, as well as their importance within it."
- "Employees must be motivated and satisfied so that they can get involved in their activities and in the company."
- "We must be able to understand our customers more and more, understanding their new demands and developing new experiences that satisfy them."

- "We must create options for our employees to get involved in activities not related to their daily tasks, creating a greater sense of participation and belonging, increasing people's well-being and motivation."
- "We must offer training that enables the development of our team, allowing them to innovate and improve the company's processes."
- "We must update ourselves on the new technologies available and the best practices and techniques adopted by the market, ensuring the company's constant development."

The strategic objectives for the Learning and Growth perspective were extracted from the answers above. The result of this activity is listed below:

- Search and mastery of new technologies and techniques.
- Increase employee motivation.
- Development of optional activities.
- Increase learning activities performed.
- Increase spread of culture.
- Improve working conditions.
- Greater understanding of our customers.

Finally, for the Financial perspective, the methodology presented by Kaplan and Norton (1997) suggests the question "To succeed financially, how should we appear to our shareholders?". The main answers are presented below:

- "We should be able to increase the company's profitability, increasing revenues and reviewing costs that can be reduced."
- "We must focus on direct sales channels to end customers, as our margin is higher."
- "We must seek to increase our current revenue and improve process efficiency to reduce our costs."
- "We cannot simply cut our costs, as we need to maintain the quality and differentiation necessary for our business proposal."

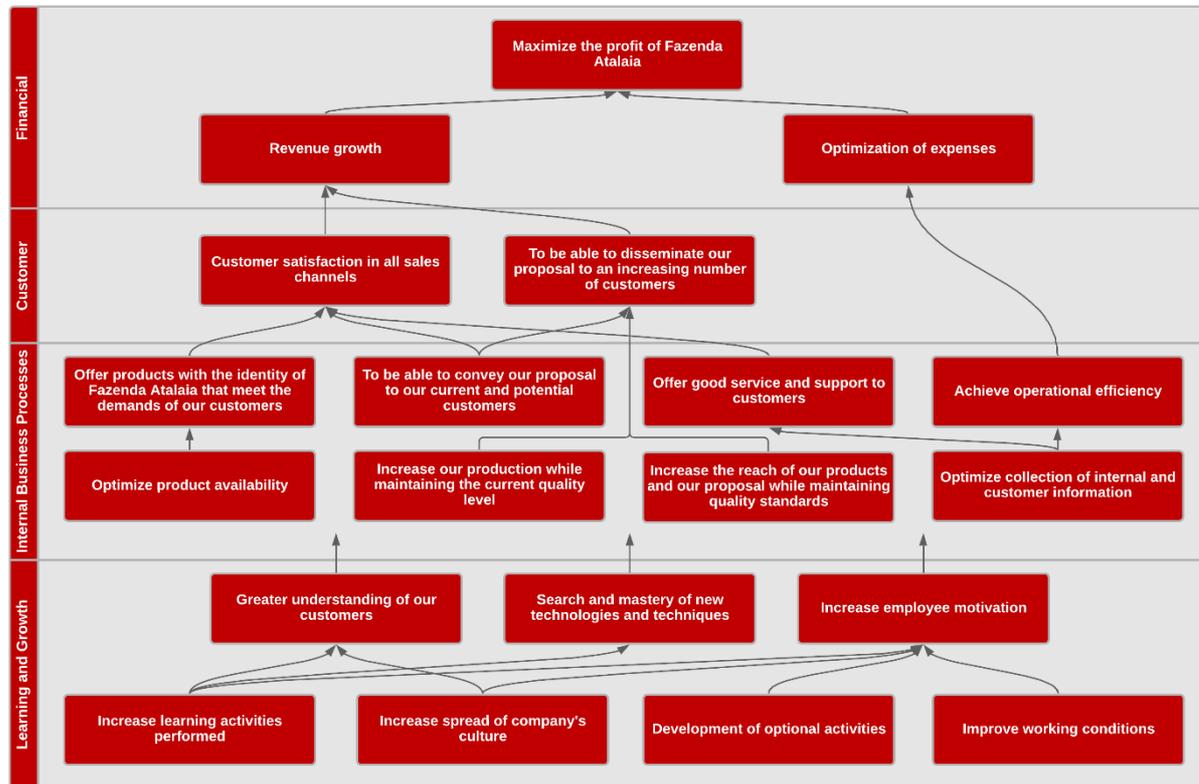
Thus, the strategic objectives aligned to the Financial perspective were:

- Maximize the profit of Fazenda Atalaia.
- Revenue growth.
- Optimization of expenses.

At the end of the meeting, all strategic objectives were revised, addressing the relationship between them and the connections between the four perspectives discussed. The

final result of this discussion was the preparation of the strategic map of Fazenda Atalaia, shown in Figure 24 below, in which the arrows indicate the cause-and-effect relationships identified between the objectives.

Figure 24 - Fazenda Atalaia's Strategic Map  
Source: elaborated by the author



An explanation of each of the strategic objectives is presented below, facilitating the understanding of the objectives, and clarifying some existing cause-and-effect relationships between them present in the strategy map.

- **Maximize the profit of Fazenda Atalaia:** Make the business more profitable in a healthy way through long-term actions aimed at increasing the company's net income.
- **Revenue growth:** Increase the company's revenue through measures such as increased customer retention and prospecting, increased representation of more profitable channels and products, and increased sales volume.
- **Optimization of expenses:** Intelligently optimize the company's costs and expenses, maintaining or, if necessary, increasing the expenses that guarantee the quality of the products and the differentiation of our proposal, but reducing expenses that do not add value to the business.

- **Customer satisfaction in all sales channels:** Satisfy our customers in all available sales channels – physical store, virtual store and sales team – by increasing the perceived quality of products, service and complementary processes. It is necessary to keep customer expectations at a high level and be able to exceed them not only in the products, but in their entire purchase routine.
- **To be able to disseminate our proposal to an increasing number of customers:** We must be able to increase our customer base through greater penetration in the markets in which we already operate and an expansion of the covered area. Furthermore, in addition to being able to offer our products, it is necessary to be able to convey our proposal to all these customers.
- **Offer products with the identity of Fazenda Atalaia that meet the demands of our customers:** We must offer products with our identity, capable of meeting the demand of our customers. Our customer's demand is not only related to the degree of quality of the products, but also to factors linked to a concern with sustainability and society. In addition, we must offer products that follow the market trend, providing, for example, smaller fractions and products that are easy and simple to consume.
- **To be able to convey our proposal to our current and potential customers:** We will not be successful if we are not able to convey our proposal and values to our customers. Our audience is not looking for a simple product, but for an experience and a concept, we must be able to transmit our proposal so that we can serve and retain this audience.
- **Offer good service and support to customers:** We must offer a good experience to our customers, for this it is necessary that the service and support are excellent in all stages before and after the sale in all channels offered.
- **Achieve operational efficiency:** We must reduce errors, rework, and waste to achieve greater operational efficiency.
- **Optimize product availability:** We need to have our products always available so that we don't disappoint our customers. Most of the products offered by Fazenda Atalaia depend on at least one month of maturation, a fact that makes it even more essential to align demand forecast, production planning and inventory control of inputs and finished products.
- **Increase our production while maintaining the current quality level:** We need to be able to increase our production of final products while maintaining the desired quality. For

this, we need to increase the efficiency of our processes and also increase our milk production.

- **Increase the reach of our products and our proposal while maintaining quality standards:** We need to be able to reach a larger audience, improving customer prospecting and developing new delivery routes and new sales channels.
- **Optimize collection of internal and customer information:** The collection of internal and customer information is essential for the company to be able to identify its weaknesses and strengths. With this data, we must be able to leverage the strengths and, mainly, address, work and improve the weaknesses.
- **Greater understanding of our customers:** We need to know and understand our customers more and more in order to be able to follow the evolution of their demands.
- **Search and mastery of new technologies and techniques:** Fazenda Atalaia has always stood out for its innovation in its production process, developing innovative authorial recipes for one of the most traditional products in the world, cheese. We must be able to maintain this characteristic and expand to other areas and processes of the company, facilitating and optimizing the work of our employees, while improving the experience of our customers.
- **Increase employee motivation:** Fazenda Atalaia's proposal depends directly on the involvement of its employees. All stages from handling the animals to serving customers depend on the attention and sensitivity of its employees. For this to be possible, the team must always be motivated and happy with the work they are developing.
- **Increase learning activities performed:** We must be able to offer training capable of developing our team in skills directly related or not to the work they perform. A team in constant evolution will have the ability to innovate and improve the processes they perform, enabling the company's development.
- **Increase spread of culture:** The company's culture is only valid if it is rooted among its employees, so it is necessary to develop activities capable of increasing the dissemination of Fazenda Atalaia's culture among its team.
- **Development of optional activities:** Employees must have the option of getting involved in activities that go beyond their daily obligations, participating in extra activities that motivate them and that increase their sense of team and belonging.

