LEVELS OF CONSCIOUSNESS AND THEIR IMPACT ON THE EFFECTIVENESS OF DIFFERENT LEADERSHIP STYLES AND ORGANIZATIONAL ARRANGEMENTS ON INNOVATION PROCESSES

Vinicius Skonicezny Vilela¹
Wellerson Santos²
José Vicente Bandeira de Mello Cordeiro³

ABSTRACT

Fast and dynamic, these have been the most used adjectives to represent the current business environment. To address these new characteristics, many authors have suggested new leadership styles and organization designs, which could increase productivity and catalyze innovation efforts. But, how do the consciousness levels of leaders and their teams relate to their organizational designs and leadership styles in order to improve team effectiveness regarding innovation? Based on the assumption that the same organizational structure and the same leadership style can be more or less effective in view of the levels of consciousness involved, this article sought, through multi-case studies with four different teams, to characterize the influence of these variables on results of innovation processes of two different companies, a multinational in the automotive manufacturing sector and a startup in the financial services and e-commerce sector. It was found that the most flexible and autonomous organizational arrangements, as well as the leaders with more situational style and with consciousness closer to the integral levels (present in the startup), were more effective in improving innovation performance, despite the similar consciousness levels among members of the four teams. This fact denotes

Aluno do 8º período de Negócios Internacionais da FAE Centro Universitário. Bolsista do Programa de Apoio à Iniciação Científica (PAIC 2019-2020). *E-mail*: vskonicezny@gmail.com

² Aluno do 6º período de Negócios Internacionais da FAE Centro Universitário. Voluntário do Programa de Apoio à Iniciação Científica (PAIC 2019-2020). *E-mail*: wellerson.santos@mail.fae.edu

Orientador da Pesquisa. Doutor em Engenharia de Produção pela Universidade Federal de Santa Catarina. Professor da FAE Centro Universitário. E-mail: josec@fae.edu

the importance of having the organizational structures and leadership styles more aligned with the consciousness levels available and the company's strategy, in this case, focused on innovation. The proposed research presents predominantly descriptive and exploratory aspects in a multi-case study. The research was carried out during the Pandemic of COVID-19, which prevented it from involving a larger number of teams and companies, which could allow deeper conclusions regarding the interplay of the variables involved.

Keywords: Leadership. Innovation. Consciousness Level. New Economy. Organizational Structures.

INTRODUCTION

The world has changed a lot in recent years. A couple of years ago anywhere you go someone would be talking about the digital revolution and how it would change everything. Well, now it has already happened. Every time a new world emerges the old one stretches and stir itself in a usual movement to change itself. But how does this affect companies, the same companies which not long ago invested heavily, on standardization and stable processes?

Most companies have already accepted that changes are essential and have searched for them. It is clear also, that the goals which these organizations want to meet cannot, and will not, be implemented in a top-down style. These changes need to be done in a macroscope fashion; they involve more than just the enterprise itself. They include how the organizations are seen by their outside and their inside (CORDEIRO et al., 2019).

Many tools have been developed to identify the stage of change on which organizations are. There are very consistent studies that relate and classify the way people think and the results they can obtain within specific contexts. These ways of processing information are called consciousness levels. These levels can reveal not only how the mind of a person might work but also predict his or her behavior in specific circumstances. That is extremely valuable, especially for those in charge of leading those people (CORDEIRO et al., 2019; WILBER, 2008; BECK; COWAN, 2014; ANDERSON; ADAMS, 2015).

Considering the description above, the following research question is presented in order to summarize the research problem: How do the consciousness levels of leaders and their teams relate to their organizational designs and leadership styles in order to improve team effectiveness regarding innovation?

This paper aims to characterize how different leadership consciousness levels and different leadership styles relate to the organizational efficacy regarding innovation in a given organizational structure within a company. This general objective can be divided into three specific ones:

- Assess the Level of Consciousness of leaders and their team members in two different organizations, one start-up and one more traditional corporation involved in digital transformation efforts;
- II. Characterize the Leadership Profile of their leaders and the company's or area's organizational structure;
- III. Assess teams' performance regarding innovation, identifying which combinations of levels of consciousness, leadership style, and organizational structures provide better results.

This is qualitative research, delineated as a multi-case study, focused on two kinds of companies: i) start-ups which, theoretically, should have a more dynamic and up-to-date structure; and ii) more traditional ones, that are engaging in digital, organizational and mindset transformation processes with the aim of becoming better adapted to the new business environment. Both researched companies are located in the Curitiba Metropolitan Area.

Only thirteen percent of worldwide leaders believe their organizations are ready to compete in the digital new economy (READY at al., 2020). Numbers like that raise several questions, closely related to the main objective of this research, among them are: i) How the companies are handling the changes imposed by the new VUCA (Volatility, Uncertainty, Complexity e Ambiguity) context? ii) Are these ways of handling the challenges compatible with the human resources available? To answer these and the main question, this research was developed on the following axis:

First: Are the start-ups that follow these new approaches of organizational structuring and leadership style harvesting the results? Are their people's mindsets in tune with these new approaches?

Second: How do big corporations that are trying to reinvent themselves approach these changes? Do they really engage in cultural, leadership and organizational structure changes?

Third: How do these companies assess their performances in terms of innovation and how are they performing?

Fourth: Do these changes take into account the actual profile, context and the needs of their teams or are imposed by different sort of hype or market rules?

As a qualitative research, this work presents two basic assumptions to be tested:

- Teams and organizations with holarchic structures and integral leadership are more effective on innovation, especially when the leadership operates at the second tier of consciousness levels and teams operate at least at the "Orange to Green level".
- 2. More Democratic leadership styles and self-management organizational arrangements have a higher efficacy when the leader operates at the second tier of consciousness level and teams operate at least at the "Orange to Green level".

1 THEORETICAL FOUNDATION

This chapter presents the Theoretical Foundation of the research. In the first section (1.1) it presents the consciousness levels and how they affect the actions and thoughts of a person engaging with a certain organizational environment. The second section (1.2) presents the main approaches to leadership styles, tracing back from the

19th century until the most recent theories. The third section (1.3) presents a historic view on how organizations are structured and also the most recent developments in terms of organizational structures, both regarding macro structures and micro (team) structures. Finally, the fourth section presents different approaches to assess innovation processes in organizational environments.

