



# Transforming the business behaving ambidextreously: The Challenges and issues of having two different units inside the organization.

A Master's Thesis submitted for the degree of "Master of Business Administration"

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Vienna, 01.07.2019





# Affidavit

#### I, DIANA CADAVID, hereby declare

- 1. that I am the sole author of the present Master's Thesis, "TRANSFORMING THE BUSINESS BEHAVING AMBIDEXTREOUSLY: THE CHALLENGES AND ISSUES OF HAVING TWO DIFFERENT UNITS INSIDE THE ORGANIZATION.", 84 pages, bound, and that I have not used any source or tool other than those referenced or any other illicit aid or tool, and
- 2. that I have not prior to this date submitted the topic of this Master's Thesis or parts of it in any form for assessment as an examination paper, either in Austria or abroad.

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### Abstract

It is becoming more critical that companies pursue exploration and exploitation activities at the same time to survive in times of past pace changes. To successfully achieve the goals of competing in the mature business excelling at efficiency and continuous improvement and in new markets with disruptive products and services, the companies must behave as an ambidextrous organization. In today's market conditions, companies that miss the opportunity to transform or fail to answer to a disruptive innovation rapidly find themselves in danger to continue the business.

The analysis from researches of different firms that have succeeded as ambidextrous organizations have permitted to define six pillars that organizations must consider to change to achieve a high level of ambidexterity. This master thesis aims to determine the gap that exists between the research suggestions and the reality at a selected company. Moreover, the paper describes the consequences of such misalignment. To assess the gap, an empirical study conducted with employees of a tobacco company, which is in the journey of business transformation and has two business units: the one dedicated to competing in the mature market and the other one dedicated to the development of new disruptive innovation. The assessment considers three out of the six pillars: Structure and governance, Leadership and culture, and People and Skills. The gap assessment has helped to determine the most critical points to focus because of threads they represent to achieve ambidexterity successfully. The paper draws on the discussion of the relationship between the two units and the unifying elements that make them convey as one organization.

This thesis contributes to the discourse on structural ambidexterity. Provides a better understanding of the consequences of the misalignment between literature and reality. Moreover, based on the gap found, the challenges and the relationship of the two units, questions if structural ambidexterity is the right approach for a company in the journey of transformation with the vision of cannibalizing with the new business the mature one.

**Keywords:** Transformation, ambidexterity, exploration, exploitation, unifying elements, vision, business strategy.

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*"The two most important days in your life are the day you are born and the day you find out why."* — Mark Twain.

To Oliver and my parents for making it possible.

Diana Cadavid

# List of Abbreviations

- **CEO** Chief Executive Officer
- **R&D** Research and development
- PBO Project based Organization
- PMI Project Management Institute
- **RNGP** Reduced new generation Product

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## 1 Introduction

Organizations compete and struggle for existence. They vary in ways that make some more competitive than others. (Charles A. O'Reilly III J. B., Organizational Ambidexterity: IBM and Emerging Business Opportunities, 2009) Thus, Companies increasingly realize that they need to renew or reconsider their business models in line with the requirements of the new century. Business model innovation concerns the redefinition of existing products or service and how they are provided to customers. (Charles Baden-Fuller, 2013)

The theory of disruptive innovation was invented by Clayton Christensen, of Harvard Business School, in his book "The Innovator's Dilemma." The term is used to describe innovations that create new markets by discovering new categories of customers. (Christensen, Altman, & Palmer, 2018). They do this partly by harnessing new technologies but also by developing new business models and exploiting old technologies in new ways. (A.W, The Economist explains What disruptive innovation means, 2015). In today's world, firms that miss a transition or fail to respond to a disruptive innovation quickly find themselves out of business. (Taxis challenged by ride-sharing firms, traditional banks facing online banking, department stores confronting the competition of Amazon). To respond to the new market evolution and conditions, it requires leaders to design organizations that can succeed in mature business and compete in emerging business; this capability is ambidexterity. (Charles A. O'Reilly III J. B., Organizational Ambidexterity: IBM and Emerging Business Opportunities, 2009). Google promises to reinvent cars as autonomous vehicles; Amazon promises to reinvent shopping (once again) using drones, and the 3D printing could disrupt manufacturing processes. (A.W, The Economist explains What disruptive innovation means, 2015)

In the process of adapting to the new conditions and new markets, new dynamic capabilities as Ambidexterity needed as enablers of the transformation. The business model transformation, as described by (Christensen, Raynor Rory, & Mc Donald, 2015) involves, having two executive functions coexisting at the same time - exploitation and exploration- both, running in parallel inside the organization and being united by the same vision and purpose. This form of structure is known as structural ambidexterity.

According to (Birkinshaw & Gupta, Clarifying the Distinctive Contribution of Ambidexterity to the Field of Organization Studies, 2013) A structural Ambidextrous organization is a firm that can compete in mature markets (where efficiency and incremental innovation are crucial) at the same time as developing new products for emerging markets (where experimentation and flexibility are critical). Based on the idea that different structures are required for exploitation

and exploration, several authors suggested that for long-term survival, organizations needed to accommodate both. (O'Reilly III C., Organizational Ambidexterity: Past, Present and Future, 2013).

The exploration unit requires new technologies, new process, and a complete business model to develop radical and incremental innovation, in the other hand, the Exploitative unit, leverage on company's existing assets and capabilities from the mature side of the business to gain competitive advantage. (O'Reilly III C., Organizational Ambidexterity: Past, Present and Future, 2013).

There are many cases where companies have transformed to pursue new markets and customers, and have achieved it successfully thanks to the capability of being ambidextrous. There is the case of Netflix, Amazon, CIBA vision, GKN (a 250-year-old company that has morphed from iron ore to steel to automotive parts to aerospace and today is an industrial services company for firms like Boeing) (Cha092). Evolution, in this view, operates not as blind variation-selection-retention but with what March refers to as "evolutionary engineering" in which organizational experience and memory are used to strengthen exploitation and exploration processes and adapt to changed environmental conditions. (Cha092).

In essence, business model disruptions have some distinctive characteristics that pose extraordinary challenges for established firms. (Khanagha, Volberda, & Oshri, 2013). One of the significant challenges the company faces is the ability to manage exploration and exploration units running inside the organization at the same time, becoming an ambidextrous organization. As cited by O'Reilly, becoming an ambidextrous organization represents various defies, mainly when the company is used to work for many years in a specific manner and has historically succeeded in it.

#### 1.1 **Problem Formulation**

The literature describes that a critical element of the company's long-term success is the ability to pursue emerging simultaneously and sophisticated strategies achieved through ambidexterity, which is embedded in the dynamic capability's framework of a company. (O'Reilly III & Tushman, Ambidexterity as a dynamic capability: Resolving the innovator's dilemma, 2008)

According to the literature, to enable a successful structural ambidextrous organization, the separated units, the one competing in the mature market (Exploitation unit) and the other racing in the new market (Exploration unit), must operate with a different organizational architecture which includes a collective strategic intent, definition of critical tasks, competencies, structures, controls/rewards, culture, and leadership roles. (Cohan, 2012)

Building structural, organizational ambidexterity requires a radical change in every single element that composes a company. Nieto-Rodriguez (2014) suggests six main pillars to be considered to lead an ambidextrous organization successfully. (Nieto-Rodriguez, Ambidexterity Inc., 2014)

- 1. Structure and governance
- 2. Leadership and culture
- 3. People and skills
- 4. Processes and methods
- 5. Systems and Tools
- 6. Enterprise performance management

This thesis addresses the challenges and the issues regarding the effort an organization faces in the process of transforming its business model behaving ambidextrously; in this work, the emphasis will focus on the three first pillars suggested by Nieto-Rodriguez (2014), 1. Structure and governance, 2. Leadership and culture, and 3. People and skills. Deals with the intersection of having the "new" and the "old" (mature) organization running in parallel inside the organization and analyzes the preconditions the organization must consider to succeed in the transformation.

This results in the following research questions:

How can an organization achieve a high level of ambidexterity and transform its business?

- Why is there often a gap between the recommendations as published in the organization's research literature on ambidexterity and the reality in companies?
- What are the consequences for the organization not managing ambidexterity appropriately? What are the challenges of building up a new business within an existing organization?
- What is the relationship between a mature business and the new business? How are they unified to cooperate and perform as one company? Why is there often not a fruitful and productive link between the old and the new business?

The thesis is structured as follows:

- Chapter 1 highlights the importance of adaptation and transformation of companies to survive in the market by becoming an ambidextrous organization. The section also includes the research questions and describes the structure of the thesis.
- Chapter 2 reviews three out of the six main pillars necessary to successfully achieve ambidexterity and highlight the challenges and issues to do it. The analysis covers concepts and examples from companies that have transformed their core business.
- Chapter 3 assesses the gap that exists between the literature and the reality to highlight the consequences to achieve ambidexterity successfully. For this purpose, the author conducted a qualitative study with employees from a company which is currently in the transformation process and possesses two different units, one dedicated to exploring and the other one dedicated exploiting.
- **Chapter 4** discusses the challenges of the ambidextrous company based on the analysis in chapter 3, determine the unifying elements from the relationship between the two units (Exploitation and Exploration), the challenges and the binding factors as motivations and commitments that exist as unifying vision for both based on the qualitative research.
- **Chapter 5** provides a summary of the results obtained, an analysis of the thesis' contributions to research as well as concrete recommendations for organizations under the transformation.

#### 1.2 Methodology and limitations

The thesis based on literature review and qualitative research based on a current case of a business dealing with two separate units. The qualitative data collection was carried out by seven phone interviews. The empirical research allowed us analyzing the gap that exists with reality and the literature in regards of achieving ambidexterity, as well as the main challenges the organization faced in facing a transformation and having two units running at the same time pursuing different goals. Before the interviews a brief of the objective of the investigation as well an explanation on the concept of Ambidexterity was provided to the interviewees to set the base to understand part of the primary purposes of the research.

The limitation of the work is that it is based on the answers provided by employees from a single company; broader generalizations are mostly blurred. However, we believe that this paper provides a better understanding of the implications and future considerations for companies under a business transformation.

## 2 Literature Review

#### 2.1 Definition of Exploration and Exploitation

Exploitation includes refinement, production, selection, execution, efficiency and implementation, variety-reducing, and efficiency oriented of the current business. (Benner & Tushman, Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited, 2003).

Exploitation is about getting better performance and doing business as usual. Over time, when an organization is successful, it becomes more and more knowledgeable and educated about their customers, and more efficient at meeting their needs. The company strategy and the organizational alignment between capabilities, structure, and culture evolve to reflect this. "The tighter the fit or organizational alignment, the more success a firm is likely to be." (O'Reilly III & Tushman, Lead and Disrupt: How to Solve the Innovator's Dilemma, 2016)

Exploration encloses terms such as knowledge, search, variation, risk-taking, experimentation, flexibility, discovery, disruptive innovation, new territory, new technologies, markets, products/services, and business models. (Lavie & Rosenkopf, 2006; Smith & Tushman, 2005) "The exploration entails a shift away from an organization's current knowledge base and skills. Such changes can be related to new technical skills, market expertise, or external relationships."

As defined by Li, Vanhaverbeke, and Schoenmakers, on the one hand, within a single function of the value chain, firms *exploit* by the search for knowledge within the organizational boundary and experience that is local to their existing knowledge base and *explore* by searching distant background that is unfamiliar.



Figure 1. An integrated framework of Exploitation and Exploration from Different Perspectives. (*Li, Vanhaverbeke, & Schoenmakers, 2008*)

The two concepts, exploitation, and exploration require different structures, processes, strategies, capabilities, and cultures, and may have different impacts on an organization's performance. (Li, Vanhaverbeke, & Schoenmakers, 2008)

As described by the authors Li, Vanhaverbeke, and Schienmakers (2008) in Figure 1., the process of knowledge search differs along the value chain, taking place in the different dimensions, the cognitive, the spatial and the temporal as they defined. This interaction is critical to bust the innovation outcome of the department and explains the importance of having exploitation and exploration running in parallel.

Setting up the systems and processes, structuring the work, motivating people and holding them accountable, and promoting constant improvement is a challenge for the leaders of the ambidextrous organization (Gilbert Probst, 2011)

#### 2.2 Definition of Ambidexterity

"Over time, successful firms become knowledgeable of their customers and efficient at meeting their needs. Their strategy and organizational alignments among competencies, formal structures, and cultures evolve to reflect this." (O'Reilly III & Tushman, Ambidexterity as a dynamic capability: Resolving the innovator's dilemma, 2008). However, in the face of competition and changes in environmental situations, such as regulatory requirements, technology evolution, etc., companies should strive to attract new markets. The attraction of new customer segments through innovation requires new competencies and a different organizational alignment; however, must maintain focus in its core product or service to ensure

the prosperity of the new business while doing the transformation. Pursuing both strategies is known as Ambidexterity.

The concept was first applied to managerial contradictions by the academic Robert Duncan in 1976 and has since entered various streams of research - in strategic management as alignment versus adaptability, and in operations management as flexibility versus efficiency; or in innovation management as radical versus incremental. (Nieto-Rodriguez, Organisational ambidexterity Organisational ambidexterity Understanding an ambidextrous organisation is one thing, making it a reality is another., 2014)

Organizational ambidexterity refers to the ability of an organization to both explore and exploit—to compete in mature technologies and markets where efficiency, control, and incremental improvement are prized and to also compete in new technologies and markets where flexibility, autonomy, and experimentation are needed. (O'Reilly & Tushman, 2013)

It is incredibly relevant to maintain the equilibrium between Exploration and Exploitation. As Nieto-Rodriguez (2014) mentioned, many of the organizations that engage only in exploration are likely to suffer the high costs of experimentation without gaining its benefits. These companies exhibit too many undeveloped new ideas and often too little distinctive competence.

A well-known example of too much emphasis on exploration is Ericsson, the telecom giant that led the development last century of the global system for mobile communications. Despite its strong focus on exploration, the company's results went into steep decline. Ericsson laid off around 60,000 employees and closed most of its technology centers to put the focus back on exploitation to return its businesses to profitability.

Contrarily, companies that merely rely on exploring are likely to be trapped on executing more efficiently their process but not going to a successful future and losing the pass to adapt to new challenges and new demands.

The key to success is an Ambidextrous organization is maintaining an appropriate balance between exploration and exploitation.

*"Ambidexterity as a dynamic capability is not itself a source of competitive advantage but facilitates new resource configurations that can offer a competitive advantage"* (Eisenhardt & Martin, 2000; Winter, 2000).

#### 2.3 When Ambidexterity is needed

Being ambidextrous, by its nature, is inefficient. The exploration activities require many efforts to find and develop new ideas that could not pay off. It also takes resources and capabilities away from the core unit, that could be useful in the short term, to provide better financial results. Thus, many companies assume the decision of using existing capabilities and assets to develop competitive advantages to improve serving current markets and new markets. The diversification of the portfolio having breakthrough products is not simple. However, when companies possess dynamic capabilities that could be applied to conquer new opportunities, adopting structural ambidexterity is the most suitable approach to succeed, according to the experts Tushman and O'Reilly (2016).

The Authors consider two main criteria to determine when Ambidexterity is needed, Leverage Core Business assets and Strategic Importance. As shown in Figure 2, the authors define four main quadrants from which the companies could define if the New unit should be created as an Independent business, Spin out, Outsource or the company should become Ambidextrous.





Figure 2. When Is Ambidexterity Needed? (O'Reilly III & Tushman, Lead and Disrupt: How to Solve the Innovator's Dilema, 2016)

**Proposition 1.** There must be a clear strategic intent that justifies the ambidexterity of the organization.

**Proposition 2.** O'Reilly & Tushman (2016) suggest, *"There must be an explicit identification of the organizational assets and capabilities to be used by the exploratory unit and should give a competitive advantage."* 

Boston Consulting Groups (Boston Consulting Group, 2019) suggests that ambidexterity is crucial in the following situations, which goes with the proposal from O'Reilly & Tushman (2016):

- When a company operates in both emerging and developed markets
- When bringing new products and technologies to market while exploiting existing ones
- When integrating start-ups into the existing business

#### Structural Characteristics Contextual Ambidexterity Ambidexterity How is Alignment- focused Individual employees divide their time ambidexterity (exploitation) and between alignment- focused achieved? adaptability-focused (exploitation) and adaptability-focused (exploration) activities are (exploration) activities done in separate units or teams Where are At the top of the On the front line – by people from sales, decisions made organization plant supervisors, office workers about the split between alignment and adaptability? Role of top To define the structure, to To develop the organizational context in which individuals act management make a trade-off between alignment and adaptability Nature of roles Relatively clearly defined Relatively flexible Skills of employees More specialists More generalists

# 2.4 Types of Ambidexterity

 Table 1. Structural ambidexterity vs. contextual ambidexterity. (Birkinshaw & Gupta, Building Ambidexterity into an Organization, 2004)

As shown in Table 1, there are different types of ambidexterity; there is the structural and the contextual ambidexterity. Both types have different management roles, processes, structures, and require different skills from the people who are part of it.

