

Louvain School of Management

**The impact of Digital
Transformation on Leadership in a
Public Service Organization : The
case of the RTBF (National Belgian
Television)**

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This master's thesis is the result of intense work with the help of so many people and it brings my Master's Degree in Business Engineering to an end.

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Introduction

This Master's thesis is the conclusion of my Master in Business Engineering. It aims to bring a reflection on how digital transformation is affecting leadership inside the RTBF (national Belgian television).

Since the beginning of the 21st century, a new phenomenon has emerged in several aspects of our society: the digitalization. The digitalization is creating a wave of disruption on all types of businesses requiring them to reinvent themselves continuously or otherwise, their business models will become not pertinent. Companies will have to go through an environment that has become increasingly uncertain over the years. They will do that through a transformation of their company that they will need to undertake if they want to stay relevant. It will be a necessary condition to thrive in this new digital economy. People could suppose that digital transformation is only about tech-savvy industries but in reality; it concerns all traditional businesses. In order to be successful in this transition, companies will need to reinvent their organizations in several fields such as the leadership or the use of Big Data in order to transform as more agile and reactive organizations.

Thesis structure and scope

This Master's thesis is divided into two different parts: the literature review and the practical case study. In this first part of this thesis, we will examine the concept of digital transformation and its relationship with the notion of leadership of managers in organizations by doing an analysis of the available literature on the subject. Doing this will lead us to have a clearer view of the definition, the characteristics and the concept of digital transformation and leadership. For this literature review, we will look at why digital transformation is a necessity for all businesses if they want to survive. We will also look at the consequences of digital innovations and digital disruption on organizations. Afterward, we will look at different principles advised for companies to follow for their digital transformations to be successful. Then we will define the leadership of organizations and all its components. Moreover, we will look at the notion of digital transformation inside public service companies. Finally, we will explore the relationship between digital transformation and leadership of managers.

Doing this literature review will lead us to have a summary and an evaluation of the collection of writings about digital transformation, digital disruption, innovation and leadership (Knopf, 2006). For this thesis, academic articles, publications, and books from different types of sources were collected. These findings were important in the development of a good understanding of the digital transformation question.

In the empirical part, we will examine the digital transformation of the RTBF. The RTBF is a public service broadcasting company producing radio, television and online contents for the French-speaking people of Belgium. To conduct this practical part, several interviews of managers were conducted. In this part, I will present the methodology, the data collection and the findings from the data analysis. I focused my interviews on people that have a position of leadership inside the company and that have some influence on the digital transformation strategy. I also focused my research on only one Belgian organization to conduct an in-depth analysis. This research will allow me to understand how this organization approaches digital transformation. Afterward, I will present a discussion on the study by answering the research question. Moreover, the limitations of the study will be analyzed. Finally, a conclusion to summarize the thesis will be provided.

Seeing that digital transformation is a wide phenomenon that still needs to be studied in-depth by academic researchers, there will be some limitation to this thesis. Because the practical part will be a qualitative case study, I will not focus on the technical angle of the digital transformation during my empirical research. I will focus more on the strategy, the leadership and the governance behind the digital transformation.

Part 1: Literature review

1. Introduction

Digital transformation has many different synonyms across the literature. It can be seen under the words digitalization, uberisation or numeric transformation. In the end, every author wants to define the same reality: a new Industrial Revolution is here. Academic researchers have different opinions on all those definitions.

For example, according to Ducrey et Vivier (2017), they are using the words digital and numeric indifferently. Another example can be found in “La transformation digitale des entreprises: Les bonnes pratiques” where the words digital and numerical seem to have different meanings. Digital is used to define portable technology in terms of use while numeric is used to define data computerization. Finally, the word uberisation seems to have one clear meaning. Big companies like Uber or Airbnb are entering markets and disrupting them by creating a platform (Colin & Verdier, 2015).

The sections that will follow will summarize this analysis and show the main findings of this literature review on the subject and the answers to some important questions. This literature review will provide a solid foundation for the empirical part. Why is digital transformation becoming such an important subject nowadays? Why do businesses need to follow this trend if they want to stay relevant? How should this transformation be implemented? How can digital transformation be defined? What are the main approaches to the leadership concept? What is the relationship between the digital transformation and the leadership of a company and how does it reinvent this role? At the end of this section, there will be a conclusion on this literature review.

For this thesis, the words digitalization, digital transformation, and numerical transformation will mean the same thing.

2. Digital transformation

2.1. Contextualization: origins and development of the digital transformation

In order to explain why digital transformation became an important topic amongst businesses, we must understand the reasons for this phenomenon. The world is entering its Fourth Industrial Revolution and the economy is now digital. Before this Fourth Industrial Revolution, there was a Third Industrial Revolution that was as much important. These two events could be considered as the triggers of this new wave of digital disruption and transformation.

2.1.1. A new era

Technological evolution has been changing the world since the last century. The apparition of the Internet has created an enormous wave of change in our society. Technological factors have been improving in an exponential way everywhere. This phenomenon is the source of instability for companies that are less agile compared to other ones. Even a new law was created by Gordon Moore to characterize what was happening by stating that human activities will increase exponentially over the years. Innovations are disrupting our traditional ways of thinking and working. Another definition of Moore's law is the fact that the technical capacity and the speed of computers will double every 18 months. It will produce enormous flows of data called Big Data that companies will need to analyze to find the added value (Babinet, 2016; Ducrey & Vivier, 2017).

The world has changed over the last few years and businesses talked about new Industrial Revolutions. One of them was the Third Industrial Revolution (1975-Present). The Third Industrial Revolution or the Digital Revolution was characterized by a huge change in manufacturing. Manufacturing through this revolution did become progressively digital. The Third Industrial Revolution allowed things to be made more efficiently in small numbers with higher flexibility. Moreover, new processes such as 3D printing or robots became available to more businesses and the output of product and services were much more individualized (The Economist, 2012).

The beginning of the Fourth Industrial Revolution overlaps with the end of the Third Industrial Revolution. It is built on what the digital revolution has created before this event. Klaus Schwab introduced the term during the World Economic Forum Annual Meeting at Davos in 2016 (Prisceraru, 2016). It is based on the convergence of technologies such as automation, digital services or Internet of Things. It will change the way people live and the environment around them. The fusion of digital, biological and physical technologies is the main characteristic of this Revolution. This phenomenon will have a huge impact on social, economic and environmental factors (Maynard, 2015).

Moreover, the level of digitization is expected to rise from 33% in 2017 to 72% in the next five years (Stancioiu, 2017). There are lots of technologies that are used through this Revolution including some digital technologies like digital manufacturing or the digitalization and integration of information systems.

2.1.2. Digital innovation

These new Industrial Revolutions are happening because of innovations that are considered digital. These innovations are pushing the companies to go through their digital transformation. Digital innovation can be defined “*as the creation of (and consequent change in) market offerings, business processes, or models that result from the use of digital technology.*” (Nambisan, Lyytinen, Majchrzak, & Song, 2017, p.224).

These digital technologies differ from other technologies by having characteristics such as reprogrammability, self-reference, and data homogenization. Reprogrammability refers to the different possible functions available that digital technology can perform. Data homogenization will set apart the content from the medium and will allow any digital data and content to be used on the same devices and networks. Self-reference means that digital innovations will need digital technologies to work and in return, the use of digital technologies will favor digital innovation. Digital technologies are present in every aspect of many organizations’ products, services, and processes nowadays (Yoo, Boland, Lyytinen, & Majchrzak, 2012; Yoo, Henfridsson, Lyytinen, & Vicktoria, 2010).

Digital innovations have been changing in a radical way the architecture and the design of products and services. It is the result of innovations that can transform a lot of industries.

Digital innovations can include several innovations such as new products, services, experiences or platforms. Digital innovations have convergence and generativity as characteristics. Convergence means that digital technology will bring distinct user experiences together by creating new experiences such as Hulu or Spotify. Convergence also means that digital technologies are part of non-digital products that result in making these products digital. Finally, there will be convergence by bringing together distinct industries. Afterward, generativity means that digital technologies can become adaptive and productive. The technology is always changing by generating new digital innovations and capabilities after the launch of the product or the service. Digital technologies are also generative by creating a large amount of trace such as data that can be analyzed to innovate more (Nambisan et al., 2017; Yoo et al., 2012).

2.1.3. Impact of the digitalization on companies

In this chapter, we will look at how digital innovations and digitalization influence firms nowadays. Digital innovations will change the type of product and will create new industries that could lead to new opportunities or risks (Lyytinen, Yoo, & Boland, 2016).

Digitalization allows companies to grow rapidly their user base. There are three different mechanisms that allow an organization to scale quickly: data-driven operation, instant release, and swift transformation. This process of growing a user base is sustainable because attracting user will increase the probability that enough users will follow. A data-driven operation is a process where companies will analyze a large amount of data in order to identify innovations opportunities and risks. The data will be captured through interactions with users or digital foundations. Swift transformation is the process where digital innovation is put in a specific context to reformulate the company's identity and value. Finally, the instant release is the process where companies will reduce the time interval between the idea and its deployment by making quick iterations based on user's feedback (Huang et al., 2017).

2.1.4. Digital Masters

In order to know why digital transformation is such an important matter today for all the businesses, it is useful to look at the companies that have already accomplished their digital transformation successfully and that are way ahead of their competitors like the GAFA (Google, Apple, Facebook and Amazon) and NATU (Netflix, Airbnb, Tesla and Uber). The

companies included in the GAFAs are considered as digitally advanced and are ranked amongst the most valuable companies in 2018 (Bonnet, Westerman, & McAfee, 2014; Hunter, Hughes, Liu, Picard, & Ethridge, 2018).

GAFAs and NATUs are considered as Digital Masters and have disrupted their industries. Digital Masters are obsessed to please the customer at any time and are characterized by a strong culture for innovation and success. Moreover, thanks to their huge revenues, they can invest heavily in R&D to make continuous innovation and their ability to innovate is above average (Ducrey & Vivier, 2017).

Then Digital Masters are excelling in two important dimensions: digital capabilities and digital leadership. The digital capabilities are about the “what” of the technology. They are seeing new technologies as the new tools to change their operating businesses, transform processes and stimulate their employees. The leadership capability is about the “how” of the change. It means that technology is not enough to go through a digital transformation because leaders are important to point in the right direction. Effective leaders are continuously targeting new ways of taking their companies to the next stage (Bonnet et al., 2014).