- **Improve working conditions:** We must offer increasingly better working conditions to our employees, as this directly impacts their quality of life and the performance of their activities.

Once the strategic objectives and their causal relationships are defined and presented, it is possible to advance to the next stage, the development of the BSC indicators.

#### 4.3.2. Development of Indicators

It is necessary to elaborate the performance indicators that will be able to guide the company to reach the established strategic objectives. To do this, a new meeting with the company's main leaders was called. The outcome of this meeting is shown in Tables 12, 13, 14 and 15 below, each focusing on one of the four perspectives addressed by the BSC. The tables present the indicators raised for each of the strategic objectives defined above. In addition, for each of the indicators, the unit of measurement, the source of data and the frequency that should be evaluated is indicated.

Table 12 - Indicators from the Financial Perspective  
Source: elaborated by the author

Strategic Objective	Indicator	Unit of Measure	Data Source	Frequency
Maximizing Profit	Percentage change in net income	% (Percentage)	Spreadsheet control	Annual
Revenue Growth	Percentage change in revenue	% (Percentage)	Spreadsheet control	Annual
Spending Control	Percentage change in spending	% (Percentage)	Spreadsheet control	Annual

Table 13 - Indicators from the perspective of Customers  
Source: elaborated by the author

Strategic Objective	Indicator	Unit of Measure	Data Source	Frequency
Satisfaction of our customers in all sales channels	Average grade in customer satisfaction questionnaire on each channel	Decimal number	Satisfaction questionnaire	Monthly
To be able to disseminate our proposal to an increasing number of customers	Percentage change in customer base by channel	% (Percentage)	ERP system	Biannual

Table 14 - Indicators from the perspective of Internal Business Processes  
Source: elaborated by the author

Strategic Objective	Indicator	Unit of Measure	Data Source	Frequency
Offer products with our identity that meet the demands of our customers	Average grade in the questionnaire in the related sections	Decimal number	Satisfaction questionnaire	Monthly
To be able to transmit our proposal to our customers and potential customers	Percentage change in customer base by channel	% (Percentage)	ERP System	Biannual
Offer good customer service and support	Average grade in the questionnaire in the related sections	Decimal number	Satisfaction questionnaire	Monthly
Achieve operational efficiency	Percentage change in the final cost of products	% (Percentage)	Spreadsheet control	Biannual
Optimize product availability	Number of days with inventory below the minimum per product	<u>Integer</u>	ERP System	Quarterly
Increase our production while maintaining quality level	Percentage change in volume produced	% (Percentage)	ERP System	Annual
Increase the reach of our products and our proposal while maintaining quality standards	Percentage change in the number of cities with purchase options	% (Percentage)	ERP System	Biannual
	Percentage change in the number of followers on social networks	% (Percentage)	Spreadsheet control	Monthly
Optimize internal and customer information collection	Proportion of orders with questionnaire answered	% (Percentage)	Spreadsheet control	Quarterly
	Proportion of mapped processes	% (Percentage)	Spreadsheet control	Quarterly

Table 15 - Indicators from the perspective of Learning and Growth  
Source: elaborated by the author

Strategic Objective	Indicator	Unit of Measure	Data Source	Frequency
Greater understanding of our customers	Number of market surveys conducted	Integer	Spreadsheet control	Annual
Search and mastery of new technologies and techniques	Number of software licenses used	Integer	Spreadsheet control	Annual
	Number of automated processes	Integer	Spreadsheet control	Annual
Increase employee motivation	Number of employee complaints	Integer	Spreadsheet control	Biannual
	Number of employee absences	Integer	Spreadsheet control	Biannual
Increase training	Percentage variation in man-hours for training	% (Percentage)	Spreadsheet control	Biannual
	Percentage of departments served with training	% (Percentage)	Spreadsheet control	Annual
Increase the spread of company's culture	Man-hours for <u>corporate activities</u>	Decimal number	Spreadsheet control	Biannual
Development of optional activities	Proportion of employees participating in activities	% (Percentage)	Spreadsheet control	Biannual
	Number of <u>activities</u> performed	Integer	Spreadsheet control	Biannual
Improving working conditions	Number of self-layoffs in the year	Integer	Spreadsheet control	Biannual

Fazenda Atalaia does not currently have an Information Technology (IT) Department or at least one responsible for mapping the necessary data for the above indicators. For example, currently all delivery errors reported by customers are resolved by a team, but this data is not recorded so that the company can assess, for example, what percentage of deliveries have failures, what are the most common failures, the origin of these errors and ways to correct them. As there are several situations like this, it was decided not to define a larger number of indicators per objective, since implementing and monitoring those proposed will already be a great challenge for the company at this first moment.

However, in parallel to the development of this work, the company is working on better structuring the IT sector so that it can have a better collection of information and, mainly, a smarter and more strategic use of it. The first action in this regard that is already being developed is the hiring of people specialized in IT and the implementation of a single and more robust ERP system that will replace several support systems used today in the company that do not communicate automatically, aiming at greater control of information and easier communication between departments. In addition, a team was also hired during the development of this work to map and document the company's current processes and suggest proposals for improvements for the processes considered critical, including the information collection processes.

It is important to highlight the existing synergies between the project developed here and the other actions mentioned above. The strategy developed, the CSF defined, the strategic map drawn up and the indicators proposed above are already being used by other projects to guide their actions. Thus, although this work is not yet able to go deeper into goals for the aforementioned indicators - as the company does not yet have the information to define the current situation, much less a basis for defining an improvement goal - the work is guiding the structuring of an entire culture of monitoring and improving performance at Fazenda Atalaia.

#### **4.4. OKRs Introduction**

Having defined the Atalaia Farm's Strategic Map and the performance indicators responsible for guiding the company towards achieving its strategic objectives, it is necessary to translate this planning into the company's daily life and the reality of its employees, ensuring greater involvement and engagement on the part of the team, which is essential for the success of these measures.

Ideally, this step would be developed through the direct application of the OKRs methodology in each of the departments, defining, for each of them, objectives and key results in each of the departments, defining, for each of them, objectives and key results that relate to the strategic map designed for the company, ensuring that each of the teams clearly has their priorities for the period and their contributions to the company achieving its goals.

However, as already raised during the stage of elaboration of the company's indicators, Fazenda Atalaia does not currently have a data collection and work routine that allows the implementation of a methodology such as OKRs, as it is essential that the company's current situation can be translated through its indicators so that new goals, objectives and key results can be properly defined.

Due to this limitation, this stage of the present work will be adjusted to adapt to the current reality of the company. For this, the stage will no longer be a direct implementation of the OKRs and will become a broader study of the function of each of the departments, an analysis of the indicators that should start to be collected so that the company can implement a performance system in the departments in the future and a mapping of the main current challenges of each one of them. Once this adaptation has been made, the main objectives of this step are now:

- Allowing, within the company's current limitations, each department and team to identify more clearly and palpably the way in which their actions contribute to achieving the company's objectives.

- Identify the basic indicators that must be calculated in each of the departments so that in the future the OKRs methodology can be applied to all teams.

It is worth noting that this adjustment is carried out keeping the focus of this work on starting the process of transforming Fazenda Atalaia into a company that performs data-based management, collecting and analyzing information in order to allow for more informed decision-making. However, it is not expected that the indicators identified during this stage of the work cover all the company's needs, the idea is to raise some initial indicators that would have an important role in the beginning of this process, but, upon reaching a more structured stage, the company must carry out a new complementary assessment so that a more robust selection of data and indicators occurs.

Finally, if the study identifies departments that already have the minimum conditions necessary for applying the OKRs, this application will be carried out in the next section of the work. This action seeks to ensure the future use of OKRs throughout the company, as the adoption of OKRs in some departments at this stage makes it likely that in the future this system will be pivoted to other teams as departments evolve. In addition, Doerr (2019) states that starting the implementation of OKRs partially in some departments of the company is a common and even recommended practice, since this measure reduces the complexity of the initial implementation and allows the company to learn about the methodology before expanding its implementation to all sectors.

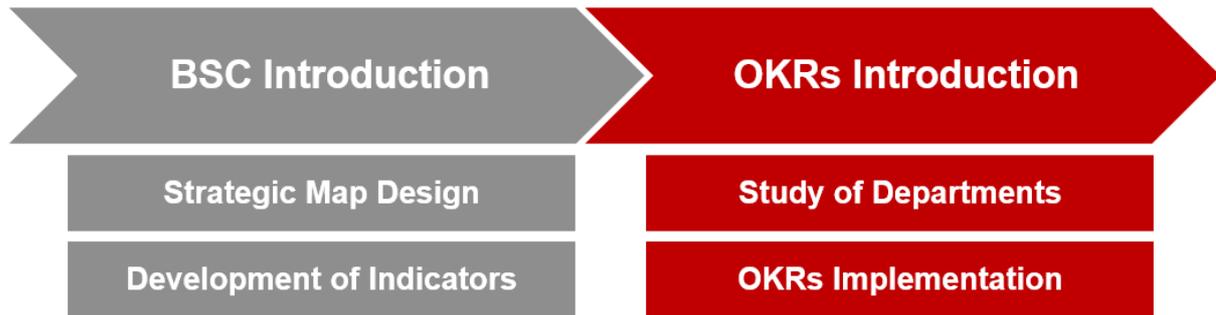
Figure 25 below allows the identification of the stage within the systematic applied to the project.