To become structurally ambidextrous, the organization needs to have senior teams with specific characteristics. (1) the ability to sense and recognise the different needs of business and its customers, (2) the understanding of the importance of ambidexterity (3) the commitment to implement the transformation, and (3) the ability to communicate a clear vision

to allow both explorative and exploitative units inside the product development to co-exist (O'Reilly III & Tushman, The Ambidextrous Organization, 2004)

Structural ambidexterity refers to an organizational structure comprising not only separate operational subunits for exploration and exploitation, but also different capabilities, systems, incentives, processes, and cultures for each unit (Benner & Tushman, Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited, 2001). These separate units are unified by a common strategic vision, a predominant set of values, and targeted structural connecting mechanisms that permit a productive integration of independent efforts. (Simsek, 2009)

In contrast, contextual ambidexterity is the capacity where exploration and exploitation are simultaneously pursuing within the same unit. This type of ambidexterity is built on the processes and systems that promote exploitation and exploration activities at the same time performed by the same person within the unit; this means, that the individuals of the product development department should divide their time between both activities. In other words, the individuals in their units provide value to the current customers and also seek opportunities in the changing environment and respond accordingly.

Contextual ambidexterity allows people inside the department to dynamically and flexibly decide on how to divide time between the rewarded and valued activities of explorative and exploitative NPD (Birkinshaw & Gibson, Building Ambidexterity Into an Organization, 2004)

The results on the business impact differ on the type of ambidexterity the company has decided to pursue.

#### 2.4.1 How to determine which Ambidexterity form is the best?

The literature suggests that the different ways of achieving ambidexterity are correlated to the nature of the market faced. For example, a simultaneous approach may be more appropriate in more dynamic markets where conditions are constantly changing while in more stable environments, firms may be able to afford a sequential approach (Charles A. O'Reilly III & Tushman, 2013).

Contextual ambidexterity within a business unit may promote the local innovation and the change needed to continually adapt to the small changes in the environment (Adler, 2007). The authors suggest that structural ambidexterity is crucial in the context where well mature

companies can explore in the context of their existing strategy and history. However, once the exploratory units gain traction, firms may take advantage of this capability by switching into more integrated structures (O'Reilly C. A., 2009). There is evidence of well mature firms that have decided to follow structural ambidexterity to reach ambitious goals, is the case of one of the biggest tobacco companies, where its Product Development unit has structurally divided to pursue exploration and exploitation.

While the exploratory units are small and decentralized, with loose culture and process, the exploitation units are larger and more centralized, these units have evolved with the company, and they are mature and packed with knowledge and experience, they have a well-established culture and processes. Exploratory units succeed by experimenting- doing continuous iterations to create new developments. Because process management tends to drive out experimentation, it must be prevented from migrating into exploratory units and processes. In the other hand, exploitation activities that reduce variability, maximize efficiency, and control are an ideal location for the coordination associated with process management efforts.

(Cha092) suggest that due to the different characteristics of the nature of Exploiting and Exploring, both, must be physically and culturally separated from one another, have different measurements, incentives, and have distinct managerial teams.

The literature suggests that the reason of choosing Structural ambidexterity is because both units, the Exploration and Exploitation, have a different speed, both require different settings to achieve the various goals and both require different skills and teams.

In the annual report of 2018, Philip Morris international, it is indicated the company's efforts towards its transformation. PMIs new vision is to have a "smoke-free world" *"We're building PMI's future on smoke-free products that are a much better choice than cigarette smoking"* (PMI, 2018) Which demands the development of new products (known as platforms) aside from the conventional cigarettes they have produced for years. The company transformation focusses on becoming a consumer-centric enterprise, which implies having new structures, processes, and governance; at the same time, PMI continues to focus on the entire operating cost base, targeting over \$1 billion in annualized cost efficiencies by 2021 (PMI, 2018). The transformation of the company indicates the appropriation of Structural Ambidexterity.

#### 2.5 Companies that have succeed being Ambidextrous.

(O'Reilly III & Tushman, Ambidexterity as a dynamic capability: Resolving the innovator's dilemma, 2008) Described the case of Ciba Vision, a maker of contact lenses, and how they

developed a drug that combated a debilitating eye disease. By the early 1990s, it was clear to Ciba Vision's president, that the market was dominated by Johnson & Johnson and that if he wouldn't react, the company could slowly decline and fail. To survive, Ciba's president determined that he could continue making money in the mature conventional-contacts business and at the same time producing entirely breakthrough innovations.,

The company launched six formal development projects, each focused on a revolutionary change. (O'Reilly III & Tushman, The Ambidextrous Organization, 2004) *"In a controversial but necessary move, the company decided to cancel various small R&D initiatives for conventional lenses to free up cash for the breakthrough efforts. Ciba's CEO knew that attempting to manage these projects under the constraints of the old organization would not work."* Unavoidably, conflicts over the allocation of human and financial resources appeared, slowing down the developments and disrupting the focus needed for breakthrough innovations. Additional, the new manufacturing process required different technical skills, which made very difficult the communication across the old and the modern units. The company CEO decided to create autonomous units for the latest projects, each with its R&D, finance, and marketing functions; he chose the project leaders for their willingness to challenge the status quo and their ability to operate independently. (O'Reilly III & Tushman, The Ambidextrous Organization, 2004)

Ciba's president determined that it was essential to protect the new unit from the old one, for its culture and norms, but at the same time they realized that it was necessary to share expertise and resources, therefore, in order to solve the paradigm Ciba's president took the decision to integrate the management team across the company.

First and possibly the most important: the leaders of all the new disruptive projects report to a single executive, to the vice president of R&D, who had an in-depth knowledge of the existing business and close contacts with all the executives throughout the firm. (O'Reilly III & Tushman, The Ambidextrous Organization, 2004)

In this journey, the company determined a new vision statement, which was meaningful to all parts of the business. It emphasized the connections between the revolutionary initiatives and the conventional "old" operation, bringing together all employees in a common cause and preventing organizational separation from turning into regulatory fragmentation.

After five years of structural ambidexterity, the company introduced a revolutionary drug for threatening age-related degeneration, pioneered a new lens manufacturing process and achieved a dramatically cost production costs. Ciba also surpassed J&J in some market

segments. The conventional lens business remained profitable, sufficient to generate the cash needed to fund the daily expenses required by the exploratory unit.

| <u>Company</u>   | Founded | Original<br>Product | Current<br>Business |
|------------------|---------|---------------------|---------------------|
| Goodrich         | 1870    | Fire Hose           | Aerospace           |
| Nokia            | 1865    | Lumber              | Mobile Phones       |
| Harris           | 1895    | Printing Press      | Electronics         |
| 3M               | 1902    | Mining              | Office Supplies     |
| Allied Signal    | 1920    | Chemicals           | Aerospace           |
| American Express | 1850    | Express Delivery    | Financial Services  |
| Armstrong        | 1860    | Cork                | Floor Coverings     |
| Bally            | 1931    | Pinball Machines    | Casinos / Fitness   |
| J&J              | 1885    | Bandages            | Pharmaceuticals     |
| Black & Decker   | 1910    | Bottle Cap Mach.    | Power Tools         |
| Carlson          | 1938    | Gold Bond Stamp     | Travel              |
| W.R. Grace       | 1854    | Bat Guano           | Chemicals           |
| Hasbro           | 1923    | Carpet Remnants     | Toys                |
| Ingram           | 1857    | Sawmills            | Distribution        |
| Sunbeam          | 1890    | Horse Clippers      | Appliances          |
| ITT              | 1920    | Phone Companies     | Insurance           |
| Xerox            | 1906    | Photog. Paper       | Business Equip.     |
| Vivendi          | 1853    | Garbage             | Media               |
| Tandy            | 1899    | Leather             | Retail Electronics  |
| Marriott         | 1927    | Root Beer           | Hotels              |
| Southland        | 1927    | Ice                 | Retail Stores       |
| Morton Intl      | 1848    | Salt                | Air Bags            |
| Nucor            | 1897    | Automobiles         | Mini-mill Steel     |

Figure 3. Long-Lived firms that have changed industries (average 105) years. (O'ReillyIII & Tushman, 2008, )

There is evidence how, through history, firms evolve and adapt to the continuous ecosystem changes. Figure 3 brings an example of the companies that have successfully achieve transformation using ambidexterity as a complementary capability. Each of these companies was capable of capitalizing on its dynamic capabilities, "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments." (Teece, Pisano, & Shuen, 1997)

It is fascinating, how did an online bookseller that had no inventory of its own and purchased books from wholesalers transmute itself in twenty years into one of the outstanding technology firms worldwide? The answer's that the leaders of Amazon were capable of exploiting mature business (distribution and retail), in which productivity, efficiency, and continuous improvement are essential, while concurrently leveraging current resources and capabilities to explore new domains were agile and experimentation are tops (Smith S. M., 2017).

#### 2.6 The dilemma- Finding the right balance

An ambidextrous organization is one that is capable of simultaneously exploiting existing competencies (e.g., satisfying existing customers) and exploring new opportunities (e.g., developing new revolutionary products). However, exploration and exploitation are quite different activities and require different abilities within the firm.

In the case of exploration, *"firms must regularly assess their vision, encourage innovation and must be willing to adjust or change strategies, products and markets and more"* (Philip A. Dover, The ambidextrous organization: integrating managers, entrepreneurs and leaders, 2010). Exploitation requires a different approach; the firm must focus on carrying out activities such as rationalization, process improvement, and customer experience improvement. Exploration requires more of a creative, dynamic approach to disrupt, to develop new products faster than the competition, and to identify new opportunities that open the horizon of the Company's ecosystem.

This activity is much different compared to exploitation, which employs a transactional approach with a focus on ensuring current customer satisfaction (Legesse, 2012). Considering the challenges in managing ambidexterity, studies have suggested that organizational ambidexterity is associated with more prolonged survival (Barrie R. Nault, 2004), better financial performance (Du & ZhongweiChen, 2018), and considerable improvement in learning and innovating (Millar, 2004).

There are different examples of companies that have extended their horizons to new business; it is the case of the automotive industry, the online retail companies as Alibaba and Amazon as well the tobacco industry - from cigarettes to non-combustible products-.

Although ambidexterity is a problematic managerial challenge, when executed in the appropriate strategic contexts, these complex designs are associated with sustained competitive advantages. (Zhongwei & Du, 2018)

In a traditional organization, the established units can only focus on continually refining the existing products; it is scarce they engage in creating disruptive innovation because they are already in a comfortable and well-structured environment. In the case of ambidextrous organizations, the integration of new talent, resources, the analysis of new

consumers/customers, etc.., brings a new atmosphere which allows and nurture the excitement of the team to create disruptive innovations.

For example, in Hewlett Packard's (HP's) Scanner Division, the more routine flatbed scanners had a completely different organizational architecture from the emerging consumer/knitting technology scanners. These distinct units were physically separated from one another and had their management teams.

The CEO of one of the biggest ambidextrous companies in the world, Amazon, mentioned the importance of not neglecting the exploration unit of the business because focusing too much on the exploitation activities. *"We often see large companies fall victim to disruption by smaller or newer players in the market because they're too slow to act on opportunities and incredibly focused on existing success"* (Guppta, 2016)

He pointed out, how could be more comfortable for big companies to focus in two units at the same time, due to the number of resources they can allocate from the exploitation to the exploration phase, "Large companies have the advantage of accessing budgets, existing assets, and resources that can power the search for future opportunities". (Guppta., 2016)

- Focusing too much in exploration: Not giving the importance and attention needed to the exploitation unit will lead the company to a scarcity on resources to build the future.
- Focusing too much in exploitation will castrate the opportunity to discover, explore a re-defined the future of the company.

To create dual organizational structures, senior teams must develop techniques that permit them to be consistently inconsistent as they steer a balance between the need to be small and large, centralized and decentralized, and focused both on the short term and long term, simultaneously (Gavetti, 2000). If the locus of strategic integration is low in the firm, experimentation will be stunted, as the short-term success of rapid exploitation will drive out exploration. If this integration is at too high a level in a multidivisional firm or done across independent firms (Rasmussen, 1998), the underlying understanding of an innovation stream's dynamic will be dampened, and the ability to drive disruptive or radical change restricted.

While complex and politically difficult, ambidextrous organizational forms permit a firm with highly differentiated units to drive process management, with its associated variation reduction and control, as well as exploration an option creation, these internationally inconsistent

operating modes must be strategically linked at the senior team through their aspirations and a limited set of core values (Hambrick, Nadler & Tushman, 1998).

To maximize short-term performance and survive in periods of incremental technology change, firms need to accentuate incremental change, momentum, and inertia associated with process activities. Multiple functions and activities must be linked seamlessly throughout the organization to efficiently deliver to and satisfy existing customers. Without this concerted refinement of capabilities, firms may not survive long enough to face or initiate technological change. (Mary J. Benner and Michael L. Tushman, 2003)

As companies achieve measurable short-term success with process management, they are likely to increase their commitment to the intensity of the process and expand their influence to even more processes. According to Hedberg et al. (1976) and Weich (1995) companies must be able to forget their past, break rules and traditions, and increase the variation in architectural and / or radical innovation service to meet the needs of new customer segments. Based on this argument, many of the companies that strive for structural ambidexterity could follow in a dichotomy of which culture each unit must follow, the arising in the exploration unit or the well-defined and known from the exploitation one.

Because competencies are hard to develop and the rates of environmental change are substantial, Brown & Eisen (1998) argue that dynamic capabilities are not rooted in sequential attention or rhythmic pacing, but, rather, in exploiting and exploring simultaneously (Sutcliffe et al., 2000; Tushman & O'Reilly, 1997).

There is not magic formula to determine how much percentage should the organization invest in exploitation and exploration activities, however, the balance between both will depend on the speed and type of challenges the organization is confronting.

Explaining how Amazon achieves perfectly follows the strategy of exploration and exploitation, Bezos notes that while many companies state to be customer oriented, most are not. The cause, he explained is that "companies get skill-focused. When they think about extending their business into some new area, the first question they ask is "why should we do that-we do not have the skills in that area" That puts a finite period on the enterprise because the world evolves, and what used to be front-line skills have turned into something your customers may not need any longer. A much more reasonable strategy to start with "What my customers need?" Then do an inventory of the gaps in your skills. (Bezzos on Innovation, 2008) In this case, tobacco companies have forced themselves to change their core -Philip Morris is not the only one offering less harmful products, their competitors do it as well- probably because the environment for the cigarette industry has change, new regulations and high tendency to leave healthier, making them to have a stronger focus on their exploration unit. The company continues reporting revenues from cigarettes, which are considerable higher compared to the revenues reported from the reduced risk product, IQOS. This situation drives to the conclusion that PMI is leveraging on their current business and capabilities to develop a mature and successful business model around reduced risk products.

The form of how ambidexterity takes its form it is very different, in the case of the largest players in the tobacco industry, Philip Morris, BAT and JTI they have decided to work as a Structural ambidextrous organization, two units, one focused on exploration and the other one in exploitation inside the same organization, in the JTI's webpage they even mentioned opening a research centre in silicon valley to attract and develop new ideas in the line of reduced risk products; nevertheless, the fourth player in the market, Imperial Tobacco, has their exploration unit as a subsidiary.

As indicated by O'Reilly and Tushman (2008) in slow moving environments, the need for exploration is reduced while in hyper-competitive situations it is heightened. With slower rates of change, ambidexterity may be more sequential than simultaneous while in rapidly shifting environments ambidexterity may need to be done in parallel. (O'Reilly III & Tushman, Research in Organizational Behavior 28, 2008)

**Proposition 3.** Defining the form of Ambidexterity (Structural or Contextual) is one of the biggest challenges a company must face.