2.2. Definition of digital transformation

Over the last decade, firms have been looking at how to use new digital technologies and how to reap their benefits in order to survive digital disruption. Organizations will need to evaluate the risks of these innovations for their business model. These new innovations and technologies can influence greatly how an industry is traditionally working. As a result, it is where digital transformation becomes important and intervenes by improving the digital abilities and resources of organizations. It requires a transformation of operations by using and integrating digital technologies and it has a huge impact on the products, processes, and services of the company. It also influences the organizational structure and leads to the establishment of new management rules. A digital transformation strategy should be coordinated with all the other business strategies. Organizations will have to make efficient use of these digital innovations and take advantage of all the opportunities they will create (Hess, Matt, Benlian, & Wiesböck, 2016; Matt, Hess, & Benlian, 2015; Sebastian et al, 2017).

There is not much academic literature about digital transformation. It was revealed that from around 3,000 articles published from 2007 to 2016 in the leading academic IS journals, about 3% touched the subject of digital transformation and other topics like innovation and digital technologies (Gerster, 2017).

2.3. Principles of digital transformation

There are several approaches to analyze digital transformation across the literature. It means that there is not one single correct way of analyzing this phenomenon. One approach could be the approach from Hess et al. (2016) that describes four different aspects that go from the change in value creation to the financial aspects. Another framework explains that in order to successfully complete a digital transformation, it is important to align "*...the company's strategy, workforce, culture, technology, and structure to meet the digital expectations of customers, employees, and partners.* » (Kane, Palmer, Nguyen-Phillips, Kiron, & Buckley, 2017, p.2).

In this section, based on my review of literature, there will be an analysis of the different axes that the digital transformation is based on and that companies need to follow if they want their transformation to be successful. It will make the organization more digitally advanced in several fields.

2.3.1. The reinvention of the customer relationship

Companies need to reinvent themselves in their relationship with customers. Digital technologies imply more interactivities with these customers. Companies have started to implement digital tools like social rooms to have a better grasp of their presence on social media. These interactions could be useful to predict future behaviors because they generate a large volume of data. Doing all of this will lead the company to handle in a better way their interactions with customers (Ducrey & Vivier, 2017).

Afterward, the relationship between the customers and the company is not one-sided anymore but it goes both ways. Customers are also interacting with each other and creating thus huge customers' networks. Companies need the participation of these customers' networks to experience success. Customers are no longer passive but active and businesses need to collaborate with them now (Rogers, 2016). They are connecting with brands through new

types of media channels and they are able to compare a large pool of competitors before making a decision (Edelman, 2010).

Moreover, there is now a need to form the employees in their online response to customers if companies do not want to go through a bad public relation stunt (Ducrey & Vivier, 2017). The digital age is creating everything described above and it pushes the companies to reinvent their marketing campaign and the consumer's journey (Rogers, 2016). Customers are expecting a new experience with companies nowadays. Creating this experience by blurring the lines between the physical and online customer experience will lead to a higher value for both sides: the company and the customers. It will improve loyalty and retention (Bonnet et al., 2014).

Companies need to follow some steps while going through this reinvention. Firstly, companies need to understand consumers' behavior by looking at the different touch points: what the customers are doing and how they are doing it. They will be able to see where they will need to act to improve the customer experience. They could look at how to co-create value with the customers. Secondly, businesses have to make digital investments like creating new apps or other innovations to reach customers. Thirdly, companies need to use carefully the data coming from their interactions with their customers. Finally, the combination of physical and online experience will lead to a more efficient outcome for the clients (Bonnet et al., 2014; Rogers, 2016).

2.3.2. Importance of using data as assets for companies

Walmart's story with big data is a good illustration of why it is necessary to not overlook it. Walmart is considered as one of the biggest retailers in the world with a turnover of \$450 billion. Walmart had one of the biggest databases in the nineties before the explosion of the World Wide Web. One day, they decided to look at their previous data. They found that when there was a hurricane in the region, consumers were buying more flashlights and pop tarts. Next time there was a hurricane in the region, they decided to place these flashlights and pop tarts at the entrance of their stores and their sales increased (Cukier & Mayer-Schönberger, 2014). As illustrated, the companies that are performing the best are the ones that have understood the importance of data (Ducrey & Vivier, 2017).

Nowadays, data provided by customers are present in large volume in markets but companies need to learn how to use and transform it into assets that could generate value in the future. The quantities of data available for companies have reached amounts that have never been seen before. It all comes from the interactions, connections and the processes in and out of the company. These quantities are called Big Data and several companies should consider the use of Big Data as a priority (Rogers, 2016).

It is considered as the new oil of the 21st century seeing the value it provides to companies. The companies need to go through all these flows of data and need to refine them to find the data that will serve the most by establishing a data strategy. A data strategy needs to follow these five principles: assembling of various data types, use data as a basis for decision-making, apply data to the conception of innovative products, observe customers actions and combine data from all the departments (Ducrey & Vivier, 2016; Rogers, 2016).

Because of this rise of data across the world, organizations need to develop new technological capabilities that will handle these amounts of data and make these organizations more efficient. These new technologies will be used to make sense of this intangible asset. The biggest improvement in data management is surely artificial intelligence. Artificial intelligence is able to recognize correlations and patterns in data and will improve its performance based on what it experienced. It is also able to imitate basic human behaviors. The more and more data the artificial intelligence gets, the higher the accuracy it will achieve through machine learning. The rise of interest in artificial intelligence correlated with the rise of interest in Big Data around 2014. Moreover, this development of new technologies has led to the digitalization of several internal activities inside organizations. Fewer jobs will need human actions in the future because automation of these processes will replace these interactions instead (Allam & Dhunny, 2019; Ba, Stallaert, & Zhang, 2010; Rogers, 2016).

2.3.3. Agile transformation

Even if businesses apply all the digital transformation principles in the world but they lack motivation and readiness to make change happening, the digital transformation will not work. Agile management is a good solution to some of these problems because it will allow the organization to create and take advantage of new digital innovations in the future. It started to become increasingly used in software development. Agile management refers to the necessity

of being able to act quickly in response to rapidly changing times like the market conditions or the arrival of new competitors. It will allow the organizations to speed up their product conceptions and to experiment. The organization will also have fewer difficulties to share effectively resources between the different activities. It is based on incremental and iterative development (Mergel, 2016; Rogers, 2016; Wells, 2014).

In an agile transformation, early results are more favored than a perfect result that will only be obtained at the end of the project. Managers will accept failure in the first stages of product development and early results can be improved later on. In the typical waterfall method, organizations will only evaluate what they have done after the transformation is completely finished. With agile methods, organizations will have to take feedback into account in order to adapt their digital transformation by doing regular meetings to review goals and objectives. It is important that the organizations take advantage of this feedback information. They also need to divide bigger tasks into smaller tasks that will be more manageable. There are several agile methods that include, amongst other, Scrum or Kanban (Mergel, 2016; Piro, 2019).

2.3.4. A new approach to innovation

The world nowadays is continuously changing and the digital leaders on the market are the ones that are continuously innovating through new strategies. New ideas are coming from processes where skills, experiences, and knowledge are working together. The company needs to stimulate the work environment in order to favor the creation of these innovations. It is also important to have a horizontal structure where most of the organization is decentralized and lets the teams more autonomy. Companies are trying to have some diversity in terms of culture and skills in order to have more innovations (Babinet, 2016).

As a result of this new approach to innovation, there will be changes in the organizational culture that will lead to a new digital culture. Shifting to a new culture will be necessary to use efficiently digital innovations and technologies. Digital transformation will redesign the organizational chart by creating, merging and deleting departments and services inside the organization. It will also have an impact on the traditional approach of the workers. Doing this cultural change can lead to some difficulties because it will require increasing involvement from the workers. Being risk-averse, collaborative and being ready to learn frequently should be encouraged. Creating cross-functional teams with people from different

backgrounds will be a good step. A new digital culture will facilitate the adoption of new business practices in the future (Kane et al., 2017; Sebastian et al., 2017).

Afterward, more and more companies are using the lean startup technique as another tool. Companies need to develop a Minimum Viable Product (MVP) that is a product with just enough characteristics to satisfy the customers and to provide feedback for the rest of the product development. They will need to test this MVP with the customers to receive feedbacks. Then the use of pertinent Key Performance Indicators is important for the company to go quickly through the Build-Measure-Learn iterative loop. If the idea is not working, the company will always have the possibility to pivot and to move to another idea. When companies will have a large number of customers, they will be able to use experiments such A/B experiments where they will test the new innovative features of the MVP on only a few customer segments to see if it is successful (Ries, 2011).

2.3.5. Importance of building a platform

In the 21st century, new kinds of businesses have emerged on the market like Airbnb that are building platforms in addition to their products. According to Rogers (2016, p.57), a platform is *“a business that creates value by facilitating direct interactions between two or more distinct types of customers”*. There are four types of platform that include exchange, transaction systems, advertising-supported media and hardware/software standards (Rogers, 2016).

Well-designed and structured platforms are important at every level in all industries today because they constitute the most important technological foundations for a digital transformation. The creation of a platform can be seen as the final result of a complete digital transformation. Companies that have developed platform thinking are among the most powerful in the world. Products and services that share a platform will have some common characteristics because the platform will integrate all kind of activities necessary to the functioning of the organization (Babinet, 2016; Bonnet et al., 2014; Raskino & Waller, 2015).

Afterward, building a platform will save time and energy by building common ground. Indeed, lots of companies are embedded in a proliferation of systems that inhibits their ability to understand information. When a company goes through its digital transformation, it needs

to do continuous improvement of its platform in order to strengthen it and simplify its system (Bonnet et al., 2014; Raskino & Waller, 2015).

Moreover, creating this platform will help to reduce several costs by connecting more easily the company, the customers, the employees, and the providers. Improving this connection will increase the likelihood of cooperation between all these actors and allow the organization to scale up fast. A platform will be the link between the different stakeholders and the data. It will also help by creating barriers to entry if the platform is doing well. In addition to that, the platform will also serve to unify the company's internal initiatives such as video conferencing or automation of factories (Babinet, 2016; Bonnet et al., 2014; Rogers, 2016).