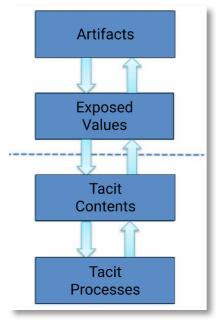
1.1 CONSCIOUSNESS LEVELS

The theory of consciousness levels is focused on investigating the process of human thinking, and how it relates to people's values. Schein (2009) describes three layers in the cultural process within an organization: i) artifacts; ii) exposed values and iii) shared tacit assumptions. According to the author, artifacts are hard to decipher but easy to see, meaning this is the feeling someone gets when first observing the company environment and behavior patterns. Espoused values account for the "manifesto" of the organization, that is, those beliefs defined by internal and external stakeholders as its core values. In Schein's model, the shared tacit assumptions represent the deepest level of culture in an organization, those deep-rooted beliefs that become stronger as the company grows. They start with the founders as a result of their background and are assimilated by the employees if the results are seen as positive (SCHEIN, 2009).

Based on Schein's approach, Cordeiro et al. (2019) proposed a new model, on which Schein's Shared Tacit Assumptions is divided into two new categories: i) a shallower one, encompassing values related to the contents of the thoughts, that is, the beliefs; ii) a deeper one, including values related to thinking processes.

Spiral Dynamics is one of the most popular approaches to categorize different thinking processes. It is a theory that tackles issues about psychological development and the ways people process information from their environment. The concept was first developed by Prof^o Dr^o Claire Graves along more than 30 years. Graves conducted experiments with his own students. During these researches, he was able to identify the assimilation process each subject on the research pool utilized, mapping, and categorizing his students to distinct categories, which he called "consciousness levels". These levels are patterns drawn from the observations and surveys he applied, and the categories are the different sets of tools each person has available to process external stimuli. The classification doesn't aim to rank people from an intellectual or moral perspective, instead, it seeks to identify paths one's mind takes to interpret the world in which it's inserted. Also, this classification is not a final one, since the human mind is always developing and the creation of new consciousness levels depends on the need to solve more complex problems. Mentioning a quote attributed to Einstein: "No problem can be solved by the same consciousness level that created" (CORDEIRO et al., 2019, p. 98).

FIGURE 1 - Four levels of values.



SOURCE: Cordeiro et al. (2019, p. 85)

Beck & Cowan (2005) categorized each consciousness level by a different color, according to the level of complexity of that thinking system. To this date there has been the identification of seven main consciousness levels (colors): Survival (Beige), Kin Spirits (Purple), Power Gods or Self-centrism (Red), Truth force or Totalitarianism (Blue), Strive Drive or results-oriented (Orange), Human Bond or Egalitarian (Green), Flex Flow or integrated (Yellow), Global view (Turquoise).

According to Cowan and Todorovic (1996), each color can be defined by the characteristics presented on that determined level and the tools the individual will use to handle the problems presented to him or her, as follows:

- Beige: Is stimulated by a physiological state where surviving is the daily goal and common tools are natural instincts, direct reflexes and the urge to survive;
- II. Purple: Tribal societies where phenoms are adored and appeased, using tradition, rituals and animistic beliefs;
- III. Red: Situations on which the stronger rule and the weak serve, everything can be conquered throughout power and coercion is the main tool of this level;
- IV. Blue: A law-based society, utilizes a set of predetermined rules to define right and wrong and expects reward based on how well the individual has followed these rules. People on this stage tend to handle issues using compliance and loyalty;

- V. Orange: A result-oriented environment where what matters is the final outcome of the work. Differently from the blue individual, the orange one expects to be rewarded sooner and in a material way. At this level, the main tools are the scientific method, changeability, pragmatism, and self-motivation.
- VI. Green: A socially responsible environment where the goal is to promote egalitarianism and common growth. Empathy is the main tool for this individual, who can also turn to relativism and conciliatory actions.
- VII.Yellow: Prevails in an environment in which chaos, constant change, and uncertainty are common and not knowing is an acceptable state. Knowledge, flexibility, independent questioning, and integration are key features to this level.
- VIII.Turquoise: A connected environment composed of delicately balanced interlocking forces at jeopardy at humanity hands, also known as, chaordic. As tools, this individual can access collective consciousness, transpersonal capabilities, and experimentation.

1.2 LEADERSHIP APPROACHES AND STYLES

The literature regarding leadership is very extensive. The first take on leadership styles in the modern world (Nineteen century or later), can be found in "Lectures on Heroes" (CARLYLE, 1869), describing leadership as a natural and god's given attribute, which cannot be taught or learned. This approach ended up being incorporated to the trait theory who views leadership as a natural gift, with some authors claiming it came as a gift from God and others putting it as a consequence of preparation and effort (DAY et al, 2014).

The behavioral theory (LEWIN et al., 1939) identified three main types of common leadership: Democratic, Autocratic, and Laissez-Faire. These styles also retake situational leadership logic. Each one is better suited depending on the leader and the context in which he or she leads (YUKL,1989).

The autocratic style is characterized by one-sided decisions, an approach on which leadership defines the metrics, guidelines, and goals, just informing the collaborators (KHAN et al.). This kind of leadership tends to make employees be tenser, more frustrated, and aggressive. However, it may be suited for teams composed of insecure or inexperienced workers which are not used to make decisions (LÜCK, 2009).

Democratic style can be defined as a co-participating decision-making approach, where the leader takes inputs from the collaborators and decides the best practices within the team acceptance. This kind of leadership is usually associated with high-quality work for a long period of time (KHAN et al., 2015).

Finally, the Laissez-faire Style can be defined as "hands-off" management (KHAN

et al., 2015). The leadership is symbolic and most of the decision is made by the workers. This type of management may work for highly skilled and self-motivated teams, but it's a risk since personal problems can easily interfere with the quality of the job, imposing big challenges for the leader regarding mediating these issues (FACHADA, 2003).

The situational leadership theory proposes to provide leaders with the flexibility to adopt a leadership style that fits better to the needs of employees. This implies that leaders should adapt their style according to the skills, readiness, and progress level of team members. Practicing situational leadership demand leaders to pay attention to the perceptions of their team. This approach is considered effective, for it focuses on not only one type of worker behavior but on a variety of them. The leadership styles of situational leadership include (see figure 3) (HERSEY, 2007; BLANCHARD, 2007):

- Style 1 (S1) "Directing", determined by a one-way leadership, decisions come top-down;
- Style 2 (S2) "Coaching", on this style the power of decision still remains with leadership, however, it may recur to the team for inputs
- Style 3 (S3) "Participating", the leader maintains a high volume of discussion but let the employee make the decision.
- Style 4 (S4) "Delegating", the leader determines the goals and path, without major interference on operational issues.