As companies and strategies evolve, their alignments must also do it. What a firm needs in its early stages must probably will not be helpful in a mature period. Figure 3. Illustrates this evolutionary challenge. (Lead and Disrupt)



Figure 4 Organizational Evolution. (O'Reilly III & Tushman, Lead and Disrupt: How to Solve the Innovator's Dilemma, 2016)

# 3 The main pillars for a successful ambidextrous organization

In this section, three of the main pillars to succeed in ambidexterity are going to be described, structure and governance, culture and people and skills. According to the literature, there are different elements.

#### 3.1 Structure and Governance

One of the biggest challenges of becoming and ambidextrous organization is having the right organizational and governing structure. (Nieto-Rodriguez, 2014)

Making changes inside an organization it is very challenging and complicating, Nieto-Rodriguez (2014) mentioned that there are two main fundamentals reasons to change: those that pertain to history and those relating to human behaviour.

First, organizations that are on the market for many years with the time become more expensive to functionate, rusty and in many cases, they tend to not follow the market because of their focus in the current business.

Second, the people inside of the organization build their own habits through the time, those habits become difficult to change when needed. A portion of the people inside the company are also influenced by decision-making power, which means that they will follow their own interests and enter in a competition for example to have the bigger department, the highest budgets or the highest salaries.

In this sense, a good example to understand how to overcome the challenges mentioned a is the structure re-organization in Microsoft. In March 2019, the company announced its organizational restructure. The firm, is being organized into three major divisions, the aim is to bring greater consistency across the organization (among the main two units, Software and devices), adjust imbalance between exploitation and exploration and become more agile. Microsoft's CEO, Satya Nadella words for restructuring the organization: "*Today, I'm announcing the formation of two new engineering teams to accelerate our innovation and better serve the needs of our customers and partners long into the future*". (Nadella, 2018) It is clear, the focus Microsoft want to give to the company, an equilibrium between Exploitation and Exploration.

In his article, Rodriguez-Nieto (2014) suggests that implementing the right connections between the change-the-business and the run-the-business activities is fundamental for the execution of the strategy. If the balance between these two activities is achieved, then, the organization becomes more agile and faster in responding to the external changes, faster in satisfying its customers and responding to its competitors. This situation, will make that the company becomes in a trendsetter in the ecosystem where it is.

(Companies that excel in execution establish a Strategy Execution Office that connects both dimensions. Harvard professors Robert Kaplan and David Norton call it the Office for Strategy Management.)

In their work in "Ambidexterity as a Dynamic Capability: Resolving the Innovator's Dilemma." O'Reilly & Tushman (2007) pointed that for a successful pursuit of organizational ambidexterity, the organizational architecture must include "different alignments and physical separation for explore and exploit units (different business models, competencies, incentives, metrics and cultures) with targeted integration to leverage firm-wide assets and capabilities. (O'Reilly & Tushman, 2007), mentioned that even the units are separated both must be aligned and should target integration at both senior and tactical levels to properly leverage organizational assets.

Structural separation ensures that each organizational unit is configured to the specific needs of its task environment (Burns & Stalker, 1995). For example, core business units may focus on exploration, while units as Research and Development or business development may emphasize alignment and exploitation (Diaz-Fernandez, 2017). The same proposal is made by Fang, Lee and Schilling (2010) which found in their study that as per literature has suggested is for the exploratory unit the isolation of the R&D teams. The isolation comes with

autonomy, which derivates in pursuing new technologies without the incumbency of the existing organization. (Fang, Lee, & Schilling, 2010)



Figure 5. Ambidextrous organization Design (O'Reilly III & Tushman, 2016)

In Figure 5, O'Reilly and Tushman (2016), suggests, that the units need to be separated and integrated at the same time. The exploratory units need the independence and autonomy to develop their strategy and alignments. The integration is required in order to balance both activities.

How the senior managers leverage capabilities is another of the challenges of structure and governance pillar, *"Strategic leverage is crucial to justify and ambidextrous organization. To effectively leverage the strengths of the mature business, the interface between the new and the old needs to be designed and managed in a way that permits the new unit to access the assets and capabilities of the larger organization without being overwhelmed or stonewalled"* (O'Reilly III & Tushman, 2016)

In the sense of how the structures of the organization should be organized Trevor and Williamson (2019), highlight a crucial point, Should the Exploitation unit operate with hierarchies and should the Exploration one eliminates them? In their investigation, the authors refer to them depending of the strategy of the firm. Product-centric firms that win by exploiting economies of scale will always conform more to the organizing principles of the bureaucratic, hierarchical model which works as a functional project structure. Service-oriented firms that need the flexibility to respond to fast-changing customer needs or maximize creativity may turn towards the internal market end of the spectrum. (Trevor & Williamson, 2019). The

challenge of the firms looking for ambidexterity is to secure the best of both worlds, flexibility and organization.

A recent example of organizational restructuring is Facebook. The company aimed to funnel its efforts into six "areas leaders", technical teams and product groups. The objective was to become more agile, where product development process become faster and less irregular, increasing the chances of meeting the requests of its shareholders. The new and now famous company's mantra is "Move fast with stable infrastructure", which speaks to the challenge of managing a large organization globally. (Trevor & Williamson, 2019). So far, the numbers have shown the effectiveness of the organization restructure having exploration and exploitation running at the same time but in different units.

The Exploitation unit requires working with a set of constrains as time, budget and quality, thus, the unit must organize as a project-based unit. The role of projects is to exploit the existing competences and capabilities. Lenfle (2008) studied the implications of working in both units as a project-based organization. The author found that, in the case of exploration, when the unit is organized as a PBO (Project based organization), the shift of the project management methodology must change, because there is a risk of applying exploitation framework to exploration. In the case of the exploratory activities, the projects that are conducted are first and notable a way to discover, develop and learn. Working in the exploratory unit as a project based-organization could be challenging because of the nature of the projects and the constrains that Project Management could bring to the organization. The author concludes that both units could be manage as PBO but the methodology for both must differ. (Lenfle, 2008)

According to the project Management Institute, one of the benefits that a project-based organization brings is that bureaucracy and hierarchy in the organization can decrease, therefore the unit become more agile (Tom, s.f.)

An interesting example of an organization following the Project based approach to leverage the existing capabilities is Huawei. The case is cited by the authors Trevor and Williamson (2019) in their article "How to Design an ambidextrous organization". The Chinese telecommunications equipment company Huawei, is now the largest maker of telecommunications equipment in the world with over 145 operations in different countries, and has surpassed Sweden's Ericsson with \$60 billions of sales, 66% of which came from outside China. (Trevor & Williamson, 2019). When the authors interviewed one of the expatriates who work for Huawei to understand better how the structure of the organization is

designed, the employee remembered, that on his first at Huawei, he asked to see an organization chart, but the answer was that at Huawei there wasn't one. In the beginning, the employee thought the company was just being secretive, but with the time, he realized that truly the enterprise didn't have an organization chart in the usual sense.

The authors mentioned in their investigation that undoubtedly, there was hierarchy, especially considering that hierarchies are a very aspect in the Chinese culture. They found that the strategy, the objectives and the direction were top down, and for many employees the word of the managers was the most important one. What it is very interesting is that inside of the company, there were units with different capabilities and specializations, such as manufacturing, product development, sales, or finance, but these capabilities were continuously being reconfigured around projects or problem solving. (Trevor & Williamson, 2019)

When a new customer opportunity was identified, a team from across the company would be grouped. When one of the top dozen leaders of the company agreed a new product initiative with their peers, a team would be put together to take it from idea – through product development and manufacturing, to final installation and service, often involving hundreds of people from within Huawei's global operations. People would be added or reallocated through the life cycle of that initiative, flexing the capability-set and capacity as required. The same process was applied to making improvements in Huawei's processes and support systems. (Trevor & Williamson, 2019)

The conclusion of Trevor and Williamson (2019) is that Huawei is strong on vertical hierarchy, but extremely flexible at all levels horizontally, reconfiguring itself continually to serve the next customer demand, back new initiatives, solve problems as they arise, and maximize knowledge exchange and joint learning.

Theory proposes, that rather viewing an organization with a set of activities, an Enterprise ecosystem should be built with a pool of different capabilities and a work as a project based organization. Rather than hard-wiring the organization, an ecosystem approach focuses on creating structures and incentives that encourage the formation of flexible connections between these capability pools that can be constantly reconfigured. (Trevor & Williamson, 2019)

**Proposition 4.** Structural differentiation will positively influence ambidexterity. The exploratory unit must be sufficient separated from the exploitative one.

**Proposition 5.** The exploitative unit should work as a Functional project structure while the explorative as PBO.

# 3.2 Leadership and culture of a structural Ambidexterity organization

Organizational culture is key to manage any enterprise; the success of a company is strongly attached to how good the culture it's defined and embedded in the people and their activities.

(O'Reilly III & Tushman, 2011) described that strong, *collective identity and culture*, achieved through the articulation of shared vision and values throughout the organization, may help the company successful accomplish the goals of the explorative and exploitative units.

Organizational culture relates to the attitudes, experiences, beliefs, and values that guide the behavior of its individuals (Alvesson, 2002) and define the way how the firm conduct the business (Barney, 1986). In mature companies, a strong identity its associated culture take control of its individuals' behaviors.

Due to the nature of the exploration and the exploitation units, both require fundamentally different architectures and competencies that create the paradoxical challenges that come with ambidexterity. "Whereas exploration has been associated with flexibility, decentralization, and lose cultures, exploitation has been related to efficiency, centralization, and tight cultures" (Lavie, Stettner, & Tushman, 2010) In this sense, O'Relly & Tushman (2011) propose, that it is critical for the organization to assure "an articulation of a common vision and values that provide for a collective identity across the exploitative and exploratory units" according. In their research, the authors suggest that in the absence of shared vision and values, there will be no collective identity to promote trust, cooperation and long-term perspective, which leads to possible failure of the company.

| Exploitation              | Exploration               |
|---------------------------|---------------------------|
| Refinement                | Search                    |
| Efficiency                | Variation                 |
| Selection                 | Experimentation           |
| Implantation              | Discovery                 |
| Focus                     | Flexibility               |
| Discipline                | Creativity                |
| Task accomplishment sense | High acceptance to change |

| Goal centric          | Not afraid of taking risks |
|-----------------------|----------------------------|
| Uncertainty avoidance |                            |

Table 2 Organization Characteristics for Exploitation and Exploration Units (Visser, Petra C.de Weerd-Nederhof, Song, Looy, & Visscher, 2010)

**Proposition 6.** There must be a unifying vision, values, and culture that provide for a collective identity across the exploratory and exploitative units.

In Table 2, the characteristics of each of the units are described; those characteristics are very different, and the coexistence of them inside the same organism result extremely challenging and ambiguous. The individuals of each of the units differed from one and other due to the individualities required to perform their activities. Because of this differentiation, the culture that arises inside both units could vary, therefore, a common understanding of the vision and goal of the company is imperative to make both units coexist and collaborate. (O'Reilly III & Tushman, Lead and Disrupt: How to Solve the Innovator's Dilema, 2016)

In this sense, a culture that fosters diversity and empowers individuals to follow new challenges and remain competitive is critical in the process of contextual ambidexterity (*Guppta., 2016*)

The company's identity impacts the exploration and exploitation units by shaping the evolution of the organizational culture; but also, the existing organization culture could shape the culture of the two different units, especially the unit that remains with the exploitative activities of the current product or service. The responsibility of the senior management team to revise the values and culture of the organization, assuring its evolution. (O'Reilly III & Tushman, The Ambidextrous Organization, 2004).

Building a new culture within a new unit represents a significant challenge because many of its individuals carry with the "old" values, norms, and behaviors.

The two separated units present different inner-cultures. (O'Reilly III & Tushman, The Ambidextrous Organization, 2004).

Wang & Rafiq (2014) found that a thriving ambidextrous organizational culture possesses forth characteristics: (a) active engagement and participation of the unit members in every activity performed by the unit; (b) adaptability to the continuously changing conditions outside the organization without abandoning the internal responsibilities; (c) normative assimilation and consistency with the norms and the conduct of the company; and (d) an strategic perspective of combining economic and non-economic goals.

The authors, found in their work, that the ideal way to implement ambidexterity is by embedding those four characteristics into the unit culture. The principal and most potent is involving individuals in shaping the new organizational context and culture.

The culture in an ambidextrous organization may be developed from bottom-up instead of using the traditional top-down approach. (Wang & Rafiq, 2014) The investigation of the authors refers to a contextual organization, where the same individuals perform at the same time, both exploration and exploitation. But what happens when the units are separated, and the organization follows a structural ambidexterity approach? The answer may imply having the same four principles proposed by the authors in each of the units.

#### 3.2.1 The Ambidextrous CEO

As mentioned by Nieto-Rodriguez (2014), the CEO is the primary driver of the organizational culture; he/she needs to own the vision, the culture, and the values of the transforming organization. The CEO is responsible for spreading the vision through the organization. An active ambidextrous CEO should have a paradoxical mindset and should foster the ambidexterity behavior of the organization. The CEO is responsible of creating a business's vision and culture with an emotionally compelling identity that should give the people a common purpose and prepare them to embrace the constant change and the pressure the transformation brings.

The ambidextrous CEO is responsible for design the new structure and brings the senior team needed in each of the functions; they should create balance in their C-Suites having exploiters and explorers, as GM's CEO says, the task is bringing to your team those who pursue order and optimization and those who give the questions. The CEO should magnify the need to communicate the transformation strategy across the entire organization persistently. The CEO's responsibility is to create systems to incentivize optimizations and at the same time, incentives the exploratory team to drive for disruptive innovations. Due to the environment where a transforming company is, the CEO should foster a culture of risk taking, but not taking the risk for the sake of it but a more reasoned chance. (Finzi, Firth, & Lipton, 2018).

In sum, the Ambidextrous CEO should engage the senior management team and the entire organization around a strategic aspiration defining an overarching vision that requires the efforts of the exploration and the exploitation units. Should establish and emotionally captivating identity across the business. Should avoid the tensions of the two units in low levels and should encourage C-team to take decision to solve the paradoxes and should define clear objectives for both units.

Proposition 7. There must be an Ambidextrous CEO.

#### 3.2.2 The motivations from people in both units

Lawrence & Lorsch (1967) referred to structural differentiation as "the state of segmentation of the organizational system into subsystems, each of which tends to develop particular attributes about the requirements posed by its relevant external environment" (Lawrence & Lorsch, 1967). It creates differences across the organizational units, in regards to the individual's mindsets, the time of achieving the goals, the team orientations, and its functions as the product and market domains. Duncan (1976) proposed a model for designing organizations for initiating and implementing innovations. The initiation stage of the innovation process has an organizational structure featured by a high degree of complexity, low formalization, and little Centralization. (Pandey & Sharma, 2009).

Structural ambidextrous organizations allow the coexistence of inconsistent and paradoxical exploratory and exploitative efforts at different locations, where motivations are built differently for each of the units. For the exploratory one, the motivation emerges from searching for new opportunities on the mainstream markets and the exploitation; it comes from improving creating more value to the existing business. (Kumar & Bhaduri, 2011)

Senior teams in a structural ambidextrous organization typically face role conflicts that may affect the quality of the decisions and the objectiveness that is required. (Jansen, George, Van den Bosch, & W. Volberda, 2008) When senior team members are responsible at the same time for the exploratory and exploitative units, the likelihood of conflict is intensified (Prange & Schlegelmilch, 2014)

**Proposition 8.** The big challenge of having structural ambidexterity is for the senior management team to balance the interests of both units.

Proposition 9. Both organizations have senior management support

A structural differentiation between the two units may enhance self-interested behavior, in which senior team members may perceive direct competition regarding the allocation of in many cases, scarce resources. The race for, resources and recognition from the management team in the different units, may permeate the entire organization, enabling the creation of subcultures inside the units (Lane, 2000)
Fostering engagement and participation among the individuals of the explorative organization maybe not difficult, as the team members are incentivized and excited to create, discover, and propose new alternatives for the company. The excitement of the explorative unit could create perfect conditions to develop a culture from the bottom to the top. In the other hand, the individuals of the exploitative organization - which in the 90% of the cases remain with the people that have already worked for the organization- may not show the willingness and engagement to evolve their current culture, they may feel comfortable with their acquired values and behaviors, therefore, change for them represents an enormous effort that may be difficult to accomplish. (Wang & Rafiq, 2014).

In line with Wang and Rafiq (2014), to design a culture that supports differences and unity at the same time is one of the biggest challenges of becoming ambidextrous. The organization must have very different individuals performing those activities. Theory, suggests that a paradoxical culture could be sustained by emphasizing unity at the firm level while allowing units and groups to have different subcultures. (Junni P., Sarala, Tarba, Liu, & Cooper, 2015).