Finally, creating this platform will be the first step to build an ecosystem around the organization. Organizations will need to assemble these large networks of partnership by being the orchestrators. An ecosystem is made up of a large group of organizations that will participate in the creation of the firm's product or service. Platforms will be the basis of the ecosystem by allowing interconnection (Markus & Loebbecke, 2013).

2.4. Digital disruption

A subject that is always linked to the concept of digital transformation is the concept of digital disruption. Disruption leads to the need to reassess and readjust organizations and structures. Even if businesses adopt digital strategies and apply them to their organizations, they might still face a threat from an asymmetric rival. Several industries including hotels and restaurants, media or telecommunications industries have been disrupted (Rogers, 2016). This chapter will look at how and why digitalization disrupts industries.

Christensen (2013) introduces the term « disruptive innovation » in its book “The innovator’s dilemma: when technologies cause great firms to fail”. Christensen did the first research on disruptive technologies and innovations. This theory explains how new entrants can challenge existing incumbents. New entrants will serve in the first place customers that are not in the market segment of the incumbents. This new challenger sells a product that has inferior performance than the current product or service but performs better in terms of price or accessibility. Thus, these incumbents will not pay attention to these disrupters and will keep serving their mainstream customers. However, the disrupters will improve the performance of

their products over the years until it disrupts completely the market by becoming a solid alternative for the incumbents' customers. The incumbents that only focused on their actual products and businesses find themselves in the incapacity to compete with the new challengers at this point.

On the other hand, even though Christensen's theory was essential in the field of innovation, researchers have made several critics on the concept. Danneels (2004) raised questions on this subject with five important issues that include:

The definition of disruptive technology, the predictive use of the theory of technological disruption, explaining the success of incumbents, the implications of the theory for the merits of being customer-oriented, and the merits of creating a spin-off to commercialize the disruptive technology. (Danneels, 2004, p.246)

Moreover, Christensen's (1997) theory only concentrates on disruptive technologies. People only used this theory to analyze all types of disruptive innovations. However, there are different kinds of innovations with each one having their own effects on responses of the incumbents. Disruptive innovations should be classified into several categories: technological innovation, business model innovation, and product innovation (Markides, 2006). Thus, Christensen's theory should not be seen as the absolute truth as several researchers have presented several limitations about it.

There are different perspectives on the execution of digital disruption. According to Bughin et van Zeebroek (2017), companies that will adopt audacious strategies against digital disruption will be the ones that will have the most chances to succeed. The digital disruption happened because of digitalization. Digitalization is a concept that is having many dimensions. It could be the apparition of a new platform or a new product. The influence of digitalization has been growing over the years and is disrupting many industries.

There are two loops effects that impact negatively the profits of businesses disrupted. Firstly, the new entrants will compete with the incumbents with their disruptive business models at an important speed. New entrants will take a large market share and will create pressure on price and change the customer's behavior. For example, 85% of the market capitalization of the top

companies in the GPS industry had evaporated after the introduction of Google Maps in 2009. Secondly, there will be more competition between the remaining incumbents on the market. This effect is called the “Red Queen” competition. Incumbents will enter in hostile imitation in order to maintain their market share. It will create a tit-for-that situation where no one will win and where innovation will be replaced by imitation. In response to these two loop effects, incumbents need to plan a new digital strategy to be more competitive. The best strategies would be to look at new customer segments and to re-segment the market (Bughin & Zeebroeck, 2017).

2.5. Controversies around the digital transformation

Seeing all the analysis above, people could think that digital transformation has only positive effects. However, if the digital transformation is not processed in a careful way, it could have unfavorable consequences on businesses and their workers. Managers need to be careful to not go to extreme methods to succeed with digital transformation. This problem concerns way more traditional companies. A good metaphor coming from the author George Westerman compares digital transformation to the vitamins you need to take. It is important to take the right amount, not more, not less (Westerman, 2016).

For example, by trying to match people with the tasks in order to get an optimum outcome, it is possible that companies will only hire workers when they need them for some particular types of work. It would lead to employees trying to accumulate many jobs to earn a living. Afterward, Big Data obsession could lead to employers to observe all their workers carefully throughout their day and make an evaluation based on performance. Businesses will consider them as numbers and not as people and will fire or hire them without too much human judgment. Finally, automation will lead to the suppression of posts and increase pressure on the people who remained at the organization (Westerman, 2016).

Heartless management could be the new normal inside firms. Amazon came under scrutiny when an article of *The New York Times* came out in 2015 about its cold-heart data-driven management where employees that were interviewed described their exhaustion and the many departures the company experienced (Kantor & Streitfeld, 2015). It is crucial for traditional companies to consider twice before copying all the high-tech companies from the Silicon Valley.

Moreover, if companies were only paying employees depending on the task they accomplished, it would impact negatively the loyalty and the innovation of these employees because people would not be motivated. Employees will go to the highest bidder until a better offer comes along. Companies should not forget loyalty because it is what will keep them afloat in tough times. People make the heart of the company, not the technology. People and technology should be collaborating, in the long run, to create value and surpass competitors (Westerman, 2016).

3. Leadership

3.1. Introduction

After reviewing the concept of digital transformation, we will take a closer look at the other part of this thesis: the notion of leadership. The concept of leadership has always been an important part of our society across many fields such as politics or businesses. Seeing that digital transformation concerns most of the time businesses, we will focus on leadership inside businesses in the third part of this literature review. There is a wide variety of leadership theories around and that makes the subject really complex with a lot of uncertainties (Bennis, 2007).

3.2. Definition

It is really hard to define leadership because there are many definitions. Due to the Second Industrial Revolution and the apparition of new forms of organizations in the early twentieth century, the concept of leadership became important. Leadership according to Meyhöfer, Schacht, Jahn, Zangere, et Kaminski (2012) can be described as the organization of a group of people that will reach a common goal. According to Yukl (2010), leadership is considered as a social science and each definition of leadership is seen as subjective. Yukl (2010) defines leadership as the process where influence is exercised on other people to establish and to facilitate a goal to reach and the methods to use.

Then leadership is linked to behavior and it is what makes the definition complicated. The leader needs to influence the behavior of his colleagues by using a charismatic and transformational leadership thanks to the beliefs and values that they will adhere to.

Moreover, leadership can be characterized as the ability to build and to establish a framework applicable to lead other people and the influence will be seen as a form of authority. The leader will be seen in front of the people and will be able to propose a direction to follow in order to have an important change (Pesqueux, 2012). Leaders must be able to answer quickly and efficiently to new challenges by guiding their employees through uncertainty (Meyhöfer et al., 2012).

As you can see, the definition of the concept is not clear. Researchers define it as a behavior, a process or ability. Some common points in these definitions include a common goal to reach, an influence from the leader on other stakeholders and the necessity of a group.

3.3. Leadership theories

We will illustrate in this part different theories about leadership through the major writings on the subject. It will allow us to understand all the stakes around this concept. There has been an important increase over the last few years concerning the research on the concept of leadership that led to the creation of these theories (Dinh et al., 2014). These theories will bring us a complete approach to this concept. Seeing the depth of the research, I was not able to explain all the theories on the matter but it was enough to bring the different points of view on the subject.

3.3.1. Trait theory of leadership

The trait theory of leadership dominated the first decades of the twentieth century of the research concerning leadership. This theory explains that personality traits will favor the development and performance of the leader. Having certain traits as a leader will differentiate him from other people. According to researchers, these traits were innate for the leaders and they had been present since their birth. They included characteristics such as intelligence, ambition or charisma (Colbert, Judge, Choi, & Wang, 2012; Metcalf & Benn, 2013; Zaccaro, 2007).

However, the results concerning this theory were inconsistent according to other researchers. After other studies of Stogdill and Mann, the theory was discredited by most of the researchers. The absence of academic research on the personality led to this discredit (Colbert

et al., 2012). This theory was the first theory of leadership but seeing that it lacks consensus amongst researchers, there will not be a further explanation.

3.3.2. Behavioral theories of leadership

Behavioral studies look at how leaders interact with their followers. They take into account the point of view of these followers but they do not consider the environment in which the leaders interact (Metcalf & Benn, 2013). The different behavioral studies concerning the leadership will be explained below.

3.3.2.1. Ohio State University's research

The first studies concerning behavioral leadership happened in the 1940s by a group of researchers (R. Stogdill, C. Shartle, and J. Hemphil) at Ohio State University. They wanted to understand the behavioral indicators that were signs of effective leadership. They had identified two factors: Consideration and Initiating Structure. The Consideration represents the extent to which the leader expresses appreciation, support, trust and respect for the people that follow him. Initiating Structure represents the extent to which the leader organizes his role and the roles of his followers and how the tasks will be performed. Initiating Structure is a task-oriented behavior while Consideration is a social-oriented behavior (Judge, Piccolo, & Ilies, 2004).

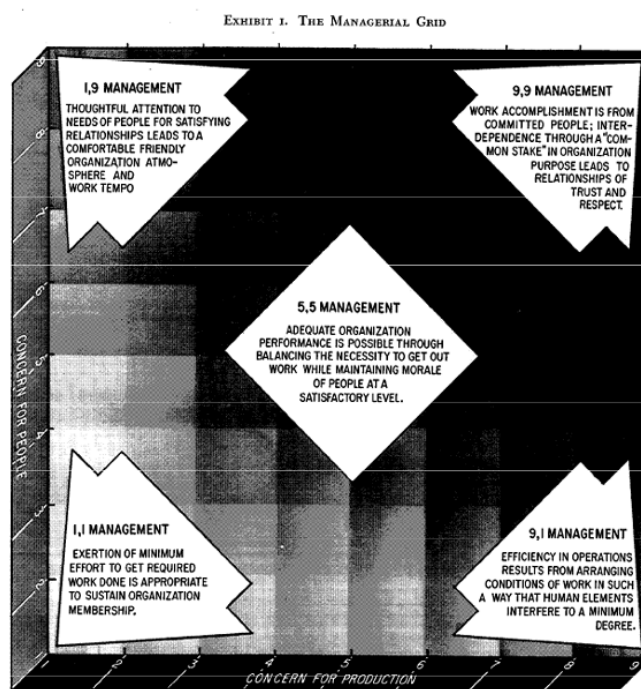
3.3.2.2. Managerial Grid

Blake & Mouton created the Managerial Grid in 1964. They wanted to invent a tool to evaluate the efficiency of leadership. There are two variables to measure the efficiency of leadership: the concern for people (vertical axis) and the concern for production (horizontal axis). The graph is built with these two axes with values going from 1 to 9. There are five outcomes possible with this grid in terms of leadership. A score of (5,5) is the basic style of leadership where the leader targets balance between production and people (See figure 1) (Blake, Mouton, Barnes, & Greiner, 1964).