D3 D1 Moderate-High Low-Some Competence Competence High Variable Commitment Commitment commitment High SUPPORTIN Low Directive High Directive and High Supportive igh Supportive Behavior "Let's Talk Let's Talk D3 Decides SUPPORTIVE BEHAVIOR Leade Decides **S3 S1** Low Supportive → High DIRECTIVE BEHAVIOR

FIGURE 2 – Situational Leadership Styles

SOURCE: Blanchard (2008, p. 85)

Later, Goleman (2000) divides the practice of leadership into six different styles. These styles came from a study carried out by Hay/McBer Consulting LLC with a population of almost 4,000 executives which analyzed several patterns on how these business people conducted their teams. One of the most important findings in the research was that the best leadership style doesn't exist in absolute terms. Rather, what makes a leadership style good, and more important effective, it's timing and context.

A competent leader should have the capability to utilize a range of different leadership styles according to the context, including the profile of the employees, particularities of the moment, strategy and needs of the company, and so on. To make sure leaders will have access to these different styles, it's important to work on their emotional intelligence which will allow them to identify and develop strong areas and treat possible gaps.

On a more practical approach, it's reasonable to say that levels of consciousness and performance - personal, organizational and systemic - can be closely related. So, in order to take this into account, it is imperative that organizations promote change in how they manage their personal lives. To Tabrizi (2019), organizational change is a must for those who want to keep being competitive. Yet it is also known that between 70-80 % of companies which try to change do not yield tangible results. High leadership is failing to understand that the organizations do not change, but the people that work for them. So, operating in a higher consciousness level is a prerequisite to generate sustainable long-term changes (ANDERSON; ADAMS, 2015).

Based on Kegan's framework of leadership (1982), Anderson & Adams draw a relational schema on how the development of leadership occurs, called the Universal Model. All of these authors, Kegan (1982), Anderson (2015), Goleman (2000), and others, point out that the development of leadership is intimately related to its identity awareness, what means that by knowing where this leader stands on his or her consciousness processes, it gets easier to determine a path to a sustainable development. According to Anderson & Adams (2016), those new lenses on leadership development are divided into five stages: Egocentric, Reactive, Creative, Integral and Unitive.

The Egocentric leadership begins around 8 years of age and tends to end at near adulthood and it is associated with the RED consciousness level of the Spiral Dynamics. When operating on this level the leader becomes dictatorial, demanding absolute loyalty to him or her, making unrealistic demands and defining as an error any decision that isn't one hundred percent in accordance with his idea of correctness. These leaders often see others to serve their will, using people as objects, thus having very low levels of empathy.

Reactive leadership can be seen when the adolescent mature. At this stage the person learns to control their impulses, instead of being controlled by them. At this level, the individual learns how to play along, insert themselves into society, being productive and rewarded for it. It's equivalent to the BLUE, the BLUE/orange and blue/ ORANGE levels of consciousness in Beck & Cowan's Spiral Dynamics. That also creates problems, since at this phase rewards can stagnate the development of the leader and the person may conclude that his or her success it's an approach that should be applied to all situations. Leaders that operate at this level have a hard time adapting their style to the situation and tend to be lost and confused when the attribute which made them become leaders does not work anymore for any reason.

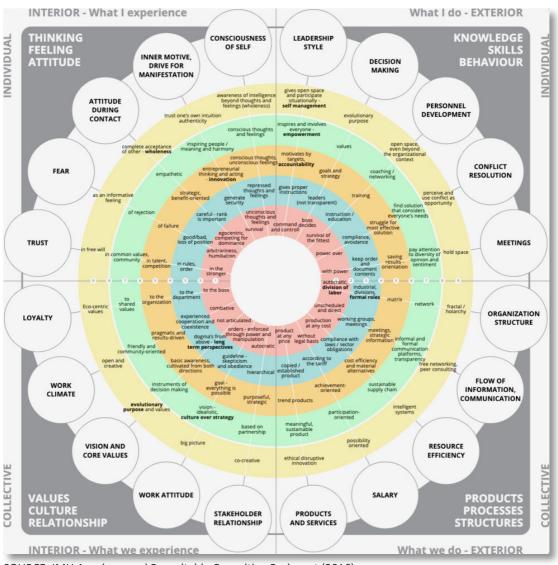
Creative leadership may be seen as a natural evolution of reactive minds when the reactive mind reaches its operational limits and the need to reinvention leads the leader to develop a less perfection-oriented vision. Creative leaders are more authentic which means a higher level of self-knowledge about their team and themselves. The creative leader is freer to set limits to their capabilities, improving the relationship with employees, and compelling at a planning stage to prioritize tasks. It's equivalent to Beck & Cowan's ORANGE, ORANGE/green, orange/GREEN and GREEN levels.

Integral leadership is a wrap on every other conscience level, also known as total leadership. Those who operate at this level are fine with uncertainty and able to accept the facts as they are, what made them equivalent to those who operate at green/YELLOW, YELLOW/turquoise and TURQUOISE levels on the Spiral Dynamics approach. Acknowledging that the leader itself is not whole neither completely evolved is part of this level of leadership. The integral leader has the ability to promote and sustain changes within a diverse group and understand that these changes affect the system in which the company is embedded (ANDERSON, 2015).

To Beck & Cowan, integral leadership is insofar equivalent to second-tier leadership, which includes yellow, turquoise and the next couple of level of consciousness that should appear in the future, repeating the developmental sequence of the first tier (BEIGE-PURPLE-RED-BLUE-ORANGE-GREEN). According to them, integral leaders' main characteristic is the ability to embrace complexity and understand their teams and themselves (BECK and COWAN ,2014).

Based on the Spiral Dynamics and several different approaches for organization and leadership, researchers from the IMU Augsburg and Roundtable Consulting Budapest suggested a map on which each different consciousness level is associated with characteristics regarding both the individual and the organization, their objective and subjective aspects, following Wilber's Four Quadrants' approach, which is presented on Figure 3.

FIGURE 3 – Different consciousness levels and their equivalent subjective and objective features within individuals and organizations



SOURCE: IMU Augsburg and Roundtable Consulting Budapest (2016)

1.3 ORGANIZATIONAL STRUCTURES

With the increase in the complexity of the processes in a globalized world where the external environment affects increasingly the way organizations position themselves, leaders need to make choices about the organization of their teams, increasingly consistent with the situation they face. To better understand what organizational structures are, it is necessary to understand what it really means to organize a structure (GEORGE; JONES, 2011).

In human history, people have changed level by level and have tried different organizational systems that define how people act and live in society. Laloux (2015) describes these different periods of history in colors: Purple, Red, Amber, Orange, Green and finally Teal. These colors are equivalent to Beck & Cowan's Purple, Red, Blue, Orange, Green and Yellow.

In Teal, or Yellow, team members and leaders are willing to open their minds and learn from others, developing an environment of mutual trust and "assumed abundance". Organizations who have such a culture base their structure on three principles: i) self-management, where people are ready to do their job and have total autonomy; ii) wholeness, one of the principles of such organizations, creates an environment where people can fully express themselves; iii) Evolutionary Purpose, that guides an organization to the world demands (LALOUX, 2015). To understand how organization relates to those levels of consciousness its core to get to know the essentials of Organizational Structures.