This paradoxical culture could be reinforced and maintained by the company's unifying culture in which there are values supporting differences and others supporting homogeneity.

**Proposition 10.** The exploitative unit must be shaped by people who work in the current business while the explorative unit should have people coming from other industries (to avoid bringing the old culture).

Senior teams in ambidextrous organizations are expected to recognize and understand ambiguous and conflicting expectations across the units to create workable strategies and avoid conflicts between the groups. Resolving this tension is a crucial element of the organization's ability to develop integrative and synergetic values across the units to successfully achieve ambidexterity.

Junni et al (2015) Concluded, "prior studies suggest that a cohesive culture integrates people from diverse backgrounds and from structurally separate units around a shared vision and values, which ultimately contributes to ambidexterity at higher organizational levels. However, it is essential that culture includes values that encourage diversity, psychological safety, and trust. Otherwise, the explorative side of ambidexterity will suffer. " (Junni P., Sarala, Tarba, Liu, & Cooper, 2015)

**Proposition 11.** The unifying culture should promote diversity and include values of psychological safety and trust.

Which type of organization is the best one to support the paradoxical situation of having exploitation and exploration in separate units? For example, (Cameron, 1999) propose clan, adhocracy, hierarchy, and market cultures as the main types of organizational culture. (Junni P., Sarala, Tarba, Liu, & Cooper, 2015) Suggest that an ambidextrous culture could feature elements from several cultural types.

#### 3.2.3 Organizational Culture Types

According to the literature, there are four organizational culture types: Clan culture, Market culture, Adhocracy culture, and Hierarchy culture.

## 3.2.3.1 Clan Culture

It is a friendly working environment. The individuals have a lot of commonalities and often is compared with a large family. The leader of the Clan culture is perceived by their employees as mentors or as a father. The central values of the organization are loyalty and tradition. The team has great involvement. The emphasis of the organization is long-term Human Resource development and look at the unity of the people through morals. The success of the organization is defined as the succeed of addressing the needs and the caring of the customers. The culture promotes participation, consensus, and teamwork.

The main characteristics cited by OCAI online (OCAI, s.f.)

Leader Type: facilitator, mentor, team builder

Value Drivers: Commitment, communication, development

**Theory of Effectiveness:** Human Resource development and participation are effective **Quality Improvement Strategy:** Empowerment, team building, employee involvement, Human Resource development, open communication

## 3.2.3.2 Adhocracy Culture

This culture emphasis in flexibility and discretion, similar to the clan culture. The adhocracy culture is dynamic and foster creativity. The individuals are willing to take risks existing, and they concern for differentiation. The leaders are perceived as risk takers and innovators. The bonding elements are innovation and experimentation.

The long term of this culture is to create new resources, grow and adapt to the constant changes. The employees thrive for the development of new product and services. In this organization, when individuals speak up and have their initiatives is well perceived and valued. The main characteristics cited by OCAI online (OCAI, s.f.)

Leader Type: Innovator, entrepreneur, visionary
Value Drivers: Innovative outputs, transformation, agility
Theory of Effectiveness: Innovativeness, vision and new resources are effective
Quality Improvement Strategy: Surprise and delight, creating new standards, anticipating needs, continuous improvement, finding creative solutions

# 3.2.3.3 Market Culture

In this organization, things get done effectively and efficiently is highly appreciated as it is a culture based on results. The individuals are competitive, and goals are driven. The leaders are producers, rivals, robust, and have very high expectations. What maintains de organization together is their emphasis on winning? Success and reputation are significant. The definition of success in this culture is market penetration and stock's prices. Thus its organizational style is driven by competing.

The main characteristics cited by OCAI online (OCAI, s.f.)

## Leader Type: Hard driver, competitor, producer

Value Drivers: Market share, goal achievement, profitability

**Theory of Effectiveness:** Aggressively competing and customer focus are effective **Quality Improvement Strategy:** Measuring client preferences, improving productivity, creating external partnerships, enhancing competitiveness, involving customers and suppliers

# 3.2.3.4 Hierarchy Culture

The hierarchy culture is a structure and formal environment. The defined procedures mandate what people do. In this context, leaders strive to maintain the organization working smoothly, and they feel proud of their efficiency-based organization. The goals of the culture are stability and positive results achieved with efficiency and seamless execution. Success is defined as delivered, smooth planned, and low-cost results. Leaders must assure results and predictability.

The main characteristics cited by OCAI online (OCAI, s.f.)

Leader Type: Coordinator, monitor, organizer Value Drivers: Efficiency, timeliness, consistency, and uniformity Theory of Effectiveness: Control and efficiency with capable processes are effective **Quality Improvement Strategy:** Error detection, measurement, process control, systematic problem solving, quality tools

The type of culture of each unit of the Product Development ambidextrous organization may differ as both strive to achieve different goals, which create two sub-cultures. Cameron and Quinn (1999) propose clan, adhocracy, hierarchy, and market cultures as the main types of organizational culture. However, there is no evidence of which of this sub-culture should follow each of the units. (Junni P., Sarala, Tarba, Liu, & Cooper, 2015) suggest that an ambidextrous culture could feature elements from several cultural types.

**Proposition 12.** The challenge is to define which type of culture fit best to the new unit and which culture will be the unifying one.

#### 3.2.4 Incentives.

Different studies have suggested that a "common fate" incentive system for the two units, has a direct impact on the possible competition of the individuals from the exploitation and exploration units; in theory, this system was proposed to foster collaboration among the teams.

However, a study made by Jansen, Tempelaar, van den Bosch & Volberda in 2009, showed that a "common fate" system does not contribute to alleviating potential problems associated with the efforts of the two units. "A possible explanation for the positive but insignificant relationship could be that the creation of outcome interdependency through senior team contingency rewards does not encourage senior team members to reconcile conflicting interests across differentiated exploratory and exploitative units" (Jansen, Tempelaar, Bosch, & Volberda, 2009)

Lou Gerstner, the former CEO of IBM, described how "to develop a unified outlook, the senior team was rewarded on company-wide metrics, not line-of-business results or financial metrics" (Harreld, O'Reilly, & Tushman, Dynamic Capabilities at IBM: Driving Strategy into Action, 2007). "When members of the senior team are rewarded for line-of-business performance rather than the business as a whole, there is often an increased focus on the short term and independent results rather than long-term collaboration" (O'Reilly III & Tushman, Research in Organizational Behavior 28, 2008)

On the individual level, (Chang, Yang, & Chen, 2009) found that incentives related to the required outputs of each of the units increased the number of them. For the individuals of the

organization, a reward system considered as "fair" positively relates to the success of ambidexterity in each of the units.

The challenge in terms of the incentive system is to recognize which are the incentives necessary in each of the units. As described in Table 2., the characteristics of the exploitative and the explorative are different, thus the people and their motivations. The incentives which stimulate people who are continually looking for new developments are distinctive to the motives for the people striving for effectiveness and customer satisfaction.

Proposition 13. Every unit must have its incentives program.

#### 3.2.5 Strategy and Vision

(O'Reilly & Tushman, 2004) "A bright and compelling vision, relentlessly communicated by a company's senior team, is crucial in building ambidextrous designs".

The authors suggest that to succeed in ambidexterity, the organization must redefine its strategy justifying the importance of having both units inside the same organization.

Without a rational and intelligent justification for ambidexterity, there will be no rationale for why the profitable exploit unit, should give up resources and work in many cases under pressure to fund uncertain explore efforts.

The literature highlighted the difficulties of being an ambidextrous company in terms of the managerial challenge that it represents, due to the potential of inefficient activities, process, and results that might generate.

To engage in ambidexterity, the managers of the explorative unit should be conscious of the efforts the unit requires such as continuous experimentation activities, iterative activities and long-term development projects which can turn out in long-term returns rather than in immediately and high-profit results. (O'Reilly III & Tushman, Ambidexterity as a dynamic capability: Resolving the innovator's dilemma, 2008)

The exploitative leaders must also face the fact that exploration will redirect resources and attention from exploitation. Therefore they may focus on generating sufficient funds to help the transformation occur.

In the absence of a vision which denotes the importance of exploration, engaging in experimentation and the possible long-term benefits of it, the risk of only focusing on short-term profitability by improving process, reducing cost and being more efficient could arise. That is the case of those organizations where ambidexterity is conducted as a contextual

structure and not a structural one. (O'Reilly III & Tushman, Ambidexterity as a dynamic capability: Resolving the innovator's dilemma, 2008)

A cornerstone of this type is a clear strategic intent that justifies the importance of ambidexterity combined with an overarching strategic vision that provides for a collective identity (O'Reilly & Tushman, 2007). In a study conducted in 2007 by O'Reilly & Tushman analyzing large European financial services firms, found that a shared vision among senior managers was positively associated with ambidexterity. Jansen et al. (2008) explain, that management's shared vision "contributes to a collective understanding of how senior team members might resolve contradictory agendas of exploratory and exploitative units and engage in productive behaviors to develop a collective response to multiple environmental demands" (p. 6).

Mechanisms for linking and integrating exploitation and exploration include shared vision (Jansen et al., 2008; O'Reilly and Tushman, 2004, 2007), senior management team coordination (Smith and Tushman, 2005), and systems for knowledge integration.

As O'Reilly & Tushman (2008) noted, 'the senior team's role is to institutionalize dual architectures and build senior team processes to deal with the conflicts and costs' (p. 7) associated with ambidexterity. Senior management teams must be able to both embrace the paradoxes related to jointly pursuing exploitation and exploration (Smith & Tushman, 2005) as well as manage the information processing and coordination demands (Lubatkin, 2006). Jansen et al. (2008) found that when senior team members shared a vision and received team contingency rewards, they were better able to pursue ambidexterity. Interestingly, they also found that "transformational leaders are necessary to force socially integrated teams to critically debate and openly discuss conflicting task issues" (p. 22).

Ambidextrous organizations create inevitable conflicts between operating units. The shortterm, efficiency and control of a mature unit is at odds with the uncertainty and inefficiency of experimentation. The way the tensions are resolved is a crucial element in the ability of an organization to simultaneously explore and exploit. Larger and more profitable businesses are likely to lay claim to needed resources. To succeed requires what refers to as "strategic debate"—the ability of senior leaders to encourage dissent and permit would-be champions to argue their points (O'Reilly III & Tushman, Research in Organizational Behavior 28, 2008) In conclusion and as validated by O'Reilly and Tushman (2011) after assessing 15 companies, the most-successful ambidextrous designs had leaders who developed a clear vision and collective identity.

In the case of USA today and its journey into transforming the business from a printing newspaper to a digital one successfully, the lessons learned: The inertia of the old business did not stop the new because of the articulation of clear strategic intent. (" a network, not a Newspaper." Curley, the former CEO of the USA today, provided a collective identity in the form of shared values (fairness, accuracy, and trust) that applied across the organization.

An overarching strategic vision is critical to assure the high-level integration of the units. In the case of CIBA, "healthy eyes for life" was speaking and meaningful to all parts of the company. The literature considers this move largely rhetorical, with a significant effect. It emphasized the connections between the revolutionary initiatives and the conventional operation, conveying together all employees in a shared reason and avoiding any organizational separation between the units.

An example to understand the importance of having a shared vision unifying the efforts of the exploitation and exploration units is the case of one of the biggest tobacco companies on the market. In their webpage, it is possible to observe how the new product alternatives, reducedrisk products, are embedded in the heart of the company. Their new business model and vision are clear: to have a smoke-free world. Different digital campaigns, the scientific explanation, and educational materials can be found on their web page to support current smokers to change their habits to the RNGP products. These are the activities and results of the exploration efforts. In parallel, the exploitation activities are also mentioned and considered vital to the process of transformation. As written in the company's 2018 annual report cigarettes (Traditional, "old" business) provide a critical source of investment to the new alternatives towards the transformation to a free smoke-world. "In 2018, we laid the foundations for the transformation of our broader value chain, focusing on delivering financial value with the agility required by our dynamic business and developing the capabilities critical to future success. This has already led to major cost efficiencies: lower tobacco leaf costs through a better sourcing footprint, factory headcount reductions through manning and shiftpattern changes, a simplified combustible tobacco portfolio, and improved metrics for material waste, tobacco yield, and labor productivity" (PMI, s.f.).

In this context, we can conclude, that a unifying element, a shared vision, which gives both the same importance, it is incredibly relevant to achieve the new strategy and perform the two activities; revolutionary innovation may not be possible without leveraging on the "old" business, the exploration unit needs to capitalize from the exploitative in order to success.

# 3.3 People and Skills

Nieto-Rodriguez (2014) remarks, that, the biggest challenge for the People and Skills pillar of an ambidextrous organization is to align two different sets of Human Resources models perfectly.

The human resource must define how should be the characteristics of the people integrating the units. Snell and Kang (2008) talked about which type of person needs to be considered for the team definition, the Specialist, and the Generalists. The authors define that specialists have a deep, very localize and in particular domains, while generalist, tend to be more versatile and multiskilled, which can be used across different situations. (Kang & Snell, 2009) Brown and Duguid (1991) conclude that due to the domain-specific knowledge of the specialist people, it tends to be more comfortable and more effective to develop and assimilate new, indepth knowledge within a narrow range of parameters. The authors suggest that the specialist tend more to the exploitative activities rather than to the explorative ones (Brown & Duguid, 1991)

Researchers have noted that generalist does not involve themselves in activities that require extensively focus over time, less rooted in a particular perspective and broader perspective to different domains. For decision making, a full spectrum with diverse mental models gives generalists the capacity for varied interpretations of problems and situations (Sutcliffe, 2002)These characteristics give to generalist a variety of knowledge that could be used to comprehend, adapt, combine, and apply to develop understanding to the future. Generalist is more incline to exploratory activities. (Shane, 2013)

Choosing the people and skills for the ambidextrous organization requires to define where the people should come (outside or inside from the current organization). O'Reilly III & Tushman (2016), illustrate the case of IBM in this direction. IBM tended to select younger and less experienced people to manage the new innovative projects. IBM's logic was that younger leaders would be less permeated with the "IBM way" and more likely to try new approaches. These leaders often failed. The company comprehended that younger managers did not have the networks needed to encourage a new business within the larger company. "We were not putting the best and brightest" on these projects, says IBM's VP (Bruce Harreld). Today, the approach of the company is different. "We bring in very experienced people, who have built

big businesses, have learned a lot along the way, who understand IBM, and are comfortable knowing what to change and what to test," says Harreld.

However, running an emergent business is very different in comparison with the traditional and mature ones. Therefore, new leaders should be trained in the skills needed for emerging business prospects. Harreld points out that "in an established business, it's all about keeping things under control. In an emerging business -the exploratory unit- there's a lot that the organization does not know, and it is the responsibility of the leaders to discover, learn, and adjust." The challenge for the leaders in the "new" business is to get strategic clarity," says Harreld.

Chrzan (2006) found that when members had a previous association because they had worked together in the same company, tended to lead the company to perform exploitative activities. (Chrzan, 2006) In contrast, when members had a diverse association when those people had worked in a different organization, they tended to explore. Prior studies suggest that a cohesive culture integrates people from diverse backgrounds and from structurally separate units around a shared vision and values, which contributes to achieving ambidexterity. (Junni P., Sarala, Tarba, Liu, & Cooper, 2015).

GE's CEO described the importance of embracing a new kind of talents to transform the business. However, he also remarks on the importance of having an experienced management team. (Jorgensen & Becker, 2017)

In Amazon, the company houses a highly aligned senior team from which Amazon demands the best. "Every time we hire someone, he or she should raise the bar for the next hire, so that the overall talent pool is always improving" This process includes using "bar raisers" as an explicit measure in the selection process for more senior hires, whose exact function is to ensure quality and cultural fit of new hires.

