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**Organizational Design Evaluation and
Redesign: A Case Study of a Small Fiber
Optics Lighting Company in Brazil**

Supervisor:

Danilo Pesce

Candidate:

Gabriel Sallouti Allegrini

I dedicate this work to my parents, who taught me what is right and encouraged me to dream.

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To my parents, who guided me, supported me and raised the person I am today, encouraging me to always do what is right, without fearing the difficulties we will inevitably face.

To my sister, who always stood by my side and shared with me the presence of her beautiful and enviable soul.

To my girlfriend, who stood close to me despite our distance, supported me through the tough times and helped me find joy in the simplest moments, whenever in her presence.

To all the family and friends who understood my absence while I dedicated myself to writing this work, and yet still found ways to welcome me, I leave my thanks.

ABSTRACT

This work analyzes the current organization design and proposes a redesign of a small family-owned business in the fiber optics lighting industry, which suffered considerable changes in the past years due to a strategic shift towards customization and the loss of its main founder. This study utilizes Galbraith's Star Model as the main academic framework, diving into other well-established authors and theories for each component of the Star Model. Data was collected through semi-structured interviews, analyzed via thematic analysis, and documents provided by the firm regarding its organizational chart, history of revenues, mission, vision, and values. Three main inconsistencies were identified: the fragmentation of the strategic apex leading to conflicting strategies; a gap between directors' desired philosophy of people management and reality; and both operational bottlenecks and communication problems related to its strategic shift. This study contributes to the organization by providing a To-be Star Model, which aims to realign the organization design of the firm. The main proposed actions are the unification of strategic formulation through planning routines; the implementation of a performance management system rooted in mutual feedback between employees and directors; and the expansion of the Projects area. The main limitation of this work is the reliance on the perceptions of directors, which may limit the understanding of the operating core's perspective.

Keywords: Organization Design. Family Succession. Strategic Alignment. Star Model. Organizational Change.

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1 INTRODUCTION

This chapter presents the company where this thesis was carried out, as well as its motivation and relevance, both for the company itself and the theoretical understanding of the matters in question. Finally, the objectives of this work and how it was structured are presented.

1.1 The Company and Opportunities

This research presents a case study of a small and growing company in the fiber optics lighting market, which will be referred to by the fictional name “Iluminar”. The adoption of pseudonyms for the company and for the directors aims to preserve its identity. Located in a small city in Brazil, this family-owned company, with now 35 years of existence, slowly grew to around 25 employees and is currently the biggest fiber optic lighting company in Brazil and all South America.

The firm was founded in 1990 by Adam, who most strongly pursued the idea of entering this business when he was faced with the opportunity to bring the technology to Brazil. This was done through the help of an American company, who sold the initial knowledge and materials to Iluminar to start its business in Brazil. However, while Adam was the main founder of Iluminar, he was not alone. In fact, both his sons, James and Peter, helped found the company and joined as directors. Cristina, Adam’s daughter, later joined the company in 2004. This trio would then become partners and directors, each one being responsible for one of three main areas of the company, while Adam shared responsibilities with Cristina for the administrative department. It is worth noting that Adam, as father of the other directors and main founder of Iluminar, always served a more central role in the company, even though all partners had the same voting power in important decisions.

Iluminar started with a limited portfolio of products and developed itself to offer a range of products for many different lighting purposes (museums, swimming pools, restaurants, monuments, among others). These products almost always consist of a lighting source (that uses LEDs or lamps to generate light) and

fiber optic cables, that transmit this light towards the desired place. Some of the advantages of this system are the possibility of filtering light, the non-conduction of electricity in the fiber optic cable, the ease of maintenance and the creative possibilities of luminous effects. Nowadays, these products can be categorized into three main groups: finished products, customized products, and special projects. The first category is for standardized products that are ready-to-ship, such as star ceiling kits and luminaires. Customized products refer to those that have standardized solutions but require tailoring for each project. The most common case is the lighting of swimming pools. Finally, special projects are unique solutions developed for clients that imagine something that has not been done before and want to bring it to life, what is extremely connected to Iluminar's slogan of "lighting beyond imagination". Nowadays, Iluminar is the market leader and a reference for both quality and creativity in lighting systems with fiber optics.

During all its lifetime, the company always kept its family-like atmosphere and valued a more relaxed work environment. However, not all things were kept the same during these 35 years. Especially in the last 5 years, the company has suffered significant and impactful changes. The first change was a strategic shift of focus from standardized products towards customized products and special projects. This was both a strategic decision of the company and an adaptation to a changing market, that demanded more complex and customized lighting solutions. A second change was the rise of a new clientele that Iluminar did not use to sell to before: large construction companies, which have increased revenue concentration and project complexity, also in the past five years. A third and possibly the most important change suffered by the company was the unfortunate and significant loss of Adam, who passed away in the beginning of 2022. Adam, father of the three directors, was a well-respected figure, who informally unified the company's vision for the future and guided the company for most of its 35 years of existence with the help of his children.

As expected, these changes considerably affected the context of the company, both internally, with the first leadership succession of the company, and externally, with new clients and a strategic shift. However, most of Iluminar's organizational design remained untouched, rooted in its past. This misalignment

has created tensions and challenges for James, Peter, and Cristina, who are now responsible for the success of the company on their own.

1.2 Motivation

This research is motivated by two expected contributions: to provide Iluminar with a tailored study of its organization with recommendations for the future, and to contribute with a meaningful case study to the academic field of organizational design. This section aims to justify the importance of this study both from a practical and academical view.

When it comes to Iluminar, the company is currently at a delicate phase of internal conflicts and misalignments, exacerbated by meaningful changes in the past 5 years, such as the strategic shift, new clients and the death of Adam, its main founder. To maintain its place as a market leader and guarantee the success of the company in the future, Iluminar needs to adapt to its new circumstances. In that sense, this thesis offers a direct benefit to the firm by providing a structured analysis through established academic frameworks of its current organization design, with a detailed understanding of its main components and interdependencies. In addition, this work aims to diagnose and deliver recommendations for a To-be model, with the goal of helping Iluminar navigate the transition into a more structured, scalable, and strategically aligned organization.

Regarding the relationship between the author of this thesis and the company, it is worth noting that there was no employment relationship, but the author has family ties with the company's directors. This connection allowed for the development of this work and reinforced the interest in obtaining satisfactory and applicable results for the organization. It also allowed the author to further explore the history of his family's economic development.

It is also worth noting that the author had already conducted multiple studies and projects regarding Iluminar during his graduation studies in Industrial Engineering, in Brazil. This previous knowledge, although not exhaustive, allowed for a faster understanding of the current context of company, its structure, and mechanisms. Nonetheless, the author did not take assumptions, aiming to achieve a faithful and complete representation of the current situation of the company through its established methodology (which will be discussed in topic 3).

Other than its practical application for Iluminar, this work also serves as an example to leaders of small and family-owned companies, or similar businesses. It provides a framework and a detailed case study for analyzing and proposing organizational changes due to changing environments, while highlighting the importance of compatibility between organization design and the context of the company.

Lastly, this study has also a contribution to the academic field by bringing a documented case study to the universe of organization design. It dives into important topics such as the identification of misalignments in an organization and the interdependency of its components, the challenges of unplanned leadership succession in small family-owned businesses and the difference between philosophy and reality in people management.

1.3 Objectives

The main objective of this work consists of analyzing Iluminar's current organization design, identifying key misalignments, and proposing a redesigned model that better supports directors' goals and vision for the company. To this end, this study intends to:

- Review the academic literature on organization design, establishing a theoretical framework to guide the analysis of Iluminar
- Diagnose Iluminar's current organization design (As-is model) through provided documents and semi-structured interviews with the three directors of the company and the use of thematic analysis
- Identify and analyze critical misalignments of the current model
- Propose a new, more aligned organization design (To-be model) with specific and tailored recommendations for Iluminar, considering directors' vision for the company and its future

With these objectives, this work aims to contribute to the development of the company, by providing insights and recommendations to navigate the current period of significant changes. In addition, this study also seeks to provide the academic field with a detailed case study on organizational adaptation in the context of small family-owned companies.

1.4 Structure

This study is structured in six chapters.

The first chapter is dedicated to the introduction of the case study, motivation, and objectives of the work, which were already presented.

The second chapter dives into the literature review, that establishes a theoretical framework that guides the rest of the work. The Star Model, by Galbraith et al. (2001), is used as the foundation for this literature review, which dives into important authors and themes in each of its five components.

The third chapter is dedicated to the methodology of the study, and details how the research was conducted, including data collection through semi-structured interviews and their analysis.

The fourth chapter focuses on the description of the As-is model of Illuminar's organization design through the lenses of the established theoretical framework. In addition, this chapter also diagnoses the current organization design through the identification of critical misalignments, both by the directors and the author.

The fifth chapter proposes a new and more aligned To-be model to Illuminar's directors, with recommendations to resolve problems and misalignments identified in chapter four, while maintaining the values and vision of directors for the company.

Finally, the sixth chapter provides readers with a conclusion, summarizing the findings and contributions of the research.

2 LITERATURE REVIEW

This chapter dives into the theoretical literature regarding organizational design and production systems to better develop an understanding of the concepts that support this study.

The first topic to be explored is the definition of an organization through Systems Theory and the complexity behind it. Subsequently, Organization Design will be discussed through the Star Model. All the other topics will be based on each of the five points of the Star Model.

2.1 Organizations as systems

Organizations can be understood at their core as systems (Ackoff & Emery, 2005): a collection of interdependent parts, where every element is directly or indirectly related to every other element, meaning that any change in one component might trigger a reaction from the others.

The authors also define the environment of a system, which consists of the external elements that are not part of the system itself, but that can cause changes in the system when altered. In that sense, organizations are seen as open systems: they are constantly interacting with the environment they participate in, in a way that the complexity of studying them depends also on the ability to understand the environment around them and how it affects the organization and its success.

According to Morgan (2006), biology was a big source of inspiration in the development of organization theories in the last 50 years, which makes the parallel between living beings and corporations important for its understanding. Due to that, a great metaphor for this case is comparing organizations to human cells. There are many subsystems working together to guarantee its survival. If a cell loses its genome, for example, there is no way for the other subsystems to function.

Instead of limiting it to only one human cell, it is possible to look through a bigger picture and consider the human itself. Even with this shift, the entity is still a system, made from many different interdependent subsystems, of which the cell is just a small part, with also more limited objectives. This perspective allows for a flexible definition of organization (Galbraith et al., 2001), where an

organization does not need to be necessarily a whole corporation, but it could be just one part of it, for example the Marketing Department of a company, or even a smaller group of people, demonstrating how organizations could be nested inside one another, being both distinct from and a part of the company itself.

Organizations can also be classified as a more specific set of systems, called purposeful systems (Ackoff & Emery, 2005). As purposeful systems, organizations have a common objective and can change their goals even in constant environmental conditions, actively selecting both their goals and means to achieve them. This capacity for self-direction allows them to achieve the same outcomes in different ways and achieve different outcomes even in the same environment as other organizations. The Contingency approach to organization also explores this idea by defining that there is no unique and best way to organize (Morgan, 2006). The optimal way of organizing depends on the kind of task or the environment with which one is dealing. In the same way that in different environments on earth you might find different forms of species, in different business environments there will be distinct types of organizations.

2.2 Organization Design through the Star Model

Starting with a definition, according to (Galbraith et al., 2001): “Organization design is the means for creating a community of collective effort that yields more than the sum of each individual's efforts and results.”. This definition reinforces the view of the organization as a system and the main role of a leader, which according to Galbraith et al. (2001) is to create an environment in which people find it easy to collaborate, innovate, produce, and achieve.

In that sense, the Star Model (Galbraith et al., 2001) is a framework that aims to tackle the complexity resulted from a system perspective of an organization by segmenting organization design into five major interdependent components, which can be designed by leaders to achieve a successful organization.

The five components of the Star Model are: Strategy, Structure, Processes and Lateral Capability, People Practices and Reward Systems.

Each component of the Star Model is important to define organization design, and each topic is interdependent. For example, a change in a company's structure might result in changes in the other components as well. This means that only when all points are aligned is the organization at its most effective form (Galbraith et al., 2001).

The Star Model will be used as the framework for the Literature Review of this work, where components of the Star Model will be explored in more detail in the next topics.

2.2.1 Strategy

According to Galbraith et al. (2001), strategy is the foundation of organization design, establishing the vision, mission as well as short-term and long-term goals of the company. It defines the organization's direction for the future and delineates which key markets, products, and competitive advantages the organization will seek. If the strategy is not clear, there are no criteria on which to base design decisions regarding the other components of the Star Model.

However, the field of strategy offers multiple perspectives on what strategies are and how they are formed. Mintzberg et al. (1998) created a framework that categorizes the vast literature into ten distinct “schools of thought”.

This approach provides a cohesive way of introducing the key theories that will be used in this research. For the sake of this work, five of the most relevant schools will be discussed: Design School, Positioning School, Cultural School, Learning School, and the Configuration School

The Design School views strategy formation as a deliberate process of conception, that aims to achieve a fit between what is internal and what is external to an organization, which can be seen in the well-known SWOT model. Grant (2018), instead of using the SWOT model, proposes the following framework to demonstrate strategy as a link between the firm and its industry environment:

Figure 1: Basic framework for strategy analysis



Source: Grant (1991)

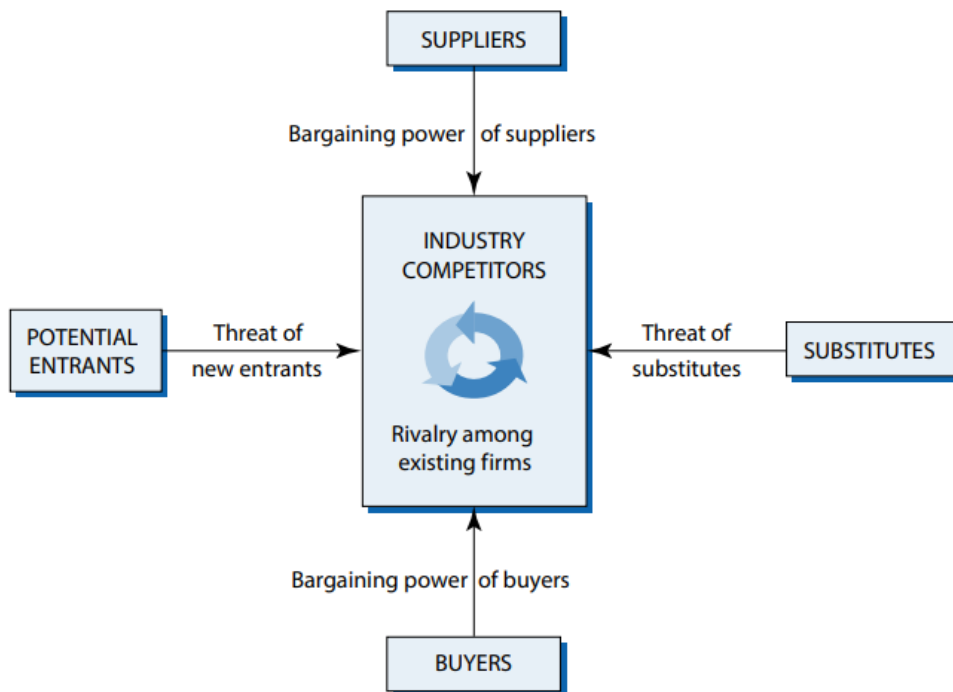
Strategy is viewed as a unique perspective tailored to the specific context of the firm, and the works of both Grant and Galbraith are rooted in this principle. The emphasis is on a rational process where a unique strategy is formulated and then implemented, with the premise that structure follows strategy. This definition explores the connection between strategy and the other components of the Star Model and the importance of alignment for an effective Organization Design. It also reinforces the understanding of the Contingency Theory, which defines that there is no best and unique way to organize (Morgan, 2006).