1.3.1 Classic Organizational Structures

A leader who has defined the strategy of his company, must also come up with an organizational arrangement that is best suited to it. Thus, organizational structures are critical for strategy implementation. Also, they are means of integrating and coordinating all the functions and activities that make up the whole of the company (GEORGE; JONES, 2011).

Functional organizations were created with a vision focused on their internal reality, that is, for themselves. This kind of thinking has dominated and still dominates most of the companies we know. At this stage, the functions are all divided into stages, where worker processes are fragmented. It is an individual work and task oriented organizational design (BATEMAN; SNELL, 2012).

At these companies, each team has a leader who coordinates the activities and reports to another superior and who, consequently, responds to a director or vice-president and, at the top of the organization hierarchy tree, usually, there a President or CEO. George et al. (2011), discuss some advantages in adopting this model, among them, the specialization of the teams for self-support and, consequently, an increase in their performance level. Furthermore, with teams working together, there is a better measurement and coordination of the functions involved and the team as a whole.

According to George et al. (2011), most organization designs involve a departmental structure, that is, organized in divisions that focus on only one segment of that organization, with the objective of creating smaller and more manageable units.

There are three ways to apply the divisional system: i) the product structure model, suitable to organize with a focus on each good or service provided by the company; ii) the geographic structure, when the focus on the regions served by the company; and iii) the market structure, when organization units are defined based on the different segments of customers and their different needs.

Matrix structures are those that simultaneously groups people and resources by function and product. A (1) functional head, who allocates individuals to a team and evaluates their performance from a functional perspective, and a (2) product head, who assesses their performance on the team (GEORGE; JONES, 2011).

During World War II, military personnel adopted teams called *ad-hoc* (here now), which consisted of teams formed for a single task and which, at the end of these, completely dissolved. Toffler (CURY, 1995) called it "Adhocracy" predicting that in the future this new model of organization would replace the bureaucratic model prevalent insofar. With globalization and the need to respond faster to market demands, this model aims to adapt as fast as possible to changes in the environment. That means, for example, adopting a functional structure within the operations department and a divisional structure within the Marketing area, having a network model on the IT department (CURY, 1995).

Holacracy is a type of organization on which self-management prevails. It admits a constitution to set the rules of the game and attribute authority, but on a daily basis the definition of each person's roles within the system can vary according to the demand. Weekly meetings are held to maintain synchronization with the complexity of the processes and carry out the work and problem solving together. (ROBERTSON, 2016). Holacracy is a type of Holarchy, the most autonomous organizational system according to the Integral Theory applied to leadership and management (CORDEIRO et al., 2019).

For Beck & Cowan and Laloux, the levels of consciousness are evident in the ways in which companies organize themselves. Table 1 presents a summary of both Beck and Cowan's and Laloux proposals for the relation between the prevailing levels of consciousness in an organization and its organizational structure and principles.

TABLE 1 – Relationship table between consciousness levels and structures

Level of Conscious-ness (Laloux)	Level of Conscious-ness (Beck; Cowan)	Organizational Model	Focus	Description
Red	Red	Linear/ Autocratic	Power	Division of labor is done by the leader in accordance with pragmatic orders
Amber	Blue	Functional / Divisional	Formality	Well-defined positions, rules, and regulations manage activities
Orange	Orange	Matrix / Divisional	Competition	Works divided according to the type of each function cells
Green	Green	Semi- autonomous groups/ Network	Equality	Understanding the whole, all areas interact with each other for decision making.
Teal	Yellow	Adhocracies/ Holarchies / Holocracies	Self- Management	Authority between self-managing teams the leadership acts as a mentor indicating common goals.

SOURCE: Authors (2020), based on Beck & Cowan (2014), Laloux (2015) and Cordeiro et al. (2019)

The first layer (Red) indicates a structure where the image of the leader is very strong and he assumes this position in an imposing and autocratic way. The divisions of work are informal and determined by the leader. The flow of information follows directly and without prior notice, so communication is direct and expository, salaries are determined by the boss according to what he or she see as necessary. This type of structure seeks to meet its demands at any cost, so it's not focused on improving efficiency and productivity.

The second layer (Blue), the authors indicate structures that change the landscape of the previous one, in this case, the image of the boss is still very strong, but what determines the shape of the processes are the specialists, fictional structures bring more formality to the processes, thus, the flow of information takes place through scheduled

meetings and decisions are made by the involved teams, still responding to a boss who defines the strategies, employees are compensated according to internal regulations and / or by external regulatory bodies. Likewise, resources are selected according to criteria determined in manuals seeking standardization and functionality for the processes, seeking stabilized products in the market and even replicating existing products.

In the third layer (Orange), the structures are matrix, that is, the teams are freer to make decisions, due to their specialization for a given project, they have mastery of the subject, thus, they have more property to assume responsibilities within the processes, even if responding to its leaders. In this structure, meetings become more present for decision-making, the members have an overview of the company's plans. Salaries are paid according to the level of involvement with the organization, there is a stimulus for delivering results and competitiveness. At this level, organizations aim at alternatives that adapt to the reality of each case, the search for efficiency and more specialized service in the demands, becomes stronger and present within the teams, thus, the products aim to popularize and add value to the brand.

For the fourth layer (green) the panorama is even more integrated, the areas work together to make decisions, the leader guides the team as part of it and the communication reaches a set of formality and informality in which employees take the freedom to make decisions strategically. The search for sustainability becomes evident, that is why the concern with the origin of its resources is even stronger, which directly reflects on its final products, which are offered paying attention to social issues and that add value. Salaries take into account team deceit and individual value delivery.

Finally, the fifth layer (Yellow), organizations have self-sufficient teams and the leader acts as a mentor to those involved, only directing them towards the company's strategy. Salaries continue to seek cheating and delivery of employee value. Information flows in alternative ways, meetings, conferences, intranet and different means, according to the need. The search for alternative resources that bring more efficiency but still pay attention to sustainability, innovation is the key word for this case, alternatives that bring new ways, not only to meet demands, but improvements in processes that bring new visions to the company are great value for these organizations.

1.4 ORGANIZATIONAL AND INNOVATION PERFORMANCE

Every operation requires a method of measurement of performance to enable continuous improvement within organizations, so that it is possible to question the results pointed out and define whether it defines a favorable or non-favorable scenario

for the company (SLACK, 2018). According to the author, it is important for a company to adopt a system mixing some Key-indicators (doesn't show a detailed scenario of the targets) and more detailed ones, always seeking a balance.