#### 3.3.1 Ambidextrous Managers and Leaders

According to Nieto-Rodriguez (2014), leadership is where everything starts and ends in a company. Although the company's culture and values are defined over time and can remain unchanged for decades, the CEO and top management have the power to alter these elements with their messages and actions at any moment. In an ambidextrous organization, *"the CEO is the main driver of change; thus, he or she needs to be the first one to adopt the culture and values and to gain top management's support in transmitting these principles to the rest of the organization. Top management needs to be aware of how a structural ambidextrous organization works and interacts. The organization requires managers that* 

understand the importance of balancing the two units; leaders need to have an agreement about the relevance of them" (Nieto-Rodriguez, 2014)

Research has documented that unity of purpose is a critical element of successful ambidexterity. Without a clear consensus in the senior team about the strategy and vision, there will be less information exchange, more unproductive conflict, and a diminished ability to respond to external change (Hambrick, 2007). Mixed signals from the senior team make the already delicate balancing act between exploration and exploitation more difficult. (O'Reilly & Tushman, 2007)

O'Reilly III and Tushman (2004) found that one of the most important lessons through their investigation is that structural ambidextrous organizations need ambidextrous senior managers—executives who can understand and be sensitive to the needs of very different kinds of businesses (O'Reilly III & Tushman, The Ambidextrous Organization, 2004)

The management team must have a unity of purpose, without clarity of the strategy and the vision of the company, the information between the two units won't flow, there could be a conflict which can derivate into unproductive battles and therefore not able to respond to the external challenges (Carmeli, 2008).

Mixed signals from the senior team make the already delicate balancing act between exploration and exploitation more difficult.

Just as few of the people are naturally ambidextrous, many managers fail to complement conformity with adaptability (Philip A. Dover, The ambidextrous organization: integrating managers, entrepreneurs and leaders, 2010). Why is this so? Interviews to managers at a leading international airline made by Hodgkinson, Ravishankar, Fischer (2017) found that more than problematic personality traits, a series of cultural barriers constrain managers' agile decision-making instincts and stop them from enacting ambidextrous behaviors (Hodgkinson, Ravishankar, & Fischer, 2017)

Fischer et al., (2017) found that in some organization, managers are a drive to follow norms and a have a strong focus on managing everything correctly than when they do not do it that can seriously influence strategic decision-making, which represents a big challenge to the structural ambidextrous organization. The author concludes," *There is an urgent need for organizations to be aware of the possible misalignments between ambidextrous pursuits and the cultural forces that drive action. A deep understanding of their organization's cultural universe is a crucial first step for managers aspiring to outwit better and outperform competitors*". (Hodgkinson, Ravishankar, & Fischer, 2017) Because ambidexterity involves radically different activities, senior managers must be able to exercise their judgment to manage continuity and discontinuity simultaneously effectively, which is difficult to achieve when cultural forces resist or oppose. In large well-established firms, the status quo is often encouraged, and risky decision-making is rarely pursued by managers, which breeds a culture that focuses on minor operational modifications rather than the pursuit of radical change or new opportunities (Hodgkinson, Ravishankar, & Fischer, 2017)

As a significant aspect, to manage structural ambidexterity, it is crucial having seniormanagers knowing how to handle the challenges of both sides, there is necessary, as cited by O'Reilly and Tushman (2008), that organizations eliminate those to oppose to the ambidexterity form.

The authors, illustrate, how in the case of transformation at the newspaper of USA Today (from Printing to digital), the CEO replaced five of his seven senior managers. At Ciba Vision, 60% of the senior team was replaced, when they change their vision to achieve new business ideas. Lou Gerstner, who returned almost his entire senior team upon his arrival at IBM, is on record noting the potential importance of "public hangings" to ensure focus. The constant communication of the strategic intent and vision are essential for the success of ambidexterity (O'Reilly & Tushman, 2007)

The importance of ambidextrous leadership and its fragility, suggested by Gilbert's (2011) makes a distinction between resource and routine rigidity (Gilbert Probst, 2011). Resource rigidity is defined as a failure to change resources patterns. The research reviewed, on organizational adaptation reveals an interesting paradox consistent with Gilbert's distinctions. In many of the well- known corporate failures, the incumbents had the technology needed; that is, they had invested in the resources required to adapt (Gavetti, 2000). The author concluded, the problem was not the Rigidity on the resource's management but the failure of the managers in capturing the value from those resources- a failure of routine rigidity.

Looking at examples of companies that have failed, O'Reilly & Tushman (2016) bring to the table the case of Kodak, Rubbermaid and Deluxe Corporation (a 90-year-old check printing company), the authors explained how the failures are unique in details but how they have the same denominator: failure in leadership. Every one of the firms was, at one point, a great success in their domain and had everything needed to continue to be successful. The catastrophe was that the leaders of the companies were austere, unable, or unwilling to sense new prospects and to reconfigure the firm's resources in ways that permitted the organization to last and prosper.

Regardless of a company's size, success, or tenure O'Reilly & Tushman (2016) argue, that it's the leaders call do the most fundamental and important question for a company survival: *"How can both exploit existing assets and capabilities by getting more efficient and provide for sufficient exploration so that we are not rendered irrelevant by changes in markets and technologies"*? (O'Reilly III & Tushman, 2016)

Theory suggests that the exploitation unit must be led by managers, while the exploratory unit must have Leaders. Managers are described by leadership theory, as efficiency-oriented, pragmatic, and people who always strive for control and stability. They have clear strategies and can define processes to achieve them; they possess a great ability to solve problems. One of the most valuable qualities of managers is their ability to fast reaction to challenges and their approach to solving problems based on data analysis. (Probst, Raisch, & Tushman, 2011).

Literature, describes leaders as innovation-oriented and visionaries, people with a clear focus to create new opportunities. Leaders can tolerate chaos and failure. They are considered as charismatic and provide their teams with autonomy. They foster a sense of belonging and commitment by creating a shared vision for the team and looking for the "one-lifetime opportunity." Leaders, drive forces behind their teams 'ability to develop innovative solutions. They have excellent communication skills. (Probst, Raisch, & Tushman, 2011)

In sum, the senior management should combine the characteristics of managers and leader with leading the structural ambidextrous organization, while the managers in each unit should be determined based on their characteristics of managers and leaders. Senior Managers should commit, support, nurture, and found the new venture and protect it from Managers who could kill it.

The BCG Henderson Institute, plyometrics, and Professor TejPavan Gandhok from the Indian School of Business, studied the strategy skills and neuroscience profiles of around 360 strategists with diverse backgrounds across different regions. They found that different emotional and cognitive qualities (Emotional traits known as cognitive neuroscience measures) can predict if managers are going to succeed in the environments they need to perform. Research results demonstrated that what is required to be an excellent strategist is highly context-depend. Therefore, companies must understand the skills individuals need in each environment (unit) to place the correct people to lead it.

The authors described the exploitative unit as an ideal environment (predictable, analytical, and plan-execute approach) and the exploratory as a shaping environment (not predictable, engage to a different ecosystem, co-evolving teams). In Figure 7, are described the traits required in each unit and the traits required from the senior management (ambidextrous managers). For the ambidextrous managers, the qualities required are a combination of the essential traits from the classical and shaping environments.



Figure 6. Each Environment Calls for Distinct Set of Traits. (Reeves, et al., 2019)

Chen (2017) suggest that the main challenge for senior management is that "Although promising and practical, structural ambidexterity places enormous job demands on top executives. It requires top executives to manage different units with different structures, create new units when needed, intervene in these units selectively, and coordinate different units to achieve organizational ambidexterity. However, top executives face many constraints and limitations that may prevent them from achieving ambidexterity. They can become the bottleneck of structural ambidexterity and cause structural ambidexterity to fail." (Chen, Dynamic ambidexterity: How innovators manage exploration and exploitation, 2017)

**Proposition 14.** The main challenge confronted by leaders is balancing exploration and exploitation.

**Proposition 15.** The organization must assess the traits of the people to allocate them accordingly.

# **4 Empirical Analysis**

In the subsequent, we pursue a qualitative research approach based on semi-structured interviews conducted with employees of Tobacco Inc. to determine if there is a gap between theory and reality and the consequences of it on achieving ambidexterity. The quality research also helped us to draw on the challenges the organization phases behaving ambidextrously and assisted on the determination of the unifying elements the firm has to conciliate the tensions between the two units. To assess the gap, we formulated propositions based on a literature review on three main pillars to achieve ambidexterity. To guarantee appropriate examination, we draw on the theoretical framework as discussed in section 3 by distinctly analyzing data per pillar.

# 4.1 Methodology

### 4.1.1 Sampling

The tobacco industry was selected out of a personal interest of the author due to the unprecedented transformation in the sector. The transformation of the company aims to minimize the impact of cigarettes in the current consumers introducing to the market reduced risk-new generation products. The reduce-risk-new generation products (RNGP) are products that have the potential to represent less risk of harm compared to cigarettes.

The interviewees selected for empirical research are employees of a company in the Tobacco industry. The firm has two units, one dedicated to the business in the mature market (exploitation) and the other one dedicated to competing in a new market (exploitation). The seven respondents for this case study were chosen because they represent both units and due to their willingness to contribute to this study. Due to confidentiality reasons of the organization strategy, the name of the company and the information of the respondents cannot be disclosed. For the analysis of empirical research, the author used the name of Tobacco Inc.

|            | Years in Tobacco |                          |              | For the exploratory |
|------------|------------------|--------------------------|--------------|---------------------|
|            | Inc.             | Position                 | Unit         | unit                |
| Respondant |                  | Medium Manager           |              |                     |
| 1          | 10               | (Operations)             | Exploitative |                     |
| Respondant |                  |                          |              |                     |
| 2          | 9                | Medium Manager (HR)      | Exploitative |                     |
| Respondant |                  |                          |              |                     |
| 3          | 9                | Expert                   | Exploitative |                     |
| Respondent |                  |                          |              |                     |
| 4          | 3                | Medium Manager (Finance) | Exploration  | New Hire            |
| Respondant |                  |                          |              |                     |
| 5          | 2                | Expert (R&D)             | Exploration  | Relocated           |
| Respondant |                  |                          |              |                     |
| 6          | 6                | Medium Manager (R&D)     | Exploration  | Relocated           |
| Respondant |                  |                          |              |                     |
| 7          | 8                | Medium Manager (R&D)     | Exploration  | Relocated           |

Table 3 Sample overview- Respondents characteristics

In *Table 3*, is described the numbers that the respondents have worked in the company, the position that they currently have, the unit for which they work and in the case of exploratory unit people, if the employees were relocated from the "old" unit to the new one or if they were hired from the outside of the company.

## 4.1.2 Data Collection

For this case study, data will be collected by conducting narrative interviews with seven employees and managers from Tobacco Inc. Narrative interviews were selected as a method of data collection because compared to the other forms, like online surveys, this method provides the opportunity to interact and elaborate on the going with the participants about their views and experiences. Besides, the interviewer can inquire for further evidence in case of ambiguous answers. Each interview lasted about 40 minutes.

The narrative interviews were divided into three main parts: (1) understand if the company follows the concepts of the three pillars described in section 1. (2) Undermine if there are challenges related of having two separate units (2) determined what elements make the two units, one organization. People were interviewed one-by-one by the author of this master thesis. Interviews were performed from June 1st to June 13<sup>th</sup>, via Skype. Due to the sensitivity of the points discussed during the interviews; the respondents did not agree to be recorded. Handwriting notes were taken during the interviewees, and send it to the respondents to agree with it.

# 4.1.3 Data Editing

*Coding:* Codes were generated from the three pillars framework with 3, 7, and four codes per pillar. For the challenges, eight codes were defined. In terms of the boding elements of the organization, four codes were defined. After testing the codes on two handwriting codes, iterative adjustments were made to consolidate a short list. Handwriting notes were separately coded with color codes for each layer based as follow:

- L1 (Structure and governance) Strategic intent, organizational assets, separation
- L2 (Leadership and culture) vision, ambidextrous CEO, management support, relocation, diversity, subculture, incentives.
- L3 (People and skills) generalist, specialist, people traits, people skills.
- L4 (challenges) –timeframe, justification, value, vision, commitment, support, right people, unifying.
- L5 (Binding elements) emotional, vision, pride, values.

*Display and structure:* Microsoft Excel was used to structure the statements to match the working propositions with them. Specific data analysis software was not applied.

*Interpretation:* After relating code patterns with propositions, we asses the gap between the theory and reality. We identify the challenges and the unifying elements by doing direct questions and by looking at the correlations between the different answers from the respondents.

# 4.2 Discussion and findings

# 4.2.1 Gap between research and reality

In this chapter, the objective is to assess the gap that exists between the literature to successfully achieve ambidexterity and reality. To determine if there is a difference, the answers from the qualitative research are going to be used. The consequences of having a gap between theory and reality are going to be highlighted.

The literature suggests that the reason why business research is not applied to reality is that many of the organization's leaders are not aware of the research findings. (Zaccaro & Banks, 2004). Zaccaro and Horn (2003) also suggest that researches have often adopted a narrow focus on their research, limiting the applicability to the practitioners. (Zaccaro & Horn, 2003). The collaborators of the Harvard business review journal, pointed, that one of the reasons why

leaders do not follow suggestions from researches is because they are afraid for failure and fixed mindset, thus it is difficult to believe in others. (Kaplan, 2015).

Even though the literature on ambidexterity has increased in recent years, only the authors O'Reilly & Tushman (2016) have been clear on how ambidexterity could be achieved and what are the challenges firms will face on the journey. In 2018, a study made by The BCG Henderson Institute found that out of 2,500 public companies that they analyzed only 2% are successful ambidextrous organizations. (Haanæs, Reeves, & Wurlod, BCG Henderson Institude, 2018). The study describes how 2% of the companies perform in embracing innovation, balancing exploration and exploitation, addressing disruption, and how aligned was the organization.



**Figure 7**. The 2% Cockpit helps to review renewal strategies. (Haanæs, Reeves, & Wurlod, BCG Henderson Instittude, 2018)

To asses, if a Structural Ambidextrous organization follows what theory suggests to achieve a high level of ambidexterity, the interview started by formulating the question if they know the term Ambidexterity and it's meaning.

The seven respondents mentioned never heard the term before. The interviewees requested and an explanation of the concept. After clarifying the term, the total of the respondents recognized that the organization follows the concept. "[...] sure, we have a "new" unit that is dedicated only to invent revolutionary products, they are in charge of the RNGP's [...], but there, not only the scientists work, they also have commercial, marketing, digital, finance and HR on that new organization [...] off course we still have the "conventional" business where everything is about optimization". (See Appendix) People do not know the concept of Ambidexterity. However, they recognize, after explaining the meaning of the term, that their work for an ambidextrous organization.

The first conclusion from the empirical research is that, to achieve ambidexterity people do not need to be aware of what is the meaning of the term ambidexterity, what is important is to understand the implications of working in each of the units and the implications of it.

## 4.2.1.1 Structure and governance

The proposition one from the pillar structure and management, argue the need for having a convincing strategic intent that knowledgeable and logically justifies the explore and exploit strategy (O'Reilly III & Tushman, 2016). Based on the contributions of the seven interviewees, we have found evidence that Tobacco Inc. follows Proposition 1 as proposed by research studies on ambidexterity. The respondents argued that to achieve the transformation of the company; the Management team has explicit explained the importance of having both units. "We know that the cigarette business must keep running, what we make, in terms of profits, is crucial for the RNGP unit [...], it is essential that we keep the conventional business running with excellence and effectiveness to support the new products" (See Appendix). In the process of transformation, companies must have the necessary tension between exploring and exploiting. "We know that to transform the business and to support our vision; we must be more efficient, constantly looking for productivities and continue profit growing" (See Appendix). The interviewees have a clear understanding of the strategic intent of two units running and at the same time.

Respondents expressed how important for them is to have transparency from the management team in regards to the company strategy. "It is key to understand how our leaders define the path and the goal of the company; we like to listen to their perspective, what they expect from us and how we can contribute to the future" (See Appendix). The literature suggests that an ambidextrous organization have the risk of cannibalizing their own business; which goes correctly online with the strategic vision of Tobacco Inc, to convert the mature business to RNGPS.

The second question we addressed, related to Proposition 2, was related to the identification of the organizational assets and capabilities that the company could use to excel in the market with the RNGP products. We found that Tobacco Inc analyzed the competencies and skills from the mature business. The missing competencies as people knowledge were acquired, hiring people outside of the company with the relevant experience.

"The company took advantage of the heritage of the main brand [...] the first year the most iconic RNGP product used the brand of the most iconic one from the cigarettes, to create awareness [...] we also leverage the knowledge we have on tobacco processing, business acumen, quality control, the company heritage [...] in those areas that we did not have a clue how to operate, for example, how to sell electronics, how to position a product in the luxury segment, we had to hire new people. We are developing those capabilities" (See Appendix). "There are still many things, capabilities, and resources that we do not know we are missing, or we do know how to develop or we just acquired [...] after two years of the transformation [...], the most recent example is the division of R&D into two different subunits, one more focus to the scientific approach, and the other one more connected to the consumer and the experience with the products" (See Appendix).