The Positioning School shifts its attention to the selection of generic strategic positions based on the analysis of the industry structure, in what can be seen as an “outside-in” perspective. Its central premise is that a firm's profitability is determined by the characteristics of its industry and its position within that industry.

In the Positioning School, strategy formulation begins with the analysis of the external environment. One tool for that is PEST, a framework that considers the political, economic, social, and technological factors that impact a firm.

However, while they might be useful to keep a firm alert, they usually are not as critical for a firm's decisions and success as competition (Grant, 2018). In that sense, Porter (1980), the main author of the Positioning School, created a framework for the analysis of competition in an Industry, known as Porter's Five Competitive Forces. These five forces include three sources of "horizontal" competition: from substitutes, from entrants and from established rivals; and two sources of "vertical" competition: power of suppliers and of buyers. All five forces can be seen in the image below.

Figure 2: Porter's five forces of competition



Source: Grant (2018)

Once the environment is analyzed, the firm must choose a position to gain a sustainable competitive advantage, which can provide more profitability than just being located at an attractive industry (Grant, 2018). To create competitive advantage a firm can utilize one out of three generic strategies (Porter, 1985):

- Cost Leadership: the firm aims to be the low-cost producer in its industry but still offers comparable or acceptable products to buyers.
- Differentiation: the firm seeks to differentiate itself from competitors by offering unique benefits to customers with a higher price.

- Focus: the firm focuses on a narrow competitive scope within an industry that is different from the broad market. Focus strategy has two variants: cost focus and differentiation focus. In the first the firm exploits differences in cost behavior in some segments, while the second exploits the special needs of buyers in certain segments.

A firm that fails to choose one of these strategies risks being "stuck in the middle" without a clear competitive advantage, while a firm that succeeds to achieve a strategy must create barriers to imitation and seek continuous improvement, guaranteeing the sustainability of the competitive advantage.

As opposed to the external focus of the Positioning School, the Cultural School, which comprises the Resource-Based View (RBV), focus in an internal ("inside-out") perspective. This school considers that competitive advantage comes from unique and complex internal resources that are difficult to imitate. Grant (2018) argues that internal resources and capabilities provide a more secure foundation for strategy than market positioning alone, so that companies should focus on developing and leveraging core competencies that are valuable, rare, and hard to imitate.

In contrast to the past schools, the Learning School visualizes strategy formation as an emergent process, where strategies cannot be fully created in advance due to an unpredictable world, but must emerge as the organization learns from its actions and consequences. While Mintzberg & Waters (1985) explore this perspective with the distinction between intended, emergent, and realized strategies, Rita Gunther McGrath (Kinni, 2014) suggests that competitive advantages are increasingly transient, making organizational flexibility and adaptability extremely necessary.

Finally, the Configuration School integrates other perspectives, proposing that organizations tend to have stable states (or configurations), where strategy, structure, environment, and processes are consistent. These states are interrupted by occasional and dramatic periods of transformation to new configurations. This is where the work of Galbraith et al. (2001) mostly fits in. The Star Model is a tool for achieving an aligned and effective configuration, and the act of redesigning an organization is a process of managed transformation from a

less effective state to a new and more coherent configuration that better aligns with its chosen strategy.

2.2.2 Structure

The structure is the formal arrangement of power and authority in an organization, typically shown through an organization chart. As described by Galbraith et al. (2001), structure creates organizational components, relationships, and hierarchy, while providing employees with a place and identity.

Mintzberg (1992) understands that every organized human activity gives rise to two fundamental and opposing requirements: the division of labor into various tasks and the coordination of these tasks to accomplish the activity. Therefore, the structure of an organization can be understood as the framework that first divides work and then reintegrates it.

Building on this principle, Lawrence & Lorsch (1968) introduced the concepts of differentiation and integration. They discuss that as an organization divides itself into units to deal with the external environment, these units inevitably become differentiated. Each unit will develop distinct reporting relationships, working styles, mental processes, goals, time horizons, and procedures tailored to their specific sub-environments.

Consequently, the greater the differentiation, the greater the potential for conflict and the need for integration. According to Lawrence & Lorsch (1968), integration refers to “the quality of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment”. In other words, it is the set of mechanisms that pull these differentiated units back together to align efforts and pursue the organization’s goals.

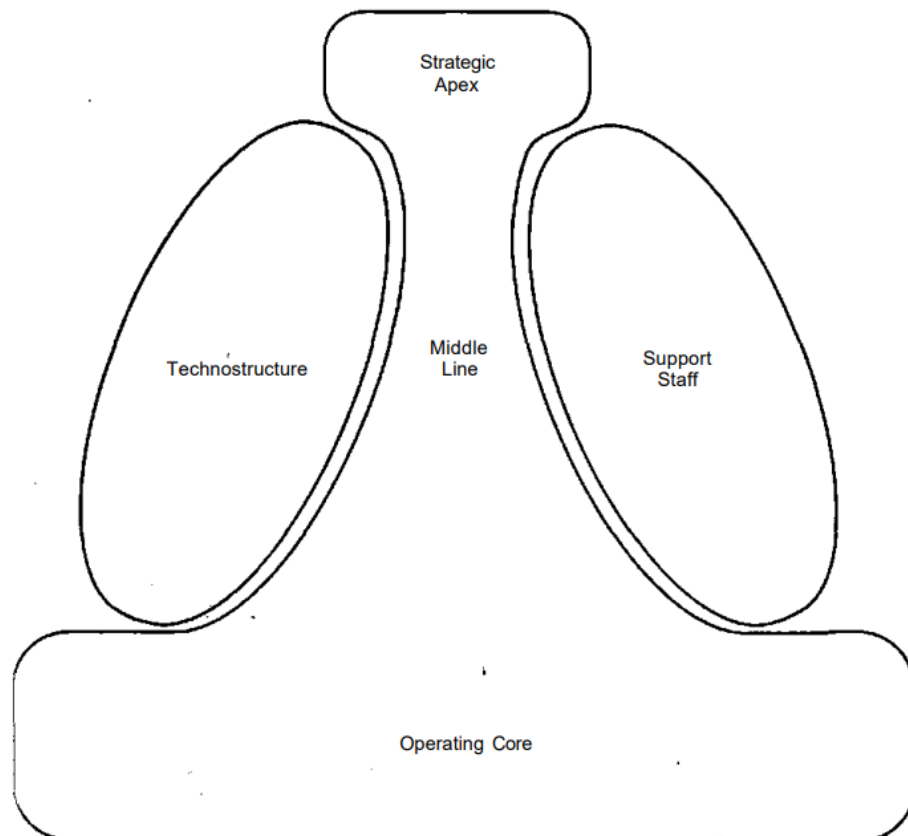
To explain how organizations coordinate work and achieve this integration, Mintzberg (1992) identifies five coordinating mechanisms:

- Mutual adjustment: coordination through informal communication
- Direct supervision: coordination by having one person taking responsibility for the work of others, by giving instructions and monitoring them
- Standardization of work processes: coordination achieved due to specified work content, through procedures and steps

- Standardization of work output: coordination by specifying the expected results of the work
- Standardization of worker skills: coordination due to specified training required to perform the work

However, understanding how these mechanisms coordinate work individually is not enough. The parts of organization are also important to understand how different coordinating mechanisms are favored and how an organization is properly structured. Mintzberg (1992) imagines a division in five different basic parts, which can be seen in the image below:

Figure 3: Five basic parts of the organization



Source: Mintzberg (1992)

The Operating Core is composed of operators who perform the basic work related to producing products or services. The Strategic Apex is made up of the top managers who control the organization and ensure its direction and mission are being achieved. The middle line is characterized by managers and charged with connecting the Operating Core to the Strategic Apex. The Technostructure is

composed of analysts who design, plan, and change the operating workflow and processes. At last, the Support Staff is responsible for providing indirect services to the rest of the organization (e.g., cafeteria, legal counsel).

Having identified the five parts of an organization, the next step is to design the formal structure, what is usually done via unit grouping, through which the system of formal authority is established and hierarchy is built. Mintzberg (1992) defines two essential bases for grouping:

- Market grouping: comprises grouping based on the characteristics of the markets served by the organization, such as the products and services offered, the customers it supplies and the place where it supplies them. This structure is more responsive to market needs and facilitates decentralized decision-making.
- Functional grouping: comprises grouping by the functions it uses to produce its products and services, such as work processes, skills, and knowledge. This promotes expertise, specialization, and efficiency.

A third possibility, the matrix structure, is considered by Mintzberg (1992) as a liaison device that attempts to combine both basis of grouping (functional and market) at the same time. The result is a structure that renounces the principle of unity of command, implementing dual authority over employees, forcing managers to reconcile between themselves and balance competing objectives. The matrix structure will be discussed as a liaison device in the next topic of Processes and Lateral Capability.

Finally, Mintzberg (1992) synthesizes these elements into five different pure configurations. The author explains that these are simplifications, and that real organizations are often hybrids. The five configurations are:

- Simple structure: this is a structure common in young and small organizations that relies mainly on informal communication. The prime coordinating mechanism is direct supervision, with power centralized in the strategic apex, which is the key part of the organization. There is little or no technostructure or support staff, and the structure “often consists of little more than a one-person strategic apex and an organic operating core” (Mintzberg, 1992).

- Machine bureaucracy: this is a structure that relies mostly on the standardization of work processes as a coordinating mechanism, making it efficient and consistent for repetitive tasks. The key part of the organization is the technostructure, composed of who design standardized systems. This structure is common in large and mature organizations in simple and stable environments. It usually contains clear and tall hierarchy.
- Professional bureaucracy: this configuration has standardization of skills as the prime coordinating mechanism, allowing professionals significant autonomy and making the operating core the key part of the organization. This configuration is common in complex but stable environments.
- Divisionalized form: this configuration divides the organization into a set of almost autonomous units and coordinates them through the standardization of outputs. In this setting, the middle line is the key part of the organization, responsible for managing each of the units and translating the strategic apex objectives and strategies into actions and results. This structure highly relies on market-grouping and is common in large and mature organizations operating in diversified markets.
- Adhocracy: this is a complex structure that is capable of fostering innovation by coordinating mostly through mutual adjustment. It is usually found in dynamic and complex environments and relies on liaison devices to foster collaboration.

Ultimately, it is important to notice that regardless of how much effort was put into the organization structure, it will create barriers to collaboration. Galbraith et al. (2001) argue that it is important to explore ways to overcome these barriers and allow information and decision making to cross formal boundaries. This is directly related to the point of Processes and Lateral Capabilities of the Star Model, which will be discussed next.

2.2.3 Processes and Lateral Capability

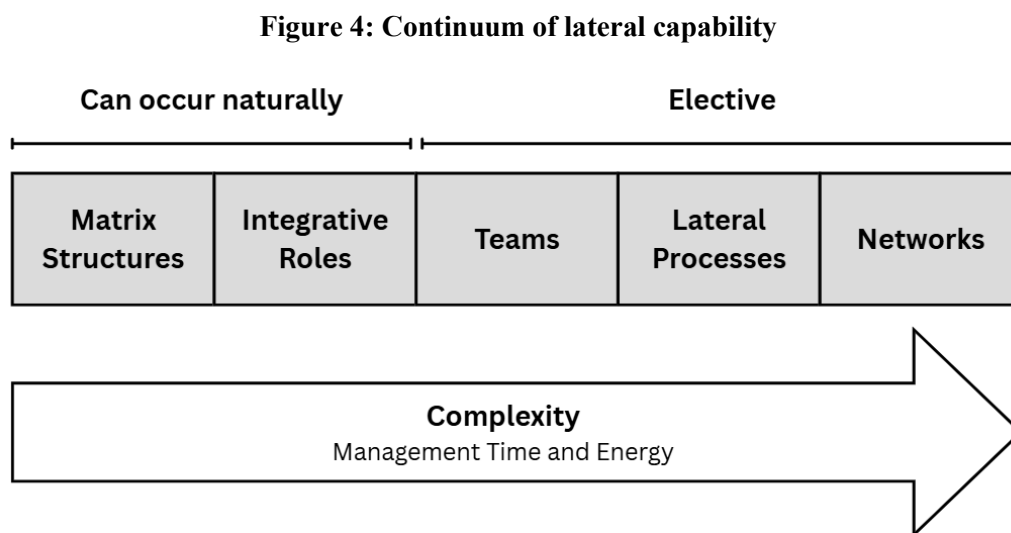
According to Galbraith et al. (2001): “The lateral organization comprises all the coordinating mechanisms that augment the vertical structure to create a complete structural design”. It defines the extent to which the organization can

utilize mechanisms to guarantee that information and resources are shared among the organization even through the white space between the boxes on the organization chart and across organizational boundaries, which are present in every organization regardless of how well-designed the structure was.

In that sense, lateral capabilities are key to ensure connection and collaboration between different parts of the organization, allowing the organization to bring together the right people, no matter where they are in the structure, to solve problems, generate ideas, create opportunities and respond to challenges and change.

Regarding implementation, these integrating mechanisms can be temporary, lasting a few months, or they can be long-term, lasting years. They can also be informal, which means they depend on relationships between employees, or they can be formalized through team structures, cross-organizational processes, or integrative roles.

Galbraith et al. (2001) explore five different types of lateral capability, which can be placed in a continuum both of complexity and of occurrence:



Source: Author

The first two types of lateral capabilities tend to occur naturally and are the easiest to achieve and be managed, while the others are elective mechanisms with higher internal complexity, especially matrix organizations. According to Galbraith et al. (2001), “The key is to use only the lateral mechanisms that are required by the strategy and structure in order to minimize complexity and to build

them on a strong foundation”. Each mechanism will be quickly explored in the next paragraphs.

Networks are informal interpersonal relationships that people create across an organization. They serve as the foundation of the lateral organization since they allow spontaneous knowledge sharing across functions, businesses, and geographies, enabling individuals to use their know-who and know-how to get things done outside formal channels. While they occur naturally, organizations can foster these networks by many means, such as co-location, training programs, rotational assignments etc.

Lateral processes represent formalized business and management processes that cut across different units of an organization to create customer value and deliver products and services. While some processes are informal, Galbraith et al. (2001) argue that critical processes to the business, which might differ to each organization, should be formalized, documented, and revisited over time to ensure efficiency and effective coordination.

Now entering elective mechanisms, teams formally bring people together by making them work and share outcomes collectively. Teams can be classified into three categories. Issue teams are created to solve short-term problems. Work groups are clusters of employees in the same unit that do similar jobs and must coordinate efforts, but usually without collective responsibility for outcomes. Finally, cross-business teams are the most important category for lateral capability by being a true integrative mechanism. These teams are composed of people with diverse skills and perspectives from different areas of the organization to create or deliver products. They reduce the need for hierarchy in decision making and allow for a more flattened organization.

Integrative roles are dedicated positions responsible for coordinating work across organizational units without formal authority over those units. In a small organization, the leader may be enough to orchestrate this work, but in large business this is impractical. There are three types of integrative roles. Firstly, managerial roles could be expanded to consider an enterprise-wide perspective in addition to the functional perspective, which contributes to the organization’s lateral thinking. Secondly, coordinators roles are dedicated positions that integrate

the work of people by facilitating transfer of critical information and monitoring of activities in other areas. Thirdly, boundary-spanning roles are usually senior-level positions that are created to integrate work and knowledge that does not fit into traditional organizational areas, such as Chief Knowledge Officer, Chief Learning Officer or Chief Innovation Officer. These positions are dependent on information, knowledge, and resources from other units for their success.

Finally, matrix structures, which were initially discussed in the Structure topic, allow an organization to focus on two or more dimensions simultaneously, with the use of multiple reporting lines, forcing people to balance conflicting needs and perspectives within the organization. This is the strongest device for lateral capability, but it introduces complexity.