1.4.1 Balanced Scorecards

The idea came from a study by Kaplan in 1990 and, since then, it has been a crucial tool for organizations across the globe, used, basically, for two fundamental points for business: the problem of effective measurement of organizational performance and the critical issue of successful strategy implementation. This study was motivated by a loss of competitiveness in the accounting sector of the USA to Japan. Then there was a need for research in the area of Management Accounting. The main areas the BSC are applicable are (KAPLAN, 1996; COSTA, 2008):

- Financial Performance: regarding strategic impacts, as seen by shareholders;
- Internal processes: understand which internal processes the company should be excellent at;
- Termination and learning measures: the level at which the company keeps improving and improving skills;
- Measure of customer performance: understand the customer's perspective regarding the organization;

Thus, each area of strategic management is being analyzed from individual points of view. Kaplan and Norton (1996) explain that these analyzed aspects make it possible to understand short- and long-term strategies. Slack (2013) says that decisions and analyzes must be made from period to period and that the decisions taken in the face of each analysis clearly reflect the knowledge acquired in previous analyzes.

1.4.2 KPIS

KPI is an acronym for Key Performance Indicator. KPIs are a combination of one or more indicators focusing on representing the critical aspects for a satisfactory performance. According to Kaplan and Norton (1996), the most popular business metrics are: i) Economic and financial indicators (cost, revenue generated, profitability, return generated, assets employed, etc.); ii) Productivity and quality indicators (throughput, lead time, errors and defectives generated, time for product or service reconfiguration, customer satisfaction, etc.); iii) Social and environmental indicators (professionals allocated in the process, categorizations of clients served, etc.); iv) Learning and knowledge (evolution of the bank of ideas, receipt and cataloguing suggestions, practical application of suggestions, etc.).

1.4.3 Innovation Performance

Not everyone knows the means to make innovation happen and most of the leaders do not have the necessary skills to manage this type of process. Maximiliano (2016), quoted a research from McKinsey Consulting stating that 70% of executives say that innovation is a top priority in their companies. At the same time, most of them recognize that their approach is generally informal, with executives lacking confidence in their innovation decisions. Furthermore, more than three quarters of executives say that the attention given to innovation by the media served at least to alert the company to the importance of innovation. But only 19% said that this attention made the company consider innovation its main focus. Less than a quarter of executives believe that they have completely mastered the art of obtaining value from innovation and half of the executives are dissatisfied with the returns from investments in innovation. Probably, these facts impact the importance given to assessing innovation efforts: 63% of companies use less than five innovation measures, the main one being the monitoring of spending on innovation projects.

In a recent study called "The New Leadership Playbook for the Digital Age" Ready et al. (2020), points out that today's leaders are less prepared than they think they are. Innovating means to deconstruct the idea of a perfect world and to go deeper into chaos, where the structures are not linear and mechanistic. When it comes to innovation, error must be allowed, which most traditional organizations are not likely to allow, especially in repetitive and fundamental activities. The process requires a great deal of persistence, often not financially rewarding. As Maximiliano (2016) points out, innovation must lead to results and does not mean inventing. A company that simply generates new knowledge, but does not incorporate it into products, dies of starvation.

1.4.3.1 Innovation KPIs

When Kaplan and Norton (1996) proposed the dimensioning of the Balanced Scorecard, they defined the four perspectives that would serve to measure the performance of a company. That means innovations can be measured in terms of financial, market, process and learning and growth perspectives. Nevertheless, our study focuses on innovation processes and these are the sort of KPIs that are relevant to it.

Tidd et al. (2005) proposed a set of different dimensions to assess organizations' performances regarding innovation. These dimensions include: i) number of new ideas generated; ii) product failure rate during development or in the market; iii) percentage of additional time and money demanded by product development projects; iv) customers' satisfaction rates; v) time-to-market; vi) number of suggestions and so on. In different ways, all the dimensions above are related to the **time** it takes for the company to innovate, the **quality** of the innovation generated and its **cost**, which is the approach adopted within this research.

2 METHODS

This section presents the approaches used in the research, its delineation and data collection procedures, finishing with companies' and teams' selection criteria.

2.1 APPROACHES AND DELINEATION

The proposed research presents predominantly descriptive and exploratory aspects in a multi-case study. The exploratory research is commonly associated with the literature review of the study subject, giving a deeper understanding of the issue and relating it to former scientific research (GIL, 1991).

The multi-case approach was used due to the fact that there are gaps in the literature currently available, what justifies this research and the adoption of the methodology. Several works deepen the themes "Teamwork organization", "Leadership" and "Values" and/or "Worldviews", but neither approaches the three of them in order to meet the objectives proposed by this research, that is, to identify how different leadership consciousness levels and leadership styles relate to the organizational efficacy regarding innovation in a given organizational structure within a company.

The adopted methodology allows a deep investigation of the relationships between all the variables involved, but prevents a broader generalization of the results. As a qualitative study, this research formulated assumptions to be "tested" instead of hypothesis.

2.2 DATA COLLECTION

All individuals researched took the consciousness level test in order to map these characteristics among the teams. This assessment was developed by Cordeiro et al. (2019) based on Beck e Cowan (2014) and it is available at https://www.integralworks.com.br .

In the questionnaire answered by team members, each question has a designed value and the individual was asked to choose the option that fitted better his view on the subject. Those questions use a Likert scale, comprising answers from 1 (totally disagree) to 5 (totally agree), with each option corresponding to a different leadership approach or organizational structure, according to those shown on Figure 3 and Table 1.

For the questionnaire focusing on leadership and organizational structure, each question have 5 possible objective answers and a total of 10 questions, 5 for leadership perception and 5 for organizational structure perception, the sum of each focus individually (5 for leadership and 5 for organization) dividing it by the total number of questions for the respective focus (5 each) will reveal the closest number on the scale 1 to 5 and allow assigning a predominant trait in each focus theme. For the team evaluation the individual results will be summed up and the average will be inferred as the main team mental functioning state, the maximum value, before the average calculation will be 20 to the teams with 4 members, excluding the leader, and 25 to the teams with 5 members also excluding the leader.

For the leader's questionnaire the same value distribution was applied, and in addition was required an open answer for the same question characterizing a semi-structured interview.

A data collection plan was developed to establish a standardized path along the data collection. The first step was to assess all individuals' consciousness levels. The second part includes the application of the questionnaire on leadership style and organizational structure, specified above. These results were compiled individually and as a group in order to obtain the researched subject's perspective on leadership and organizational structure, with the intent to characterize the actual leadership style and organizational structure and identify any difference between the perceptions of leaders and their teams.

Finally, the latest KPI's results regarding innovation were obtained from the companies' respective human resources and business unit managers.