- The bottom-left (1,1) shows a minimum concern for production and people. Managers are ineffective (Mind Tools, 2016).

- The bottom-right (9,1) shows that the manager puts importance on the production but doesn't care about the employees. The leader here is strict and has a lot of policies and regulations. It is not a sustainable way for the employees even if the company achieves short-term results (Mind Tools, 2016).
- The top-left (1,9) represents a leader that has a strong concern for people but doesn't care about production. However, leading people like this will lead to chaos and loss of productivity (Mind Tools, 2016).
- The top-right (9,9) is where organizations want their managers to be. It represents a leader that cares about people and results. It is the most effective style of leadership (Mind Tools, 2016).

Figure 1: The Blake & Mouton Managerial Grid



Source: (Blake et al., 1964)

<https://hbr.org/1964/11/breakthrough-in-organization-development>

3.3.3. The five levels of leadership

According to John Maxwell, a leader can go through several stages across his career and will be able to move across different levels. Moving across these stages will allow the leader to increase his influence and to earn respect from his peers (Preslar, 2012).

In the first stage of position, people will follow you because they have to. In the second stage of permission, people will be behind you because they want to. In the third stage of production, people will follow you because of your achievement for the organization. In the fourth stage, people development, people will follow you because of how you have helped them personally. In the last stage called the pinnacle, people will be behind you because of what you represent and your identity (Preslar, 2012).

3.3.4. The Situational Leadership model

Hersey and Blanchard developed the Situational Leadership theory. This model explains that there is not one style of leadership that fits every situation. Two important features of this model are the leadership styles and the readiness level of the individual or the group. The most effective leaders will be the ones that adapt their style of leadership to fit the readiness level of the individual or the group they want to influence. The effectiveness of the leadership will vary depending on the job or the task. Hersey and Blanchard have developed four types of leadership in their model and four types of readiness level. The leadership will depend on the attributes of the leader but also on the attributes of the people he needs to influence. Displaying adaptation will be the key for leaders to increase their organization's agility (Hersey & Blanchard, 1988).

The four different styles that a leader needs to follow depending on the readiness level of his followers are the following:

- Telling: the leader needs to provide a lot of explanations and guidance to his followers. He needs to tell his followers what to do and how to do it exactly. It fits the type of followers that needs direction (Hersey & Blanchard, 1988).

- **Selling:** the leader needs to use this style when his followers are willing or confident but they are unable to complete their tasks even if they are still trying. The leader in this situation needs to show appreciation and support of the commitment of his followers (Hersey & Blanchard, 1988).
- **Participating:** in this case, the followers have the skills and the competencies but they lack the confidence to show these characteristics. The leader here needs to be communicative and supportive but does not need to provide much guidance (Hersey & Blanchard, 1988).
- **Delegating:** in this case, the followers of the leader are competent and willing to try. They will not lack confidence. The leader does not need to provide a lot of directions on how to perform the task. He should give autonomy to his followers to perform the tasks (Hersey & Blanchard, 1988).

3.3.5. The Contingency theory

Fred Fiedler developed the Contingency theory in 1967. How an organization will perform will depend on the interactions of the leader with his environment. Moreover, the efficiency of the leader will depend if his style fits the situation (Utecht & Heier, 1976).

Afterward, three variables were identified by Fiedler to see if a leadership style fits the situation:

- **Task structure:** this variable looks at how structured is a task (Utecht & Heier, 1976).
- **Leader position problem:** this variable looks at if the position of the leader helps him to make his values and beliefs accepted by his employees and to make his employees comply with his instructions (Utecht & Heier, 1976).
- **Leader-member relations:** to what extent there is tension between the leader and his employees and how it does affect his relationship with them. The leader's relations with his employees will depend on his personality (Utecht & Heier, 1976).

Another Contingency theory of leadership is the path-goal theory of leadership developed by House. According to House, the theory's essence is "*...the meta proposition that leaders, to be effective, engage in behaviors that complement subordinates' environments and abilities in a manner that compensates for deficiencies and is instrumental to subordinate satisfaction and individual and work unit performance.*" (House, 1996, p.323). The leader will need to complement the environment of his subordinates and will need to adapt his style of leadership depending on his degree of control of the environment. This theory identifies four types of leader behaviors: directive, supportive, achievement-oriented and participative (House, 1996).

3.3.6. Transformational and transactional theories of leadership

Burns was the researcher who introduced the difference between transactional and transformational leadership. A transactional leader will control and monitor his followers through the use of rational and economic techniques. This type of leadership will involve an exchange of labor against reward or punishment. The leader will provide resources and help his employees against their performance and efforts (Bono & Judge, 2004).

Moreover, transformational leadership is made up of four elements:

- Idealized influence: it means that leaders have high standards in terms of ethics and moral conduct and possess loyalty from their followers. Followers will try to imitate the leaders. Leading by example and promoting confidence and optimism will be key (Bass & Riggio, 2006; Bono & Judge, 2004).
- Inspirational motivation: leaders have a solid vision for the future based on their beliefs and have a vision that will be shared by their employees through their commitments. They are encouraging confidence and enthusiasm among their employees by promoting an optimistic vision for the future. They will also create a sense of fulfillment for their employees by giving them a purpose in their work (Bass & Avolio; 1994; Bono & Judge, 2004).
- Intellectual stimulation: leaders are able to modify the corporate culture of their organizations and are stimulating their followers to be more innovative without criticizing them. Leaders encourage taking risks and they will not create problems if

the follower's idea differs from the leaders' idea. Indeed, this approach will allow having a fresher and more creative angle on a project or a problem (Bass & Riggio, 2006; Bono & Judge, 2004).

- Individual consideration: they can recognize the potential and the needs of their employees and develop coaching depending on these. Leaders will be able to stimulate growth and success among their followers by focusing on their needs and desires. Leaders will adapt their teaching methods depending on the needs of their followers by being either adaptive or tougher. The leaders will also develop a secure environment for the development of their followers and will make changes to it if necessary (Bass & Riggio, 2006; Bono & Judge, 2004).

Moreover, the five important personality traits of transformational leaders are the following: extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness (Bono & Judge, 2004). Actually, there is more interest from researchers in transformational leadership concerning leadership development (Dinh et al., 2014).

3.4. Conclusion

As you can see, the concept of leadership has several meanings and seems to change over the years with several academic pieces of research about it. The main point shared by all the researchers is the fact that leaders have an influence on their organization and their followers. The field of leadership is complex and constantly growing and thus leading to more diverse insights. Researchers need to understand how all these theories are related and act together. Moreover, the structure of organizations is regularly changing and it will be more complicated to understand how leaders think in these cases. New theories of leadership have appeared over the last few years in response to what is happening in the world (Dinh et al., 2014).

4. Public service company and digital transformation

In this part, we will look at what a public service company does consist of and its relationship with digital transformation. A lot of public service companies in the world are going through this transformation nowadays. The new environmental constraints are pushing them to digitalize their processes and administrations and to go through this so-called uberisation of the economy (Bertholet & Létourneau, 2017).

4.1. Public service company

There are several principles that a public service company needs to follow in its existence. They can vary from an organization to another but most of the time they revolve around these three principles: continuity, mutability, and neutrality (Denoix de Saint Marc, 2004). As a result, even if a company is transforming digitally, they will always need to respect these principles. It is important for society as a whole but they can create a lot of constraints for the public service sector.

In the public service industry, a company's primary goal is not to make a profit but to answer to the needs of the population. They should not make any difference between their customers. However, in some cases, customers can choose another provider that can be private in the market. The customer needs to be at the center of their decisions. These organizations need to borrow new types of management coming from the private sector. Public service organizations should not think that because they have the characteristic "public" that they would have a certain monopoly on what they do and a monopoly that is legal. Instead, they will also be vulnerable to what the uberisation is doing to the economy (Bertholet & Létourneau, 2017).

Finally, public service organizations need to be careful with the use of the public data that they are collecting. It is important to have some cyber-security against possible attacks. Like described before, data is considered as the new oil of the 21st century. The users are producing data that a lot of companies want to have access to. Then the public service sector could use this data in a partnership with other organizations to create and personalize their products or services. It will also help them to enhance their different processes (Algan, Bacache-Beauvallet, & Perrot, 2016; Bertholet & Létourneau, 2017).

4.2. Impact of the digital transformation on the public service sector

New technologies have an important impact on public service delivery and the expectations of the taxpayers. Because these technologies are playing such an important role in today's world, public service organizations have to adapt themselves in response to these changes. Citizens are expecting a more proactive organization. The digital transformation is altering in a drastic way their delivery practices concerning production and distribution (Algan, Bacache-Beauvallet, & Perrot, 2016; OECD, 2017; West, 2004).

They need to take advantages of the different opportunities coming from these technological changes in order to improve themselves and reinstate confidence among the citizens on what they do. Going through this digitalization will also be a source of economic value for the public service sector. They need to take into account the demands of citizens in the construction of their new structure and strategy by customizing their offer. Otherwise, they will enter into some difficulties in the future. However, if they go through this digital transformation effectively, they might change positively the perceptions of the citizens on their abilities. A digital transformation will push these organizations to innovate and to propose new types of products and services (Algan, Bacache-Beauvallet, & Perrot, 2016; European Commission, 2018; OECD, 2017; West, 2004).

In order to be effective in this transformation, the public service sector will need to develop or recruit people that have new skills and competencies that fit the requirements of this new numerical world. They will need to make themselves appealing to attract this new pool of talents to their organizations. Moreover, a digital transformation could lead to the reduction of the people working in the public service sector (Algan & Cazenave, 2016).

5. Relationship between digital transformation and leadership

As it can be seen in the second part of this literature review, digital transformation needs to follow different principles in order to be successful. Having explained the “what” of the digital transformation in the second part, we will now look at the “how” of the digital transformation by doing a literature review on the relationship between digital transformation and leadership.