Figure 25 - OKRs Introduction step within the work systematic  
Source: elaborated by the author



In addition, Figure 26 below presents, in a more illustrative way, the division mentioned above in the step of OKRs Introduction in its different steps.

Figure 26 - OKRs Introduction Steps  
Source: elaborated by the author



#### 4.4.1. Study of Departments

The study of the departments will be developed through two main stages, the first will be responsible for, together with the company's leadership, mapping which are the main departments that currently make up Fazenda Atalaia, since this division is not yet formalized and explicitly defined, although naturally there is already an implicit division in daily work. This is because most departments and workgroups were created informally as the company grew and new demands arose.

After this step, with the division of departments already consolidated, an analysis will be carried out to identify the main functions of each department and, mainly, the ways that relate to the strategic objectives outlined for the company. During this second stage, the indicators that should begin to be collected within each department will also be mapped, so that in the future it will be possible to apply the OKRs methodology within all departments.

##### – Defining the Departments

As currently the division and structuring of departments is not something formalized and well defined in the company, the first step was to hold a meeting with the main leaders of Fazenda Atalaia to map out the company's departments. The division resulting from this meeting guided the segmentation used later in the work. The departments are:

- Agricultural.
- Zootechnician.
- Dairy.
- Bakery and Restaurant.
- Quality Control.
- Research and Development.
- Sales.

- Finance.
  - Logistics.
  - Shipping.
  - Customer Support.
  - People.
  - Purchases.
  - Marketing and Communication.
  - Architecture and Restoration.
  - Information Technology.
- Department Analysis

The analysis of departments has as main objective to map and clarify the main functions of each of the company's departments, as well as to make more explicit the way each one of them contributes for the company to reach its strategic objectives defined in Chapter X of this work. In addition, during this stage the main current challenges of each of the teams will also be mapped, as well as the first indicators that need to start to be collected to prepare them for the future implementation of the OKRs methodology.

### **Agricultural**

Department responsible for the agricultural management of the company, producing corn grain, corn silage, grass for grazing and hay. Production has as its main objective to meet the nutritional needs of the farm's herd, but, in the case of surpluses, it also provides a source of income for the company when it sells grains or silage to third parties.

The department has a fundamental role in the company's objective of increasing its production, since, within the current model of the Farm, the increase in the production of milk and its derivatives depends directly on the increase in the production of roughage available to the animals. In addition, the quality of the feed offered to the herd is one of the factors with the greatest impact on milk quality, which makes it necessary to maintain the high-quality level of these inputs.

The company recently signed new land lease contracts in the region valid for periods ranging from two to ten years, increasing the area destined for planting. Thus, one of the main current challenges for the team is to ensure good production throughout the available area, carrying out all the necessary steps for a good harvest within the necessary schedule, respecting the planting and harvesting windows. If this goal is achieved and the desired

productivity is reached, production is expected to exceed the current demand of the company's herd, which creates an opportunity for the department to generate income through the sale of agricultural products to third parties, something that has already been practiced in recent years.

Thus, there is the challenge of maximizing this revenue, which can be obtained through two main options, greater diversification of production, moving to crops that are financially more attractive than corn, or the increase in the added value of the marketed product, aiming at the sale of silage or corn in grains in a more strategic way than currently practiced.

Finally, the initial indicators that need to be collected for the implementation of a performance methodology in the department are:

- Total volume produced by product (tons of corn silage, corn grain sacks and others).
- Crop productivity by product (tons of silage/hectare, corn grain sacks/hectare and others).
- Production cost per product (R\$/ton of silage, R\$/sack of corn and others).

Calculating the cost of production is the responsibility of the Finance Department, as we will see below, but it is included in the indicators above because keeping this cost within an interesting range is the responsibility of the Agricultural Department.

### **Zootechnician**

The Zootechnical Department is responsible for managing the farm's herd, which is mainly made up of cattle, but in 2020 it also includes goats and sheep. The action encompasses the creation of animals from their birth, including vaccination, nutrition, welfare, reproduction, and milking. The department's final function is to supply the company's dairy demand in terms of quantity and quality.

The department plays an essential role in achieving the company's strategic objectives, as the quality of dairy products directly depends on the quality of the milk used. The company's products are even known and commonly praised for their low salt content, a characteristic that aims to enhance the quality and flavor of the milk used.

The achievement of the current level of quality is seen within the company as the result of a long work of genetic improvement of the herd, together with a constant concern for the animals' well-being. The herd of Holstein cows, all born and raised on the property, stands out for its good genetics, the result of crossing cows with prominent bulls in the market through artificial inseminations. In addition, investments in improving the structure offered to

the animals and care for the nutrition and welfare of the herd are regular, being one of the main concerns of the company's leadership.

In 2020, the first goats and sheep at Fazenda Atalaia were acquired from partner farms. The company's plan is to learn to work with these animals, to gradually increase its herd and be able to diversify its product portfolio without creating dependencies for the purchase of milk from other farms. The current portfolio does not have any sheep milk products, but it does have some goat milk products currently produced with a small volume of milk supplied weekly from a partner farm.

In order to accelerate the growth of the dairy cow herd, Fazenda Atalaia acquired in the first half of 2021 heifers of the Angus x Nellore breeds to be used as embryo recipients of the company's best cows. The plan is for these animals to be recipients of embryos, increasing the birth rate of new Holstein cows, in a process that aims to accelerate the increase in the herd and also accelerate genetic improvement, since the embryos would come from the best cows in the current herd.

The main challenges of the department today are to increase the production of bovine milk while maintaining the quality and without increasing the costs per liter of milk and to learn to manage the goat and sheep herds, starting the production of milk from these animals.

Finally, the indicators that must be collected for the implementation of a performance methodology in the department will be divided between the cattle herd, which is already more structured, and the goat and sheep herd. The herd of Angus x Nellore cows will not be covered in the indicators as they do not have the function of producing milk for the company's dairy. In the case of the Holstein cattle herd, the indicators are:

- Total daily milk production.
- Daily milk production from each of the cows.
- Number of cows in the lactation period.
- Total number of cows.
- Productivity per cow in lactation period.
- Productivity by total cows.
- Proportion of lactating cows to total cows.
- Average lactation period of the herd.
- Days in milk.
- Stocking rate of areas destined for the herd.
- Bulk Tank Somatic Cell Count (SCC) history.

- Individualized SCC history of the herd.
- Total Bacterial Count (TBC).
- Herd clinical mastitis rate.
- Cost per liter of milk produced.

In addition to these indicators, it is important that the department also establish a routine to collect information about the goat and sheep herd. For these herds, the selected indicators are:

- Number of animals in each of the herds.
- Daily milk production in each of the herds.
- Average daily productivity of animals in each of the herds.
- Cost per liter of milk produced for each herd.

As in the case of the Agricultural Department's production costs, the cost per liter of milk is included in the above indicators because keeping it within an interesting range is the department's responsibility, although performing the calculation is the responsibility of the Finance Department.

### **Dairy**

Department responsible for all the steps involved in transforming the milk produced by Fazenda Atalaia into its derivatives, from receiving the milk until the product is ready for consumption. In addition to the production process, the Department's current scope also encompasses the planning of this production and the control of finished goods inventory.

As the Department responsible for the production of cheeses and other dairy products, the performance of the dairy team has a direct influence on several strategic objectives of the company. Offering products with the identity of Fazenda Atalaia is only possible if the production processes adopted by the dairy follow the techniques and care necessary for this. Furthermore, the increase in production while maintaining the outstanding quality level also depends on the performance of the team, which must be able to develop structured and scalable processes without abandoning its differentials, avoiding an excessive industrialization of production. Finally, as the Department is also responsible for planning production and managing finished goods inventory, optimizing product availability is also an objective related to its competencies.

Currently, the department faces great difficulty in different aspects of its routine that are essential for achieving the company's strategic objectives. Many products are often out of

stock, a fact mainly caused by failures in the calculation of minimum stocks and by the misalignment between production planning, stock levels of finished products and demand forecasts. As many of the products require months of maturation to be ready for consumption, it is common for some to be depleted for weeks before stocks are replenished. In addition, losses due to errors in production and lack of product standardization are also regular failures, resulting in a high failure rate by the company's quality control and a low production efficiency of the department.

Improving the situation of these points are currently seen as the main challenges of the Department for the coming periods. In addition, another challenge addressed by the department is to adopt the logic of circular economy within production, using solid waste from the production of main products as secondary raw material for the manufacture of new products, an approach that increases production efficiency and reduces waste disposal, which is also a sustainable initiative.