TABLE 2 – Data Collection Plan

	Data Callastic	Dien	
	Data Collection	rian	
Specific goal	Information type	Source of information	Data collection procedures
Identify the levels of consciousness of leaders	Consciousness Level of Leaders	Leaders	Assessment available on www. integralworks.com. br
and team members in the companies surveyed	Consciousness Level of Team Members	Team Members	Assessment available on www. integralworks.com. br
	Style of	Leaders	Semi-structured interview
Characterize leaders' leadership style and the organizational structure of the companies	leadership	Team Members	Questionnaire
	Organizational Structure	Leaders	Semi-structured interview
		Team Members	Questionnaire
Characterize the innovation performance of the teams in each company	Innovation Performance	Business Unit Management and HR	Average percentage of improvement on teams' selected innovation KPIs (Documental Analysis)
Analyze the relationships between the different arrangements of consciousness levels, leadership styles and organizational structures and performance in innovation, identifying the combinations with the most expressive results	Effectiveness of Leadership Styles and Organizational Structures in relation to innovation	All the above	Qualitative Analysis

SOURCE: The authors (2020)

It's important to highlight that due to the pandemic of COVID-19, the research team were not allowed to perform on site observations, which were part of the original data research plan. In order to overcome these setbacks all interviews and questionnaires were applied via the internet.

2.3 THE COMPANIES AND THE SELECTION CRITERIA

To ensure that the collected data is relevant, researchers defined two different clusters. So, to be a valid source of information the organization had to fit in one of those clusters: i) Startup born companies; ii) Traditional corporate companies that are undergoing digital transformation processes. Also, all the participating companies should be monitoring their team's performance regarding innovation using KPIs. For this research, two different companies were selected:

- Organization A: A multinational company of the automotive sector. Acting strongly on the shifting of its business model towards a new one focused on innovation and digitalization;
- Organization B: A start-up company, service-based, used innovation as a business model.

At Organization A, 2 different teams were selected: i) Team A1, formed by 4 product development engineers and one Product Development Manager and ii) Team A2, formed by 5 process improvement analysts and one Process Improvement Coordinator. At Organization B, 2 different teams were also selected: i) Team B1, formed by 5 Client Analysts (all servicing one specific client) led by one Team Leader; ii) Team B2, formed by 4 Client Analysts and one team leader, servicing two different clients with similar operations.

3 RESULTS AND ANALYSIS

This section presents the results of the research and its analysis.

3.1 RESULTS

The current research was applied to one automotive organization, referred as company A, and a fintech start-up, referred as company B. At total, the questionnaires were answered by 18 employees and 4 leaders, summing up to a total of 22 interviewees.

It is expected that the consciousness level of both team members and leaders will act as a moderator for the effect of different leadership styles and organizational structure on team's performance regarding innovation. Both individuals' and teams' consciousness levels were calculated with the help of a Microsoft Excel sheet, using the gross data collected at www.integralworks.com.br. Exhibits 1, 2, 3 and 4 present each team's and their team members' and leader's predominant level of consciousness.

EXHIBIT 1 – Consciousness levels results – Team A1

TFAM A1

	Indv. 1	Indv. 2	Indv. 3	Indv. 4	LEADER
RED		3,3%			0,0%
BLUE	16,7%	23,3%	20,0%	13,3%	0,0%
ORANGE	40,0%	52,7%	50,0%	40,0%	28,7%
GREEN	30,0%	14,0%	23,3%	40,0%	53,3%
YELLOW	13,3%	6,7%	6,7%	6,7%	18,0%
TURQUOISE	0,0%	0,0%	0,0%	0,0%	0,0%
Prevalence	ORANGE	ORANGE	ORANGE	ORANGE-green	GREEN

RED	0,7%	5
BLUE	14,7%	110
ORANGE	42,3%	317
GREEN	32,1%	241
YELLOW	10,3%	77
TURQUOISE	0,0%	0

SOURCE: The authors (2020)

For team A1, there is a clear predominance of ORANGE result-oriented consciousness level, as can be noticed on Exhibit 1. It also can be noticed that the GREEN egalitarian consciousness level is the second most prevalent in the team. Team's leader is clearly operating on ORANGE.

EXHIBIT 2 – Consciousness levels results – Team A2

TEAM A2

	Indv.1	Indv.2	Indv.3	Indv.4	Indv.5	LEADER
RED	0,0%	0,0%	0,0%	0,0%	0,0%	3,3%
BLUE	20,0%	43,3%	34,7%	3,3%	36,0%	26,7%
ORANGE	70,0%	36,7%	45,3%	30,0%	44,0%	46,7%
GREEN	6,7%	13,3%	20,0%	56,7%	16,7%	13,3%
YELLOW	3,3%	6,7%	0,0%	6,7%	3,3%	10,0%
TURQUOISE	0,0%	0,0%	0,0%	3,3%	0,0%	0,0%
Prevalence	ORANGE	BLUE-orange	blue-ORANGE	GREEN	blue-ORANGE	ORANGE

RED	0,6%	5
BLUE	27,3%	246
ORANGE	45,4%	409
GREEN	21,1%	190
YELLOW	5,0%	45
TURQUOISE	0,6%	5

SOURCE: The authors (2020)

For team A2, there is also a clear predominance of ORANGE result-oriented consciousness level, as can be noticed on Exhibit 2. Nevertheless, in opposition to team A1, team A2 has the BLUE dogmatic consciousness level as the second most prevalent, indicating a tendency to favor more standardized approaches and solutions in detriment of innovation.

TEAM B1

	Indv.1	Indv.2	Indv.3	Indv.4	Indv.5	LEADER
RED	3,3%	0,0%	3,3%	0,0%	0,0%	0,0%
BLUE	0,0%	3,3%	13,3%	10,0%	16,7%	3,3%
ORANGE	63,3%	66,7%	43,3%	43,3%	54,0%	40,0%
GREEN	6,7%	20,0%	15,3%	31,3%	16,7%	23,3%
YELLOW	26,7%	10,0%	24,7%	12,0%	12,7%	33,3%
TURQUOISE	0,0%	0,0%	0,0%	3,3%	0,0%	0,0%
Predominance	ORANGE	ORANGE	ORANGE	ORANGE-green	ORANGE	orange- GREEN

RED	1,1%	10
BLUE	7,8%	70
ORANGE	51,8%	466
GREEN	18,9%	170
YELLOW	19,9%	179
TURQUOISE	0,6%	5

SOURCE: the authors (2020)

For team B1, the most prevalent consciousness level is also the ORANGE result-oriented. Nevertheless, in opposition to what was found in teams A1 and B1, the prevalence of BLUE dogmatic level is really low, with a high prevalence of GREEN egalitarian and YELLOW integrative levels, both strongly more open to innovation than BLUE.