5.1. Leadership style and vision

5.1.1. Style of leadership

There are several leadership styles that an organization can use in order to be successful throughout its digital transformation. It is important to use a leadership style that fits the needs of the organization but not every organization does that. Some writers are saying that transactional and transformational leadership can smooth the digital transformation by making it easier. These types of leadership can enhance organizational engagement and increase optimism towards change. Transformational leadership is used to inspire others in the change and increases creativity and commitment among employees where transactional leadership is more rational and does not let much space for creativity (Holten & Brenner, 2015).

Leadership abilities combined with the involvement of employees are the key to start a successful transformation. Leaders will have an important role in the long-term execution of the transformation from a traditional process to an extensive digital platform. Moreover, the leader should try to adapt his leadership style with the digital transformation because it will create problems if he does not. Digital transformation requires a lot of changes in terms of strategy and organizational culture and processes. Only a creative leader that is not afraid of disruption will be able to accomplish these changes in order to maintain stability and reach good results (Bonnet et al., 2014; Sow & Aborbie, 2018).

Then leaders need to reinvent themselves in order to go through the digital transformation of their organizations. Old methods of leadership are nowadays obsolete. Lots of leaders today in traditional companies do not want to take risks and were given the same education concerning leadership. Digital disruption will not wait for the organizations that will not take the digital train. Leaders who are ready to take into account changes will have higher chances of success (Ducrey & Vivier, 2017).

An organization should promote e-leadership in order to develop strong strategic changes that are connected to digital transformation. Moreover, it should also provide a level of stability for leaders during the transformative operation. A digital transformation should follow a specific model that will contribute to the implementation of the change. Digital leadership is all about doing the right thing for its business in order to go through its digitalization

successfully. The necessity for new technological tools, customer engagement and the development of a new framework for a new innovative culture should be essential to digital leadership (Berman, 2012; El Sawy, Kræmmergaard, Amsinck, & Vinther, 2016; Li, Liu, Belitski, Ghobadian, & O'Regan, 2016).

Then leaders will need to stimulate a culture of innovation and demonstrate a digital strategy in their companies by having digital fluency. Digital fluency means that leaders need to be able to express the value of the technology in accordance with the future of the organizations. Digital technologies will give the organization an advantage if the leader integrates them efficiently in the transformation of the organization's processes. Leaders should thus use digital technologies as a mean to reach their strategic objectives. Leaders should also lead by example by being present on social media platforms and by being present in several types of worlds that include: physical, virtual and augmented worlds (Ducrey & Vivier, 2017; Kane et al., 2015).

5.1.2. Vision

Leaders need to listen and to be open to the new world changing around them. They should not be afraid of new methods and ways of thinking. Curiosity is the key to success. Managers need to start to be passionate about innovation. Digital leadership will require the leaders to create a common vision for everyone to go in the same direction. Creating this vision will require the leader to define where the change is needed. It will allow having a coherent angle on the digital transformation and its results. Indeed, a strategy is as much important than technology to go through digital transformation and leaders establish strategies. By showing examples, leaders will be able to direct all their employees in the right direction (Bonnet et al., 2014; Baculard, 2017; Ducrey & Vivier, 2017; Kane, Palmer, Phillips, Kiron, & Buckley, 2015).

5.1.3. Strategy criteria

Managers need to take four subjects into account while developing their new digital strategies. These subjects include the source of business value creation and capture, the speed of the digital business strategy, the scale of the strategy and the scope of the strategy (Bharadwaj, El Sawy, Pavlou, Venkatraman, & University of Southern California, 2013).

They will be explained below:

- Firstly, the scope of the strategy refers to the set of products, services, and activities done by the organization. Leaders need to understand the impact of digital innovations on the scope of the digital strategy because boundaries have changed. A digital strategy has a larger range than a traditional strategy and is more cross-functional (Bharadwaj et al., 2013).
- Secondly, leaders need to think about the scale in digital and physical terms. They can use network effects in order to quickly scale capacity in multisided platforms. The availability and use of cloud computing can be a way for an organization to scale its infrastructure. Then organizations can scale up by entering a partnership in order to share their digital capacity with another organization (Bharadwaj et al., 2013).
- Thirdly, organizations need to think about the speed of the strategy by accelerating the speed of the product launch. Then digital innovations have also increased the speed of decision-making by improving the access to information. Finally, a digital business strategy will create more dimensions that will change the value creation and capture. There will be more value coming from information and multisided business model. Companies are personalizing their offering based on the information they get from their customers. Then these business models have several layers where one business will give value in one layer and recapture it at another one (Bharadwaj et al., 2013).

5.2. Involving the organization at scale

Once there is a vision created by the leader, it is not enough. The next step is to increase the involvement of the employees on a general scale. They can do that through different ways that include connecting the entire organization, encouraging co-creation among their employees and stimulating open discussion and innovation. Through social media, leaders will be able to engage the workers on an organizational level and allow everyone to get an opinion on the change. Moreover, leaders can use digital champions to engage the organization at scale. These champions conduct the digital change on a local level by using their experience and customer knowledge. Another way to increase involvement from the workers is to cooperate with them on the creation of the digital transformation roadmap. Cooperation will facilitate

the journey because employees will feel that their opinions will be taken into account on the change of their organizations (Bonnet et al., 2014).

Risk-taking should be integrated into the norms of companies' culture in order to get a successful digital transformation. Leaders should make their employees understand that it is normal to fail and that is a condition to success. Risk-taking should be combined with the collaboration of employees from different backgrounds. Employees will be attracted by companies that want to progress in terms of digitalization and leaders need to keep that in mind by being digital. There will be a lot of competition to attract these digital talents seeing that they can work in different types of industries. Developing these talents can be an important step in a strong digital transformation. Moreover, companies that want to accomplish an effective digital transformation should always need to develop their strategies in accordance with the transformation of the business (Kane et al., 2015).

5.3. Digital Governance

Having a strong vision for your organization is not enough, it is important to implement effective governance to direct the digital actions of the company in the right direction. Effective governance mechanisms will allow a favorable digital transformation. Governance mechanisms will be different depending on the type of organizations. While outlining these mechanisms, leaders need to focus on how they will achieve these two key objectives: coordination of initiatives across the organizations and sharing of resources and abilities across the company (Bonnet et al., 2014; Hess et al., 2016; Horlacher & Hess, 2016).

Moreover, leaders need to develop new leadership roles inside their organizations. It is important to have leaders with technical knowledge otherwise; it will lead to significant additional costs for the leadership. General leaders should give leadership and more responsibilities to these new technological leaders and should also restrict their authorities over them. It is important to have a certain trust between the main leader and these new leaders so that they feel empowered and are ready to succeed. These roles include Chief Digital Officers and Digital Liaisons (Bonnet et al., 2014; Hess et al., 2016; Horlacher & Hess, 2016; Kiron, Kane, Palmer, Phillips, & Buckley, 2016; Sow & Aborbie, 2018).

Digital Liaisons will lead the digital transformation at the local level. The Chief Digital Officer (CDO) will unite the digital vision, give energy to the company around digital opportunities, coordinate digital projects and implement useful resources. The CDOs could be considered as the trigger of change in the organization and they are the ones that will direct in a proactive way the digital transformation through an entrepreneurial initiative. Moreover, they will need to counter-attack the cultural resistance to change inside the organization by being the spokesperson of the transformation. The CDO needs to work closely with the Chief Information Officer and coordinate together with the digital activities (Bonnet et al., 2014; Hess et al., 2016; Horlacher & Hess, 2016; Kiron et al., 2016; Sow & Aborbie, 2018).

Then leaders need to align clear incentives combined with KPIs to stimulate digital transformation inside the company. They should establish clear pay-off for their employees linked to the digital transformation. Developing clear metrics will help investment in digital technologies. Defining useful KPIs is an important step in order to see the return on investment. Leaders also need to have good management skills to perform with these KPIs and change the corporate culture to make these KPIs accepted (Fitzgerald, Kruschwitz, Bonnet, & Welch, 2013).

Finally, traditional companies are stuck in a system called legacy spaghetti where every department of the company operates in silos with its own system. A strong digital platform requires strong leadership and the disappearance of all these silos. Developing a useful digital platform will provide great information for the leaders to make decisions. The leader needs to develop the correct platform and skills; to align them in the same direction and to take advantages of opportunities (Bonnet et al., 2014).

5.4. Technological leadership capabilities

Leaders need to develop technological leadership capabilities by improving their relationship with the IT department because they do not have these capabilities. This relationship is an important pre-requisite to develop digital transformation because it will allow the organization to survive digital disruption. Real collaboration is needed between these two sides. Nowadays, this relationship is not successful because of different reasons such as too slow IT or too expensive IT. Companies should thus improve this relationship by making these two departments working with each other (Bonnet et al., 2014).

Companies should introduce a dual speed IT where the traditional IT model will be held for the traditional standards processes while the other part of the IT model will be used for projects that need to be operated at digital speed. This method will have an important benefit for the organization. Moreover, leaders need to build digital skills by developing the skills needed inside the organization and recruiting competent people with analytical and hybrid digital skills. Businesses should also accentuate the development of new digital skills among their employees through different methods such as external sourcing, partnership or internal development. They can also promote the development of programs that will enhance sharing ideas and collaboration to improve these digital skills (Bonnet et al., 2014; Hess et al., 2016; Kane et al., 2017).

5.5. Leadership skepticism around digital transformation

With this emergence of new technologies, accomplishing changes on the scale of the entire organization can be complicated for leaders of traditional organizations that are skeptical. These leaders are working in a very rigid and traditional structure where it is complicated to promote changes. This apprehension towards changes from this type of leaders and other employees can be strong and reduce the chance of success for a digital transformation. In order to avoid this problem, it is important to provide information and training to these leaders so that they can learn about the benefits of digital transformation and its different elements. Doing this will allow the organization to move ahead in its transformation and to surmount obstacles. Finally, it will be important for the leader to coordinate his new technological know-how with the needs of the organization in order to avoid a misstep (Gerth & Peppard, 2016; Kolbjørnsrud, Amico, & Thomas, 2017).

6. Conclusion

The first part of this Master's thesis had for goal to summarize the collection of literature about the digital transformation, the public service, and the leadership question. We went over several terms such as digitalization, disruption, and leadership in the digital age. This literature review helped us to understand why companies want to go through a digital transformation and the different principles they need to follow. Moreover, we explained the different approaches to the leadership notion. We also went over the relationship between the digital transformation and public service companies; and the leadership.