2.2.4 People Practices and Rewards Systems: Human Capital

While strategy determines what capabilities and competencies are necessary, an organization depends on resources to successfully implement these strategies. These resources can be tangible, such as machines, or intangible, like trademarks, patents, and human resources. The latter is composed of people with individual abilities and different ways of thinking, that only when well combined and managed can provide what was envisioned by the organization in the first place.

This means that organizations need to also investigate how to manage the human side of the business: how to select new employees, how to evaluate performance, how to reward, how to provide feedback, and how to develop this human capital.

When considering the Star Model, from Galbraith, there are two key topics that are related to human capital, which are people practices and rewards systems. Due to that, both will be discussed simultaneously in this chapter

Fleury (2025) explores that the design of the People Management System depends on different factors, but mainly on the model of person that is considered by the organization. As an example, in Fordism people were considered simple minded, interchangeable, and replaceable, which led to a management system

based on predefined and repetitive tasks, minimum requirements on recruitment, light training and designed to deal with high turnover.

Theory X and Y (McGregor, 1960) also explore this topic, by defining two contrasting set of assumptions about people, that considerably change the management system of human capital of organizations.

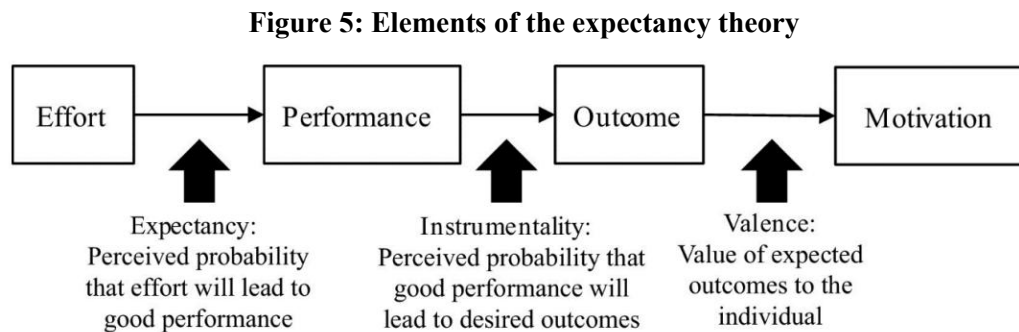
Theory X represents a traditional view, where people are assumed to dislike work and understand that they will avoid it if possible. Because of this, even the promise of rewards is not enough, and people need to be coerced, controlled and punished to properly work. These assumptions lead to more control-oriented people practices and money-based reward systems, which satisfy only basic needs of employees.

Theory Y, on the other hand, does not assume that people inherently dislike work. It assumes that external control and punishment are not the only ways to achieve organizational objectives, since individuals are believed to exercise self-direction and self-control if committed to these objectives. In that sense, commitment is a function of rewards associated with their achievement, especially ego-satisfaction and self-actualization as key motivators. Under the right conditions, humans are expected not only to accept responsibilities, but also to seek themselves. This leads to more empowering people practices, that try to foster autonomy, opportunities for development and a broader view of rewards, that considers satisfaction, recognition and growth opportunities.

As explored in both theories X and Y, motivation is a key topic regarding the understanding of the model of person that needs to be understood in more depth with specific theories.

The Two-Factor Theory (Herzberg, 1993) explores motivation by distinguishing between two different groups of human needs: hygiene factors and motivators. The former does not directly lead to job satisfaction, but the absence of it can cause dissatisfaction. Hygiene factors include fair salary, safe working conditions, company policies, job security etc. Motivators, on the other hand, when present, lead to job satisfaction, while their absence does not necessarily cause dissatisfaction. Motivators include recognition, possibility of growth, responsibility, achievement etc.

Expanding the interpretation of human motivation, Vroom's Expectancy Theory (Fang, 2023) also lays a good foundation for rewards systems. It explains that individuals are motivated to exert effort when three conditions are met: Expectancy, Instrumentality and Valence. The image below explains these conditions and the process to activate motivation.



Vroom's Expectancy Theory highlights the importance of transparent linkages between effort, performance, outcome, and motivation.

Expectancy suggests that managers should create an environment that allows employees to achieve goals and a positive work environment, so that effort will be translated into performance. Instrumentality suggests that companies should provide clear rewards based on performance. This creates the belief that employees will be rewarded if a particular level of performance is achieved. Lastly, Valence depends on how much employees value the rewards provided based on their performance. This suggests that managers should provide rewards based on what workers perceive as valuable, which requires a clear understanding of employees.

Understanding these motivational drivers is crucial, yet not enough to explore the link between human resources management and performance. To fully leverage human capital, it is important to consider a more holistic framework that integrates not only motivation but also individual capabilities and the environment that enables their contribution.

In that sense, the AMO framework (Marin-Garcia & Martinez Tomas, 2016) offers more complete lenses to understand how to design an organization and its human resources management practices to leverage employee's

discretionary effort. According to the model, individual performance depends on three components: Ability, Motivation and Opportunity.

The Ability (A) dimension refers to the knowledge, skills, and aptitude that employees have. In that sense, an organization should develop practices that aim at recruiting qualified personnel with rigorous recruitment and selection, as well as training and development programs to continuously improve current employees.

The Motivation (M) dimension contains the desire and willingness of employees to exert effort, which were previously explained through the theoretical views of the Two-Factor Theory and Vroom's Expectancy Theory. To enhance motivation an organization should implement fair and competitive reward systems, recognition programs and opportunities for career development and personal growth.

Finally, the Opportunity (O) dimension refers to the employees' opportunities to participate and contribute, which highlights the role of the organization in enabling employees to use their abilities and motivation effectively. This matter is highly linked to the points of Structure and Processes and Lateral Capability of the Star Model. While decisions regarding Organizational Structure define job empowerment, autonomy and formal reporting lines, decisions concerning Processes and Lateral Capability define information flows and collaboration across organizational boundaries. All these decisions have a high impact on the opportunities of participation employees will face in an organization. However, opportunity-enhancing practices are not limited to those, since other practices could be providing employees with resources and tools, realistic workloads to avoid overloads, culture of experimentation and initiative, mentorship programs, and even methodologies like Kaizen, which focus on a sense of ownership and collaboration among employees to generate continuous and incremental improvements.

3 METHODOLOGY

This chapter details the methodology used for this research. The central problem of this work was the revision and rework of the organization design of Iluminar, small Brazilian company, to its current strategy and market context. In that sense, the objective was to analyze the current organization design and propose a new and more aligned design, using Galbraith's Star Model as the main structuring and analytical tool.

This study was conducted as a qualitative single case study, to investigate the phenomenon of organization design changes inside a real context and to provide Iluminar with a solid recommendation. This approach allowed a detailed investigation of the unique situation of the company, exploring the interconnections between the five components of the Star model.

3.1 Research steps

This research was structured in two consecutive phases that allow the transition from diagnosis to recommendation.

- **Phase 1 - As-is Star model:** This initial phase of the study focused on understanding the context and current organization design of Iluminar, as well as the changes that occurred in recent years. This research was done by collecting data and mapping each component of the current Star Model. The result is an As-is model of the organization, as well as its strengths, weaknesses, critical areas of misalignment between the components and inconsistencies.
- **Phase 2 - To-be Star model:** Based on the findings of the first phase, the second phase focused on proposing a new design for the organization. The transition from the As-is model to the To-be model is not only a correction of misalignments, but a restructure guided by design criteria, which are derived from the directors' vision and values of the organization. Following the identification of criteria, a new Star Model (To-be) was developed, aiming to solve the most critical misalignments of the current organization design of Iluminar while maintaining its key values.

3.2 Data collection

This research was conducted and designed to collect multiple perspectives of each component of the Star Model mainly through semi-structured interviews. A script was developed for the company's directors (Appendix A) and used as a guide for the interviews, while the semi-structured format allowed flexibility to deviate from the script by asking follow-up questions, exploring unexpected topics that emerged and tailoring of questions to each interviewee. This approach allowed a deeper and more detailed collection of data than what would be achieved through a fully structured interview.

The interviews were conducted with the three partners and directors of the company in Brazilian Portuguese. With the consent of the participants, each interview was recorded, transcribed, analyzed, and later translated to English. The following table presents key information about each interview:

Table 1: Details of interviews conducted

Name	Duration (minutes)	Position	Time at the company (years)
Peter	109	Partner / Marketing and Commercial Director	35
James	70	Partner / Production Director	35
Cristina	121	Partner / Administrative Director	21

Source: Author

In addition to the interviews, Cristina offered further support through multiple conversations conducted during the writing of this study, offering further details and acting as a validation point for the recommendations proposed in the To-be Star Model.

Illuminar also provided their official organizational chart, MVV (Mission, Vision, and Values), and normalized revenue data regarding the past decade to further support this study.

3.3 Data analysis

The data collected from the semi-structure interviews was analyzed using thematic analysis, a method used to do qualitative studies by identifying, coding and interpreting patterns.

The first step consisted of the transcription of the interviews with the AI-based transcription tool offered by Microsoft Word 365 and the reading of the transcribed interviews, to get familiarized with the data and note down initial ideas and observations.

After familiarization, each interview was coded, identifying the relevant sections through a deductive process structured around the five components of the Star Model. This approach was complemented by inductive coding, allowing emergent topics and a deeper understanding of Iluminar's situation. This combination allowed the analysis to be at the same time structured and flexible.

Once every interview was coded, themes were identified by recurrent patterns within the dataset. These findings were finally synthesized into an As-is model of Iluminar, which maps the current organization's design and misalignments, which will be used as evidence for the development of the To-be model.

4 AS-IS STAR MODEL AND DIAGNOSIS

This chapter presents a comprehensive analysis of the Organization Design of Iluminar, through the definition and diagnosis of its As-is Star Model as the main analytical framework. Each component is discussed based on the data collected, both through interviews and other sources, and interpreted through the vision of the main theories addressed in the literature review of this work.

4.1 Strategy

In Iluminar's context, strategy reveals itself as a paradox: the company demonstrates a successful competing strategy that allowed the company to become the market leader of its segment in Brazil, while it suffers from the absence of a unified and long-term strategy formulation process, especially in the context of the transition to the second generation of family partners. This duality between the successful external behavior and the internal fragmentation is among one of the most critical challenges faced today by the company, affecting other components of the Star Model.

4.1.1 The Industry Environment and Lines of Products

Iluminar's environment is mostly stable and composed of few companies, especially with the global transition from fiber optics lighting to LEDs, what caused the number of global companies producing this technology to go considerably low. In Brazil, Iluminar is a market leader for decades and according to James, there are no direct competitors today. However, Cristina and Peter share a different view. They discuss that there are some companies or individuals selling products in the market today, but none as structured as Iluminar. In addition, every director discussed the use of LEDs as a substitute for fiber optics, especially in the case of swimming pool lighting.

To properly comprehend Iluminar's external environment, it is necessary to explore the three different lines of products sold by Iluminar today, since each of them has different competitors, substitutes, and customers, which will lead to

different entry barriers and competing strategies. These three different categories were first defined by Peter in the company, and are:

- Finished products: ready-to-ship products, such as lamps and star kits.
- Customized products: products that require the same solutions but need to be tailored to each client. For example, pool lighting requires a custom design for each pool: determining cable lengths, lighting spots and number of lighting sources used, as well as their power. However, the solution itself remains the same independently of the pool design.
- Special projects: projects for which no established solution exists, and which may require the development of new parts and mock-ups to understand if the desired solution is achievable with fiber optics. Even though these projects require the most amount of customization and development, the underlying technology remains largely the same; what changes are their applications.

As pointed out, each line of products has different environmental conditions, complexities and profitability that need to be discussed:

Finished products face the highest level of competition, with rivals ranging from small individual sellers to more structured companies. Most of them sell low-quality, pre-made kits that are imported and resold in the Brazilian market, often through e-commerce platforms, such as Mercado Livre. This is possible because products are highly standardized and require no customization, enabling a simple reselling business model from imported products. The strong rivalry between competitors, combined with the low differentiation between products and relatively low entry barriers, push prices down.

Customized products still have a high degree of competition, but mostly due to substitutes, especially with pool lighting, which is a representative segment of Iluminar's revenues and profits. In this segment, LEDs offer similar visual effects for a much lower initial cost, but with higher maintenance costs and lower lifetime. Cristina explains that not all customers realize the benefits of fiber optics over LEDs in the long-term: “ `Oh, this one costs a third of the price, so let's get this one`. And he doesn't realize that if he considers it over three years, he'll end up spending a lot more replacing those same lamps”. However, substitutes are not

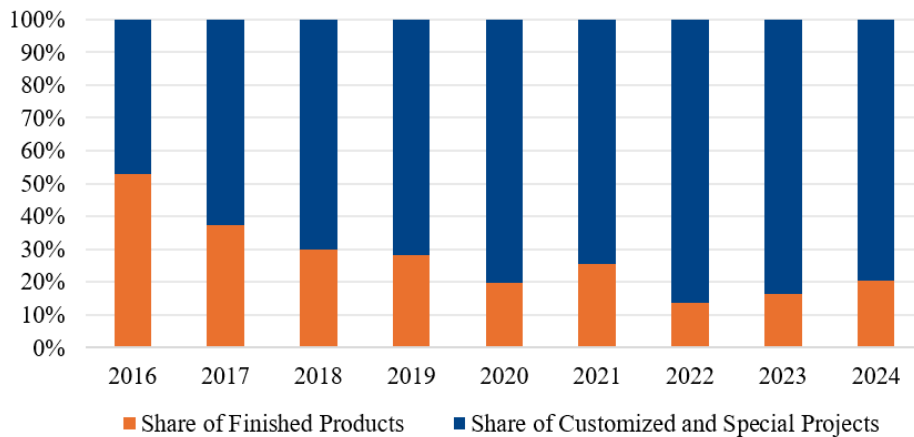
the only competitors in this field. Five years ago, a new competitor appeared in the market and seems to be following in the footsteps of Iluminar, doing similar projects and competing for the same clients. This competitor positions itself as a low-cost player, but that has also brought consequences: it is not uncommon for projects made by this competitor to have quality issues due to poorly designed and installed products. While Peter and James did not mention this competitor directly, Cristina seemed worried about how he might damage the public perception of fiber optics due to its low-quality issues. When asked about the risk of him pushing for better quality, she believes that he would not be able to improve his products and services without reaching a similar price point, at which Iluminar would have an advantage due to the well-established brand.

Finally, special projects require different capabilities regarding customization and innovation, which considerably increase entry barriers. Peter argues that they are the only ones capable of doing these types of projects in Brazil, while Cristina points out that the new competitor mentioned in the last paragraph is also entering this segment and has already done a project that was initially planned to be made by Iluminar, even though the results were not satisfactory with the lightning system not working 6 months after the installation. Due to the higher complexity and higher customization, customers also have a higher willingness to pay, which in addition to the small competition leads to higher overall prices in this segment. However, even though these projects are highly profitable and usually big, they are not common and would require a lot of idleness if a company decided to only focus on them.

Diving into clients, usually this market involves two different types of end customers: businesses and individual consumers, who install products in their own houses for personal use. Regarding businesses, there are many different types of companies that might be interested in fiber optic lighting, such as museums, hotels, hospitals, and construction companies. These consumers are usually looking for functional lighting, an example being to avoid degradation of materials in museums, or decorative lighting, to achieve aesthetically pleasing environments. It is relevant to note that demand has shifted in the past decade to more customized

products, what can be seen in the image below through the reduction of the share of finished products in the company's revenue in the past years.

Figure 6: Revenue distribution between lines of products



Source: Iluminar

One example is the case of construction companies, which used LEDs to illuminate swimming pools, and in the past five years realized the potential of differentiation that bringing light designers could offer to their buildings. Consequently, they started using fiber optics and have been increasingly looking for more customized lighting in their swimming pools.