Proposition 2 is validated with the actions the organization has taken to define resources and capabilities necessaries to have a competitive advantage on the market. Thus, the organization is still in the learning curve, to detect what are those capabilities that they lack to commercialize, create awareness, and increase the sales volume of the RNGP products. An open question remains and is related to the time window an Organization should take to acquire those capabilities. From the empirical research with Tobacco Inc, we could not deduct if the "late" restructure of the R&D unit had repercussions on the sales volume of their RNGP products. Further investigation on this subject is required.

O'Reilly and Tushman (2016) found how companies that have transformed have invested efforts in designing process to discover business opportunities, validate and scale them. *"Each starts with a clear strategic intent and a profound understanding of what assets and capabilities can be used for competitive advantage"* (O'Reilly III & Tushman, 2016).

As shown in Figure 2, when a company can leverage core business assets (Competences, Technology, manufacturing, marketing, sales, brand, channels) and the strategic importance of the new business is high, the set of strategic conditions for ambidexterity are met. O'Reilly and Tushman (2016) denote, that under those circumstances, *"to spin the exploratory unit out is to sacrifice the future or, at minimum, endure the efficiencies of not using available resources."* (O'Reilly III & Tushman, 2016). "[...] I cannot imagine having RNGP outside of Tobacco Inc, [...]it is not the same, that a company like us goes to the highest authorities in the United States asking to have the approval to claim that RNGP are products with less health-related risks than a conventional cigarette than a little company doing it....RNGP needs the credibility of Tobacco Inc." (See Appendix)

Academics point that the advantage of ambidexterity is the benefit the new business has from using the existing assets and capabilities to gain competitive advantage on the market and reach sustained organizational performance (Smith & Tushman, 2005).

Assessing proposition 2, led us to find that, the assessment of the resources and capabilities that provide a competitive advantage should help to determine which of the missing ones are imperative to be immediately acquired from the outside of the organization and which ones can be developed over time inside the organization. The absent knowledge critical to success in the new market can be obtained by hiring people who work in different industries but face the same challenges. The primary purpose and final goal are to speed up the learning curve on the new market.

To understand if Tobacco Inc. has a structural or contextual ambidextrous organization, the question made to the participants was: Do you have different structures for the RNGPS and the conventional business? And what are the benefits do you perceive from it. All the seven respondents mentioned that the main functions of the business have two structures, one working for RGNP and the other one working in conventional products. The supporting areas such as finance, HR, and IT do not have a separate structure but have teams supporting each of the units; there is a management team who oversee both units. "We have a Director for R&D for discovering and a director of R&D for consumer-centric activities (conventional business) and those two-director report to the VP of R&D" (See Appendix). As suggested by the literature, Tobacco Inc. follows the recommendation of having structural separation of the units, one dedicated to the mature market and the other one dedicated to the exploration of the new market. "We know with exactitude what we have, but we do not with the same exactitude what we are missing, I think because we have that gap of knowledge in many things in regards of this new business, I am not sure if we are hiring the correct people." (See Appendix)

"We do not know how the things with RNGP work, we are learning, and sometimes I feel like we are way behind [...], we wanted to be perfect with all the different RNGPs products we have [...], and because of that we came late to the market, our need for perfections make us not be the first ones on this disruption [...] I know that the high-quality standards are one of our strengths, and we took it as a capability to leverage. However, I am not sure if that superiority in quality as we know in the cigarette industry is valued by the RNGPs customers". (See Appendix). The assessment of the capabilities and resources needs to be checked on a time basis as the "new" business is under development and therefore changing as the capabilities the company needs to excel in it. (See Appendix)

In analyzing if the structural differentiation positively influences ambidexterity as per defined in Proposition 4, in the case of Tobacco Inc, we detected pros and cons. It is essential to mention that none of the respondents is part of the senior team management. Thus, we could not have key performance indicators results that measure the effectiveness of the two unit's separation.

From the empirical study we concluded, there are advantages of having two structures.

(1) People have time and resources to achieve their specific goals. The teams have particular tasks which allow them to focus and make faster and better units' goals. In contextual ambidexterity, when people must maneuver both activities, explore and exploit, the results of the organization could be affected. The results are affected due to the lack of resources and skills to perform contradictory activities at the same time (2) The exploratory business is more agile compared to the mature business, and it is possible because one does not interfere in the process of the other. (3) The exploration unit has room to learn because it does not need to focus on effectiveness and productivity optimization. (4) Distinct sub-cultures in each of the units that promote the values and motivate employees. (5) People can focus on their strengths because they focus on activities they dominate.

The disadvantages of the structural separation are (1) lack of a common denominator of the two units. Even, when the company has an emotional, strong vision, the people from the exploitative group feel the lack of clarity in their future, disinterested in supporting the business. (2) lack of equal support from the senior management, benefiting one unit more than the other (3) Segregation of employees between the "brilliant" (Exploration unit) and the "others" (Exploitation unit), leading to a lack of motivation and a sense of purpose. (4) High competitiveness among people from the exploitation unit to be considered to become part of the new unit. (5) High pressure to the new business to achieve results. That led to managers to control the processes instead of leading the teams to do it.

In Tobacco Inc, the evidence showed that the benefits of the structural separation in terms of creating a sub-culture that foster the values of the exploratory unit has been not possible. The effect of many people from the old business into the "new" has permeated the culture inside the RNGP organization, especially in R&D. "There are sub- units inside R&D and development that were built by managers from the "old" business [...] what I can see is that people are giving everything to become more innovative, agile, but the managers still have this mindset from the "old" times, they have to approve everything [...] we cannot act with autonomy and therefore we cannot bring disruptiveness at the pace we would like to". (See Appendix).

"In the teams where there is no presence of "old" people, as in the commercial organization, can do a great job in terms of being agile, they are failing fast and learning fast [...]they have

the keys to drive the car, is not like us that we are supposed to drive, but the manager does not let us" (See Appendix).

The structural separation between the new and the old business does not guarantee that the organization can achieve a high level of ambidexterity, the implications of building a new business unit with people from the old one, in the sense of developing a new culture, learning context cannot be developed as expected.

"Exploitative subunits are organized to be efficient, while exploratory subunits are organized to experiment and improvise. These highly differentiated organizational designs create fundamentally different learning contexts within the firm (Sutcliffe et al., 2000). To buffer the more fragile exploratory unit from the historically dominant exploitative unit, these highly differentiated designs employ limited structural linkages (O'Reilly and Tushman, 2004).

Even if Tobacco Inc, follows the research suggestion of having structural separation of the exploratory unit and exploitative one, a considerable proportion (approximately 60%-70%) of the managers in sub-units of the exploratory team come from the "old" business, avoiding the creation of a new culture based on values and process required to develop disrupting ideas. The "new" business is permeated with the "old" culture, the resilience to fail, the innovativeness and the behaviors expected from the new "unit" could be not perceived due to the influence from the old people.

The analysis of proposition 4 led us to conclude that there must be a maximum percentage of people who come for the mature business to the new one. The proportion must be defined considering the knowledge needed from the people into the latest business and the disposition to transform and adopt the new culture.

When the interviewees were asked about how they perceived the separation of the structure, the people from the explorative unit did not provide argumentation. However, the people from the "old" business mentioned their feel insecurely and demotivated. "We are second class citizens, while the people working in the RNGPS are the first-class citizens [...] we understand the separation of both units, but what we do not understand is the importance the senior team gives to the "new" business and not to us [...] we are the ones milking the cow to make the "new" business grow and they do not appreciate it, seems like they believe that in two or three years there will be no more "old" business [...] and honestly, I do not believe that we will stop selling cigarettes in the very near future" (See Appendix). According to Business Harvard review, employees want to be appreciated and respected for the exceptional skills and

contributions they can bring to the business, and the more the organization can support this, the better.

If Tobacco Inc. does balance its attention to both units, the repercussions are (1) people leaving the company and with them the experience and (2) low performance.

In regards of Proposition 5, and how the units are organized in terms of structure, the respondents mentioned that although in the last company's annual report, it is stated that the organization works project based, the reality is that in many departments is just being implemented. "The idea to work based on projects is that we become more agile, but not all the units need the same, in the department I work, we still are a functional project structure, whenever there is a project for RNGPS we dedicate a team just for it, but that is only in our area". "In certain subunits in the Science RNGP unit, we just started working based on projects; I know many others work with hierarchies" (See Appendix). At this moment, Tobacco Inc. is on a transition period; they aim to work in both units based on projects which go in the opposite direction from what is suggested in the literature. (Mishra & Soota., 2005)Claim *"that functional organization is suitable only if operations are continuous and routine."* In those cases, organization and management are not so relevant, and the specialists are gathered to do just one function, the disadvantage is that people could lose the picture of the entire project.

The implications of working as a project- based organization within the "old" unit are that people who are dedicated to focus in a very specific activity, such as purchasing, quality control, finance controlling, could lose the focus and the effectiveness the organization required. Also, inside R&D, there are dedicated teams to particular activities that should not change to work in a project-based structure. The consequences of not having implemented the suggested structure in the organization cannot be determined; more time will be needed to decide which results have the implementation of PBO in the entire organization.

| Research Suggestion                                       | Followed  | Consequences  |
|---|-----------|---|
| Proposition 1. There must be                              | Yes       | -People have clarity, feel                              |
| a clear strategic intent that                             |           | considered, and therefore                               |
| justifies the ambidexterity of                            |           | has a strong commitment.                                |
| the organization  |           |   |
|   |           | -Facilitate the transformation                          |
|   |           | of the company (no fear to                              |
|   |           | cannibalize their customers)                            |
| Proposition 2. There must be                              | Partially | -Leverage to excel in the                               |
| an explicit identification of                             |           | business.   |
| the organizational assets                                 |           |   |
| and capabilities to be used                               |           | -Lower speed to react to new                            |
| by the exploratory unit and                               |           | challenges /because you do                              |
| should give a competitive                                 |           | not have the right people and                           |
| advantage.  |           | skills.   |
| Duran a sitilary de Otaria tamat                          |           | Desce Francis in such with                              |
| Proposition 4. Structural differentiation will positively | Yes       | Pros: Focus in each unit,<br>more agile, room to learn, |
| influence ambidexterity. The                              |           | sub-cultures fitting the                                |
| exploratory unit must be                                  |           | needs.  |
| enough separated from the                                 |           | needs.  |
| exploitative one.   |           | Cons: Lack of unifying                                  |
|   |           | elements, lack of support to                            |
|   |           | one of the units, segregation                           |
|   |           | of employees, high                                      |
|   |           | competitiveness, high                                   |
|   |           | pressure to achieve results.                            |
| Proposition 5. The  | No        | -   |
| exploitative unit should work                             |           |   |
| as a Functional project                                   |           |   |
| structure while the                                       |           | -Could not be determined.                               |
| explorative as PBO.                                       |           |   |
|   |           |   |
|   |           |   |
|   |           |   |
|   |           |   |

 Table 4. Structure and governance' gap assessment (literature suggestions vs. reality at Tobacco Inc.) and consequences.

#### 4.2.2 Leadership and Culture

Considering Proposition 6, having a unifying vision, values, and culture that provide for a collective identity across the exploratory and exploitative units, we identified that Tobacco Inc has excel at formulating an emotionally and strong vision. The idea of transforming the business towards a world without the health-related risks of the cigarettes has a strong impact in how the people of Tobacco Inc. feel the need to push hard to help the company achieving such a utopic vision. The moral element of helping smokers around the world to reduce the risk of smoking-related disease is key to transforming the company. From the empirical research, we cannot conclude if there are an umbrella culture and values for the entire organization. The participants did focus on the vision of the company but were reluctant to expresses how the company culture and values are.

"Even we do not take to each other, we do not share any practice with the "old Business" we are all connected to the same goal, we want to have a world free of smoking-related health issues, that is our common denominator, that is what push us to achieve our objectives, even if we are very stress or we have created a very competitive environment" (See Appendix).

"We all know that the conventional product and the RNGPS compete for the same customers, that is part of the transformation, that is what we want to have [...] I consider myself, even still working in the conventional unit, the best ambassador of the RNGPS [...] I used to be a smoker and when I switched to one of our RNGPS I felt the difference [...] I want every smoker to feel the difference, that makes me go work every day" (See Appendix).

Research suggests that having an overarching culture, values, and vision makes companies to avoid the mistake of losing the big picture of the competitive environment. *"The U.S. railway companies failed to survive the rise of the motor car and the passenger jet in large part because they defined themselves too narrowly—by the assets they had built up rather than by what they did with those assets"* (Tushman, Smith, & Binns, 2011) When having a broader identity, the company can engage in the dichotomy ambidexterity implies.

The overarching vision and the goal of the transformation are defined and understood, thanks to the openness and the visionary view of Tobacco Inc.'s CEO. All the respondents mentioned that their CEO is the first pushing for innovation and committed to the transformation. "He knows what he is doing, sometimes is slow because of I also think he is learning, he knows the tobacco business perfectly, but he does not know much about electronics or pharmaceutical industry, and that's why I think he takes time to make some decisions."

(See Appendix). Tobacco Inc, according to the employees interviewed, has an ambidextrous CEO.

In finding if both organizations have senior management support, as indicated in proposition 8, we found that the "old" business is not perceived as a unit that deserves recognition and support. "We believe in the transformation of the company, for us, it has been very inspiring that we are moving towards a world where no more cigarettes are going to be sold, however, in the process, it would be very encouraging to receive more attention to the impressive things that we also achieve" (See Appendix). All the three interviewees from the "old business" mentioned "We do not receive the support from the senior management and the importance we deserve, [...] We have seen that the efficiency of the "conventional" business has been given by shooting down factories, it is understandable that we need to be more productive, but the way senior management is doing things with the "old" business does not make us very happy"

(See Appendix). These contributions may us led that Proposition 8, balancing the interests of the two units, as suggested by the academic research is not followed by Tobacco Inc. One person from the exploitative unit mentioned: "They fell in love with their product, they believe that they are the best, that they do not give any more importance to the "conventional" business" (See Appendix).

Researchers suggest that in many of the analyzed cases, the lack of support of the senior management team to the exploratory units has derivate in a failure of the ambidextrous organization, in the case of Tobacco Inc, seems like it is the opposite, the lack of support to the "old" business has caused the demotivation in people and losing the talent.

"Maintaining a balance between exploitation and exploration is complicated not only by the difficulty of determining what the appropriate balance should be but also by several ways in which learning itself contributes to imbalances" (Levinthal & March, 1993). As mentioned by the authors, the exercise of learning produces imbalances inside the organization, Tobacco Inc. is learning how to do business with the RNGPs, and that could be one of the reasons the senior management team gives more importance to the "new" unit.

Form the empirical research, we found, that the senior management is not given enough importance to both units. The reason is that the overarching vision does not give balance the importance of the activities from the two units. The unifying vision is emotionally strong to motivate people to transform happens; however, due to the lack of actions from the senior management to recognize the achievement of the "old" business, the people lose the motivation and the energy to cooperate with the company.

Proposition 10 defines that the exploitative unit must be shaped by people who work in the current business, while the explorative unit should have people coming from other industries. We consider this proposition as a critical element to achieving build the right culture in each of the units. Having people from outside the organization in the exploration unit, avoid that the behaviors, values, and culture form the "old" organization impregnate the "new" one, hindering the unit functioning and goals achievement. "In the sub-units of the RNGPS we have managers, old managers form the conventional business, they think that we need to do our developments following the processes and asking for permission as before [...] its funny, we have received the message that we should behave as a Startup but old these old guys do not get it" (See Appendix). "It is hilarious that after two years, we just realized that the VP of the Exploratory unit must not be the 60-year-old guy that has been in the business for years, things are starting to change but not at the pace should be" (See Appendix).

To successfully achieve ambidexterity, it is imperative that new people join the exploratory unit to create disruption, bring new ideas, and embrace failure and change. The CEO task is to provide the units with adequate individuals to lead and transform the business.

"We sometimes feel demotivated, especially the new hires, who join the company thinking like we are very open, we can innovate and speak up, there is no hierarchy and bureaucracy [...] which is not totally true, it is changing but not as fast as we would like" (See Appendix). It is essential to consider that the new business should also have people who know the business, the critical point to be considered is the willingness of the people to embrace new cultures, new ways of thinking and to be innovators.