Moreover, important factors that lead to digital transformation as explained were the digital disruption, digital technologies, and digital innovation. Digital technologies produce digital innovations that will disrupt digitally industries. In order to survive these disruptions, companies will have to use these digital innovations in a more successful way to go through their digital transformation.

We found that there were several principles to follow in the digital transformation that are the following:

- The reinvention of the customer relationship.
- The importance of using data as assets.
- Being agile.
- Having a new approach to innovation.
- Building a new platform in addition to a product/service.

Businesses need to consider these principles while conducting their digital transformation.

Moreover, we noticed that public service sectors are starting to imitate the private sector with their methods of functioning. There is a general trend where public services are transforming digitally in a way that resembles what is observed among private companies but they will always have the constraints proper to the public service aspect. Finally, there was not that much literature available on the subject because it is such a recent phenomenon.

As explained in the literature review, leaders have a decisive role in this transformation through their behaviors and actions. Most of the leaders in today's business world are looking to apply this transformation to their organizations even if it is a difficult process to follow. Going through this transformation will require a profound change in the many organizational processes. An important step in this process is to demonstrate clear vision and strategy by the leaders in order to engage and align all their employees in the change around these vision and strategy. It is also important to stimulate a culture of innovation and not being afraid of failure. Challenges of digital transformation should be considered as a source of knowledge.

The literature on the relationship between digital transformation and leadership is still in development even though more and more case studies are done to establish this relationship between these two notions. The literature review did not allow choosing one specific style of leadership that suited a digital transformation. From the theories that linked leadership and digital transformation, various leadership features from different leadership theories are needed to ensure a new leadership in the digital age. Finally, according to Bonnet et al. (2014), leaders need to lead the technology and they should not be led by it.

7. Research question

After reviewing the literature on the subject, the research question will be the following: “How does digital transformation affect the leadership of managers in a large public service organization?”

This thesis will help us to understand in a better way the different elements of the digital transformation and their influence on the leadership of the chosen organization. I wanted to see if these managers had to change something in terms of leadership to go through this digital transformation. This research question will focus on what are the causes of digital transformation in this organization; on the methods used by managers to govern a digital transformation and on the way it will affect their digital capabilities. This question could also help to determine if a particular type of leadership style is used inside this organization.

Part 2: Empirical analysis

In the second part of this Master's thesis, we will do an empirical analysis. This empirical analysis will be divided into three parts. The first part will look at the methodology used to collect and analyze the data. This empirical analysis will be based on a qualitative method with a focus on one case study. We will explain the interview process that will be done for this research. Afterward, we will summarize all the data that was collected by doing an objective presentation of the facts, case, and results. Finally, the last part will be a discussion of the results found. Moreover, questions and limitations for next researches will be disclosed.

1. Methodology

This part will describe the research methodology used for the practical part of this thesis. Firstly, I will present the method I chose; then I will look at the research environment; thirdly, I will explain the data collection and finally, I will explain how I will analyze this data.

1.1. Research methodology

In this section, I will explain the methodology used for this research. In the first place, I will present the qualitative approach and then I will look at the description of a case study.

1.1.1 Qualitative Research

According to Marais (2012), quantitative research can be defined as:

Research that approaches phenomena from an outsider's perspective to explain and predict the phenomenon under study in isolation; this approach uses numerical indicators of abstract concepts; its methodology is normally relatively formalized, rigid, cross-referenced and explicated, but more parsimoniously recorded by means of statistics. (Marais, 2012, p.250)

Afterward, Marais (2012) also defines qualitative research as:

Research that approaches phenomena from the insider's or subject's perspective to understand it in its natural context; this approach uses qualitative indicators such as

words, stories, pictures and other communicative representations as non-numerical symbolic information on phenomena; its methodologies are normally less formalized, rigid, specific and explicated, but more comprehensively recorded. (Marais, 2012, p.249)

The objective of qualitative research is to explain and describe a theory about a new phenomenon and dive into unexplored areas. Choosing qualitative research will also allow interpreting the world from the perspective of the interviewees and could lead to a new breakthrough in the research that will contribute to the expansion of the knowledge. The sources of data in empirical research are most of the time words but there could be stories or pictures. Data can be assembled through observations, documents or interviews (Lejeune, 2014; Ritchie, Lewis, Nicholls, & Ormston, 2013; Savin-Baden & Major, 2013).

The objective of this thesis is to understand the impact of digital transformation on the leadership skills of managers inside organizations. Seeing that the concept of digital transformation is quite new to have any well-developed literature, it seems clear that qualitative research is suitable for this empirical analysis because it will allow us to understand this concept in a better way. As a result, we will attempt to understand these concepts and back these interviews with facts when it is required.

1.1.2. Case study

For this Master's thesis, I chose the single case study method. The end goal of this empirical analysis is to analyze the impact of digital transformation on leadership among managers in the RTBF organization. Finding generalized results was not the main goal here. According to Ying (2009), a single case study is better if I want to focus on a single organization or a group of people. I would also be able to explore and question old theoretical discoveries and deep dive into new ones. Another method that could have been used was the multiple cases study but it is a time-consuming process. Seeing the limited time frame of this thesis, it was complicated for me to use this method.

According to Eisenhardt (1989), there are eight steps to follow in a case study research. They include (1) getting started; (2) selecting case; (3) crafting instrument and protocols; (4) entering the field; (5) analyzing data; (6) shaping hypotheses; (7) enfolding literature and (8) reaching closure. He developed this process based on several types of research from the past

such as on qualitative techniques or the design of the process. The goal of a case study is to interpret the forces in a certain environment. Afterward, I will use several methods to assemble data and start to collect the data. The methods to collect data include: interviews, newspapers articles, company reports or presentations. These methods will allow me to understand deeply the functioning of the organization and of the subject. It is typical for a case study to collect several sources of data to make an analysis of a phenomenon. Qualitative data and quantitative data can be both used for a case study.

After collecting all the data, the analysis of the case study will begin. I will analyze individually the interviews in the first place. Afterward, I will try to see if there are common points or patterns by doing a cross-examination of these interviews in order to understand the different points of view. Before doing this analysis, I started to build hypotheses to answer the research question. Thanks to the interviews that were done, I will be able to accept or refute these hypotheses. I will also compare my findings with what I found during my literature review. Finally, I did a number of interviews that led me to reach theoretical saturation where I found that additional interviews brought me only small incremental improvements.

1.2. Research environment

This empirical analysis will explore the phenomenon of digital transformation and its impact on the leadership of managers inside a Belgian public service organization that is the RTBF. The broadcasting and audiovisual industry, whose RTBF is a part of, has been digitally disrupted over the years so it was a useful choice to illustrate my research. I realized this analysis in collaboration with the main managers (preferably from the top-level) of the RTBF that provided me with several useful resources. I also interviewed managers from the middle-level to remove biases and have a more accurate view of the phenomenon. They are currently ongoing a digital transformation that will last a few years until 2022 and that's why this topic was interesting for me because I wanted to understand how the leaders acted in this changing environment and if they acted differently. It allowed me to understand deeply how the organization worked and how they faced the digital transformation. This concept is becoming more and more important over the years for leaders. I used an exploratory method seeing that digital transformation is quite new.

1.3. Data collection and method of analysis

In this section, I will explain the data collection methods and the way I will analyze them for this thesis.

1.3.1. Data collection

In order to achieve this empirical analysis, I will use several data collection methods. There are four types of data collection according to De Ketele & Roegiers (cited by Lejeune, 2014):

- Analysis of documents: this method is suited to collect data from the past. It is indirect and it will not require interactions with other people.
- Interviews: this method will require interactions with other people and is more direct. It is done with a certain person at a specific moment in a specific location.
- Observations: the researcher will have to make writings about what he is seeing. It will require the presence of the researcher to observe the phenomenon and it is time-consuming.
- Physical or online questionnaires: it is an indirect way to collect data.

Like described in the part 1.1.2., I will use principally interviews and documentation. The observation was not possible for me because the organization is in Belgium and I was abroad for the entire year. Moreover, thanks to the interviews, I was able to get direct contact and more interactions with the managers. It also gave me more freedom for the direction I wanted to have in the discussion. Finally, I will use documents about the RTBF's digital transformation like reports, newspaper articles, company website as a way of completing the content of my interviews. I found the media articles by doing research on the organization and its approach to digital transformation. Then I looked at the company's website and its documentation to find its approach towards this subject. It gave me a more objective view of the organization.

Concerning the interviews, they will be conducted individually and will last around 30 to 60 minutes. I had a list of around 20 questions that I tried to ask my interlocutors. I chose the semi-structured interview approach as the main form for these interactions. Semi-structured interviews are suited for exploratory research because they allow more freedom and flexibility for the interviewees. It will also lead me to improvise other questions depending on what the interlocutors will say. However, it is important to prepare an interview guide to lead the interview in a pertinent way towards the subject of my research (Kallio, Pietilä, Johnson, & Kangasniemi, 2016).

Appendix A presents the semi-structured interview guide that I will use for these interviews. I will use it as a structure to follow with the interviewee and to have a natural flow with all the topics discussed. I will not follow perfectly the interview guide all the time. The questions that I will ask will be similar from interview to another but depending on the direction, they might change slightly based on the role or the experience of the people I will talk to.

The list of people that I interviewed at the RTBF included:

- Samuel Profumo - Chief Data Officer
- Cécile Gonfroid - Chief Information Officer
- Christine Thiran - Chief People Officer
- Lucile Struyf - HR Partner
- Olivier Paijens - Application and Infrastructure Director
- Pierre Bonte- Digital Innovation and Transformation Manager

1.3.2. Data analysis

After having completed the interviews that were recorded, the interviewer transcribed the audio files into notes for analysis. I segmented my interview in blocks that represent each one a specific theme and I asked 3 to 5 questions per theme. I interpreted the common points and differences between the acts of different leaders towards digital transformation. Afterward, I used the most interesting insights from my research and made them understandable for the reader. Finally, the interviewer will interpret the results and discuss his findings. This paper is

a qualitative research paper based on one case study. We collected the data through interviews and documentation.