However, end consumers are not the only type of client in this market. Resellers, through lighting boutiques, are a common practice and they work by offering many lighting options in their region to end consumers. This means that companies that both produce lighting products and sell directly to end consumers, like Iluminar, are competing for sales against resellers, while they allow an easy geographical expansion on the other hand.

Other key stakeholders that should be mentioned are architects and light designers, called by Iluminar as specifiers. While they are not consumers, they are intermediaries between lighting companies and end consumers. They are hired to design buildings and, therefore, usually have a big importance in deciding whether fiber optics will be used or not in a project.

The following Porter's five forces summarize what was presented regarding competition in this market.

Table 2: Porter's five forces of competition for Iluminar

Force	Main Objectives
Competitive Rivalry	Intense price competition from importers in Finished Products, with lower competition in Customized Products and Special Projects, both segments dominated by Iluminar against a new low-cost rival
Threat of New Entrants	Barriers are low for simple standardized kits and resale business models, but high for complex projects requiring technical expertise
Threat of Substitutes	High threat from LEDs, which offer a significantly lower upfront cost compared to fiber optics, but with higher maintenance costs
Bargaining Power of Buyers	High influence held by specifiers (architects) and price-sensitive clients who often favor cheaper initial costs over long-term value
Bargaining Power of Suppliers	Not mentioned in depth during interviews

Source: Author

4.1.2 The Firm and its Competitive Strategy

Iluminar's competitive strategy is one of the drivers of its success, and at the same time a source of internal challenges. Externally, the company is seen as the reference in fiber optics lighting in Brazil. Internally, however, this evolution, especially the transition from standardized to customized products, generated organizational tensions.

Through the Positioning School lenses, Iluminar's strategy lies in differentiation. The firm does not seek to compete through costs but focuses on offering as much value as possible through durable, high-quality, and complete solutions. Cristina made a statement about this philosophy during her interview, while mentioning how other competitors position themselves differently: "We have a concern not only with selling but with delivering a product that matches what the customer is buying. [...] there are people who [...] are not worried about whether it will last or not".

This strategy allows Iluminar to operate with higher margins and to develop a good reputation, which allows it to dominate the most complex segments, such as special projects, where technical capability is usually the main criteria.

Diving deeper into Iluminar's strategy, it is worth exploring its competitive decisions in each of the three lines of products.

In finished products the high competition pushes prices down, which forces Iluminar to also offer more competitive prices. However, Iluminar remains in the position of highest price and highest quality for this type of product. They are produced in moments of low demand from the other lines of products and are kept in stock, so they can be quickly shipped when sold. This line of products is responsible for approximately 20% of current revenues.

In customized products, Iluminar relies on a more educational strategy, focusing on demonstrating the long-term cost-benefit derived from the use of optic fibers instead of LEDs, among safety and the smaller need for maintenance. However, Iluminar also proactively innovates to develop exclusive lighting effects that could not be replicated by substitutes, which leads to higher differentiation through a different value proposition not focused on price. This was the case of star lighting effects on swimming pools, especially successful with construction companies, for example.

Finally, special projects demand high adaptability and innovation capabilities, and Iluminar highly believes that they have a considerable competitive advantage in this segment. Peter explicitly says that they are the only ones able to do most of these projects, and that allows them to charge higher prices for the development of these solutions. Peter also explains that these projects allow Iluminar to innovate and develop new products, that might start as special projects and can become customized products in the future.

In fact, one of the most significant changes in Iluminar's trajectory was the transition from a portfolio of mostly finished products 20 years ago (with around 70% of revenues, according to Peter) to a business model mostly centered on "tailor-made" solutions now, with close to 80% of revenues on customized products and special projects (as seen on figure 6). This shift was initially the result of the evolution of clients' demands, followed by a strategical shift of attention of the company towards customization. Iluminar rebranded itself with a slogan that perfectly aligns with that increasing market demand of customized and special products, "lighting beyond imagination", while also focused on exposing creative projects and innovations at exhibitions frequented by specifiers. Iluminar has worked on getting close to and known by specifiers for a long time already, since

they realized that these stakeholders are critical for bringing new projects to Iluminar. But with the strategic shift and the company's rebranding, Iluminar focused not only on being close to specifiers, but expanding the idea of what is possible to be done with fiber optics and lighting overall. This created a strong image that connects Iluminar not only to quality, but also innovation and creativity.

The company, however, continues to offer finished products (kits) to clients, maintaining its line of finished products. Peter mentioned how these cheaper products are usually the first contact a person or company will have with their products and might lead to future purchases of more complex products. This was the case of a big construction company that recently became a regular client of Iluminar after initially purchasing finished products.

Although externally successful, this strategic move also created tensions inside the company, due to the required changes to adapt to this new value proposition focused on customization. One example of change was the growing volume and complexity of projects, especially in the past years, which led Peter to reinvent the sales team to a project support team. This move required the development of employees in new technical areas they were not familiar with and increased their responsibilities.

Peter says that this increase in customized and special projects turned the Commercial area and, especially, the Projects area into a critical bottleneck, with both teams "super stressed" and "working at their limit".

Despite the clarity of its market strategy and its challenges, Iluminar faces a dangerous inconsistency in its future objectives. There is a shared understanding of the need for increasing revenues, motivated by the change in tax regime in the past few years, even though no common plan was identified on how to achieve this. Other objectives that were mentioned by Peter were the possible international expansion in the long term, capitalizing on the diminishing number of fiber optics players in the world, and even an expansion of the scope of products and services. Cristina, on the other hand, shares the objective of preparing the structure for growth, motivated by a fear of the current structure of Iluminar not being able to support the desired increase in revenues, especially in the areas of Projects and

Installation. She also adds the importance of construction companies to revenues and says that Iluminar should focus on developing these relationships further on.

However, the most critical objective that points to a strategic inconsistency regards product development. Peter and Cristina share the understanding that Iluminar should focus on developing a more powerful light source, in a way to reinforce differentiation and open new markets. Simultaneously, James, in isolation, is working on a cheaper, less robust lighting source. He believes that nowadays a lot of the costs of lighting systems in swimming pools come from the lighting source and he is trying to develop an inferior version that could compete better on costs against LEDs. According to James: "...we are trying to make a version—this is just internally, me and (censored name), not involving sales or anything. Because otherwise Peter will already want to start selling, and the product isn't ready. We are trying to develop a version that basically has the same essential components. So the LED is the same, the luminous flux, everything, but with a cheaper casing, with a cheaper cooling system. Meaning, it would be an inferior product in terms of robustness, but with the same result..."

It is important to consider what the development of a lower cost and less robust lighting source would mean for the business model, especially if it were to lead to less durability. As mentioned, the company aims to compete through differentiation, and offering this new lighting source at a smaller price could lead to serious consequences: cannibalization, dilution of brand image and increased operational complexity.

Therefore, this duplication of paths represents a threat to the sustainability of Iluminar's strategy. It is, instead of a difference in opinion, the coexistence of opposing competitive logics: one focused on differentiation and another focused on cost leadership. This duality of strategies is a symptom of the absence of a unified strategic formulation process among the directors and risks dividing the company's efforts in different directions and compromising its competitive advantage. This topic will be explored in more detail in the following section.

It is worth mentioning that if this experiment can lead to a new and cheaper lighting source that has the same characteristics as the ones used today, with no loss of durability or perceived quality, this would be an important development to

increase profitability while maintaining prices constant. However, this is not the strategy targeted by James in the development of this new lighting source.

4.1.3 Definition, Communication, and Implementation of Strategies

Divergent views about the company's strategic direction appear to stem from the absence of a formal strategy-making process. Iluminar used to have periodic meetings to discuss important and long-term topics, however, they are now rare with Peter admitting that "today, it is the demand that makes us call for these meetings" and most of the times they are "putting out fires". Cristina complements this by saying: "We sometimes discuss a few points that would be important for the strategy, but I don't think we ever just stopped, sat down, and said: Let's define the strategy for...". This indicates that the directors are too immersed in the operation of the business and rely largely on an emergent approach, where they do not formally plan their long-time strategies and make decisions in response to more immediate operational pressures, with limited long-term planning meetings. Before the succession of the second generation, strategy was largely in the founder's mind. Now, the new generation faces the challenge of establishing shared mechanisms for strategic dialogue and collective decision-making.

In addition, the disconnection is enhanced by the centralization of most of the competitive strategies within the commercial area, due to Peter's proximity to the market. Cristina recognizes this dynamic as a problem: "that's a failure on our part, but this is left a lot in Peter's hands". She also noted that other directors do not participate in the development of competitive decisions and are not always communicated about them. She added, "Sometimes he presents the strategy to us, but we don't participate together in this composition". This centralization led to a significant lack of strategic sharing between departments. In fact, most of topic 4.1.2 of this study was written based only on Peter's interview.

This lack of a unified process and limited sharing has allowed the development of parallel and sometimes conflicting views and strategies between directors. The best example of this is the inconsistency found and discussed around product development. James confirms this fragmentation and points to a change

that occurred in the past years that enhanced this harmful dynamic, the missing centralization role of their father: "individually, if you ask Peter, he has his strategy; Cristina, she has hers; but the company itself, together, like let's do this! That was my father's role...". Therefore, while the lack of a unified process and limited sharing created a disconnect between directors, Adam, the main founder of Iluminar and father of the three current directors, was a key actor in connecting the departments and guiding the company. However, Adam stepped back from the company in the end of 2021 and died a few months later, on what resulted in a leadership vacuum. James articulates that his father played a crucial role in centralizing and defining the company's direction: "it was my father's role... My father centralized this, and it was his vision. He had the vision, and he went for it". Without Adam, the directors struggled to establish a new process to replace the informal leadership and centralization that Adam provided. And so, even with a voting process, the directors find it hard to take strategic decisions, especially those that influence other departments, according to James. As a result, the loss of Adam enhanced the effect provided by the lack of an unified process of strategy formulation, what led to parallel strategies and an increase of the disconnection between departments and directors.

Furthermore, all directors mentioned in different ways how they do not share the same ideas on how to achieve their vision for the company. One common topic was how risk averse the directors are and how some want to do bigger and riskier investments than others. While Cristina does not claim whether these differences are good or not for the company, she recognizes that they exist and they usually "end up talking and someone ends up giving in". The other directors, however, share opposing arguments about how these differences affect Iluminar. Peter believes "that these differences that we have help us", while denying that the company used to work because their dad took care of dealing with these differences, arguing that Adam also had different ideas. James, on the other hand, explores this difference between directors as a problem and clearly relates it to the lack of a unified strategies and goals: "Without embellishing, just as it is. So, the strategy today is to sell. I wish it was different, I wanted us to have a plan, a strategy trying to reach a place, but I don't see that, as I told you, because of the very

difference between us, the disagreements between us, how far we want to go, what we want”.

The following table aims to objectively compare the main opinions directors have regarding current strategies, objectives, and the formulation process.

Table 3: Comparison of Directors' Opinions on Strategy

Dimension	Peter (Commercial)	James (Production)	Cristina (Administrative)
Time Allocation (Strategy vs. Operations)	60% of time in operations	Almost entirely in operations	80% of time in operations
Vision of Current Strategy	Focus on differentiation: moving away from standardized kits towards high value, "tailor-made" solutions, through the slogan of "lighting beyond imagination"	Cost leadership: focuses on competing with LED on price/value by developing a new, cheaper, and less robust lighting source	Focus on differentiation and high-quality lighting solutions, but not certain on how Illuminar currently competes with other companies
Objectives (Short & Long Term)	Main objectives in innovation and expansion: developing a more powerful light source, international expansion, expanding service scope	Main objectives are competing with LEDs through a low-cost light source and growing revenues due to tax regime changes	Focus on developing better relationships with construction companies to grow revenues, developing a more powerful light source, and preparing the structure for growth, while maintaining personalization
Opinion on Strategy Formulation Process	Views the dynamic of divergent views among partners as positive and helpful for decision-making, despite the lack of time for formal planning	Criticizes the current state as having "no plan" and believes the differences in vision lead to a lack of consensus. He explicitly misses the "CEO role" his father played in centralizing the vision, arguing that decisions now stagnate because "no one takes them"	Recognizes the current process as a "failure" on their part. She admits they do not have meetings to discuss strategies and rely heavily on Peter to define strategy due to his market proximity, often just reviewing what he presents

Source: Author

When it comes to sharing of the strategy to the rest of the company, Cristina makes it clear that employees are mostly unaware of Iluminar's goals and strategies. She states, "I think the employees know very little about what's happening, and even about what's coming and what isn't". Therefore, this disconnection between directors and departments also extends itself to employees and leads to consequences in other areas of the Star Model, such as People Practices.

After this discussion, James states: "The problem, after everything that we talked about, we clearly identified that it is this lack of direction. What we want for the future of Iluminar". But this pessimistic view fails to recognize the similarities of thought among the differences. While directors have different opinions, goals and even strategies, they still share similar visions for Iluminar. All directors mention their desire to grow the company, to be a reference in its market and to offer high quality lighting for clients, while providing employees with a great work environment (which will be explored further in topic 4.4). This shared understanding is considerably similar to the company's vision: "To be recognized as a world reference for its quality in products, services, and processes in the use of fiber optic technology for lighting. To expand the market and be a source of inspiration for the creativity of specialized professionals, resellers, and specifiers in general, through a constant concern for sustainable innovation and excellence in service and support".

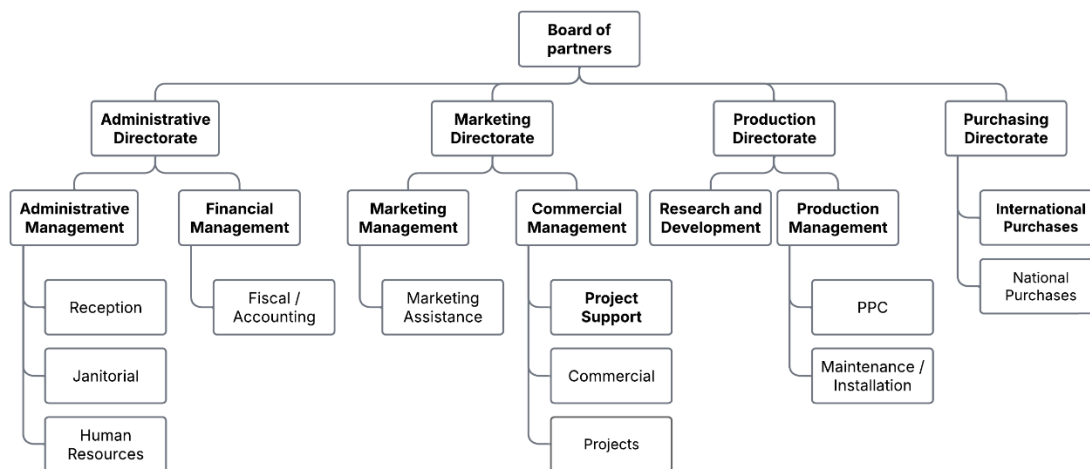
The difference between strategies, goals, and opinions, while still having a shared vision of what directors' desire for Iluminar reinforces the understanding of the absence of a unified strategic formulation process. The company, especially after the death of Adam, lacks the process to properly reach a collective agreement of path that would allow the achievement of this shared vision, what leads to the fragmentation discussed.

4.2 Structure

Illuminar’s organizational structure grew throughout the years without a predetermined model. The result of this evolution is a clear functional division at the upper levels, with significant centralization and informality. This simple structure is usually effective for small companies, but the increasing complexity due to its growth and strategic shift towards customized and special projects might require changes to the current state of this structure.

The company’s official organizational chart can be seen below. Only the first layers of the organization are shown for the sake of objectivity. Most of the hidden layers are under “PPC”, where there are divisions between expedition, warehousing, fiber optics production, and metallurgical production. The areas signaled with bold text are currently conducted by the directors of Illuminar.