The initial data that needs to be defined and collected to allow for the future implementation of a performance methodology in the Department are presented below:

- Production yield.
- Discarded percentage of total solid waste produced.
- Disapproval rate by Quality Control for each product.
- Inventory levels of each of the products.
- Number of product-days below the defined minimum stock level.
- Average stock-out rate.
- Inventory loss index.
- Customer satisfaction regarding the Department's products.
- Awards won by products.

The production yield mainly assesses whether the actual dairy production is consistent with the volume of milk produced on the day and the production yield range established by the Research and Development Department. For example, if one day five thousand liters of milk were produced and all this volume was destined for the production of a single cheese whose expected yield calculated by the Research and Development Department is ten liters of milk per kilogram of cheese, the actual production is expected to be around five hundred kilos. This index will compare the yield obtained by Dairy with the established ratio, ideally there is no great divergence either up or down, as production must be efficient and must follow the recipes and processes established for each product.

### **Bakery and Restaurant**

The Department is responsible for the production of bread, cakes, biscuits, sweets, and other products that are not derived from milk, but which are also offered by the company in its virtual store and in its physical store on the property itself. In addition, the department also encompasses a very distinct second activity that includes the production of portions, breakfast and lunch for clients who visit the property. Develop the restaurant's menu – which currently changes weekly – and new recipes are the Department's responsibilities, as well as coordinating the team that serves the restaurant's lounge at Fazenda Atalaia.

It was decided to concentrate the two actions in a single Department because the team responsible for both fronts is currently the same. Currently, production from Monday to Friday is more focused on meeting the demands of the virtual store, especially bread and cakes. On weekends and holidays, the production of bread and cakes continues, but to meet the busiest days of the physical store. On these days, the movement in the lounge for portions, breakfast and lunch also grows, receiving greater attention from the team.

At the moment this work is being developed, a new room is being built for the restaurant, a fact that may further divide the team's performance, since the two activities will no longer be held in the same place. Therefore, it is recommended that a new assessment be carried out to define whether the Department should continue as proposed here or whether the division into two departments would be more appropriate.

The main challenge for the bread and cakes area today is to be able to further diversify the products offered to customers, developing, for example, smaller breads and cakes with greater added value. In this line, the aim is to offer products that are easier to consume, following the current trend in the industry of having individual portions ready for consumption.

In the case of the restaurant, the main challenge identified is to develop a more complete menu connected to the ingredients produced on the farm. Currently, the restaurant offers a few fixed portions in the morning and weekly defines two or three dishes for lunch that always accompany a starter and a dessert. The challenge is to develop a more complete menu, with starter options, a greater variety of dishes than today, and desserts and drinks that are more elaborate than today, with greater added value and that satisfy a demanding customer profile. In addition, the restaurant must use the greatest possible amount of ingredients from the property, preferentially opting for chicken and pigs raised on the property, including cheeses in the recipes and acting in line with the production of the garden that is cultivated on the property.

The indicators that need to start being monitored and collected to allow the future implementation of a performance methodology in the department are presented below:

- Revenue from Department sales in the virtual store.
- Revenue from Department sales in the physical store.
- Revenue from restaurant sales.
- Percentage of products lost due to non-compliance.
- Percentage of products lost in stock.
- Percentage of options offered on the menu with ingredients from the property.
- Percentage of options offered on the menu that use the company's cheeses.
- Number of clients served at the salon.
- Customer satisfaction in relation to the service at the restaurant.
- Customer satisfaction with the restaurant's dishes.
- Satisfaction of the virtual store's customers in relation to the Department's products.

### **Quality Control**

Department responsible for quality control of all Dairy products, acts to ensure that all products available for sale are within the desired standards.

The Department's good performance is essential for the success of the company's business model, since the strategy is to offer differentiated products to a demanding public that always seeks high quality products.

Currently, the Department is still structuring itself, quality control already exists, but it is not carried out following a defined and organized protocol. Therefore, the Department's main challenge for the coming periods is to develop a manual containing the necessary procedures for the quality control of each of the Dairy products. Once this is done, an organized quality control routine must be established for all batches of all products so that the batch is only released for delivery after approval by that Department.

It is important to make it clear that for a product to be disapproved it does not necessarily have to have bad characteristics, it is enough for it to present characteristics different from those defined and desired by the company. For example, if it is defined that the company's cream cheese will have a soft consistency, all batches must respect this characteristic. If a batch has a harder consistency - as is the case with many good cream cheese brands that opt for harder consistencies - it is recommended that it fail even if it looks great, as it is necessary to follow a standard, as customers who buy the product recurrently expect the soft consistency that has been established as the standard.

The initial indicators that must be monitored and collected to allow the future implementation of a performance methodology in the Department are:

- Percentage of dairy products with defined quality procedures.
- Percentage of orders with non-standard products.
- Percentage of lots evaluated.
- Average evaluation time per batch per product.

### **Research and Development**

The Department is responsible for capturing information about the market, customers, technologies, innovation, and new trends and applying them to the company's reality to obtain improvements and practical results. The main functions of this Department are to manage the portfolio offered by the company through the development of new products and the improvement of current ones, in addition to adapting our operations according to the demand of our customers.

The Department's performance is closely linked to the strategic objective of offering products with an identity that meet the demands of our customers, as the development of new recipes – with emphasis on the authorial line – and the constant evolution of the current portfolio and the processes adopted are competences of this Department.

The Department is still linked to the Dairy sector, since there is currently no team dedicated exclusively to this area and the participants are currently employees who work in both Departments. Despite the development of new products being an already consolidated practice in the company, which resulted in the development of authorial products, the area is only being structured and formalized now within the company.

With this, one of the main challenges of the department is to structure its performance, formalizing the production protocol of the products that already exist in the company. After this step, the department must develop products from the current solid residues of dairy production that are currently underused, creating the necessary basis for a more circular production. In parallel, more packaging with renewable raw materials should be adopted, in addition to reviewing the fractioning of products offered to customers, aiming to meet the demand already identified by the company for individual portions and easy consumption.

The initial indicators that must be calculated by the Department at first to allow the future implementation of a performance system are:

- Percentage of products with a formalized production report.
- Number of recipes developed from the current solid production waste.

- Percentage of revenue from products developed in the last 12 months.
- Percentage of revenue from variations of existing products launched in the last 12 months.
- Percentage of packaging volume used from renewable raw materials.
- Number of products with individual portions.
- Average number of steps needed to consume the products.
- Customer satisfaction regarding new products.
- Customer satisfaction regarding new portions.
- Customer satisfaction regarding packaging.

### **Sales**

The sales Department is responsible for selling Fazenda Atalaia's products through current channels and for developing and evaluating new channels. Currently, its activities are divided into three main channels: the physical store on the farm, e-commerce, and wholesales for restaurants and retail stores. In addition to sales, the Department is responsible for prospecting new customers and retaining current ones, especially in the wholesale channel where there is a strategic character to strengthen the brand by establishing relationships with renowned partners, such as award-winning restaurants, a fact that requires an assessment and segmentation of these customers. Coordinating the team that works at the farm's store, presenting the company's proposal and carrying out tasting and sale of the products is a responsibility of this Department.

The performance of the sales team is related to several corporate strategic objectives of Fazenda Atalaia, as the department is responsible for selling products to customers, generating the company's revenue. In addition, by exercising this role, the Department is also one of those responsible for customer service and for the presentation and dissemination of our proposal.

A challenge for the entire Department is to increase the company's revenue, which must be done through the growth of the three current channels that are seen today as complementary to achieving the company's objectives. The wholesale channel currently accounts for around sixty percent of total sales and also plays an important role in strengthening and spreading the brand by establishing partnerships with renowned restaurants and partners in the market. The other two channels mainly serve end customers and, as is to be expected, the margin enjoyed by the company in them is greater than in the wholesale channel. In addition, e-commerce is able, through social networks and the use of digital

marketing, to increase the purchase frequency of current customers and attract new customers. Finally, the sale at the farm's store is important to gain customer loyalty, as the farm is easier to present and transmit the company's proposal, presenting the history of the property and the company and the way in which the products are produced.

In addition to these challenges, there is a need in the wholesale area to increase the sales team's understanding of its customers, mapping total revenue, average ticket, purchase frequency, customer profile, contribution to brand strengthening, product basket margin and other features. Once this study has been carried out, it is necessary to improve the segmentation of these customers into classifications that indicate their strategic importance for the company, in order to use these criteria in defining the conditions of sale offered. In addition, the Department needs to better understand its current customer retention rate and the main reasons for evasion so that it can correct them.

In the other two sales channels, the main current challenge is to better understand the current level of customer satisfaction so that it is possible to act efficiently in the correction and improvement of identified problems. Furthermore, in the case of e-commerce, there is a proposal to structure an initial recurrent sales test to evaluate this opportunity.

Finally, two new sales channels were recently identified by the team with great potential, the first of fixed deliveries to condominiums in the region in a kind of condominium fair held in partnership between the company, the residents themselves and the administration of these condominiums and the second of direct sales to companies, either to their employees or to their partners. The two demands arose during the year 2020 when companies and condominiums contacted the company requesting budgets, some tests were carried out and the first results were positive.