TEAM B2

	Indv. 1	Indv. 2	Indv. 3	Indv. 4	LEADER
RED	0,0%				0,0%
BLUE	13,3%	3,3%	3,3%	3,3%	0,0%
ORANGE	46,7%	46,7%	53,3%	36,7%	16,7%
GREEN	13,3%	23,3%	16,7%	33,3%	31,3%
YELLOW	26,7%	26,7%	26,7%	26,7%	52,0%
TURQUOISE	0,0%	0,0%	0,0%	0,0%	0,0%
Predominance	ORANGE	ORANGE-green	ORANGE	ORANGE-green	YELLOW

RED	0,0%	0
BLUE	4,7%	35
ORANGE	40,0%	300
GREEN	23,6%	177
YELLOW	31,7%	238
TURQUOISE	0,0%	0

SOURCE: The authors (2020)

By looking at Exhibit 4, it's possible to notice that Team B2 follows a very similar pattern when compared to Team B1: prevalence of ORANGE results-oriented level of consciousness and a much higher occurrence of both GREEN pluralistic and YELLOW integrative levels when compared to BLUE dogmatic level. In addition, it's also possible to notice that its leader operates primarily from YELLOW integrative, which is an important indication of a good fit with second tier leadership styles and organizational structures, which is expected to lead to good results in terms of innovation.

The data collection of both leadership styles and organizational structures were also consolidated in a Microsoft Excel sheet. As already mentioned, a Likert scale was used to characterize the level of accordance of the respondents with each sentence. Each of the sentences on the questionnaires were related to one leadership style or

one organizational structure. The higher the summatory of points of a sentence, the more the leadership style or organizational structure associated with that sentence is present on the team.

EXHIBIT 5 – Team members' and Leader's views – Leadership styles and organizational structure

Results – Team A1

TEAM A1						
Leadership			Structure			
	Leader	Team		Leader	Team	
Coercive	10.53%	10.16%	Division of Labor	7.79%	13.70%	
Conformist	14.47%	23.70%	Formal Roles	22.08%	23.13%	
Results Oriented	27.63%	25.28%	Matrix	29.87%	23.55%	
Pluralistic	27.63%	22.80%	Network	23.39%	20.56%	
Integral	19.74%	18.06%	Holarchy	16.88%	19.06%	

SOURCE: The authors (2020)

As can be seen on Exhibit 5, the prevalent leadership style of the leader on Team A1 is the result oriented one. The leader sees himself also as much egalitarian as result oriented, but the team doesn't agree exactly. In regard to the organizational structure, it can be noticed the prevalence of the matrix profile. with formal roles being the second most prevalent according to the team members (the leader thinks it's the network, but also considers a high prevalence for the formal roles organization).

EXHIBIT 6 – Team members' and Leader's views – Leadership styles and organizational structure Results – Team A2

TEAM A2						
Leadership				Structure		
	Leader	Team		Leader	Team	
Coercive	11.39%	8.62%	Division of Labor	13.10%	12.64%	
Conformist	18.99%	20.69%	Formal Roles	23.81%	22.41%	
Results Oriented	25.32%	28.62%	Matrix	25.00%	25.29%	
Pluralistic	24.05%	21.72%	Network	21.43%	18.97%	
Integral	20.25%	20.34%	Holarchy	16.67%	20.69%	

SOURCE: The authors (2020)

Exhibit 6, shows very similar results for TEAM A2 when compared to TEAM A1. The prevalent leadership style is also that focused on results, but the formal roles organizational structure is almost as much prevalent as the matrix one.

EXHIBIT 7 – Team members' and Leader's views – Leadership styles and organizational structure Results – Team B1

TEAM B1							
Leadership			Structure				
	Leader	Team		Leader	Team		
Coercive	8.86%	11.29%	Division of Labor	8.86%	9.06%		
Conformist	8.86%	12.37%	Formal Roles	8.86%	12.30%		
Results Oriented	26.58%	26.34%	Matrix	29.11%	25.57%		
Pluralistic	25.32%	24.19%	Network	25.32%	21.36%		
Integral	30.38%	25.81%	Holarchy	27.85%	31.72%		

SOURCE: The authors (2020)

When compared to both TEAM A1 and A2 results, TEAM B1's results present (presented on Exhibit 7) a very distinctive profile. Despite the prevalence of the result-oriented leadership approach (at least according to the team members), both Egalitarian and Integral approaches are practically as much prevalent. In terms of structure, results present a mix of the matrix and holarchy approaches, which indicates a great suitability with innovative approaches.

EXHIBIT 8 – Team's and Leadership views – Leadership styles and organizational structure

Results – Team B2

TEAM B2							
Leadership			Structure				
	Leader	Team		Leader	Team		
Coercive	12.05%	9.98%	Division of Labor	10.47%	12.86%		
Conformist	9.54%	16.49%	Formal Roles	13.95%	16.53%		
Results Oriented	30.12%	24.51%	Matrix	29.07%	23.06%		
Pluralistic	21.69%	24.08%	Network	22.09%	23.27%		
Integral	26.51%	24.95%	Holarchy	24.42%	24.29%		

SOURCE: The authors (2020)

TEAM B2's results regarding leadership styles and structure are presented in Exhibit 8. They are very similar to Team B1's results. However, despite the prevalence of the result-oriented leadership approach (at least according to the team members), both Egalitarian and Integral approaches are practically as much prevalent. In terms of structure, results present a mix of the matrix and holarchy approaches, which indicates a great suitability with innovative approaches.

Finally, Exhibit 9 presents the four teams' results regarding innovation. In order to make them comparable and also to preserve confidential data from both companies, the chosen KPI was the average percentual variation of the Innovation KPIs of the teams. Teams A1 and A2 use three different innovation KPIs. On the other hand, Teams B1 and B2 have only two innovation KPIs. The data on Exhibit 9 show that both Company B's teams performed much better than Company A's ones in the period in terms of innovation.