Figure 7: Illuminar’s Organizational Chart



Source: Illuminar, visually redesigned by Author

Illuminar is structured into three main departments (Administrative, Marketing and Production), each ruled by one director, through functional grouping, which facilitates specialization and reasonably aligns with the academic knowledge of the directors. James, who graduated as a mechanical engineer, leads the production area of the company, which comprises Production, Installation, Warehousing and Expedition. Peter, who graduated in marketing, leads the Sales, Marketing and Projects teams. And Cristina, who graduated as a forestry engineer, leads the Administrative and Financial departments. At last, there is a small

Purchasing Directorate, which is directed both by James and Cristina, and has only one employee responsible for national purchases, while both directors conduct international purchases.

This division clearly defines authority lines from the strategic apex towards the operating core. Below the strategic apex the structure is mostly flat, with only one formal middle manager, who is responsible for PPC (Production, planning and control) and the supervision of the Production department, intermediating most of the connection between James and Production employees. This flat structure is common to small companies due to the lack of resources to employ middle managers.

Inside the Production department, there's a division between fiber optics cable production and metallurgical production. The former is responsible for preparing fiber optics cable for each product or project, for example by picking the desired cable types and cutting them to the necessary lengths. In that sense, this is the part of production that deals mostly with customization since each customized product and special solution has different fiber optics cable's specifications. The latter, metallurgical production, is mostly responsible for light sources, which are standardized products for every sale of the company. This strategy of segmentation of production aims to separate variable demands and standardized demands, and it is aligned with the goal of offering customized solutions with an efficient structure. However, in periods of low number of sales, it is not uncommon to have one or both areas idle, what was mentioned by directors as one of the causes of low productivity of employees, who aim to stabilize production to avoid peaks and valleys. This motivation problem will be explored further on topic 4.4.2.

Even though this structure has a small number of actors with formal power, it is supplemented by the informal power given to employees due to their knowledge and time at the company. Examples were mentioned during the interviews, both in the administrative and sales department, of people who lack formal power, but have significant influence and recognition due to their expertise.

Regarding decision making and autonomy, major strategic decisions are highly centralized, taken exclusively by the three directors, reinforcing the power in the strategic apex. This centralization, however, coexists with a considerable

degree of operational autonomy at the employee level, due to the model of person the directors imagine, what will be discussed in further topics. Directors explicitly state their choice of delegating autonomy to employees, to empower them to manage their own daily routines. Cristina states: “I don't dictate to (censored name), for example, whether she's going to do the month-end closing today or check if there's been a change in some tax in some state... she determines her routine on her own. Everyone has their autonomy within their purview to chart their own plans”. This delegation, however, has boundaries, and is mostly confined to predictable, routine activities. When faced with new problems and situations requiring specialist judgments, employees seek directors for the decision-making process, or directors take over the responsibility on their own. Peter states that employees are still insecure about their autonomy: “I like to give autonomy because it frees up valuable time for planning, but they are still very dependent; they feel very insecure”. Therefore, this creates a dynamic of decentralized authority for routine, but recentralization for non-routine activities. Despite the efforts, directors mentioned that they are still highly involved in the operation, especially due to more customized orders from customers and key tasks they would not be comfortable delegating, what restricts their time availability for strategic planning.

Although the functional structure appears mostly straightforward, the strategic shift towards more customized products considerably affected the sales and projects team. The higher complexity of projects and higher volume of customized solutions requires increased capabilities and capacity from both teams, which led, according to Peter, to a highly stressed team that is currently “working at their limit”. In fact, aiming to deal with the increased complexity of projects, Peter reinvented the Sales team to also a project support team, training employees in new technical areas (as also mentioned in topic 4.1.2) to better serve clients with custom demands.

However, the Projects team remained mostly untouched, and Peter argues that it became a critical bottleneck for the company regarding capacity, with limited time availability. This area is currently composed of only one employee, who is responsible for designing every customized product or special project

requested by the Sales team, which, in turn, is responsible for dealing with clients and understanding their needs. In fact, the current proportion of employees between Sales to Projects is 5 to 1, as Peter mentions how this creates a high-stress dynamic with constant project demands from five different sellers. In fact, directors desire to hire another employee in the Projects area to increase capacity, aiming to properly navigate this scenario of increased number of customized projects and increased complexity, to allow further growth of sales.

It is worth noting that the Projects team is a key area of connection between Sales and Production since it needs to balance the translation of clients' desires into viable technical designs. It is common for the Projects area to consult James, to understand the viability of certain designs. In fact, even Peter was not sure that the Projects department was formally under his direction during the interview, as he thought James was responsible for the area. A later look at the organizational chart provided by the company revealed that it was under the Marketing Director, which shows how this area of the company has, in fact, considerable ambiguity between both Sales and Production.

Regarding work coordination using Mintzberg's five mechanisms, Iluminar relies on three methods. The first and main coordinating mechanism is direct supervision, due to the active role of directors in daily operations, the centralization of important decisions, and eventual interventions when necessary. The second coordinating mechanism is mutual adjustment, which is common in special projects and custom solutions due to the novelty of tasks. The third mechanism is standardization of work processes, especially for already standardized products and key processes that are carried out through the company's ERP. Most of these routines are not formally documented and largely reside with experienced employees, what increases the risk of knowledge loss with the departure of key employees.

In summary, Iluminar's structure resembles mostly Mintzberg's Simple Structure, due to the dominant strategic apex, high centralization and the almost absence of middle managers, even though there is a mix of coordinating mechanisms currently in use. This type of structure is usually effective for small organizations managed by owners in stable environments. However, Iluminar's

strategic shift towards more customized projects challenges the current structure, especially due to the increased complexity and volume of customized solutions. Therefore, recent bottlenecks in the Project team, described by Peter, are signs that the current structure might require adaptations and bigger teams to support Illuminar's strategy and desire for future growth.

4.3 Processes and Lateral Capability

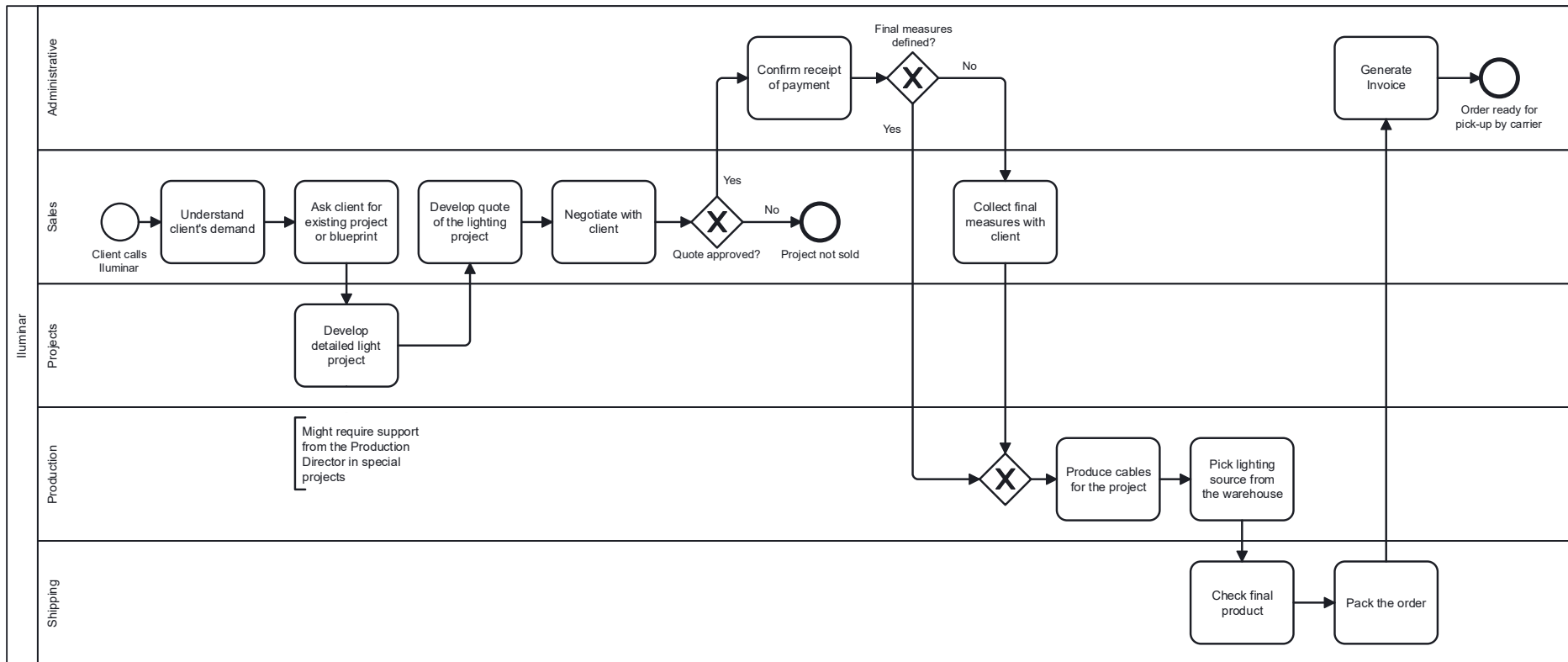
As is common to any structure, Iluminar's functional structure naturally creates barriers that hinder collaboration between areas and requires the use of lateral capability mechanisms to overcome these where necessary. This is especially true with the strategic shift of the company from standardized products to customized solutions and special projects, what increased the necessity of integration and collaboration between Sales, Project, and Production. In fact, this has become even more important in the past few years, when the complexity of projects increased considerably due to bigger projects and clients, especially construction companies. Now Iluminar is facing signs of the insufficiency of its current lateral capabilities, what might affect the company's capacity to be efficient and scalable.

Analyzing each of the five mechanisms defined by Galbraith, Iluminar's main lateral capabilities are Networks and Lateral Processes. Other mechanisms are mostly absent but will also be explored in this chapter.

Lateral processes appear in the company as a main sequential workflow. This hand-off model is characterized more as a transfer of responsibility than a collaborative workflow between departments, where one area finishes a task and passes the "baton" to the next, with almost no interface.

Peter explained that for finished products this flow is extremely simple since the product is a pre-made kit ready to ship and requires no customization and simple interactions between departments. However, for customized products or special projects, this flow is more complex, requiring higher integration between Sales, Projects, and Production due to the higher customization. Especially in special projects, this higher integration is mostly supported by networks due to the lack of formal mechanisms to deal with differences between projects, while still utilizing more standardized procedures for common activities. Cristina explained the main steps of this process in detail, which will be simplified for the sake of objectivity. This simplified flow of processes can be seen in the image below.

Figure 8: Flow of Processes for Customized Products and Special Projects



Source: Author

It is worth noting that, depending on the client's demand, Iluminar will also install this product, what requires an installation team to travel to the client's location after the product is sent by carrier.

The central tool facilitating this flow is the ERP system ("GERPI") implemented by the company and its internal mailing system. These tools support the transfer of information and activities of the detailed flow, ensuring that payment confirmations, production orders, and product specifications travel between the areas of Administration, Commercial and Production. However, processes remain with considerable informality and no standardization, what sometimes leads to misinterpretation between departments due to incomplete information or ambiguity. Cristina mentioned how "even though we ask for everything to be in the order, sometimes some things slip through—'unnoticed' isn't the right word—but, for example, sometimes the client wants a color disk that only cycles through white, and when the order is checked, the disk inside the illuminator's box is colored... So, we realize that communication failed at some point.". James agrees with this perception of problems with communication, mostly due to the lack of standards. During his interview he said: "We sometimes have some communication problems. Because the rule is one thing, but then there was a lack of communication and it wasn't done the way it should have been, and then it causes a problem, right? So, in truth, I think we really need to formalize this."

In addition to the lack of standards, the company also faces communication problems due to the coexistence between paper and digital systems, since most of the production department is disconnected from the GERPI system. In fact, while the production orders are received by the PCP middle manager through the ERP system, most of the activities conducted inside the production department are managed by paper.

Despite the existence of the ERP, a significant portion of lateral coordination at Iluminar occurs through voluntary and informal networks. While each department is considerably isolated from others, whenever there is a non-routine issue that requires interaction, it is usually solved through informal communication by the people involved.

One example is when Production has a doubt about a custom order, and they informally reach the person who sold the project to talk and clarify. However, it is not uncommon for cases to escalate to directors, who are key nodes in these networks of informal communication. Directors are still actively responsible for guaranteeing the lateral capability necessary for the proper functioning of the company. This is especially true with special projects, which are usually more complex and require higher coordination that often cannot be achieved only through common processes.

While these informal networks are quick and work in a small company, they are hardly scalable and create dependencies on main actors, such as directors. This contributes to the statement that was heard in all interviews about directors being too close to the operation (“putting out fires” as mentioned by Peter) and, consequently, having less time to strategic planning.

When it comes to teams, Iluminar uses Work Groups, which are implemented in the Production Department. As mentioned in the Structure topic (4.2), production is divided between fiber optics production and metallurgical production. Each one of those two areas uses Work Groups to deal with production, empowering employees to coordinate work to reach the expected outcomes defined by the Supervisor of Production, the only middle manager of Iluminar.

James also mentioned past attempts at creating cross-business teams failed at his department due to internal jealousy and rivalry among employees, especially by those who were not selected, what ended up creating more issues than solving them. This connects to the topic of People Practices and may indicate employees’ insecurity and the lack of transparency by directors.

While the company has no formal and dedicated integrative role, directors themselves take over some of this function informally by necessity, solving conflicts and connecting the departments. In addition, the Projects area also plays a central role in integration due to its responsibility in translating the customer’s needs into something executable by production, what considerably absorbs the complexity of customization before it hits the production line.

When it comes to matrix structures, the company does not formally implement them. There is only an informal dual reporting line in the Projects area

born out of the necessity of balancing both the needs of the Commercial and the Production Director. However, Peter is the only one with formal authority over the area.

Finally, directors also mentioned that the lateral capabilities of Iluminar are currently limited due to the lack of formalization and standardization of current processes. James mentioned how this leads to communication problems: “We lack documentation of these processes, documenting these paths that already exist so that we have a rule. We sometimes have some communication problems, because the rule is one thing, but then there was a lack of communication, and it wasn't done the way it should have been...”. Cristina also adds: “Sometimes I think there's a lack of integration. Even though we ask for everything to be included in the order, sometimes things slip through... So, we realize that communication failed at some point.”. Peter says that Iluminar used to have communication problems with orders, but that does not happen anymore. On his view Iluminar needs to be restructured in a way that optimizes internal processes, to reorganize current flows in a way “that would give a little more peace of mind and time”. In that sense, all directors agreed to the necessity of documenting and formalizing current processes. This could guarantee standardization and reduce misunderstandings and errors regarding the transfer of information between departments, especially Sales and Production. Peter goes a step further and reinforces the importance of redesigning these processes to guarantee a simpler and quicker flow of information.

In summary, Iluminar's lateral capabilities depend mostly on undocumented processes and on informal networks, with considerable intervention of the directors. The shift towards customizations increased the complexity of the operation and the necessity of efficient mechanisms, what revealed signs of the limited lateral capabilities of the current structure, such as the communication problems and the dependance on directors. The diagnosis is that the current lateral capabilities bring concerns about the capacity of dealing with increased complexity in an efficient and scalable way.

4.4 People Practices and Reward Systems: Human Capital

This section dives into Iluminar's human capital, exploring both the philosophy and reality of the current model, which is rooted in its identity of a family business with life-long jobs in a city of small opportunities. The analysis will be carried out by analyzing the management philosophy and reality, looking at the current systems for hiring, training, motivation, and rewards, while considering current challenges faced and the opportunities for improvement.

The main argument is that Iluminar's current human capital challenges are symptoms of organizational changes that occurred in the past years: both the strategic shift to more customized products and the leadership vacuum due to the death of its founder, Adam, a respected and centralizing figure in the company. This section will explore the current gap of the directors' vision for the workforce and the daily reality.