The initial data that must be tracked and collected to enable the future implementation of a performance methodology in the Department are:

- Total revenue.
- Percentage growth of total revenue.
- Total revenue by channel.
- Percentage revenue growth by channel.
- Average contribution margin per channel.
- Average ticket of customers.
- Customer purchase frequency.
- Customer purchase history.

- Contribution margin of each customer's basket.
- Number of wholesale customers by segment.
- Customer retention rate.
- Customer evasion rate.
- Most frequent reasons for evasion.
- Customer satisfaction by channel.
- Total number of customers per channel.
- Number of cities served by channel.
- Total revenue in the condominium channel.
- Number of partner condominiums.
- Total revenue in the corporate channel.
- Number of partner companies.
- Number of deliveries through companies.

### **Finance**

The Finance Department is responsible for pricing the products, planning and managing the company's receipts and payments, as well as approving sales made by the sales sector, monitoring the receipt of payments and mapping and contacting defaulting customers.

The Department is also directly related to several strategic objectives of the company, especially those related to the financial perspective, since managing the company's income and expenses in order to maximize long-term profits in a sustainable way is something that directly depends on this Department.

At the moment this work is being developed, the department is undergoing a transition of its team, so it can be said that it is also undergoing a restructuring phase. In this situation, the central challenges for the coming periods will be to actually complete this restructuring, organizing the company's account management and making basic financial reports available to the company's leadership that facilitates the visualization of the company's financial situation so that investments can be planned. In addition, the Department must act in the optimization of product costing, minimally automating the calculation model and defining the price ranges that must be negotiated for each product in each sales channel. Finally, the team must closely monitor defaults so that it can actively act in blocking sales to customers in this situation and also in resolving these cases

The information that must be monitored and collected to enable the beginning of the implementation of a performance methodology in the Department in the future are:

- Revenues.
- Gross profit.
- Net profit.
- Current liquidity.
- Percentage variation between expected and actual revenue.
- Percentage of defaulting customers.
- Percentage of pricing calculations already automated.

### **Logistics**

The Logistics Department receives approved sales from the Finance Department and is responsible for the logistics of delivering these products, which is its main function. For this, the Department must develop and update the delivery schedule, defining on which days deliveries will be made in which cities. With the schedule done, you should be able to distribute the sales made within these days, scheduling the delivery of all orders. Finally, the Department is responsible for coordinating the actions of the drivers, routing orders on the same day and offering them the necessary support during deliveries.

The Department's activities have a direct relationship with the company's objective of increasing the reach of sales, as the creation of new routes increases the reach of the company's channels. In addition, the way in which the delivery is carried out has a direct influence on the experience that customers have when receiving products, directly contributing to their satisfaction. Finally, an optimized route facilitates the drivers' routine, improving the working conditions of these employees.

Among the main challenges of the Department for the coming periods, it is possible to highlight the challenges of maintaining the quality of products during deliveries, increasing the covered area through the development of new routes, reducing delivery times for our customers, increase the predictability of deliveries for customers and optimize the cost of deliveries. In other words, ideally deliveries should cover a large area, have short delivery times, offer a good forecast on the date and time of delivery to customers, allow customers to follow up on the order and guarantee the quality of the products. All of this is done at a low cost to the company so that customers can be charged a low amount.

In addition, the Department uses a system that allows full automation of the routing process, but currently many of the steps are performed manually, increasing the probability of errors and reducing the Department's efficiency. A major challenge for the industry is to

master the tool so that the routing process is increasingly automated, allowing the team to have more time available for other activities.

The initial indicators that must be calculated by the Department at first to allow the future implementation of a performance system are:

- Average time spent routing deliveries.
- Average delivery time by city.
- Average cost of delivery by city.
- Customer satisfaction with deliveries.
- Percentage of deliveries made with refrigeration.
- Percentage of deliveries made during business hours.
- Percentage of deliveries made by the company's own route.
- Range of own routes.
- Percentage of faulty orders made due to Department errors.
- Percentage of orders with expected delivery time fulfilled.

### **Shipping**

The Shipping Department receives orders from the Logistics Department already separated into routes. Its role is to pack (when necessary), separate, identify and check each order, ensuring that all orders on the route are ready for transport, without picking errors.

The level of satisfaction of customers or partners who receive the company's products in their homes or businesses depends a lot on the performance of this Department, as it is necessary that there are no errors in the separation of products, ensuring that everyone receives exactly what they expected. In addition, the Department's performance is essential for the Logistics Department's routing to work, as the identification of orders within the established routes is its competence.

Another major current challenge for the Department is to develop a structured process that allows for the traceability of products sold. For this, the first step is to adopt a routine that records the date each batch starts to be used by the Department.

The initial data that must be monitored by the Department to allow for the future implementation of a performance system are:

- Number of orders per day divided by channel.
- Percentage of deliveries with errors caused by the Department divided by error.

### **Customer Support**

Department responsible for customer service, especially in the post-sales stage. It must be able to collect customer feedback and, when necessary, act quickly and efficiently to correct possible errors and complaints. The feedbacks collected must be intelligently mapped and passed on to the responsible departments, allowing for constant development.

The Department is currently unstructured, having a very passive posture in which the errors made are only noticed when they are notified by the clients themselves. In addition, currently the Department does not send customers a satisfaction survey capable of collecting perceptions on relevant topics, allowing for mapping the company's strengths and weaknesses.

It is through the good performance of this Department that the company will be able to optimize the collection of information from its customers, thus being able to offer them good service and support, two of the strategic objectives outlined for Fazenda Atalaia.

The Department's main challenges for the coming periods are to create a satisfaction survey capable of collecting customer perceptions and develop an active routine for sending this survey and analyzing the collected data. Finally, it is necessary to structure the process for resolving errors and complaints, ensuring standardized and quality customer service.

The indicators that should be collected to allow for the future implementation of a performance system are:

- Percentage of customers that the satisfaction survey is sent.
- Percentage of customers responding to a satisfaction survey.
- Average time between error identification and correction.
- Average time between delivery and error identification.
- Customer satisfaction with after-sales service.

### **People**

Department responsible for the management and development of the company's workforce. It must be able to offer good working conditions to employees and provide training and initiatives that allow the development and constant learning of those involved.

The Department plays an essential role for the company to achieve its strategic objectives, as it is the main agent in building a healthy work environment that allows for the constant development of people. In addition, the Department is also responsible for hiring the company, so it must be able to attract people aligned with the purpose of Fazenda Atalaia.

Currently, the main challenge of the Department is to have a more present role in the daily lives of the company's employees, promoting activities that increase people's motivation

and that collaborate with the propagation of the company's culture among its employees. For this, the Department must establish a direct and constant dialogue channel with the leaders of the other Departments and with all the company's employees. In addition, the Department seeks to structure the initiative of optional activity groups that seek to integrate employees more, such as sports groups or social initiatives.

Another current challenge is to better structure the entry of new employees into the company, ensuring that everyone understands the company's business as a whole, not just that of their specific Department.

Some of the indicators that should start to be monitored within this Department to allow for the future implementation of a performance system are:

- Hours of training carried out per year.
- Number of Departments that received training in the year.
- Company employee turnover rate.
- Employee satisfaction.
- Number of employee complaints.
- Hours of corporate events held throughout the year.
- Number of participants in selection processes.
- Number of employees participating in optional activities.
- Number of optional activities performed.

### **Purchases**

The department's main function is to concentrate the purchases of other company teams, including occasional or routine purchases. In the case of one-off purchases, after receiving requests from the Departments, it must carry out quotations and complete the purchases – in some cases requiring the approval of the Finance Department. In addition, it must also organize and control input stocks, making routine purchases without depending on requests from Departments.

The Department plays an important role in optimizing the company's expenses, as it is responsible for researching the options available on the market before making purchase requests, without losing sight of the need for quality supplies.

The main challenge of the Department currently is to organize the stock of inputs and outsourced products for resale in physical and virtual stores and the relationship with suppliers, defining the minimum stock and the purchase price of each product and carrying out a more organized and formalized mapping of each of the current and potential suppliers.

Defined the minimum stock, it is necessary to implement a practical way to control the level of each one of the products so that new purchase requests are carried out before the stocks run out.

The main indicators that must be calculated so that this Department can implement a performance system in the future are:

- Percentage of variation in prices paid for each input.
- Inventory levels of outsourced inputs and products.
- Product-day number below the defined minimum stock level.
- Number of product-days of zero stock.
- Inventory losses.

### **Marketing and Communication**

Department responsible for managing and strengthening the Fazenda's brand. It also monitors the company's social networks, producing its own content and interacting with customers and partners. It must develop marketing plans and develop promotional actions, in addition to developing specific or long-lasting partnerships.

The Department works very closely with the Sales Department, as it is an essential tool in disseminating the company's proposal and in prospecting new consumers and partners. For these reasons, it plays an essential role in the company's strategic objective of being able to disseminate its proposal to a growing number of customers and also in the objective of transmitting Fazenda Atalaia's proposal to its customers and potential customers.