2. Analysis and results

This part will consist of a descriptive presentation of the facts, case, and results without making any assessment at this point. In the first section, the company chosen for the case study (RTBF) will be introduced by looking at its profile and its current situation. Afterward, the second part will look at the plan behind the digital transformation of the RTBF and what led to this digital transformation. In the last part, the results about the RTBF's digital transformation methods in terms of leadership will be explained thanks to the data analysis. We will look at the different practices used and the implementations made by managers at the RTBF to drive this digital transformation successfully.

2.1. Description of the company

2.1.1. History

The RTBF is an acronym for « Radio-Télévision Belge de la Communauté française ». In English, it translates as the Belgian Radio-Television of the French Community. It was created in 1977 from the roots of the INR and then from the RTB. It is part of the audiovisual industry with diverse offers in terms of social media, internet, radio, and television through TV channels, radio channels, a website, and social media accounts. It has been a self-governing public service organization with a cultural aspect since 1997 (RTBF, 2019a).

They have a managing contract to respect with its missions and goals to reach. This managing contract is renewed every four years and is negotiated with the French Community of Belgium. They are also publishing an annual report every year to guarantee transparency. The RTBF has also different subsidiaries in which it has a certain percentage share. All these subsidiaries participate in the production of contents. Finally, the RTBF has around 2000 internal employees in its organization (RTBF, 2019a; RTBF, 2019b).

2.1.2. Mission and values

The RTBF has for mission to serve the citizens of the French Community of Belgium by acting as a motor of fulfillment, expression, and cohesion for its audiences. Its values allow it to surpass itself in order to meet the challenges of tomorrow. Its mission revolves around two axes that are its desire to educate, entertain and inform; and the needs of the French-speaking citizens of Belgium (RTBF, 2019a; RTBF, 2019b).

The certification and confirmation of information before explaining it is at the heart of what the RTBF does. They are also constantly creating and innovating in order to shine the light on the economic, social and cultural aspects of Wallonia and Brussels through the creation of original productions. Its offer should be diversified in terms of culture, ideology and without any discrimination (RTBF, 2019a; RTBF, 2019b).

2.1.3. Existing governing body

A Board of Directors, whose members are elected depending on the political distribution in the Cultural Council of the French Community of Belgium, runs the RTBF. This Council is the supervising authority of the RTBF and its members are elected this way in order to get diversity in terms of political representation. This Board of Directors did not change with the digital transformation. The Board of Directors needs to do all the actions that are deemed necessary to help the RTBF. The RTBF's Board of Directors is made up of 13 people to which are added 2 government commissioners (RTBF, 2019c).

2.2. Vision 2022

The audiovisual industry whose RTBF is a part of is currently going through important changes in terms of digitalization, media convergence and globalization. In response to these economic evolutions of the 21st century, the RTBF decided to adopt its new digital transformation strategy called « Vision 2022 ». In this part, we will describe the digital transformation plan of the RTBF behind « Vision 2022 » that entered in motion in September 2018. The RTBF wants to accomplish the majority of its transformation by 2022 like the name of the plan describes (see Appendices C.1. & C.2.).

2.2.1. Drivers of the RTBF's digital transformation

2.2.1.1. External drivers of change

In the external environment of the RTBF, there were changes in terms of consumption methods of young generations because of the arrival of digital technologies and the Internet. As noted by Ms.Gonfroid: “...*la transformation numérique a amené une consommation des médias différente...*”. These changes were considered as important drivers of the RTBF's digital transformation. The RTBF noticed that young people were not watching TV or listening to the radio as much than before and its main audiences were mainly old people between 50 and 60 years old with classical consumption methods. For example, the average age of people watching the news on the RTBF's main channel “La Une” is around 59 years old (Giroux, 2018; see Appendix C.1.).

Moreover, younger generations do not consider traditional media channels as the main sources of trustworthy information nowadays. A lot of people are starting to use Facebook or Youtube to get this type of information and these big tech companies have disrupted consumption methods and commercial and marketing approaches. Younger people can find all the information they need on their smartphones and consume contents wherever they want, however they want and whenever they want because they want immediacy. As Mr.Paijens noted: “*Il y a Google, Amazon, etc. Il y a en effet une prolifération de solutions où on dit que les modes de consommation changent.*”. The RTBF sees all these tech companies like Facebook, Youtube or Spotify as the main rivals in its new digital transformation plan instead of RTL-TVI and TF1 (the other traditional news channels in the French-speaking community of Belgium). These companies question the pertinence of the RTBF's way of working. Another secondary reason for this transformation could have been the arrival of TF1 on the Belgian advertisement market where it is gaining a lot of market shares and reducing the RTBF's revenues (Bremme, Scherer, & Yeh, 2018; Dillies, 2019; Giroux, 2018; Sacré, 2019; see Appendices C.1., C.2., C.4., & C.5.).

As a conclusion, the RTBF understood that not renewing its audiences would have led to the demise of the organization and would have decreased its abilities to fulfill its public service mission. This mission can now be accomplished through other non-traditional and non-linear actors. The RTBF had to do a reassessment of how its audiences were working. The RTBF is

part of a network world where it is only a link of the network and changes are happening at a faster rate in the society than in the corporate world. As explained by Mr.Bonte: *“On doit essayer de limiter ce décalage entre la société qui bouge et notre entreprise qui doit bouger aussi.”* It was necessary for the RTBF to adapt itself to new expectations of its audiences and to the new methods of consumption in order to promote the values of the public service of tomorrow (see Appendices C.1., C.4., C.5., & C.6.).

2.2.1.2. Internal drivers of change

Firstly, there had been some internal tensions at the RTBF for a few years and the executives decided to launch a health barometer of the organization in order to know the functioning problems. As illustrated by Ms.Thiran: *“On a vu qu’il y avait une grosse attente du personnel par rapport à un changement de culture”*. A reassessment of the organizational functioning was necessary in order to move towards a revival of the RTBF. Even if the financial health of the RTBF was good, employees wanted to prepare against the wave of disruption created by the tech companies and therefore, they understood the digital transformation. Moreover, seeing that the RTBF is also consuming media for its functioning through the cloud that require new numerical work tools, additional internal changes were also necessary (see Appendices C.1., C.2., C.3., C.4., & C.6.).

2.2.2. Creation of the digital transformation plan

In order to design its digital transformation plan, the RTBF worked with consulting companies specialized in this field like Deloitte and McKinsey. Firstly, the consulting companies have established a situational analysis in cooperation with the main executives of the RTBF and they also reflected about the vision of tomorrow. The Board of Directors approved in the first place the digital transformation strategic plan in 2016 (Pautler, 2017; Pierard, 2017; see Appendices C.1. & C.4.).

Afterward, in order to set up the digital transformation plan, Mr.Bonte explained that: *« Au niveau général, pour mener à bien cette transformation, il y a une équipe interne de transformation qui a été mise sur pied. Donc au maximum de la charge de travail de cette équipe on était 8 personnes internes à travailler sur le projet. [...] et 8 ETP externes qui nous aidaient avec leurs compétences et expériences en transformation et en gestion du changement. »*. This team was responsible to create the communication plan for the ambitions

concerning the digital transformation to the employees (Pautler, 2016; Pierard, 2017; RTBF, 2018; see appendix C.6.).

Moreover, the leadership promoted a participative method in the design of this plan by asking online the opinions of 950 employees from different departments for 6 months. They had to make propositions on what tools they needed or what competencies they needed to develop. By taking all these feedbacks into account, the leaders thought they designed a plan that was more acceptable by the employees because they participated in it (Faidherbe, 2018; Lo Giudice, 2017).

2.2.3. The philosophy behind the digital transformation

The digital transformation was urgent according to Jean-Paul Philippot, the RTBF's managing director. Otherwise, it would have compromised the ADN of the RTBF. Suffering the change and risking disappearing were not an option seeing that the digital transformation impacts jobs, people and the functioning of our daily life and is inevitable. This digital transformation plan is customer and user-focus with a 360° vision and it creates a lot of opportunities to seize for the RTBF (Bremme, Scherer, & Yeh, 2018; Giroux, 2018; Lo Giudice, 2017; see Appendices C.1. & C.5.). The philosophy behind this digital transformation revolves around the following axes:

- Being a leader in the production of Belgian and francophone original contents for all its platforms. Ms.Gonfroid noted that: *«...on s'oriente sur le fait qu'on veut continuer à produire énormément nos productions propres [...] Ce sont des émissions vraiment que nos publics s'y retrouvent »*. This new type of contents is what attracts the audiences to the RTBF and should be available on the linear and non-linear level (see Appendix C.1.).
- Broadcasting contents depending on the needs of its audiences (Bremme, Scherer, & Yeh, 2018).
- Simplifying its production processes and its work methodologies (RTBF, 2016).

- Becoming a learning organization through a more collaborative management, a change of culture, accountability and the development of competencies of its employees in order to remove outdated hierarchies and to ensure well-being. Ms.Thiran explained that: « ...être une entreprise apprenante, qui veille au bien-être, qui veille à développer une culture de leadership différente et qui veille à ce que l'on prenne en compte les membres du personnel. » (see Appendix C.3.).
- Valuing contents to create new sources of financing (Lauwens, 2017).
- Expressing public service values in the digital age (Giroux, 2018).

Another important aspect of the philosophy behind the transformation was the fact that the leadership of the RTBF wanted to go through it with all the employees and not fire any of them to reduce costs. As illustrated by Ms.Thiran: « Ici, notre pari a été de dire, on le fait avec tout le personnel qui le souhaite et qui souhaite monter à bord. ». It goes against the direction used by many other organizations in the world that go through a digital transformation (see Appendices C.1. & C.3.).

2.2.4. Elements of the digital transformation

2.2.4.1. New infrastructures

One of the most important investments for this digital transformation is the construction of their new €150m Media Square headquarters in Brussels that will be finished in 2022 and will host most of their employees. Mr.Bonte described that: « ...à l'horizon 2022, on a l'ambition de construire un nouveau bâtiment sur le site de Reyers qui sera beaucoup plus compact, plus ouvert, qui permettra beaucoup plus de transversalité, de communication avec des outils technologiques et des studios médias plus performants. ». It will also encourage creativity, transversality and collaboration among the employees through an ergonomic, user-friendly, flexible and bright working environment (see Appendices C.4. & C.6).