4.4.1 The Model of Person: Philosophy vs. Reality

When asked about Iluminar's philosophy on people management all directors agreed on a preference for a more collaborative environment, rooted in autonomy, responsibility, and trust. They express their desire to create a more relaxed and family-like atmosphere, that allows better experience at work and empowers employees to take ownership of their work. Both Peter and James expressed how their past works were in strict companies, and how they saw the opportunity to do something different at Iluminar. Some examples in which this philosophy was explicitly made clear by all directors are:

- Peter: "Our policy is an open-door policy. To try to be as horizontal as possible, meaning, of course, we understand that there are hierarchies and that decisions must be made by the board, but we like a collaborative and participatory environment."
- Cristina: "I think that everyone knows why they are there and what their goal is that they have to achieve. I don't think you need someone directing them daily for results to come out. So, what I demand is that by the end of the month, things are within what is expected for a month-end."

- James: “I came from a background of a very strict school. I had three experiences in, it was four, but three in very rigid and very harsh industries regarding behavior, especially. If a guy stepped a little out of line, it was dismissal. And everything with a lot of pressure; besides being harsh on the behavioral side, there was a lot of pressure on production... So, in my department, I make a point of being different, of having things lighter...”
- Peter: “I know it's too stressful, so precisely for that reason I think it must be a little more fun, a little more extroverted. I like to make jokes, I like them to make jokes with me, I let them mess with me. I get angry when they call me boss. To give you an idea, I say, `No, that word is forbidden here. No, there is no boss here`. So, we have a position of hierarchical leadership there, but without needing to be that 'boss' figure, right?”

This vision of the people management system idealized by the directors is extremely aligned with Theory Y, by McGregor. This can also be seen by their understanding of an ideal employee, who was described by directors as: responsible, not scared of facing problems, dedicated, collaborative, organized, hard-working and always looking for more responsibilities whenever his share is done.

However, while all directors shared this Theory Y philosophy for people management, some of the previously quoted phrases ended with the duality between philosophy and reality:

- Peter: “...we like the collaborative and participatory environment, even though we often fail to achieve it.”
- James: “So, in my department, I make a point of being different, of having things lighter like that. But then people, you know, start to understand that... they don't need to be responsible.”

Directors shared multiple episodes and perceptions on how it is common for employees to behave in not desired ways. They frequently described employees as: passive, avoiding responsibilities, and requiring close supervision. Those are the exact behaviors that Theory X managers expect, what contrasts with what directors envision for the company.

It is important to point out that the directors still mention that there are highly creative, collaborative, and motivated people in the company, who are close to the ideal employee, but directors fear these people might change. In fact, Iluminar's workforce can be split into two groups of people, those who "wear the shirt", are dedicated and motivated (the engaged group), and those who are simply "fulfilling the table" (the disengaged group). The behaviors of the latter are spread throughout the company and frequently observed by directors, especially in the past years.

Peter mentions how his team in many times is "very dependent", "insecure" and "uninterested in changes", while it is also common for discussions, rifts, and gossips to appear, what degrades collaboration.

Cristina adds that most of the company's idleness, in her view, is in the production department. She mentions how production workers rush back to their stations whenever she walks onto the shop floor, as if they were not where they were supposed to be and avoiding work by doing non-related tasks.

James mentions that he is aware that some employees take much longer than expected to do tasks and that it is probably related to his more relaxed management style when compared to other departments. He mentions how these people do not take on responsibilities on their own and that maybe he should have controlled more how they work. However, James mentions that "punishing is not my thing. I feel very helpless in those cases".

Directors mention there is a noticeable trend where employees gradually slide into this disengaged group, since every employee used to be closer to an ideal employee when hired. James believes that Iluminar's management system spoiled those employees with the lack of consequences and the extremely rare layoffs. Cristina agrees with that perception, mentioning that employees settle with their situation, aware that they most likely will not get fired, and become reluctant to change and to improve further. There is also another trend, which is the influence of this disengaged group on dedicated and motivated employees. Peter mentions how this influence affects the engaged employees, who see their peers not as dedicated while having the same benefits, and how it also affects the overall performance of the company. A recent hiring in the production department made

this influence clearer for James, who fears this new and dedicated employee might change when in touch with the older collaborators.

While this problem between Philosophy vs. Reality has existed within Iluminar for a long time, Cristina mentioned that it got progressively worse in the past three years and became an important organizational problem. It is possible to imagine that the diagnosis of the root causes of this worsening is connected to the recent change Iluminar suffered regarding its leadership due to the death of Adam, the main founder of the company, also three years ago. Adam was a centralizing figure in the company and extremely respected by employees, with whom he always kept a relationship, by walking throughout the company and talking to them. Adam knew how to balance both strategic and operational roles as a director, being able to both motivate and penalize employees when necessary. With his death and the consequent leadership vacuum, this informal management system was transferred to his sons, who already worked at Iluminar, but lacked the same abilities and image he had to centralize efforts, to guide employees, to deal with misbehaviors and to guarantee continuity of the implemented system which employees were used to. Due to personal problems, James was also partially absent from the company for a few months in the past two years, leading to an improvised system where other directors stepped up to take over his responsibilities while he was not present.

Time slowly exposed in the past years the consequences of this leadership vacuum to the management of human capital: a serious growing problem that requires adjustments in people practices and reward systems, to realign employees' interests and to encourage efforts.

Now, directors are creating a Conduct Guide, after a few recent episodes of unwanted behaviors regarding smartphone usage happened. Their objective is to clearly state what are some limits that are not accepted at the company, with the hopes of changing these behaviors. However, it is important to note that while possibly helpful, this does not fix the root causes of these problems and directors must look for more meaningful changes to be implemented simultaneously.

4.4.2 Motivation and Rewards

The interviews with the directors provided enough information to map both Herzberg's Two-Factors and Vroom's Expectancy Model, what allows an analysis that correlates to performance issues and explains behaviors seen by employees from the disengaged group.

When it comes to Hygiene Factors, Iluminar appears to provide strong factors to employees. The company provides high job security, fair salaries for the region, good benefits (meal vouchers and health plan), and a good work environment (rooted in a relaxed and family-like environment).

Motivators, on the other hand, are applied inconsistently by the company. While recognition of employees exists through occasional compliments and an annual revision of performance and salaries (so that employees are being paid fairly for their function), other factors like feedback, bonuses, and a sense of achievement tied to goals are not implemented on a regular basis, limited only to occasional cases. All directors mention that when it comes to career progression, it is clear how employees that were dedicated and performed well had better progression than others who might have the same time at Iluminar but lower performance and dedication. However, this difference in progression has been made clear considering a long period of time of many years, and even decades, so that employees might not see this impact on the short term.

Vroom's Expectancy Theory dives deeper into the motivational system of Iluminar and how it is not fully effective. Each link of the theory will be explored in the next paragraphs.

The expectancy (effort to performance) link is critical, since employees do not have clear goals and frequent feedback to properly understand what is expected from them regarding performance, initiative, and other key values of the desired philosophy of people management. In fact, it might be unclear to employees whether their current performance is above or below what is expected from them. This is aggravated by the context of unclear strategies between directors and low communication of goals to employees, both connected to the Strategy component of the Star Model and discussed in the topic 4.1.3. Another aspect that also affects expectancy is idleness: when the number of orders is low and employees have

considerable idle time, they might not visualize reasons to conduct their work efficiently or even to put effort into less critical activities, such as organizing papers and tools or cleaning their workspace.

Instrumentality (performance to outcome) is another critical link, not because employees do not receive good outcomes, but because average or low performance often has no clear consequences, especially in the short term. This was expressed by the directors on topic 4.4.1, more specifically on the discussion of the trend of employees gradually sliding into the disengaged group. In fact, this ambiguity demotivates engaged employees, since they feel a burden of carrying less motivated employees, who work less seriously, achieve worse results and still get the same outcomes in the short term.

At last, valence (value of outcome) dives into the outcomes provided by Iluminar. The company currently offers outcomes valued by employees, what has contributed to the high retention rate of employees, who usually stay in the company for decades and leave due to personal decisions or retirement. However, these outcomes are focused mostly on Hygiene Factors, what shows the opportunity of exploring further the use of Motivators. The most valued outcomes currently provided by Iluminar are the good financial compensation and benefits for the region, the current job stability due to its culture of life-long jobs and a friendly work environment rooted in a relaxed, family-like atmosphere that provides a sense of community.

Therefore, while Iluminar provides employees with good outcomes for the region, it lacks mechanisms to incentivize performance and desired behaviors on employees, what could be achieved through better designed expectancy and instrumentality links. This seems to have been especially lost with the death of Adam, who was able to informally create these links and guide employees towards goals, while keeping order and respect in the daily routine of the company. Both statements, the lack of mechanisms and the death of Adam, explain the actions and current growth of this disengaged group, increasing the contrast between philosophy and reality regarding the human capital of the company.

4.4.3 Hiring and Training

When it comes to hiring, this is an occasional activity to Iluminar, since most employees stay at the company for decades and the company is slowly growing. However, it is worth exploring how this hiring process is done to better understand what the directors consider when selecting new employees.

When asked about hiring, directors made it clear that they mostly take into consideration technical abilities and past experiences, for example how long candidates stayed at their last job. Peter also explored how the adaptation of the sales team to a project support team requires new technical skills that are now being considered for new hires. However, while technical abilities are considered, all directors mentioned how no personality or fit analysis were objectively carried out in interviews, and how that has already led to hiring people that should not have been hired. James mentioned, however, that in the last hiring he actively analyzed the candidate's personality and fit for the first time, taking it into active consideration when deciding whether to hire.

Regarding training, Iluminar provides temporary general training for all new employees. This training aims to properly show the overall work of the company, even at departments where the new hire will not work at. The directors believe that it is important for all employees to understand what is being sold, how it works and what needs to be done in other departments to deliver it to customers. After this general training is concluded, new hires are trained in the specific role they will be performing, to guarantee they have the necessary skills for the job. The company also offers the possibility of transferring between areas. While it is not frequent, this practice has already been conducted to reallocate employees into other departments.

For long-term employees, it is not common to have company-wide recurrent training. What usually is done is a case-by-case definition, so that the company provides training whenever necessary. One example is the case of a current tax reform being considered in Brazil, where it would be prudent to have an employee trained to properly understand the consequences of this reform. Another case was carried out years ago when the company decided to purchase a

CNC lathe machine and had both a director and an employee learn how to code and operate this machine.

4.4.4 Diagnosis Through the AMO Framework

The AMO (Ability–Motivation–Opportunity) framework is adopted as a basis to synthesize the analysis of human capital through more complete lenses, while considering not only motivation, but also individual capabilities and the environment that enables contribution.

Regarding ability, Iluminar had most employees develop abilities internally with on-the-job specific training and self-adaption over the years, while now looking for more specific technical abilities when hiring. Iluminar also offers a temporary rotation system for new hires, in a way to guarantee that employees understand the functioning of the products offered and the steps involved in production, while also exploring different departments and their dependencies on delivering value to clients. However, most of the knowledge is tacit and remains informal and not documented, which can lead to significant losses in the case of the departure of key employees.

As explored in the last topics, motivation is highly influenced by the lack of expectancy and instrumentality, what creates a scenario of unclear expectations and low consequences to low performance. This leads to the existence of a disengaged group of employees, who also influence the performance and motivation of the engaged ones. In addition, periods of idleness also affect the motivation of employees, making the connection between effort and performance blurry due to the lack of critical activities at these moments.

When it comes to opportunity, Iluminar's strategic shift towards customization and its management philosophy require employees to be proactive and collaborative, what links human capital to the rest of the Star Model. However, while employees have considerable autonomy in the day-to-day operations and have a close relationship with directors, the lack of communication of strategies, expectations, and goals (mentioned in topic 4.1.3) limits employees' opportunities of developing significant contributions to the company. This becomes even more intense in the production department, where employees have less contact with

directors, due to the existence of a middle manager. In fact, employees, unaware of how to contribute further, might focus only on their routine tasks and get accommodated to the current management system, that does not provide natural incentives to go beyond their roles.

Finally, this consolidated vision, through the lenses of the AMO framework, provides valuable insights regarding misaligned topics between what is desired by directors and the reality of the company's current people management system. While it enhances the understanding of why and how this duality between philosophy and reality appears, it also helps directors focus on the necessary changes to further achieve their desired work environment.

4.5 Final Diagnosis

As mentioned in the literature review, the Star Model defines five different intercorrelated components of the organization design that need to be aligned for the company to be at its most effective form. As a result of the As-is Model developed in the past chapters and its challenges, it is possible to summarize the key inconsistencies found in the current Star Model of the company into a final diagnosis, which will be used to plan the To-be Model of the firm.

While Iluminar has developed itself considerably in the past decades and became the biggest reference in its market in Brazil, the recent changes suffered created misalignments between components of the Star Model, especially the change of strategy towards more customized products and the death of its main founder, Adam.

The final diagnosis for Iluminar can be summarized into three main inconsistencies, which will be explored separately in the next subtopics.

4.5.1 Inconsistency 1: Fragmented Strategic Apex

This is a central misalignment in the strategic apex that leads to consequences on all other components of the Star Model since it is the main starting point to define criteria on which to base design decisions regarding the other components of the Star Model.

This inconsistency is the result of a misalignment between directors regarding strategy since there is no clear understanding of common strategies and goals for the company. In fact, what was seen is a reactive, informal, and fragmented strategy formulation, resulting in multiple and even opposing strategies by directors. The key evidence of this inconsistency, in addition to directors' statements, is the duality of opposing product development and market strategies, with one director developing in secret a cost-oriented lighting source (with lower cost and robustness) and the other directors hoping for a more powerful, and consequently more expensive, lighting source oriented toward differentiation.

This lack of a unified strategic formulation process among directors leads to impacts on all components. Structure is highly affected by the lack of a

centralizing figure or strategy, in an organization that relies on the strategic apex through a Simple Structure. The remaining topics are affected by having no criteria to base design decisions and the resulting low communication of strategies to employees, who are not aware of Iluminar's situation and goals.

This fragmentation was exacerbated by the loss of Adam, who informally centralized and unified the vision for the company. Without this key actor and no formal process to substitute what used to be his role, directors have no clear plans to follow and are constantly "putting out fires" whenever problems arise.

4.5.2 Inconsistency 2: Philosophy vs. Reality

This misalignment is related to Human Capital and the difference between what is desired by directors and the reality of employees' behaviors, what can be seen as a confrontation between philosophy and reality.

When looking at motivation, it becomes clear how the lack of expectancy and instrumentality of Vroom's Expectancy Theory could explain the existence and growth of a disengaged group, due to unclear expectations and low consequences to low performance. This is a critical point for the company, especially when considering the possible influence of this group on engaged employees. There is also an inconsistency regarding opportunity due to employees not being informed of the company's strategy and goals, what limits their perception of opportunities for contribution.

In fact, although the directors desire to adopt Theory Y practices, the existence and recent growth of this disengaged group might signal their inability to achieve that philosophy now, what could be traced back to the low experience on managing people that directors have, although their long stay at Iluminar.

In the past years, this behavior was intensified by the death of Adam, who was a well-respected figure in the company and had the abilities to informally manage employees, ensuring aligned efforts, correction of misbehaviors and the creation of a powerful sense of community. This inconsistency slowly grew bigger in the past years with the leadership vacuum left by his unfortunate absence.

4.5.3 Inconsistency 3: Difficulties of Increased Customization

This inconsistency appears from the strategic shift of focus that occurred in the company in the past decade towards customization, and the increased complexity of projects in recent years due to a new segment of clients: construction companies.