Currently, the Department's main challenge is to be able to increase the reach of its actions, something that has been well worked on in recent years, a fact that can be seen in the large increase in the base of followers on social networks. In addition, the Department must be able to develop an annual planning of marketing actions and must also be able to mobilize efforts from the other Departments involved so that these actions are carried out.

- Some indicators that should be monitored by this Department for the future implementation of a performance system are:
- Percentage change in the number of followers on the company's Instagram page.
- Number of posts on Instagram.
- Variation in engagement indicators provided in the Instagram tool itself.
- Variation in Facebook and Google paid advertising metrics.
- Number of partnerships made.

- Number of promotional activities carried out and returns obtained.
- Percentage of customers who claim to have first contact with the company through social networks or other Department actions.

### **Architecture and Restoration**

Department responsible for the preservation of the property's historical heritage and its enhancement. It works in the restoration of heritage and in the development of cultural activities such as reception of schools, offering guided historical visits and developing exhibitions connected with the context of the company.

The Department plays an important role in transmitting the company's proposal to its customers and potential customers, as it works to preserve and spread the history of the property where the company is located, one of the most prominent points in its proposal. In addition, the preservation of the heritage itself is an essential activity to guarantee Fazenda Atalaia the reach of its strategy, as one of the company's differentiation and highlight factors is precisely the preservation of its history and the entire architectural complex of the property.

The Department's main challenge for the coming periods is to complete the restoration of the historic center of the farm. In addition, the Department must be able to promote actions that value this work and increase the dissemination of these actions among people.

Some indicators that must be monitored within this Department to allow for the future implementation of a performance system are:

- Variation in the percentage of completion of reforms initiated.
- Number of cultural activities carried out.
- Number of customers participating in the promoted activities.

### **Information Technology**

The company's Information Technology (IT) Department was practically non-existent until the beginning of the development of this work. However, during the first few weeks, the company's leadership itself noticed the need for this change, a fact that motivated the hiring of a consulting team specialized in the subject that would lead the implementation of a more robust ERP system in the company that should be adopted in parallel with the greater structuring of the IT Department, both actions that are happening concurrently with this work.

The Department's main functions are to collect, manage and work on the company's information, ensuring that the data captured is translated into practical analyzes and actions that bring the company closer to its outlined strategic objectives.

These functions are essential for the company to be able to more clearly situate its current situation so that it can outline ways to advance towards its goals. The Department's performance is essential so that the strategic objective of optimizing the collection of internal and customer information is achieved, allowing the company to better satisfy the demands of its consumers and better understand the ways to achieve operational efficiency.

As the Department is structuring itself, the main challenge for the coming periods is to implement the new systems and ensure the beginning of the collection of company information, including those raised in this same section of the work. After that, the Department will have an active role in the implementation of the future performance system at Fazenda Atalaia.

Due to the initial phase in which it is currently, indicators will not be defined for this Department, as its initial role is to implement the necessary tools so that the other Departments are able to collect their data.

### **Considerations on the Study of Departments**

Having presented the main Departments that make up the company, it is important to highlight some considerations on the subject. As is to be expected from the company's size, there are some overloaded Departments that currently accumulate tasks that would ideally be the responsibility of other teams, as well as there are several employees whose work is divided into more than a single Department within the company. However, such factors will not impede the continuation of the proposed methodology for this work.

In addition, the importance of good coordination between the Departments is highlighted, since the vast majority of the challenges faced by the company can only be overcome through joint action between two or more areas. For example, the development of new commercial routes depends on the alignment between the Logistics Department and the Sales Department, as a new route depends on a careful assessment of delivery costs and, at the same time, the prospection of customers located in the region.

### **Linkages between Departments**

The relationship between the Departments becomes clearer if two processes at Fazenda Atalaia are mapped in a simple way, the production process of dairy products and the sales process. However, in this case, only the production of dairy products will be addressed,

without also including the production of bakeries and restaurants, as this Department has a more independent role. In addition, in the case of the sales process, the analysis will be limited to e-commerce and wholesale channels, as the physical store also has a more independent and usual process, similar to that of a traditional store.

The beginning of the production process can be understood as the production of roughage by the Agricultural Department, offering food for the herd's nutrition so that the cows remain healthy and produce milk during milking carried out by the Zootechnical Department. Once the milk is produced, the Dairy Department will act in the application of the recipes and procedures established by the Research and Development Department for the transformation of milk into its derivatives. These products will then be evaluated in several stages by the Quality Control Department, which will judge whether the products meet the quality standards expected by Fazenda Atalaia and, if so, will release the lots for sale.

Once the production process is understood, it is possible to analyze the product commercialization process. This process starts with the joint action of the Marketing Department and the Sales Department in prospecting for customers. Once this step is completed, the Sales Department will be responsible for completing the sales that will go on for approval by the Finance Department and, after approval, will be forwarded to the Logistics Department to schedule and route deliveries. Once the deliveries are separated, the orders are sent to the Shipping Department, which will separate the products from each order, identify them according to the routes and leave them ready for the drivers to make the deliveries with the support of the Logistics Department. Once the delivery has been made, the Customer Support Department needs to get in touch to ensure that everything was done as expected and gather consumer insights.

The two processes are being approached in a very simplified way, but the great relationship existing between the different Departments of the company is noticeable, a fact that makes clear the need for each one to understand the business of Fazenda Atalaia as a whole, as well as its importance for the company to reach its goals. However, for this process to occur in a simple and natural way, it is necessary that all Departments understand the strategy defined for the company and that their goals and objectives are related to the goals and objectives established by the leadership. Ensuring this understanding and alignment between the teams and the company is the main role of the OKRs Methodology, a performance system already presented in Chapter X of this work, which will be addressed in the context of Fazenda Atalaia in the next section.

#### 4.4.2. OKRs Implementation

After the analysis of the Departments, the process of implementing the OKRs Methodology at Fazenda Atalaia begins. As already presented during the previous stages of this work, it was defined, together with the company's leadership, that the current situation of Fazenda Atalaia does not allow the full implementation of this performance methodology in all its Departments, but given this limitation, this section of the work will be adapted in two steps described below:

- **Selection of Departments to apply the methodology:** step aims to assess whether there are Departments that already have the minimum conditions necessary for applying the OKRs Methodology.
- **Application of the Methodology in the selected Departments:** application of the OKRs Methodology in the Departments selected in the previous step, if any has been selected.

Even if it is not possible to apply the model throughout the company, the implementation of the methodology in some sectors generates several benefits for Fazenda Atalaia, as this action allows the company to start its process of learning and adapting to the new performance model, in addition to facilitate its future expansion to other areas as the structuring of Departments progresses.

The assessment of the situation of each Department will be carried out based on an analysis of the current structuring level of each department, the ease of implementation of the proposed indicators and, of course, a joint discussion between the author of the work, the leader of the department in question and at least one of the company's main leaders. It is important to highlight that it is more interesting for the successful implementation of the methodology that initially Departments whose leadership is more aligned with the methodology are selected, thus generating less resistance to the necessary changes.

The implementation of the OKR methodology aims to ensure that the performance of each team is aligned with the strategic map designed for the company. Defining an action plan for the departments is extremely important to facilitate the dissemination of the strategy developed for the company, because, by translating the strategic objectives of the BSC into specific OKRs for each team, it is easier for each area to understand what their role will be for the company to achieve its strategic objectives.

Furthermore, as the OKRs are not imposed, but defined jointly between departments and leadership, there is a greater commitment on the part of teams to these objectives. Finally,

as already presented in Chapter X of this work, the OKRs enable a clear alignment on what the priorities of the departments in the period should be, increasing the teams' focus on what really matters to the company, in addition to allowing an easy monitoring of the progress objectives through their indicators.

– **Seleção dos departamentos para aplicação dos OKRs**

Although it has already been identified during the work that the company is not currently able to apply the methodology in all its departments, it is essential that communication about the importance of the OKRs is carried out throughout the organization, thus ensuring the engagement of all teams in developing the necessary bases for the future adoption of the model in all areas of Fazenda Atalaia.

With this, the work of defining the OKRs began with a meeting in which the main leaders of the company and all departments were present, regardless of the level of structure of each team. Aiming to ensure alignment with previous meetings, the elaborated strategy, the defined CSF and the company's strategic map were presented again, as well as the company's division into departments and the main functions and challenges of each one of them. Finally, a presentation on the concept of OKRs was prepared, ensuring the alignment of all those present about the model and its potential benefits for the company.

Then, a round of individual meetings was conducted with the leadership of each of the departments, in which at least one of the company's leaders was also always present. These meetings aimed to define which teams presented the minimum conditions necessary for the application of the OKRs. For this, the analysis of the departments was used to support discussions on the current level of structuring of the departments and the efforts needed to implement the suggested indicators that were not yet calculated internally.