Assessing if proposition 11 is followed by Tobacco Inc, we found that the proposition is not thoroughly supported. There is a culture that embraces diversity, transparency, and trust, but is not strong enough to move the entire organization, they respect each other as individuals and embrace diversity in the teams, but they do not do it between the two units. We found that the employees from the "old" business do not feel very secure in terms of their future inside the organization. This culture of diversity has been built in the company even before of the transformation, however, because the importance that is given to the "new" business and the separation of the two units, people from the old organization do not feel related to the people in the new organization. It is challenging to have a common denominator, to create a robust overarching culture; employees from both units believe in the same goal, but the way to reach the goal requires very different things from them, which makes having a general culture very difficult. Both organizations share values such as openness, dealing with ambiguity and

creativity; employees feel proud of their efforts towards a better future. However, there are not enough elements to connect the "old" and the "new" business more deeply.

Assessing the Proposition 13, regarding the incentive system in both organizations, (Chen, Dynamic ambidexterity: How innovators manage exploration and exploitation, 2017) recommends the exploratory unit to rely on emergent strategies, which means that rather than following specific and pre-determined goals, the management should explore and allow strategic directions to emerge on their own. These units should offer incentive structures that accept early failures and are focused on long-term success, as well as implement a searchoriented project (Chen, 2017). The empirical research showed that currently, both units have the same incentive system. However, HR has already planned to change it because of the characteristics of the people in both organizations. The compensation practices and performance appraisal procedures are directly related to the employee's actions to the accomplishment of the objectives and their motivation because their contributions are valued. (Subramony, 2009). "Before the company valued more the generalist, people who can rotate and evolve in different areas but we want to change that, with scientist we realized that not all the people have to follow the same path, and therefore the incentives should be not the same; a scientist value his relationship with knowledge, they like to be specialists, and we need to encourage that" (See Appendix)

| Research Suggestion  | Followed    | Consequences   |
|--|-------------|--|
| Proposition 6. There must be<br>a unifying vision, values, and<br>culture that provide for a<br>common identity across the<br>exploratory and exploitative<br>units. | NO          | <ul> <li>People feel committed, proud<br/>of working in the company.</li> <li>Have the big picture of the<br/>environment which allow them<br/>to have exploration and<br/>exploitation.</li> <li>They do not feel they have a<br/>unifying culture; there is two<br/>types of workers, the<br/>innovative, progressive, and the<br/>old ones.</li> <li>Demotivation, loose of talent,<br/>lower performance.</li> </ul> |
| Proposition 7. Ambidextrous<br>CEO   | Not defined | -Middle management in the<br>new business coming from the<br>old business.<br>-Strongly supporting the new<br>business neglecting the mature<br>business   |

| Proposition 9. Both exploration<br>and exploitation units have<br>senior management support  | NO         | -The attention goes mainly to<br>the exploratory unit. Which<br>creates in the exploitative unit:<br>Lower performance,<br>demotivation, loss of talent.                        |
|--|------------|---|
| Proposition 10. Exploitative:<br>Must have Management team<br>form the mature business.<br>Exploratory: Must have people<br>from outside | NO         | -Resistance to change<br>-Bureaucracy<br>-Avoid the creation of the new<br>culture in the exploratory unit<br>-Not agile as should be<br>-Low engagement from the new<br>hires. |
| Proposition 11. The unifying<br>culture should promote diversity<br>and include values of<br>psychological safety and trust.             | Not enough | -Segregation of employees,<br>the "cool" people, and the<br>"old" people.<br>-Uncertainty for the future<br>from the people in the<br>mature business.<br>-Low engagement       |
| Proposition 13. Every unit must have its incentives program.   | NO         | -Frustration<br>-Low motivation   |

**Table 5.** Leadership and culture gap assessment (literature suggestions vs. reality atTobacco Inc.) and consequences.

## 4.2.3 People and skills

The sub-unit R&D, of the RNGP, is conformed mainly by scientists. "Scientist is very qualified; they are cautious with the things they do. They like to explore. They are very proud of what they achieve. However, they do not understand the general business, they do not connect the points, and they do not integrate with the other teams" (See Appendix). In the case of R&D, the unit must have people specialized in very specific knowledge. In the case of

sub-units such as the commercial and marketing, the people should be more generalist, with broader knowledge, connecting dots and generating solutions very fast. The case of the generalist and specialists should be considered in detail because there are specific areas where the company demands specialized people to innovate and propose new products. That is the case of the pharmaceutical industry.

The empirical analysis to asses Proposition 16, is not conclusive. Managers did not disclose how the people's assessment in term of skills, attitude, and behavior is conducted to relocate employees from the mature business to the new business. Though, they argued that some skills and parameters permit them to understand which skills, values, and qualities the persons posses to be allocated in the specific unit.

In terms of leadership, the literature recommends that exploitative unit must be led by managers while the explorative by Leaders.

O'Reilly and Tushman (2016) suggest that leadership is about creating, providing, and communicating a compelling vision, about inspire and motivate and re-order the capabilities and resources of the organization as it evolves. Management is more to the execution side, assuring that everything is implemented on time and as planned. Most of the practitioners and researches suggest that both are necessary for an ambidextrous organization.

| Research Suggestion  | Followed       | Consequences  |
|--|----------------|---|
| Proposition 14. The exploratory<br>unit should have generalists<br>while exploitative unit should<br>have specialists. | Partially      | -The theory applies only for specific core business in the organization.  |
| Proposition 15. The organization must assess the traits of the people to allocate them accordingly.                    | Not conclusive | <ul> <li>Bring more people from outside to feel the gap.</li> <li>Not upskilling the "old" people willing to transform to continue growing in the company.</li> </ul> |

**Table 6.** People and skills gap assessment (literature suggestions vs. reality at TobaccoInc.) and consequences.

After analyzing the propositions suggested by the literature to achieve the maximum level of organizational ambidexterity, from the empirical research, a new proposition emerged in terms of how the units could work as an ambidextrous organization — the opportunity to exploit inside the exploration unit. "In the new material development at a certain stage, I also have to optimize, to look for best practices and to become more efficient in the way a work." Several recent studies recommend that the disparities between exploration/adaptability and exploitation/alignment are marginal and that these two sides may be highly compatible.

In a recent interview given by HR employee from Tobacco Inc, it was mentioned that to drive a positive change in the company, the company is willing to keep attracting talent and the upskilling to the current workforce. The interviewees declared that it is true the company is bringing more people from the outside, but there is not effort dedicate to upskill the people from inside. " I have been told that I need to be ready to transform, to acknowledge the gaps in skills that I have to continue growing in the organization, I do not see how they are helping us to become better prepare for the future."

The dynamic ambidexterity construct suggests that both approaches are appropriate means of achieving ambidexterity and that their substance will vary at different stages in the innovation process. The new concept proposed by (Dixon & Brohman, 2017) is dynamic Ambidexterity. The authors suggest the integration of the structural and contextual views of ambidexterity.

In sum, many propositions are met by Tobacco Inc. However, there are significant and challenging aspects of the ambidexterity that the company does not follow. The high percentage of medium management from the mature business in the exploratory unit does not allow the creation of a more agile, innovative, and self-managed culture. The imbalance in of the attention given to the units by the senior management team creates discontent among the employees of the mature business. It is imperative to avoid the permeation of the culture from the mature business to the new one. There are a higher number of capabilities and resources to be acquired from outside the organization to lead the new business than the capabilities to leverage from the mature business. Therefore the benefits of behaving ambidextrously are not relevant.

# 4.3 The challenges of the Ambidextrous Organization

In the previous section, we assessed the gap of the research suggestions to achieve ambidexterity vs. the reality of Tobacco Inc. Analyzing this gap, we encounter different challenges that a structural organization faces; those challenges are going to be described and discussed based on the empirical research conducted.

Achieving excellence simultaneously at both exploration (new ideas and innovation) and exploitation (operational proficiency and efficiency) is enormously challenging because these actions are opposing; they pull firms in different courses. They are potential pitfalls. Pursuing too much exploration seduces corporations to request a further change before perceiving the befits of the initial innovation. Conversely, operational success creates a resistance to change and explore. (Haanæs, Reeves, & Wurlod, BCG Henderson Institude, 2018).

This paper defines, based on the analysis of the empirical research, combined with the findings from studies that there are four significant challenges that a Structural Ambidextrous face:

- 1. Establishing the timeframe to become ambidextrous
- 2. Expounding a clear strategic intent to justify the ambidexterity of the organization. Definition of a vision, values, and a culture that provide for a common identity across the two units.

- 3. Commitment and support to both organizations. Balancing and managing the implicit tension between exploration and exploitation.
- 4. Establishing the right structure with suitable people and management for each of them. (each structure with this culture and its values)

### 4.3.1 The time to become Ambidextrous.

The first challenge a CEO encompasses is the decision of when the organization should become ambidextrous. From the empirical research, the interviewees pointed, that Tobacco Inc. took a lot of time to release to the market their most iconic RNGP product, they mentioned that the company, never took risks, even in the conventional industry. "We had the product we wanted, but we always strive for perfection, we were behind compared to our new competitors [...] when we launched our the first RNGP, the market was already full of vaping products" (See Appendix). Jim March (1991) concluded, that because of the bias that years of success bring to the organization *"established organizations will always be specialized in exploitation, in becoming more efficient using what they already know."* Seeding a new "mindset" in a robust company, towards embracing innovation, dealing with ambiguity, being consumercentric, and learn from failure are vital elements that push the transformation to occur at the right time.

## 4.3.2 Justifying the need for Ambidexterity.

As O'Reilly & Tushman (2011) found, "without an intellectually compelling strategic intent to justify the ambidextrous form, there will be no rationale for why profitable exploit units, especially those under pressure, should give up resources to fund small, uncertain explore efforts." To justify the need for ambidexterity, the organization must define a convincing vision containing leadership principles that convince both units to excel in their activities. A goal that does not justify the efforts from both units would be driving the organization to failure.

## 4.3.2.1 Designing a compelling and motivational Vision

The corporate vision provides the direction of the company towards the desired future. The characteristics of the vision should, intrinsically, bring together the efforts of the entire organization towards the accomplishment of the goal. In the case of Amazon, "to be Earth's most customer-centric company, where customers can find and discover anything they might want to buy online." (Amazon, 2019) The characteristics of the vision: customer-centric approach, global reach and most extensive selection of products, encompasses the efforts from exploring and exploiting (disruption innovation, competitive prices, less time of delivery)

which make people at Amazon embrace the vision and work hard to achieve it, this is what makes Amazon the most successfully ambidextrous company in the world.

In the case of Tobacco Inc, we observe a lack of characteristics from the exploitation activities. During the interviews, people working in the exploitative unit mentioned the uncertainty they face in terms of job security and future. Not having a clear horizon, creates a stressful environment led by low levels of trust and demotivation and frustration.

The core of Tobacco Inc's vision is based on their future products; our suggestion is to bring the customer as the key element of the company efforts.

A great example is from Johnson & Johnson "Our **vision** at **Johnson** & **Johnson** is for all employees to draw on their unique experiences and backgrounds together—to spark solutions that create a better, healthier world. Diversity & Inclusion Mission: Make D&I how we work every day" (Inc., 2019)

"A company's success depends on having a solid vision for the future -- and employing an engaged team that is dedicated to making that vision a reality. A clear vision statement helps companies run more efficiently because it keeps everyone in the same place." (Lavoie, 2017)

#### 4.3.2.2 The unifying culture, values, and Identity.

To succeed, the organization must embrace the new vision defined for the transformation. Amazon's success is due in large part to its culture. Continuous exploration of markets and products, the importance of the customer, constant experimentation, frugality, direct feedback, ownership, and continuous measurement of results, are the principles that delineate the company's culture.

Those leadership principles bring together the exploration and exploitation objectives, which contradict the approach of Tobacco Inc. As mentioned in the previous section, the new vision of the company does not include the purpose and goal of the exploitation unit. The people belonging to the "old" business feel segregated and unrecognized.

A survey to a financial service company, leading the IT services industry conducted in 2002, led the researches (Lawrence & Nohria, 2002) identify four basic emotional that drives for high levels of satisfaction: acquire, bond, comprehend, and defend. (Lawrence & Nohria, 2002). These four drivers led to the engagement, commitment, reduce the intention to quit, and ultimately better corporate performance.

The drive to acquire refers to the acquisition of resources that supports the well-being of the employees (food, housing, experiences, etc.). The drive to bond is associated with emotions: caring, sense of proudness, and lose of moral when the organization betrays them. The drive to comprehend is related to the willingness of the employees to take action and make

significant contributions to the organization. The drive to defend is derived from the natural defense of personal property and accomplishments. When the company satisfies the drive to protect leads the people from the organization to feel secure and confident. (Nohria, Groysberg, & Lee, 2008).

The employees of the exploitative unit in Tobacco Inc., have gradually lost their motivation and the sense of bond to the company. The organization has not demonstrated the drive to defend and has failed in the creation of an inclusive culture that gives importance to both units. The poor, poor recognition from the senior management has fostered the discontent and the lower enthusiasm of the employees.

When the interviewees were asked about the culture in each unit, they openly described it; however, when they were asked to describe the company culture, many of the elements from the exploitative sub-culture appeared.

"It is difficult to think in having a new culture when all the senior team members are from the conventional business; they have been here for years, it is almost impossible to change the company behavior from one day to another"

Undoubtedly, the vision of Tobacco Inc plays a vital role in people engagement. The idea of minimizing the negative impact of cigarettes has a significant moral component that mobilizes people to achieve such a goal. This element fosters the empowerment and the motivation of the employees; however, it is not a sufficient condition to create the culture. It is imperative to disregard leadership rules based on command and control, transform the formalized and highly bureaucratic process and practices, and embrace openness and diversity to shape the culture of change, Tobacco Inc. promulgates.

"Changing an organization's culture is one of the most difficult leadership challenges. That's because an organization's culture comprises an interlocking set of goals, roles, processes, values, communications practices, attitudes and assumptions" (Denning, 2011).

The interviewers from the exploratory unit who work in the "new" unit, pointed that even if the exploratory unit want to perform as a start-up, continuously looking for innovation, more open and less rigid, the senior management is still not open to it, their vast knowledge on the business, make their think that they can decide what is better for the consumer, without actually listening to the consumer. In the development phase of new products and materials, the development process still takes a lot of time, and there is a certain level of caution to test and implement new things. There is a tendency to develop new products having an agile approach. However, the fear of not being perfect before going to the market is still embedded in the culture of the new unit. This characteristic is not present in every subunit of the exploratory business,

One of the interviewees expresses that in the commercial organization, they have implemented tools as an agile and lean startup.

To sum, company culture cannot be shaped by people who are not willing to change and to embrace new values, process, attitudes, and roles. The new organization culture requires the commitment and disposition to do it.

# 4.3.3 Commitment and support to both organizations

Managing the implicit tension between the two units is the most challenging aspect of the ambidextrous organization.

Through the paper, we have identified that without the reconciliation of the interests from the two units led to the undeniable failure of the ambidexterity's objective. Organization's management should be able to handle and guide both systems with their intrinsic differences. (Lerner, Zieris, Schlagbauer, Rippel, & Wiesenäcker, 2018)

The focus from the senior management to the "new" business led to issues within the "old" organization:

- Increase on the control in processes and activities of medium management to achieve results. To be promoted to the "new" business
- Competition between medium management to be promoted to the "new" business
- Loose of the motivation of the teams because their efforts are not recognized as the "new" organization results are.
- Second class and first-class citizens' perception.

The focus on the exploratory "new" unit brought high pressure to achieve results and led to:

- High competition between the outsiders and the insiders at all levels of the organization
- Loose of the motivation of the employees when the management is coming from the mature organization impose their view.
- High voluntary turnover of new employees because they realize they do not have the freedom and the promised values of the innovative organization.

The informants from the mature business stressed the need for attention from the senior management as the increased pressure it is created towards the transformation. "We do not have the same visibility as the RNGP have, now the company only talks about it [...] and yes I understand that we cannot go to the media and the press talking about cigarettes, but internally we expect the recognition our efforts imply to the transformation of the business" (See Appendix)

In sum, it is essential that senior management understands that the company transformation as an ambidextrous organization has to balance the tensions and interests of both units.

#### 4.3.4 Designing and choosing the right people

The distinction between management and leadership is about Management preserving and improving the status quo. It is about evading various "bad" ideas in the organization. In the other hand, leadership is about running experiments and questioning the status quo. In the case of senior leaders becoming excellent managers, the organization is in danger. Ambidexterity needs management that can be both great managers and great leaders. (Kemp, 2000)

It is then, the biggest challenge for the CEO to create his/her team with a combination of Managers and Leaders to foster the intrinsic culture in each of the units. The senior management team must have the same sense of hunger for achieving the vision even if they perform different activities.