These changes affected the overall operation of the company and required an increased integration between areas and an increased capability and capacity of both the Sales and Projects teams. The former exacerbated problems regarding the current lateral capabilities of Iluminar, especially between Sales, Projects, and Production, such as undocumented processes and miscommunications. The latter reinforced the importance of increasing the capacity of the Projects team, which is a key actor for Iluminar's strategy and the current bottleneck in the commercial department, what might restrain directors' desire for growth.

The result is a misalignment between strategy and the existing structure and lateral capabilities of the company, which have not been extensively adapted to the current market strategy and its increased operational complexity.

5 TO-BE STAR MODEL

This chapter proposes a new To-be Star Model Based on the As-is Star Model defined on chapter 4, its diagnosis of critical misalignments and the definition of guiding values and aspirations for the organization redesign.

The main objective of this redesign is not to alter the identity of Iluminar, but to realign each component of the Star Model while maintaining the values and vision of directors for the company. This redesign aims to solve the inconsistencies identified and adapt the organization design to its new context (internal and external), by resolving operational bottlenecks, unifying leadership, and enabling the organization for sustainable growth.

5.1 Guiding Values and Aspirations for the Redesign

The transition from the As-is Star Model to the To-be Star Model is not only a reaction to inconsistencies and challenges by searching for punctual solutions. As defined by the Star Model (discussed in the Literature Review), this shift requires the simultaneous redesign of multiple interrelated components, which leads to a universe of different possible solutions to be implemented. To navigate the possibilities and choose reasonable solutions directed towards the desired path of the organization, this study defines guiding principles, by considering both the values of the organization and what directors aspire for Iluminar.

Therefore, the first step into designing the new Star Model was to understand what is important for the company and for directors, guaranteeing that this redesign provides a coherent result that might help directors get closer to their vision. In fact, even though one of the identified inconsistencies is the fragmentation of strategies and goals, the interviews allowed the understanding of common values and desires.

In addition, during interviews, it was clear how directors' visions for the company are not only based on their own aspirations, but how they still have considerable remnants of Adam's vision and how directors wish to honor their father by developing the company even further. Peter proudly expressed this

aspiration while describing his desire for Iluminar to be a reference in technology not only in Brazil but in the world: “I think that would be the realization of my father's dream”.

Therefore, the identification of common values and aspirations developed in the Strategy topic of the As-is Star Model, more specifically at the end of topic 4.1.3, allows the definition of a common vision for Iluminar. These will be used as the guiding principles for the redesign, and are:

- To be recognized as a reference in innovation and quality: to reinforce its slogan of “lighting beyond imagination” by developing even further what is possible to be achieved with fiber optics globally and to provide clients with excellence in quality of products and services
- To offer a great place to work: to provide a friendly, light, and collaborative environment, where employees feel safe and have autonomy to conduct their work with responsibility and consistency
- To grow the company further: to increase revenues and profits sustainably, especially in the short term due to the recent change in tax regime

5.2 Strategy

The As-is Star Model revealed important inconsistencies within this topic, especially a fragmented strategy due to the lack of an established strategy definition process, which led to the development of conflicting views and goals between directors. The best example of this inconsistency was the duality in product development explored in the Strategy topic of the As-is Star Model.

While these inconsistencies persist, other changes to the Star Model will not be sustained. To be properly implemented, they require cooperation and active engagement of all directors, which depends on the creation of a common understanding of the current context of the company and the common definition of clear strategies and goals. As mentioned by Galbraith et al. (2001) in the Literature Review, Structure acts as the pillar of Organization Design.

In addition, without this critical pillar, the company also faces the risk of fragmenting its limited resources (of around 25 employees) towards different and opposing objectives, which might damage current competitive advantages of Iluminar. This risk can be seen in the observed duality regarding product development, and its potential of getting the company “stuck in the middle” between Cost Leadership and Differentiation (Porter, 1985).

Therefore, the starting point of this redesign is creating a common understanding among directors that allows the unification of the strategic formulation.

To reach this desired level of integration and alignment, it is crucial that strategy becomes a regular topic of discussion among directors. The aim is to integrate this topic into their routine, guaranteeing that they have time and space to discuss these matters and properly address strategic plans together.

While a well formalized and established strategy formulation and review process might be perceived as the objective, it is unreasonable for Iluminar to implement such a complex and time-consuming process as its first step. It would require directors to develop both long-term and short-term detailed strategic plans, with targets, goals and metrics. In addition to the formulation, a well formalized system would require regular strategic reviews of performance against goals (using KPIs), constant analysis of the environment (competitors, taxes, substitutes, etc.),

clear documentation of matters discussed and frequent adjustment of short-term tactics. In fact, this complex process could be seen as a future goal for Iluminar, to be implemented when the company achieves a bigger structure and increased maturity in strategic planning.

Therefore, for a small company with limited resources and busy managing partners (acting as directors), Iluminar should aim to gradually implement a simplified system for strategic planning, which reinforces communication, sharing of information and decisions between directors. While the main output of this process is a well-defined strategy, which is useful to every company, for Iluminar's specific case the implementation of such a system has the potential to substitute the founder's informal leadership, creating a mechanism that unites directors into collective construction of meaning and execution, rather than individual strategies.

This simplified strategic planning system should be implemented in three different phases.

The first phase is dedicated to the alignment of directors. At this moment, the immediate priority is to guarantee that directors have a full understanding of the company's current context, both internally and externally. Therefore, directors should start conducting regular meetings to discuss in a holistic manner Iluminar's situation and inconsistencies. This can be done through the sharing of information among directors, the discussion of the As-Is Star Model of this work and the creation of data visualizations with relevant data.

While there is no pre-defined duration for this phase, it is suggested that directors conduct weekly or bi-weekly meetings for a period of two months. In these meetings, major topics of discussion should be: current market conditions (the emergence of competitors, the threat of new LED substitutions, the rise of construction companies as clients), current production capacity and development of new products (what is being developed, at what stage it is and when it will be concluded), pricing of products against competitors and substitutes, and the inconsistencies identified in this study.

It is also relevant to express the importance of consolidating and analyzing Iluminar's past data to reach more valuable and precise insights during these meetings (and in the next phases of strategy formulation). This might require

directors to bring pre-made materials for the discussion, which can be created directly by them or with the help of employees.

For example, when discussing market conditions, it is extremely relevant that directors have an analysis of Iluminar's revenues considering different breakdowns (e.g. by year, by product, by client type, by specific client) to identify trends, major areas of focus and better understand customers' demands.

The second phase is dedicated to consolidating the vision for Iluminar among directors. With the help of the previous phase, which created a shared understanding of the company's context, directors must now conduct meetings to define a simple but clear strategic intent, limited to a small number of priorities.

To achieve this common understanding, directors must discuss their expectations and visions for Iluminar for the next years, while considering the current context of the firm.

Even though the first phase aligned directors regarding context, it is expected that this phase results in discussions among directors due to their different personalities, backgrounds and expectations. These are important discussions that should be carefully conducted to collect multiple perspectives and reach a shared strategic direction, to which directors feel comfortable with.

Major topics of discussion that should be addressed include directors' perspective on growth, cost leadership versus differentiation, visions for product development (e.g. more powerful or less robust lighting sources), aspiration for international expansion, among others.

The third and final phase of this process is dedicated to translating the strategic direction into managerial decisions. In this phase, directors use the shared strategic intent to prioritize initiatives, to allocate resources and to filter decisions that allow them to get closer to their vision for the company.

This should be conducted through meetings, and the main desired output of these conversations is a set of common goals for all directors and specific goals for each department of the firm. Considering a simplified implementation, goals do not need to be associated with metrics at this moment but must express in simple language what should be achieved. For example, to the production department this

could mean “Develop a 30% more powerful lighting source in lumens” or “Expand the building to fit a new machine X”.

Even this simplified implementation of a strategic planning system will already guarantee that directors communicate about strategic choices and align goals for each area of the company together, substituting what Adam used to do informally. By having better defined plans and goals, day-to-day operational decisions are more consistent between directors and other important decisions can be taken more easily by using the strategic plan as a guiding criterion.

In addition, this reinforces that all directors are aware of the company’s environment and take part in the definition of competing strategies, which are currently centralized mostly by the Commercial Director.

It is worth noting that for the successful implementation of this new unified strategic formulation process, it is crucial that directors have enough time to conduct meetings and to analyze the internal situation of the company and its environment. Therefore, this requires changes in the Structure component of the Star Model to free directors’ agenda and detach them from a full operational routine, which can be achieved through the revision of autonomy and delegation of tasks to employees. This matter will be explored in more detail in topic 5.3.

It is also important that the recently defined goals of the company are communicated to employees and translated into simple objectives. This would lead to two different outcomes: the first outcome is a better understanding of what is expected from employees and how they should spend their time, what could lead to an overall improvement of performance and further development of employees; the second outcome is an increased involvement of employees and a boost in motivation, by providing purpose and context to the importance of their work, which could be further aligned with a more developed reward system, which will be discussed in topic 5.6. Therefore, the communication of goals and strategies could directly impact the inconsistency identified in human capital, which explores the duality between philosophy and reality.

5.3 Structure

The company's shift of focus towards customization and the recent increase in complexity of projects increased the time and knowledge demand from the Sales and Projects team. However, while Sales has been adapted towards a project support team, with the necessary training of employees, the Projects team remained mostly the same and became a critical bottleneck for the company, requiring adaptations to offer a scalable business. In addition, other important areas of discussion regarding structure which will also be explored are the current level of delegation of activities to employees and the recurrent idleness in the production department.

To solve the previously mentioned bottleneck, this Redesign suggests an increase in the team size of the Projects area, with the hiring of another employee to develop customized and special projects. This is aligned with the directors' perception of current bottlenecks and the necessity of expanding the area further, especially with the desired growth in sales. In fact, the hiring and training of another person would shift the employee ratio of 5:1 between Sales and Projects into 5:2, already considerably reducing the project workload per person, while also allowing the parallelization of the development of projects.

When searching for this new employee, directors should aim for people with backgrounds aligned with key software used by the Projects Area (e.g. CAD) and project design knowledge, to facilitate the introduction of this new employee. Nonetheless, it is still necessary to offer proper training in lighting design and in Iluminar's products and workflow with the help of Iluminar's current project designer.

Initially, this new employee should be allocated to watch the current project designer working, while he offers insightful tips and explains the overall development of the lighting projects. After a few days/weeks of carefully watching the senior designer and taking notes, the new employee should enter an initial practical phase, where he starts developing simple projects with the guidance of the older project designer. The complexity of projects allocated to this employee should gradually increase over time, to guarantee a continuous evolution and exchange of knowledge among the team. Whenever the desired level of autonomy

is reached, different divisions of projects could be implemented among the team, to reach higher levels of efficiency in the development of lighting designs.

A second matter involving the Structure is the time availability of directors, which was mentioned in topic 5.2 of Strategy as an important matter for strategy planning, especially in the current context of directors too immersed in the operation and relying mostly on an emergent approach for strategy. Therefore, it is important that the structure is revisited to allow directors to detach from a full-time operational routine and have the necessary time to also conduct their obligations as the Strategic Apex of the company.

This flexibility can be achieved through a selective increase in autonomy and delegation of activities to employees. While freeing directors' agenda, these changes can also benefit selected employees through increased responsibilities, providing higher engagement and motivation at work, and increased rewards, with revisited salaries based on the newer responsibilities. In addition, this also moves Illuminar closer to a future where middle managers can be further implemented, which might be necessary for the scalability of the business depending on the growth achieved in future years.

Considering the implementation of these changes, directors must first map activities that could be transferred to employees, considering their time consumption, scope and confidentiality. Following this task, directors must ponder key employees to assume these responsibilities in each department, by considering their dedication and reliability, the scope of their current activities, the potential and willingness to assume further responsibilities, and their personal interest in further development. In other words, the selection should be in line with the AMO framework and its three components: Ability, Motivation and Opportunity.

Directors should then consider reviewing salaries with the newer responsibilities, and properly present them to the selected employees, by exploring the possibility of further development in the company.

At last, it is important that directors offer the proper training to employees (when necessary) and keep track of how they perform with the increased responsibilities. This evaluation could be paired with a performance management

system (which will be further explored in topics 5.5 and 5.6) to guarantee a smoother transition of responsibilities.

A third and final matter involving the Structure regards the eventual moments of idleness in the production department, discussed in the Structure topic of the As-is Star Model (4.2). It was previously mentioned how it is common to have periods of high intensity of work when big projects are sold, and opposing moments of only small and simple sales, which require lower effort from employees. It was also mentioned on topic 4.4.2 how this behavior of peaks and valleys in production affects expectancy, since employees might not visualize reasons for being efficient or to conduct non-critical activities.

Therefore, to deal with this variable demand, Iluminar should implement the practice of temporary shifts of employees between the two main areas of production: fiber optics cable production and metallurgical production. This change could directly impact on the motivation of employees due to the stabilization of workload, while also increasing the overall production capacity of Iluminar, which is especially relevant given the directors' desire for growth.

Regarding their coordination, these temporary shifts should be determined by Iluminar's current middle manager, who is responsible for PPC (Production, planning and control) and the supervision of the production department. While he already takes important decisions and coordinates the company's production, he should also implement this mechanism to temporarily reallocate idle employees, on a necessity basis.

To make these shifts possible, metallurgical production should aim to maximize the inventory of lighting sources (to reasonably defined numbers) in periods of low sales, while allowing a temporary transition of these employees to the fiber optics cable production in periods of increased demand. This dynamic would increase overall capacity of the production department, while dealing with idleness: a factor that leads to lower motivation and performance today.

Regarding their implementation, these temporary shifts should be implemented gradually and initially focus on simple tasks. This ensures that employees can more easily adapt to new activities they will be conducting, while slowly creating the routine of temporary shifts. It is again important for directors

to utilize the performance management system to collect employees' feedback and to keep track of both performance and satisfaction with these different tasks.

5.4 Processes and Lateral Capability

Another critical aspect of the strategic shift of focus towards customization and the increased complexity of projects is the necessity of integration between different areas of the company, especially Sales, Projects, and Production. This is important to guarantee that each project is rightfully customized to the needs of each client and for Iluminar to be able to produce customized orders and special projects efficiently. More than that, integration is a critical point for the successful scalability of the business model in future years, requiring attention from directors.

To achieve this increased level of integration between departments, it is important that this To-be Star Model deals with the current problems the company faces: lack of standards, communication problems between departments, coexistence between paper and digital systems.

To tackle the first two problems, directors should implement an initiative to map key processes of the company and the workflow of orders. This initiative can provide multiple benefits for the company regarding the occurrence of errors, the loss of enterprise knowledge, and the efficiency and integration of the current workflow.

The first result of having key processes mapped, documented, and standardized is the reduction of errors. This was mentioned by directors as a recurrent problem, usually originated from miscommunication between areas (especially in more complex projects) and the lack of standards (on written language, on processes, and even identification of projects). This problem leads to confusion, loss of time, friction between employees and could even result in not fulfilling the client's order according to what was initially sold.

The second result of this internal project is the reduction of the risk of knowledge loss due to the exit of key employees. With the proper mapping and documentation of important processes, the company can more easily adapt itself to the exit of a key employee without considerable losses to the organizational knowledge, while it also facilitates the training of new hires.

At last, this mapping and documentation also opens the opportunity for revisiting key processes and redesigning them to achieve more efficient and effective workflows. Peter believes there is considerable value in the structuring

and reorganization of these workflows, as he mentions that this “would give a little more peace of mind and time” to directors and employees.

Regarding the implementation of such an initiative, Iluminar should conduct an internal project involving the leadership, the current middle manager, and selected employees. Since every person at the company has key and valuable tasks in their routine work, this project should be conducted part-time, with a small weekly load and flexible demands, to adapt to Iluminar’s high volatility in sales and projects.