EXHIBIT 9 – Results for the first Quarter of 2020 (compared with 4th Quarter of 2019) (pre-COVID-19)

TEAM A1:	time quality cost	-6,50%
TEAM A2:	quantity time cost	-8,2%
TEAM B1:	time cost	8,10%
TEAM B2:	time cost	12,40%

SOURCE: The authors (2020)

3.2 RESULTS' ANALYSIS

Both teams from Company A seem to have a strong influence of both the dogmatic leadership style and the formal rules structure, as can be seen in Exhibits 5 and 6. Considering the fact that both teams have a significant percentage of BLUE consciousness level (Exhibits 1 and 2), that could be seen as a sign of alignment between the worldviews, leadership and structure. Nevertheless, this aligned set doesn't meet the required levels of innovation by the company. On the other side, both teams from Company B replace BLUE consciousness levels, dogmatic leadership and formal rules structure by almost the same amount of YELLOW consciousness levels, integral leadership and holarchic structure (as can be seen in Exhibits 3, 4, 7 and 8). According to Beck & Cowan (2006), Cordeiro et al. (2016) and Laloux (2015) and Anderson et al. (2015), among others, that makes us expect a better performance in terms of innovation, which ends up being true as can be noticed in Exhibit 9. This confirms this work's first basic assumption that adhocratic and holarchic structures are more likely to generate better results in terms of innovation and are more effective when the leadership operates at the second tier of consciousness levels and teams operate at least at the "Orange to Green level", with the last two conditions being one of the main common features of Company B's teams, that probably enable them to be more innovative than their counterparts in Company A.

Furthermore, it's also clear in Exhibit 9, that Team B2's performance in terms of innovation is even better than Team B1's. That ends up confirming the expectation according to this work's second basic assumption, that states that more democratic and self-management leadership styles and network and holarchic organizational arrangements have a higher efficacy when the leader operates at the second tier of consciousness level and the team operates at least at the "Orange to Green level". As can be seen from Exhibits 4 and 8, Team B2 has a classic ORANGE-green profile prevailing on its members and is led from the YELLOW level of consciousness. It also can be noticed from Exhibits 8 and 9 that the more democratic and self-management (results oriented, pluralistic and integral) approaches used by the leader together with the more flexible organizational structures (matrix, network and holarchic structures) presented in Company B ends up creating a working environment that is more suitable for innovative performance.

FINAL REMARKS

This paper aimed to characterize how different leadership consciousness levels and different leadership styles relate to the organizational efficacy regarding innovation in four teams in two different organizational designs and cultures. This main objective was achieved by means of assessing the level of consciousness of the teams' leaders and their team members, characterizing their leadership profile and each company's organizational structure and relating them with each team's performance regarding innovation.

By means of a multi-case study, it could be noticed that the BLUE/ conformist worldview is still very present even among innovation-driven environments of traditional multinational companies. This presence is accompanied by some remains of the conformist leadership style and strong evidence of formal roles organizational structures, which are consensually seen by many authors (BECK; COWAN, 2006; CORDEIRO et al. 2019; LALOUX, 2015; ANDERSON et al., 2015) as barriers to an innovative working environment, what have been confirmed by this research's results.

On the other hand, this paper also showed that more democratic and self-management leadership approaches performed by second tier leaders when associated with holarchic structures and team members operating at orange to green worldviews are capable of producing very good results in terms of innovation performance.

Due to the Covid-19 Pandemic, it was not possible to carry out the study in a larger number of teams (it was intended to study 16 teams from 4 different companies

originally, two start-ups and two traditional companies in digitization processes), which would make the result more accurate and reliable. The pandemic also affected the rigor of the methodology used, since it was not possible to carry out on-site observations in the companies surveyed, making a complete triangulation of data impossible. The original intention was to have at least three different sources of data on the leadership profile and the organizational structure (the vision of the leaders, the vision of the followers and the vision of the researchers) but it was not possible to visit the companies to collect data.

It is suggested to carry out quantitative studies that replicate data collection for a larger number of companies in order to be able to test the assumptions of this research as hypotheses.

REFERENCES

ANDERSON, R. J., ADAMS, W. A. **Mastering Leadership**: an integrated framework for breakthrough performance and extraordinary business results. New York: Wiley, 2015.

BATEMAN, T. S.; SNELL, S. A. Administração. Porto Alegre: Mcgraw Hill, 2012.

BECK, D. E.; COWAN, C. **Spiral dynamics**: mastering values, leadership, and change. Hoboken: John Wiley & Sons, 2014.

CARLYLE, T; On heroes, hero-worship, & the heroic in history. London: Chapman and Hall, 1869.

CURY, A. **Organização e métodos**: uma visão holística – perspectiva comportamental e abordagem contingencial. 6. ed. São Paulo: Atlas, 1995.

CORDEIRO, J. V. B. M.; CRUZ FILHO, P. R. A.; LAMOGLIA, L. B. **Liderança integral**: a evolução do ser humano e das organizações. Petrópolis: Vozes, 2019.

COWAN, C.; TODOROVIC, N. Spiral dynamics: the layers of human values in strategy. **Strategy & Leadership**, v. 28, n. 1, p. 4-12, 2000.

DAY, D. et al. Advances in leader and leadership development: a review of 25 years of research and theory. **Leadership Quarterly**, v. 25, n. 1, p 63-82, 2014.

GIL, A. C. Como elaborar projetos de pesquisa. 3. ed. São Paulo: Atlas, 1991.

GEORGE, J. M.; JONES, G. R. **Understanding and managing organizational behavior**. New York: Prentice Hall, 2012.

GOLEMAN, D. Leadership that gets results. Boston: Harvard business Review, 2000.

KAPLAN, R. S. Organização orientada para estratégia. 12. ed. Rio de Janeiro: Elsevier, 2001.

KEGAN, R. **The evolving self**: problem and process in human development. Boston: Harvard University, 1982.

LALOUX, F. The future of the management is Teal. **Strategy + Business**, v. 80, p. 1-12, Autumn 2015.

LEWIN, K.; LIPPITT R.; WHITE, K. Patterns of aggressive behavior in experimentally created "social climates" **The Journal of Social Psychology**, v. 2, n. 10, p. 269-299, 1939.

MELO, R. C.; SILVA, M. J.; PARREIRA, P. **Effective leadership**: competing Values Framework. Coimbra: Elsevier, 2014.

READY, D. A.; COHEN, C.; KIRON, D.; PRING, B. The New leadership playbook for the digital age: reimagining what it takes to lead. In: SLOAN MANAGEMENT REVIEW. **A Sloan Management Review Research Report** (in Collaboration with Cognizant). Boston: MIT, 2020.

ROBERTSON, J. B. **Holacracia**: um novo sistema que propõe o fim da hierarquia. New York: Benvira, 2016.

SCHEIN, E. H. Organizational culture and leadership. São Paulo: Atlas 2009.

SLACK, N. Administração da produção. 8. ed. São Paulo: Atlas, 2018.

TABRIZI, B. **Rapid transformation**: a 90-day plan for fast and effective change. Boston: Harvard Business Review, 2007.

TIDD, J.; BESSANT, J.; PAVITT, K. Gestão da inovação. Porto Alegre: Artmed, 2005.

220 — FAE Centro Universitário | Núcleo de Pesquisa Acadêmica – NPA