Table 16 below shows the impressions collected from these meetings, indicating the departments in which, together with their own leaders, the level of structuring needed to apply the methodology was identified and the departments in which the effort required to implement the suggested indicators did not preclude the action at that time.

Table 16 - Mapping the situation of departments  
Source: elaborated by the author

Department	Structuring	Indicators
Agricultural	✓	✓
Zootechnical	✓	✓
Dairy	✓	✓
Bakery and Restaurant	✓	✓
Quality Control		
Research and Development		
Sales	✓	✓
Finance		
Logistics	✓	
Shipping	✓	
Customer Support		
People		
Purchases	✓	
Marketing and Communication		✓
Architecture and Restoration		
Information Technology		

Based on this, the following departments were selected as potential options for implementing the OKRs Methodology:

- Agricultural.
- Zootechnician.
- Dairy.
- Bakery and Restaurant.
- Sales.

In addition, during the meetings, the company's leadership sought to understand how comfortable each of the department leaders was with the implementation of the methodology, making it possible to map certain points of greater or lesser resistance to the model, something totally natural and expected when a new methodology is being implemented to a

company. For this reason, the Dairy Department was removed from the list, as the leader of the sector stated during the meeting that he would prefer to adhere to the model at a time when the tool is expanding with other departments.

Despite already having a good level of structuring and already monitoring a good part of the suggested indicators, the Department of Bakery and Restaurant was also removed from the list of potentials for being in a moment of transition with the construction of the new space for the restaurant, which could lead to a split in the team into two independent areas, as previously mentioned during the department's analysis.

After these changes, the final list of departments selected for initial application of the OKRs Methodology was as follows:

- Agricultural.
- Zootechnician.
- Sales.

The three departments have the necessary structure to implement the proposed methodology, being three of the oldest and most mature departments in the company and that already follow almost all the indicators proposed in the analysis stage. In addition, one of the company's owners is closely linked to the Agricultural and Zootechnical Departments, which was seen as a positive point for the selection of these departments, since the involvement of the leadership in this implementation has the potential to encourage future application in other departments, as well as, in case of failure to reach the proposed objectives, it also helps to demystify the fear that exists in most companies of failing to reach the goals, which is something necessary for the good application of the OKRs.

– **Application of the methodology in selected departments**

Having mapped the departments in which the OKR methodology would be developed, it was possible to start defining its objectives and key results. For this, a round of individual meetings was conducted with each of the selected departments, in which at least one of the company's leaders was always present. These meetings aimed to define, from the strategic map of Fazenda Atalaia developed during Chapter X, which were the main objectives in which each department would define its efforts in this first cycle and, subsequently, also define the key results linked to each of these objectives.

The company's leadership initially decided to work with annual-term OKRs with quarterly reviews, with the beginning of the period set for the beginning of the second half of

2021. That is, in July 2021 the objectives of this section become valid and the success in achieving the objectives will be measured in a retrospective section at the end of June 2022, ending the period in question and starting a new cycle . However, as presented by Doerr (2019), the objectives and key results are not rigid and should not only be evaluated at the end of the period, it is also necessary that the data be collected and compiled frequently and, when necessary, the objectives are revised and adapted.

Adapting the recommendation presented by Doerr (2019), the discussion for defining the objectives began with the following questions:

- “What are the main objectives of the Department? What are the biggest obstacles to achieving these goals today?”
- "What is the most important thing for the Department for the next term?"
- "What should people in the Department focus their efforts on?"

Based on these questions, the meeting was conducted following the brainstorming technique, without much focus on prioritizing the objectives raised. In a second moment, with a vast number of objectives already available, the participants jointly elected which of these should guide the Department's action during the next period, bearing in mind that the maximum number of objectives per department should be five, ensuring the necessary focus. Finally, for each of the selected objectives, the key results capable of guiding the team towards achieving the objectives and monitoring and evaluating their progress were established, as will be presented below.

### **Agricultural**

Department responsible for the agricultural management of the Farm, producing corn grain, corn silage, grass for grazing and hay. Production has as its main objective to meet the nutritional needs of the farm's herd, but, in the case of surpluses, it also provides a source of income for the company when selling grains or silage to third parties.

Fazenda Atalaia needs to increase its herd so that it can increase its current milk production. Aiming at this objective, the Agricultural Department needs to increase its production to meet this growing demand for inputs. As corn is the main crop, it was decided to focus the department's OKR on the production of this product.

It was defined that the OKR for the Agricultural Department would be annual to respect the crop cycle and would adopt a more committed than ambitious character, that is, goals that the company really hopes to fully achieve and that are more tangible. From a

technical discussion evaluating the production history and the expected need for the company, the meeting participants aligned the OKR for the Department as shown in Figure 27 below.

Figure 27 - OKR of the Agricultural Department  
Source: elaborated by the author

<b>OBJECTIVE</b>
Meet the internal demand of the farm for corn silage and corn grain
<b>KEY RESULTS (MEASURED BY...)</b>
<ol style="list-style-type: none"> <li>1. Plant corn in 100% of the area available for this purpose (own and leased) until November 10</li> <li>2. Produce at least 80 hectares of corn silage with a minimum yield of 50 tonnes per hectare</li> <li>3. Produce 140 bags of corn grain per hectare in the area intended for this purpose</li> </ol>

### **Zootechnician**

As already presented, this Department is responsible for managing the farm's herd, consisting of cattle, goats and sheep. Its performance encompasses the stages of reproduction, health, comfort, nutrition and milking of animals. The Department's main objective is to supply the company's demand for milk in terms of quantity and quality.

As in the case of the analysis, at this stage the Department was also analyzed in two stages, the first focusing on the herd of cows and the second focusing on the herd of goats and sheep, this division was carried out due to the different objectives and challenges currently identified for the team. In both cases, the defined cycle was annual, similarly to the Agricultural Department.

As can be seen by the OKRs below, in the case of the cattle herd there is a search for quantity, quality and efficiency, while for the next period the main concern for the other two herds is even more initial, concentrated in the beginning of the milk production of these animals. The set of OKRs aligned for the department is shown in Figures 28 and 29 below.

Figure 28 - OKRs of the Zootechnic Department linked to the cattle herd  
Source: elaborated by the author

OBJECTIVE	OBJECTIVE
<p data-bbox="256 383 788 477">Suprir a demanda do laticínio da Fazenda por leite de vaca em termos de quantidade e qualidade</p> <p data-bbox="408 528 638 589">KEY RESULTS (MEASURED BY...)</p> <ol data-bbox="240 629 788 891" style="list-style-type: none"> <li>Achieve, by the end of the period, a daily production of 4,000 L of cow's milk</li> <li>Achieve a minimum fat and protein content of 3.8% and 3.4%, respectively</li> <li>Keep the SCC and TBC index lower than those recommended for type A milk</li> </ol>	<p data-bbox="906 383 1382 412">Produce cow's milk at a competitive price</p> <p data-bbox="1031 528 1257 589">KEY RESULTS (MEASURED BY...)</p> <ol data-bbox="863 629 1422 801" style="list-style-type: none"> <li>The average cost of a liter of cow's milk should be a maximum of 15% higher than the price of milk raised by CEPEA (ESALQ - USP)</li> </ol>

Figure 29 - OKR of the Zootechnic Department linked to goat and sheep herds  
Source: elaborated by the author

OBJECTIVE
<p data-bbox="624 1126 1046 1155">Start goat and sheep milk production</p> <p data-bbox="722 1267 949 1328">KEY RESULTS (MEASURED BY...)</p> <ol data-bbox="552 1368 1074 1541" style="list-style-type: none"> <li>Achieve, by the end of the period, a daily production of 150 L of goat's milk</li> <li>Start, by the end of the period, the production of sheep milk</li> </ol>

## Sales

The Sales Department's main objectives are to carry out the company's sales, being responsible for prospecting customers, offering products and presenting the company's proposal and making sales.

As in the other departments, the annual cycle of OKRs was also adopted, as it was agreed that in many of the objectives the assessment would be more accurate if the assessment period was twelve months of the year. Once the period was defined, the

department aligned OKRs that seek to create goals for the company's revenue growth, but also kept part of its objectives linked to the development of a more strategic approach in the wholesale area, aiming to segment these customers according to the strategic importance that each has for the company. Finally, objectives were also defined that aim to increase customer retention and test the corporate and condominium sales channels, both created from demands identified during the last year.

The set of OKRs aligned for the department is shown in Figures 30 and 31 below.