The issue of designing the organization of the "new" business unit, arises when people from the mature business without the willingness to transform and with a lack of leader's characteristics join the new organization. The exploitative units are commonly led based on control management, centered on people and group/team performance, while the exploration units are managed loosely with guidelines & values allowing people to contribute, collaborate and create. When the managers from the mature business become part of the "new" organization, without understanding the need of a management style change, they keep bringing control causing peoples demotivation, loose of purpose and finally low performance.

The exploitative unit is characterized by factors such as transactional & formalized leadership and professional skills as core competencies, internal collaboration guided by hierarchy & cross-functional teams, and standardized process management. In contrast, the exploratory system should have empowered & transformational leadership, self-management, and selfdevelopment skills as central competencies, with an organizational set-up that is market- and customer-centric. It is imperative for the CEO and its team to allocate and bring the people to match those characteristics for the two organizations. In many cases, the suggestion is to bring people from the outside with sufficient experience in business transformation and with the required technical knowledge. That must address people's mindsets, revamp organizational practices and routines, provide the necessary tools and methods for transformation, and, above all, outline and promote new leadership behaviors. If it does not, it is doomed to fail fast.
It is a responsibility of the CEO to eliminate the fear of own cannibalization, because in the transformation process that could lead to failure. A good example is how Jeff Bezos invested in the development of new capabilities for the business, even though the belief was that Kindle would reduce the sales of hardcover books. The interviewees from the exploratory unit addresses such issue "How it is possible that the Senior VP of the RNGP product innovation team is a guy that has been in the company for 30 years [...] yes we understand he has the knowledge, but he is afraid to fail, and because of that he wants to control everything" (See Appendix)

The informants stressed that it is not possible to expect different results if things are managed in the same way. "How it is possible that in innovative teams, we still have a Director, that is just imposing his view, because he has more experience than the other directors [...] I mean, what is he expecting, where is the "new" purpose of being a consumer-centric organization [...]" (See Appendix)

In sum, to foster a new sub-culture, a different way of thinking and foster innovation and disrupting approaches, it is mandatory the assessment of the skills and attitudes needed to lead both organizations. That does not mean that 100% of the employees and management team from the exploratory unit must be new hires, but the people from the mature business must have the right characteristics to join the new one. From the empirical research, we can conclude that there is a harmful interference from the "old" senior-medium management team in the culture, values, identity, and performance of the exploratory unit.

### 4.4 Integration and relation between the units.

As an organization, it is critical to creating an umbrella for the two business to converge towards the same goal. According to O'Reilly and Tushman (2016), to provide integration, the organization with two units must implement specific changes. The first change is to redefine the values of the organization based on the new vision of the company, reconciling the activities of both units. Second, the organization must institutionalize certain activities that permit both units to come together, share results, and contribute to solutions to both units. Third, the CEO must identify those who are not committed to the new vision and strategy to ensure consistency along with the organization. Foster a sharing in the organization while maintaining the identity of each of the units. The authors mentioned that it is imperative to provide a common identity to the organization in the form of shared values.

According to the literature, to hold together the structural ambidextrous organization, there must exist an overarching, emotionally, engaging aspiration, a few core values, and strong senior team integration. (O'Reilly III & Tushman, 2016)

In empirical research, we could identify specific elements that contribute to the company's integration. The first element and the most powerful in the case of Tobacco Inc. is the emotional, aspirational vision of the company. The organization's future is described based on the reduction of diseases related to cigarettes consumption. This factor of morality plays an enormous impact on the motivation of the employees.

Research shows that companies that use specific emotional approaches to influence employees behavior have a higher willing to experience changes; through it, firms can achieve enormous pride and pride and passionate commitment.

The conclusion from the researches is that punctuated change requires an engaging, emotional vision that will generate an enormous impact on employees motivation. (Henderson, Gulati, & Tushman, 2015)

From the empirical research, we conducted to the seven employees of Tobacco Inc. we found, that there are no doubts that the company did a prodigious job defining their strategic vision. However, as mentioned in the previous discussion, this ambitious, emotional, and "philanthropic" vision, creates an environment of uncertainty for those in the exploitative unit. The company's vision does not give credits to the efforts of the current business, which, it is understandable considering the nature of the product and the controversy around the company. Nonetheless, their senior management should be transparent in terms of the strategy and perspective of the mature business. The people from the exploratory unit is highly engaged with the vision. "I am in love with the RNGP products; I believe we are going to help thousands of people to improve their lives" (See Appendix)

"I have converted, I used to smoke cigarettes, and now I only used the non-burn tobacco product, every time that I meet a smoker I have to do the conversion, it is impressive how can you really feel the physical change [...] I am super extremely committed to the future of the company" (See Appendix)

While the motivation from the people in the exploitative unit is overshadowed by the uncertainty of the future. "I love the product, what we are doing has not to precedent [...], but I have uncertainties about my future, I do not know what will happen with my team, and that, I do not like" (See Appendix)

The second element we identify as the unifying element is the sense of pride of belonging to an organization that is putting all the efforts to a future without cigarettes. The latest research suggests that employees with a sense of pride, can become a positive ambassador of the organization, present a strong desire to belong to the firm, and exert extra effort to contribute to the organization success. (Gouthier & Rhein, 2011). "I feel very proud of being part of the transformation, especially because I worked for three years in the mature business and now I am here, making the changes happen [...] feels very nice, that we are doing the right thing to do" (See Appendix)

The third element that unifies the units is the values that the company defined and transmitted, such as collaboration and integrity. The respondents stressed that even there is no collaboration between the two units, there is in each unit. "I like very much that the culture of our team is based in collaboration; we all are here to help each other, share best practices and look for solutions" (See Appendix).

Tobacco Inc. also has a strong background in being a company that promotes fair trade and has a strong commitment to regulatory policies which goes in line with the

# 5 Conclusions, suggestions and contributions to research.

Ambidexterity is an essential determinant for company performance (Sarala, Taras, Tarba, & Junni, 2013) and an enabler of business transformation. In the case of a company's transformation, individually, when the new set of products are conceived to jeopardize the current business, the idea of behaving structural ambidextrously, having two different units, must be considered. Furthermore, when the exiting capabilities and resources do not bring the strengths to develop further the new business, the consideration of spin out could be discussed. Consequently, it is crucial to precisely define which are the resources and capabilities that the strategic new business could leverage from the mature one to give the advantages over their competitors. In the case, when the knowledge from the mature business it is considered as one of the main capabilities to leverage, the organization must define a strategy to assure the correct allocation of the incumbents possessing the knowledge into the new business. The procedure should consider: (1) percentage of employees' relocation from the mature business to the new business (2) assessment method to correctly determined the skills, attitudes, and openness to embracing disruption and transformation ability of the incumbents considered to relocation.

From the empirical research, we determined that the consequences of incorrect people allocation procedures have implications on the sub-culture creation, agility to develop disruptive innovations (bureaucracy) and ultimately low performance of the unit. It represents an extraordinary effort to transform and disrupt the market if the people are not suitable, and the organization is not prepared. It is not conclusive but appears that Tobacco Inc. has not taken substantial advantages on the current capabilities of the mature business. Instead, the new organization has invested resources on building it.

The high leverage core business assets in combination with the high strategic importance of the new unit is what determined if the organization should behave ambidextrously, in the lack of presence of one of the two criteria, the organization should consider (1) Define an Independent business unit or (2) spin out the new organization. (O'Reilly III & Tushman, 2016).

The clear preference and the imbalance in the recognition and support to both units from the senior management team, led to weak corporate culture, demotivation of employees in the mature business and implications on company profitability. The incorrect approach to balance the tensions from the two different units sentence the ambidexterity efforts to fail. (Charles A. O'Reilly III & Tushman, 2013). It is difficult to determine if the consequences on the decrement in profitability from 2017 vs. 2018 of Tobacco Inc. are related to the misalignment of the company in following the main propositions to achieve ambidexterity or to the global reduction in cigarette consumption and increase on regulations for RNGP products. However, because of the results of the gap analysis, the examination of the efforts that Tobacco Inc. makes to overcome the challenges that ambidexterity represents and the poor unifying culture and values, our suggestion for the company is to analyze if a different corporate realignment should be considered.

Researches and consultants have found that when the company has the determination to maintain both units, even if is known that in the future the mature unit could lose its impact on the company profitability, ambidextrous behavior is the best strategy to embrace the change; that has been the case of Fujifilm, SAP, and Amazon. In the case of a company transformation, in which the purpose is to cannibalize the mature business entirely, the approach of behaving ambidextrously would not provide the benefits to support such a transformation. Accordingly, new strategies such as Spin out the unit should be considered. The implications and consideration of such an approach were not analyzed in this paper. We recommend future studies to determine the pre-conditions that a company in the journey of transformation should meet to determine the best corporate alignment to compete with new disruptive product and services in the emerging markets.

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# Appendix

### Table 7. Quotes from respondents. Qualitative research

| Ref | Quotes  |
|-----|---|
| 100 | "We know that the cigarette business must keep running, what we make, in terms of profits, is crucial for the RNGP unit [], it is extremely important that we keep the conventional business running with excellence and effectiveness to support the new products."  |
| 101 | "We know that to transform the business and to support our vision; we must be more efficient, constantly looking for productivities and continue profit growing"  |
| 102 | "It is key to understand how our leaders define the path and the goal of the company; we like to<br>listen to their perspective, what they expect from us and how we can contribute to the future   |
| 230 | " The company took advantage of the heritage of the main brand, the first year the most iconic RNGP product used the name of the brand to create awareness; we also leverage the knowledge we have on tobacco processing, business acumen, quality control, the company heritage [] in those areas that we did not have a clue how to operate, for example, how to sell electronics, how to position a product in the luxury segment, we had to hire new people. We are developing those capabilities".   |
| 231 | "There are still many things, capabilities, and resources that we do not know we are missing, or we do know how to develop or we just acquired [] after two years of the transformation [], the most recent example is the division of R&D into two different subunits, one more focus to the scientific approach, and the other one more connected to the consumer and the experience with the products"   |
| 232 | "[] I cannot imagine having RNGP outside of Tobacco Inc, []it is not the same, that a company<br>like us goes to the highest authorities in the United States asking to have the approval to claim that<br>RNGP are products with less health-related risks than a conventional cigarette than a little<br>company doing itRNGP needs the credibility of Tobacco Inc."  |
| 310 | "We have a Director for R&D for discovering and a director of R&D for consumer-centric activities (conventional business) and those two-director report to the VP of R&D."  |
| 311 | "We know exactly what we have, but we do not with the same exactitude what we are missing, I think because we have that gap of knowledge in many things in regards of this new business, I am not sure if we are hiring the correct people."  |
| 312 | "We do not know how the things with RNGP work, we are learning, and sometimes I feel like we are way behind [], we wanted to be perfect with all the different RNGPs products we have [], and because of that we came late to the market, our need for perfections make us not be the first ones on this disruption [] I know that the high-quality standards are one of our strengths, and we took it as a capability to leverage. However, I am not sure if that superiority in quality as we know in the cigarette industry is valued by the RNGPs customers." |
| 450 | "There are subunits inside science and development that were built by managers from the "old" business [] what I can see is that people are giving everything to become more innovative, agile, but the managers still have this mindset from the "old" times, they have to approve everything [] we cannot act with autonomy and therefore we cannot bring disruptiveness at the pace we would like to"  |
| 451 | "In the teams where there is no presence of "old" people, as in the commercial organization, can<br>do a great job in terms of being agile, they are failing fast and learning fast []they have the keys<br>to drive the car, is not like us that we are supposed to drive, but the manager does not let us"  |
| 452 | "We are second class citizens, while the people working in the RNGPS are the first-class citizens [] we understand the separation of both units, but what we do not understand is the importance the senior team gives to the "new" business and not to us [] we are the ones milking the cow to make the "new" business grow and they do not appreciate it, seems like they believe that in two or three years there will be no more "old" business [] and honestly, I do not think that we will stop selling citarettee in the upper page future"               |
| 452 | cigarettes in the very near future"   |

| "The idea to work based on projects is that we become more agile, but not all the units need the<br>same, in the department I work, we still are a functional project structure, whenever there is a<br>project for RNGPS we dedicate a team just for it, but that is only in our area"  |
|--|
| "In certain subunits in the Science RNGP unit, we just started working based on projects, I know many others work with hierarchies."   |
| "Even we do not take to each other, we do not share any practice with the "old Business" we are<br>all connected to the same goal, we want to have a world free of smoking-related health issues, that<br>is our common denominator, that is what push us to achieve our objectives, even if we are very<br>stress or we have created a very competitive environment"  |
| "We all know that the conventional product and the RNGPS compete for the same customers, that<br>is part of the transformation, that is what we want to have [] I consider myself, even still working<br>in the conventional unit, the best ambassador of the RNGPS [] I used to be a smoker and when I<br>switched to one of our RNGPS I felt the difference [] I want every smoker to feel the difference,<br>that makes me go work every day" |
| "He knows what he is doing, sometimes is slow because of I also think he is learning, he knows the tobacco business perfectly, but he does not know much about electronics or pharmaceutical industry, and that's why I think he takes time to make some decisions."   |
| "We believe in the transformation of the company, for us, it has been very inspiring that we are<br>moving towards a world where no more cigarettes will exist, however, in the process, it would be<br>very encouraging to receive more attention to the things that we also achieve."  |
| "We do not receive the support from the senior management and the importance we deserve, []<br>We have seen that the efficiency of the "conventional" business has been given by shooting down<br>factories, it is understandable that we need to be more productive, but the way senior<br>management is doing things with the "old" business does not make us very happy"  |
| "In the sub-units of the RNGPS we have managers, old managers form the conventional business, they think that we need to do our developments following the processes and asking for permission as before [] its funny, we have received the message that we should behave as a Startup but old these old guys do not get it"   |
| "It is hilarious that after two years, we just realized that the VP of the Exploratory unit must not be<br>the 60-year-old guy that has been in the business for years, things are starting to change but not at<br>the pace should be"  |
| "We sometimes feel demotivated, especially the newcomers, who join the company thinking like<br>we are very open, we can innovate and speak up, there is no hierarchy and bureaucracy [] which<br>is not true, it is changing but not as fast as we would like"  |
| "Before the company valued more the generalist, people who can rotate and evolve in different<br>areas but we want to change that, with scientist we realized that not all the people have to follow<br>the same path, and therefore the incentives should be not the same; a scientist value his<br>relationship with knowledge, they like to be specialists, and we need to encourage that"  |
| "Scientist is very qualified, and they are cautious with the things they do. They like to explore. They are very proud of what they achieve. However, they do not understand the general business, they do not connect the points, and they have a lack of integration with other groups."   |
| "We had the product we wanted, but we always strive for perfection, we were behind compared to<br>our new competitors [] when we launched our the first RNGP, the market was already full of<br>vaping products."  |
| "We do not have the same visibility as the RNGP have, now the company only talks about it [] and<br>yes I understand that we cannot go to the media and the press talking about cigarettes, but<br>internally we expect the recognition our efforts imply to the transformation of the business."  |
| How it is possible that the Senior VP of the RNGP product innovation team is a guy that has been in the company for 30 years [] yes we understand he knows, but he has fear to fail, and because of that he wants to control everything."  |
| . "How it is possible that in innovative teams, we still have a Director, that is just imposing his view, because he has more experience than the other directors [] I mean, what is he expecting, where is the "new" purpose of being a consumer-centric organization []"   |
| "I am in love with the RNGP products; I believe we are going to help thousands of people to improve their lives."  |
|  |

| 912 | "I have converted, I used to smoke cigarettes, and now I only used the non-burn tobacco product,<br>every time that I meet a smoker I have to do the conversion, it is impressive how can you feel the<br>physical change [] I am super extremely committed to the future of the company." |
|-----|--|
| 913 | "I love the product, what we are doing has not to precedent [], but I have uncertainties about my future, I do not know what will happen with my team, and that, I do not like."   |
| 914 | "I feel very proud of being part of the transformation, especially because I worked for three years<br>in the mature business and now I am here, making the changes happen [] feels very nice, that we<br>are doing the right thing to do."  |
| 915 | "I like very much that the culture of our team is based in collaboration; we all are here to help each other, share best practices and look for a solution."   |