At first, it is necessary that directors define the scope of activities and workflows that should be mapped, with the proper selection of employees next. During a few months, these people should work together mapping and documenting key processes and workflows. With the conclusion of this first phase, the result should be an “Operations Manual” that serves as the standardized basis for work execution of critical tasks in each area.

Following this phase, directors and the middle manager should conduct an iterative optimizing phase, where key activities and workflows are redesigned to offer a more fluid and efficient work environment for the company. It is worth noting that this requires the adaptation of current processes and should be carefully conducted with the help of the employees affected, to guarantee both participation and the definition of new processes that will actually be followed.

Finally, the changes mentioned above should be paired with the implementation of the GERPI system as a standard in the whole company, including the Production department. This change aims to deal with the current coexistence between paper and digital systems and the recurring communication problems related to this discrepancy, while it also creates a more standardized process for information to flow through the company.

5.5 People Practices

One of Iluminar's greatest internal misalignments is the conflict between its management philosophy and the observed reality of employees, described by Inconsistency 2: Philosophy vs. Reality. As explained, this failure was deepened with the absence of Adam, and now the company needs to implement a new system to substitute the informal management style which was conducted by the founder. This implementation aims to both deal with the current inconsistency and to prepare Iluminar for a more structured and scalable future.

The first and most significant change to be implemented is a performance management system through regular feedback sessions with employees. This structured system must not be seen as a punitive judgment by directors, but rather as a development process focused on connecting with employees, understanding their situations, and providing them with helpful insights and support. For high-performing employees, this is an opportunity to praise them, let them know they are on the right track, and even propose new challenges, such as the expansion of autonomy, for further development and rewards (reasonably defined by directors). For low-performing employees this conversation becomes a place to establish clear expectations and consequences, while providing helpful insights and tips. More than only giving feedback to employees, these conversations allow directors to understand how Iluminar can be improved and what else the company can do to help employees have the necessary abilities, the motivation and the opportunity to perform better at work (through the vision of the AMO Framework). This solution allows an overall better understanding between the strategic apex and the operating core, with clearer expectations and opportunities for improvement from both sides.

Regarding its implementation, Iluminar should first define key areas and values that need to be evaluated on employees and use a 5-point metric scale to rate each of them from "Exceptional", "Above expectations", "Meets expectations", "Under expectations" until "Unsatisfactory".

Employee evaluations should initially be conducted at a low frequency and progressively increased to the desired evaluation frequency. During this period, each director should be responsible for evaluating the employees from his

department and for conducting feedback sessions, where they can properly discuss their grading and other important topics in a 1:1 meeting.

At first, these metrics are only supposed to facilitate the evaluation of employees and should not be used for other activities. However, when a more structured system is reached, Iluminar could implement this grading system to evaluate bonuses, promotions, future training and other important events.

While this performance management system should be implemented with all employees, it should be conducted with a higher frequency with new hires. These employees are still adapting to the company's culture and environment, while still understanding the expectations for their work. By having these conversations more frequently, the process of adaptation is accelerated, resulting in higher satisfaction and a better integration into Iluminar's structure.

A second important change is to link the proposed performance management system to training. While the company already offers initial company-wide training and conducts specific training on a case-by-case basis, there is space to further link training to specific needs and desires of employees. This can be achieved through the identification of opportunities for training through the performance management system. This helps directors have a clearer picture of how they can provide better support for low-performing employees, how to further develop and reward high-performing employees, and how to identify the necessity of training in whole areas of the organization, which might need to develop new skills to adapt to the constant changing environment. In fact, the connection between the performance management system and training offers the possibility of better implementing the increased delegation of tasks and autonomy mentioned in topic 5.3, what requires higher qualifications of employees.

In addition, it is also important that directors aim to improve their own management capabilities. In that sense, training in people management and key theories, such as semi-autonomous groups, could provide directors with new and enhanced skills and knowledge to improve the day-to-day operation, helping to achieve their desired philosophy of people management grounded in Theory Y and autonomy.

A third change, already in development, is the implementation of the code of conduct, not as a punitive measure, but to clearly define the boundaries of autonomy and responsibility. And finally, a fourth and final change regards recruiting, where Iluminar should systemically implement the analysis of candidates' personalities and fit with the company's culture. This simple change aims to hire not only through abilities, but also the candidate's alignment with Iluminar's values and the management philosophy. This is expected to increase the number of people in the engaged group and the alignment between employees and directors among new hires.

Finally, Iluminar should maintain other practices that are extremely related to its core value of offering a great place to work, with a familiar, collaborative, and light environment. Practices like the initial company-wide training, the possibility of changing departments and the overall offering of stable work for life are key policies to achieve the desired environment.

5.6 Reward Systems

Still exploring the critical misalignment between directors' philosophy and the observed reality of people management, the Reward Systems appear to be directly connected to the existence and growth of the disengaged group. Therefore, its redesign is critical to guarantee that employees are motivated to properly adapt to and perform in this new Star Model.

In fact, a considerable number of redesign measures taken in other components of the Star Model highly impact Reward Systems, through the vision of Vroom's Expectancy Theory.

Regarding expectancy, while the temporary transition of production employees helps to deal with periods of idleness and their effects on motivation, there are other two proposed changes that are considerably more impactful. Both the better communication and translation of strategies to employees and the implementation of the performance management system considerably increase the understanding of what directors expect from employees. They help define what good performance looks like and when it is being met. As mentioned in chapter 4.4, this is currently lacking in the current Star Model. In addition, they also create clearer goals and provide employees with increased opportunities to contribute and develop themselves further. The increased expectancy provided by these changes aims to increase overall performance by better aligning effort and expectations.

With the proper definition of good performance by the increased expectancy, the company must also focus on instrumentality, the link between performance to outcome. There are two key adaptations needed in this area: to reinforce that engaged and high-performing employees are likely to receive desired outcomes and to create consequences for low-performing employees.

The former can be achieved through the clear connection of performance to rewards, which starts with the identification of high-performing employees, conducted by the performance management system mentioned in topic 5.5. After the identification, it is important that directors fairly reward high-performing employees. One clear implementation that is already in use at the company is the annual revision of performance and salaries, where promotions are considered. While already informally implemented, a redesign of this system with clearer

definitions of what is necessary for progression can lead to a more formalized career system, where feedback sessions can state what is necessary for promotions and create a more transparent link between performance and rewards.

The latter, the creation of consequences for low performance, requires the implementation of a gradual process that starts with the clear definition of what is expected from employees, followed by structured feedback with a constructive approach, until the change in management style as a last resource.

As mentioned, the first step is the clear definition of good performance, which could be implemented with the definition of the Code of Conduct, the documentation of processes, creation of indicators and the use of the performance management system as a channel for directors to explicitly state what is expected from each position.

The second step is the use of the regular feedback sessions as the first consequence of low performance, where directors can properly expose this matter to employees, understand what might be affecting their performance and help them focus on improvement, with the suggestion of corrective measures. The goal is to have constructive conversations, instead of using a punitive approach.

In case of recurrent low performance, these conversations should make clear how this can impact progression and the opportunities for further development. As a last resource in the case of the lack of engagement after the past steps, the company should consider slowly removing the benefits offered in autonomy, with a slow transition towards a Theory X management style for those employees, but with transparent communication of why this is being made and the necessary areas of improvement.

Finally, it is important to note that promotions are not the only rewards to be offered, and a revision of Valence (the value of expected outcomes to the individual) is also valuable.

Illuminar currently offers employees important hygiene factors, which are essential to prevent dissatisfaction, but could explore further the use of motivators, to enhance job satisfaction. These motivators often consist of non-financial rewards, such as recognition, personal growth, sense of achievement and sense of community. Illuminar can implement this by creating more opportunities for

professional development. For example, employees could be offered the chance to participate in new and more complex activities, be granted greater autonomy in their routines, or conduct specialized training. Other motivators could also be increased possibility of growth, with promotions to higher positions (such as middle managers), and even higher recognition by directors, both through feedback sessions and company events. While most of the motivators mentioned are low-cost, the revision of career progression must be carefully considered to the current financial situation of the company, to ensure it can be implemented in a reasonable and sustainable way.

5.7 Action plan to implement To-Be Star Model

The following table summarizes the main objectives of the redesign of each of the five components of the Star Model and the necessary actions to be implemented by Iluminar to reach the To-be Star Model.

Table 4: To-be Action Plan

Star Model Component	Main Objectives	Key Initiatives / Actions
Strategy	Unify leadership and clarify direction	<ol style="list-style-type: none"> 1. Implement regular strategic conversations among directors 2. Communicate and translate strategy into goals to employees
Structure	Solve capacity bottlenecks and free directors' agenda	<ol style="list-style-type: none"> 1. Hire and train one additional light designer for the Projects area 2. Increase autonomy and delegation of tasks to employees
Processes and Lateral Capability	Ensure scalability and reduce errors between areas	<ol style="list-style-type: none"> 1. Map, document, and standardize key processes among employees 2. Fully implement GERPI (ERP) in the production department
People Practices	Redesign practices to align behavior with Theory Y	<ol style="list-style-type: none"> 1. Implement a performance management system with regular 1:1 feedback sessions 2. Link training to the new performance management system 3. Develop Code of Conduct to clarify boundaries
Reward Systems	Reinforce expectancy and instrumentality	<ol style="list-style-type: none"> 1. Use feedback sessions to reinforce expectations and to define what good performance is 2. Provide structured feedback, support for development and clearly express consequences of low performance to career progression 3. Revision of rewards offered to further include motivators

Source: Author

6 CONCLUSIONS AND CONTRIBUTIONS

The main objective of this study was to analyze the current organization design of Iluminar, to identify misalignments and to propose a redesigned model that supports the directors' vision for the company. Through a qualitative study structured around the Star Model (Galbraith et al., 2001), this research aimed to provide a practical analysis and roadmap to Iluminar, while also contributing to the academic field through the documentation of a study case centered in organizational adaptation in a small family-owned business.

The As-is Star Model analysis revealed that the company is navigating a critical transition period centered in two considerable changes: the strategic shift of focus towards customization and special projects, and the unfortunate death of its main founder, Adam. Through the diagnosis of the current Star Model with the theoretical framework established in the literature review, three main inconsistencies were identified.

The first and possibly the most critical inconsistency identified was the "Fragmented Strategic Apex". The field analysis concluded that while the firm currently seeks a differentiation strategy focused on quality and innovation, internally the company is facing signs of unclear paths and strategies among directors. This phenomenon was exacerbated by the death of Adam, what created a leadership vacuum and reinforced the lack of a unified strategy formulation process. In fact, what was revealed is that the company lost its centralizing force, leading to the coexistence of divergent views and strategies.

The second inconsistency identified, "Philosophy vs. Reality", highlighted a disconnection in Iluminar's Human Capital. While directors envision a company grounded in autonomy and collaboration, aligned with the perception of Theory Y, the reality observed by directors was often the opposite. Through Vroom's Expectancy Theory (Fang, 2023), it became evident that this behavior was connected to the lack of expectancy and instrumentality of the current model. The death of Adam also impacted this inconsistency due to the loss of a respected and centralizing figure, what increased the gap between desired workplace and reality of the workforce.

The third inconsistency, “Difficulties of Increased Customization”, addressed the impacts of the strategic shift of focus towards customization in the structure and processes of the firm, with the increased need for integration between Sales, Projects, and Production. The evidence pointed to the Projects area as a critical capacity bottleneck of this strategy and the lack of documented processes and standards, resulting in communication problems among departments. This confirms the understanding that as an organization differentiates its output (customization), it requires stronger lateral capabilities in a functional structure.

To address these misalignments, this study provided Iluminar with a To-be Star Model, for which key actions are: the unification of strategic formulation through planning routines, the structural expansion of the Projects area, and the implementation of a performance management system focused on feedback between employees and directors. These recommendations aim to realign the organizational design of Iluminar to its new context.

In terms of contributions, this thesis provides Iluminar with a detailed analysis and a tailored action plan to its reality, that drives the organization closer to the directors’ vision and key values. Academically, this study contributes to the academic field by illustrating the application of key organizational theories to the redesign of organizations. It explores three main areas of interest. First, it demonstrates the interconnection of the Star Model components, by exploring the implications of the strategic shift towards customization. Second, it documents the challenges of unplanned succession in small family-owned businesses, which usually rely in Simple Structures and centralizing figures. Finally, it explores the difficulties in human capital management, by exploring the gap between directors’ philosophy and perceived reality.

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APPENDICES

APPENDIX A - Script for semi-structured interviews with directors

1. Introduction

- a. Brief introduction + consent (purpose and recording)
- b. Can you briefly describe your role and main responsibilities in the company?
- c. How much of your time is spent on operations vs strategy?

2. Strategy

- a. How does Iluminar historically position itself in the lighting market?
- b. Who are the main competitors now?
- c. Are there important substitutes for Iluminar's products?
- d. Who are the main customers? What are they looking for?
- e. Were there significant changes in customers, competitors or substitutes in the past 5/10 years? Which changes?
- f. If there were significant changes, how did Iluminar adapt itself to this new environment?
- g. What is Iluminar's strategy now?
- h. What are the main objectives in the short-term and long-term?
- i. How is strategy formulated?
- j. How is this strategy communicated and translated to employees?
- k. Are you aware of any problems or irregularities in the definition or implementation of strategy?
- l. Do you have any other comments regarding strategy that you would like to express?

3. Structure

- a. How is Iluminar divided into departments? Are they autonomous?
- b. Which directors are responsible for which departments?
- c. Can you describe the formal reporting lines? Who reports to whom?
- d. How are major decisions taken, for example investments, hiring, new products?

- e. At which organizational level are most operational decisions made?
What are recent examples?
- f. Are processes formally documented? Are these followed?
- g. Are there people who design or standardize how work is done? If so, what is their role and influence?
- h. Describe the day-to-day work of the employees from your departments.
Is work highly routine or does it require specialist judgement?
- i. How much autonomy is given to employees? Why? Is it the same in all departments?
- j. How is work coordinated between employees in your department?
- k. Which are the key problems with the organization structure that you notice?

4. Processes and Lateral Capability

- a. How do different areas of the company (for example, sales and operations) work together daily?
- b. When a complex problem arises that involves multiple departments, what is the typical process for solving it?
- c. When you need information from another department, do you typically follow a formal process, or do you just contact the person you know can help?
- d. Can you tell me about any regular meetings that bring leaders or members from different departments together? What is their purpose?
- e. Explain the lifecycle of a typical project, from the initial contact to final delivery. Who is involved at each stage and how is work coordinated and handoffs managed?
- f. Is this done with the use of standardized processes?
- g. Have you ever created a temporary task force or a project team?
- h. Is there anyone whose job is to coordinate work across departments?
- i. Does any employee report formally to more than one manager?
- j. Do you think the current level of integration of departments is enough?
- k. What are the biggest challenges or problems in collaboration between departments today?

5. People Practices and Reward Systems: Human Capital

- a. What is your general philosophy on people management here at Illuminar? What do you believe is the most important factor in building a high-performance team?
- b. If you could describe the “ideal employee” for Illuminar in a few words, what would they be like?
- c. How does this description reflect in your hiring process? What do you look for in a candidate besides technical experience?
- d. How does Illuminar deal with new employees? Are they trained?
- e. What is Illuminar’s approach to the training and development of current employees?
- f. In your experience, do employees at Illuminar generally take initiative and responsibility on their own, or do they require close supervision?
- g. Would you consider that employees are motivated to work?
- h. What motivates people the most at Illuminar, other than salaries?
- i. How does Illuminar recognize and reward performing employees today?
- j. How would you describe your leadership style? Do you prefer to be more hands-on with operations or to delegate more autonomy to your teams?
- k. How do you handle it when an employee makes a significant mistake?
- l. How is feedback provided to employees? Are they done regularly?

6. Conclusion

- a. After these discussions, what do you consider as the main problems or challenges at Illuminar today?
- b. What else would you change at Illuminar if you could?