Figure 30 - OKRs 1 and 2 from the Sales Department  
Source: elaborated by the author

<b>OBJECTIVE</b>	<b>OBJECTIVE</b>
Develop criteria for targeting our wholesale customers	Increase understanding about our wholesale customers
KEY RESULTS (MEASURED BY...)	KEY RESULTS (MEASURED BY...)
<ol style="list-style-type: none"> <li>1. Being able to divide all wholesale customers into classifications that indicate their strategic importance to the company</li> <li>2. Develop different sales conditions for each of these wholesale segments</li> </ol>	<ol style="list-style-type: none"> <li>1. Map average ticket, frequency, profile and purchase history and margin of customers' product basket</li> <li>2. Understand the current customer retention rate and the main reasons for evasion</li> </ol>

Figure 31 - OKRs 3 and 4 from the Sales Department  
Source: elaborated by the author

<b>OBJECTIVE</b>	<b>OBJECTIVE</b>
Perform tests for evaluation and development of new sales channels	Increase company revenue
KEY RESULTS (MEASURED BY...)	KEY RESULTS (MEASURED BY...)
<ol style="list-style-type: none"> <li>1. Develop delivery routine in at least 10 condominiums</li> <li>2. Contact at least 50 companies and convert at least 5 of them to the corporate channel</li> </ol>	<ol style="list-style-type: none"> <li>1. End the period with monthly revenue 50% higher than the average of the 12 months prior to the period, as follows:               <ol style="list-style-type: none"> <li>a. Wholesales 60%</li> <li>b. Farm store 30%</li> <li>c. E-commerce 10%</li> </ol> </li> </ol>

#### **4.5. Implementation schedule**

As it will not be possible to implement all the actions proposed during the development of this work, a schedule for the implementation of activities will be drawn up, as informed in section 1.4 "Goals" of this document.

The main objective of this schedule is to help Fazenda Atalaia to complete the adoption of the performance system proposed by the work, contributing so that the ideas presented in this document are put into practice within the study target company and, in this way, can actually help it achieve its goals. For this, the schedule covers a period of thirteen months, encompassing the entire first annual cycle of OKRs already implemented in three of the company's departments and also the first month of the next cycle, period in which all departments should already be able to participate in the system.

Figure 32 below shows the schedule activities, those responsible, and the period in which each of them must be started and completed within this thirteen-month period. It is noteworthy that, despite the existence of one or more responsible sectors in each of the activities, there are also many others involved that need to act in an aligned manner so that the objectives are achieved within the defined deadlines. However, it is the role of those responsible to coordinate the others involved and, within their limitations, ensure compliance with the proposed schedule.

Figure 32 - Implementation schedule  
Source: elaborated by the author

#	Activity	Responsible	07/21	08/21	09/21	10/21	11/21	12/21	01/22	02/22	03/22	04/22	05/22	06/22	07/22
1	Monitor and update OKRs established in the three selected departments	- Leadership of the three departments													
2	Complete implementation of the new ERP	- IT Department													
3	Review indicators from unselected departments and define collection processes	- IT Department - Leader of each department involved													
4	Collect data from the indicators defined in the BSC strategic map	- IT Department													
5	Collect data and calculate indicators from initially unselected departments	- Leader of each department involved													
6	Definition of goals for strategic objectives defined in the BSC	- Company leadership													
7	Application of OKRs in unselected departments that have the necessary structure	- Company leadership - Leader of each department involved													
8	Monitor and update indicators of the strategic objectives defined in the BSC	- IT Department													
9	Monitor and update OKRs of new selected departments	- Leader of each department involved													
10	Data collection and calculation of indicators from departments not yet selected	- IT Department - Leader of each department involved													
11	Review of the results achieved in the goals of the strategic objectives of the BSC	- Company leadership - Leader of each department involved													
12	Completion of the first cycle of OKRs	- Company leadership - Leader of each department involved													
13	Review of BSC's strategic map and goals established for its objectives	- Company leadership													
14	Definition of OKRs of all company departments for the new cycle	- Company leadership - Leader of each department involved													

The schedule was developed in a meeting with the company's leadership. Then, it was presented to the leaders of all the company's departments, ensuring alignment and engagement of everyone involved.

## **5. RESULTS**

This chapter aims to show the results obtained at the end of this work, after completion of its development.

### **5.1. Strategy Development**

Regarding the company's strategy, it is possible to notice that the work reached the initially proposed objectives, helping the company in the elaboration of a clear strategy that allows the achievement of its long-term goals. This was possible through an internal analysis of the company based on the mission statement, values and vision, followed by a situational analysis consisting of the study of Porter's Five Forces and a SWOT analysis. After carrying out these studies, the company was framed within one of Porter's Competitive Generic Strategies, defining a strategy of Differentiation Focus.

After the company's positioning was defined, the company's Critical Success Factors were defined, an important step to help decision-making by the company's leadership, working as a kind of guide for priority areas that should receive leadership attention, as the company must obtain a good result in them to be able to reach its goals.

Comparing the situation at Fazenda Atalaia before and after the development of the work, it is possible to note internally a greater clarity about what its priorities should be, as well as a greater understanding on the part of employees about the company's purposes. In addition, communication with customers and partners also tends to be easier now that this information is available, making it easier to work on brand development and develop a deeper relationship with customers.

### **5.2. Performance System**

After the development of Fazenda Atalaia's strategy, the work addressed another point of pain for the company, the lack of a measurement system capable of guiding the company's performance, defining its priorities and facilitating the monitoring of the results obtained. For this, two different models were applied in a complementary way, the BSC to define a strategic map capable of guiding the company's decisions and the OKRs model to guide the work of the departments and ensure an alignment between their objectives and the proposed objectives for the company.

The lack of a data collection and analysis routine within the company caused some limitations within this part of the work, but the methodology was adapted to the company's reality, ensuring that good results could be obtained, as we will see below.

Before the project, the company did not even have a formalization about the different departments that made it up and their functions. The project allowed the development of a strategic map, the definition of departments and the survey of the necessary indicators for a future full application of the performance models. These indicators are also guiding the implementation of a new ERP system at the Farm that is being developed in parallel to the project in an action that also aims to structure a department focused on the company's IT area. In addition, OKRs were applied in three departments that presented the minimum conditions necessary for this, facilitating the future expansion of this culture to the rest of the company.

### **5.2.1. Balanced Scorecard**

From the development of the strategy and the CSF, the company was able to draw its strategic map, defining the strategic objectives of Fazenda Atalaia and the causal links between them.

Although the company's current situation does not allow the definition of goals and the complete implementation of the BSC, the simple design of the strategic map already presents an evolution for the team, as it facilitates decision-making by the leadership and also allows each department to identify its importance within the company's reality by relating its function to the established strategic objectives.

### **5.2.2. Objectives and Key Results**

In addition to the BSC, the work also used the OKRs methodology to ensure the internal alignment of Fazenda Atalaia, ensuring that each department of the company had its activities aligned with the strategic objectives defined by the BSC.

At this stage, the first result obtained was the simple formalization of the company's existing departments, something that until then had not been explicitly defined. After this definition, an analysis of the departments allowed the mapping of their functions, their challenges and the performance indicators that must start to be collected so that the model can be fully implemented in the future. This analysis was of great value to the company, as it ensured that each department understood its relationship with Fazenda Atalaia's strategic objectives, facilitating alignment and increasing the motivation of the employees involved. In addition, the analysis also created a kind of step-by-step way of structuring the departments by defining the initial performance indicators that each team must calculate so that the OKRs can be applied widely across the company in the future.

Finally, the work also started the implementation of OKRs in three departments, thus ensuring the beginning of the company's learning process with the new model and facilitating the future expansion of the system to other departments as the mapped performance indicators were collected.

## 6. CONCLUSIONS

With the conclusion of this work, it is clear that the initially proposed objectives were achieved, because, even with the limitations found and the consequent adaptations needed in the development of the project, Fazenda Atalaia had its strategy elaborated, its strategic objectives traced through the construction of a BSC and its different departments aligned towards these same goals through the application of the OKRs.

Although it was not possible to fully implement the BSC and the OKRs within the company, it is possible to note that the application of the theoretical framework used as the basis for this work was indeed efficient in practice, as several positive results for the company were achieved in the course of work.

In addition, the importance of adapting the theories learned at university and in books to the reality of companies was clear, as the conditions faced by companies will rarely allow the application of methodologies and tools without the need for adjustments, especially when it comes to micro, small and medium-sized companies.

Still on this issue, the scarcity of works in the literature dedicated to this type of company is highlighted, which is surprising if we consider the great relevance of companies of this profile for the global economy and, especially, for the Brazilian economy. Even so, this work demonstrates how it is possible to generate good results for MSMEs, even applying tools originally developed for large companies, as there is currently a great lack of a theoretical approach capable of guiding the actions of entrepreneurs in many of these companies.

The willingness of the company's leadership to carry out this work was essential for achieving the results, as nothing would be possible without the efforts applied by all employees involved during the development of the project. Furthermore, the results obtained here would have no real value if their implementation were not carried out by the company's team.

The company's rapid movement in, while still developing this work, began structuring the IT Department to continue the project proposed here, indicates the importance of the results obtained for Fazenda Atalaia and the satisfaction of the leadership with the work.

Finally, it is important to emphasize that performance systems are living tools, as the company's indicators and strategic objectives are not fixed and are in constant evolution. Thus, in addition to implementing the models, it is necessary to be constantly dedicated to monitoring, incrementing, and re-evaluating the indicators developed here, ensuring that they

are always aligned with the objectives of Fazenda Atalaia, allowing the company to move in the right direction.

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