2.2.4.2. New digital processes and Big Data

There was also an important digitalization of the internal functioning of the RTBF. The RTBF has digitalized several business processes like production processes through the disappearance

of physical supports inside the organization. They have also digitalized and simplified purchasing processes to not waste time. Moreover, concerning the HR department, Ms.Gonfroid noted that: « *On a tout un travail aussi sur tout ce qui est le SI RH, le système d'information des ressources humaines pour pouvoir intégrer tout ce qui est formation, recrutement, l'évaluation par objectifs, gestion des compétences d'une manière numérique voilà.* » (see Appendices C.1., C.3., & C.4.).

Furthermore, an important technological initiative to increase collaboration between the RTBF's different media and departments was Numprod. It developed the working methods of the RTBF. This new platform supervises all the productions of the RTBF, dematerializes physical supports and increases automation of the different processes (see Appendix C.1.).

Moreover, with this new strategic plan, the RTBF is using more and more Big Data to personalize its offers to audiences. Structuring this data is important to perform the digital transformation seeing the value of data nowadays. The data needs to be transformed in order to be available and understandable so that different people inside the RTBF can use it (see appendices C.1. & C.5.).

2.2.5. New business model

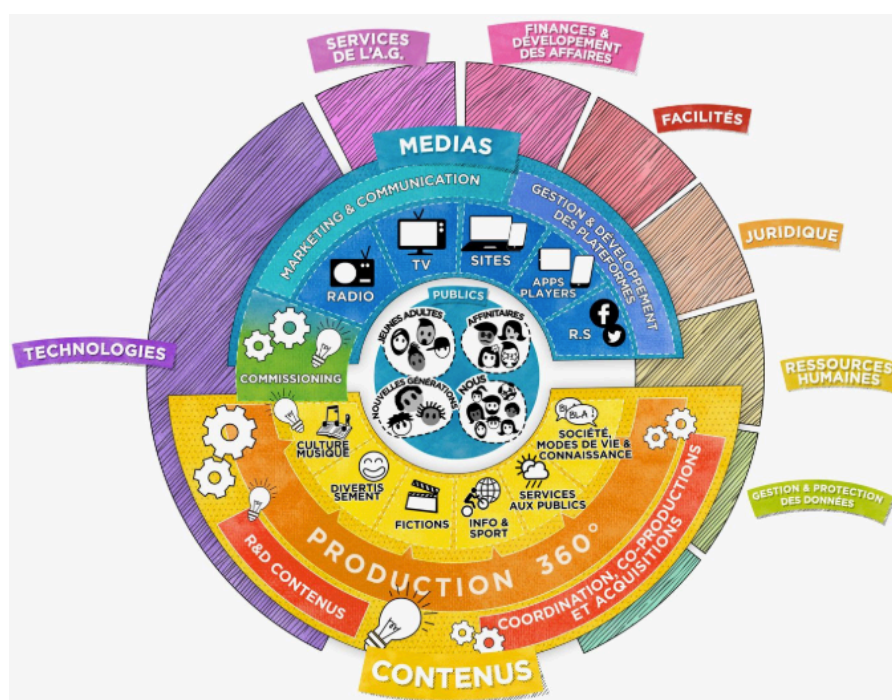
It was important for the RTBF's leadership to involve as many employees as they could in the design of the digital transformation plan and its new business model. The RTBF had to rethink the way it was working and completely restructured its business model. It will help the RTBF to stay pertinent and to complete its mission of public service in this increasingly numerical world. It was refined by successive iterations in order to get the right result. This business model had a lot of impact by redefining certain positions, deleting others and creating new ones (Giroux, 2018; Pautler, 2016; RTBF, 2019d).

The main feature of this new business model was the disappearance of the different silos and the removal of all the “walls” between the different departments. Mr.Paijens noted that: « *...casser les codes qui sont dans l'état d'esprit des gens avant et de ne plus travailler en silos mais bien de travailler en groupes de compétences et mélanger des personnes* ». There will be instead a cross-media functioning with a 360° vision. It increases transversality and convergence between all the departments and will integrate digital technologies in its

functioning. Departments' managers ask their teams to work together and not in their own corner. The apparition of new transversal functions led to the creation of cohesion and communities in the RTBF (Faidherbe, 2018; RTBF, 2019e; Sacré, 2018; see Appendices C.1., C.2., & C.3.).

The new business model chart is shown below:

Figure 2: RTBF's New Business Model



Source: (RTBF, 2019d)

<https://www.rtb.be/entreprise/a-propos/nos-missions/detail?id=10003887>

This new digital transformation plan revolves around two main divisions: Media and Contents. At the heart of this new business model are the RTBF's audiences: Us, New Generations, Young Adults and Affinities. The technological and other support divisions support these two divisions. The notions of radio, TV, and Internet will be replaced by Contents and Media (Grosfilley, 2017; RTBF, 2019d).

2.3. Leadership under the digital transformation

From all the managers I have interviewed, something that came back very often was the fact the human aspect was essential in the process of the digital transformation. Leaders should put employees at the center of everything by encouraging cooperation and team spirit.

Helping the employees in their development and empowerment will allow the RTBF to ensure the business' sustainability. It is important as a leader to challenge himself regularly and to have some humility (Faidherbe, 2018; RTBF, 2019f). In this part, I will explain my findings concerning the relationship between leadership and digital transformation. The changes in terms of leadership represent an important part of the digital transformation plan of the RTBF and it is the field where they still need to make a lot of progress. Mr.Bonte explained that: *«...on se retrouve avec [...] une intention d'un nouveau modèle mais des modes de fonctionnement et une culture d'entreprise qui ont un peu de mal à s'adapter à ce nouveau modèle. »* (see appendix C.6.).

2.3.1. Previous style of leadership before the digital transformation

The RTBF's managers had a top-down style of leadership where risk-taking was not at all encouraged. This leadership style is considered as directive and employees were always waiting for their managers to tell them what to do and not questioning decisions. With this command and control style, employees postponed the risk on the person above them in the hierarchy. Mr.Bonte noticed that: *« C'est difficile pour eux de prendre du jour au lendemain des responsabilités. Dans cette logique de prise de risques, je pense qu'on a habitué les gens à leur taper sur les doigts quand ils disaient quelque chose qu'ils ne pouvaient pas ou qui n'étaient pas validées ou qui ne correspondaient pas à la vision du manager. »*. The decision-making process was involving a lot of people and was costing a lot of time (see Appendices C.1., C.4., & C.6.).

2.3.2. Change of organizational culture

With the digital transformation, it was a necessity for managers to change the organizational culture by rethinking the values of the organization (Faidherbe, 2018). The 5 new values that must be shared by all the employees in their attitudes and behaviors according to the RTBF's leadership; and that must be in line with the public service mission are:

- **Audacity:**

Leaders should promote an innovative environment that stimulates creativity and taking initiative. Leaders should give the right to their employees to make mistakes and take risks. The fear of failure needs to disappear if employees are accountable for their actions.

Mr.Paijens explained that: « ...c'est la peur de l'échec et de disparaître. Elle a existé, ça je ne le nie pas, mais maintenant on fonctionne vraiment différemment. C'est un échec, on prend les choses différemment, on les regarde différemment. C'est un point positif pour demain. » (see Appendices C.1., C.2., & C.5.).

- **Connection:**

Leaders should promote work with a spirit of collaboration and mutual comprehension (RTBF, 2018).

- **Diversity:**

Leaders should encourage diversity by having people from diverse backgrounds working together because it will benefit the quality of the work. Mr.Paijens noted that: « Je mélange systématiquement les jeunes et les moins jeunes pour essayer de pouvoir correctement dans mes décisions [...] baliser et mettre correctement le curseur. ». It will also increase innovation and creativity (see Appendix C.2.).

- **Transparency:**

Employees should not be afraid to express their opinion and should have access to all the information (RTBF, 2018).

- **Respect:**

The RTBF's new culture should recognize the skills and accomplishments of each employee (RTBF, 2018).

It was the internal multidisciplinary team that led the brainstorming on these new values that need to be cultivated as much externally than internally. These values express what connects them in terms of professions and functions. They give sense to the RTBF's work and illustrate the RTBF's public service characteristic (RTBF, 2018).

2.3.3. Creation of new governing bodies

There were a few new governing bodies that were created with the digital transformation. Firstly, a new executive committee (COMEX) was created to replace the old one and it is taking care of the editorial, financial and human resources strategy. Managers of the executive

committee had to refocus on a more strategic role compared to before and gave up the operational aspect of the business. It is made up of the managers of the different departments of the organization plus the managing director of the RTBF, Jean-Paul Philippot. Mr. Bonte added that: « *Au final, c'est souvent le comité de direction qui va trancher mais le comité de direction a une vue très hélicoptère des enjeux du terrain. Il va trancher peut-être pas nécessairement de la bonne manière à tous les niveaux. A ce niveau-là, je pense qu'il y a encore pas mal de boulot à faire.* » (see Appendices C.1., C.5., & C.6.).

Secondly, an operational committee (COMOP) was created to take care of the operational areas of the company. This operational committee is made up of managers that are just under the departments' managers in terms of hierarchy (N-1) and of some departments' managers. Ms. Gonfroid said that: « *On a mis un comité opérationnel en place où ce sont nos N-1s qui sont au comité opérationnel. [...] C'est plus opérationnel. C'est-à-dire c'est du day-to-day. C'est l'attribution, la gestion opérationnelle. On peut parler des recrutements au jour le jour, des marchés en cours. Oui des travaux, donc oui c'est plus de l'opérationnel.* ». Most of the operational committee is made up of employees who did not have that much authority before the transformation. The operational committee is almost on the same level than the executive committee but with different reflection axes. Each member of the operational committee has a staff where they will reverberate all the important decisions and information from the committee's meetings (see Appendices C.1., C.2., C.4., & C.5.)

In order to challenge the higher governing bodies that are more classical in terms of managerial approaches, the RTBF has created a committee called “le Turfu”. Mr. Bonte described the “le Turfu” by saying: « *Ce sont des personnes de l'entreprise qui ont moins de 30 ans, qui sont tournées vers le futur et qui ont un regard sur l'agenda du comité exécutif et qui peuvent porter un regard de la nouvelle génération sur les points qui sont à ramener au comité exécutif et les décisions qui sont prises par la comité.* » (see Appendix C.6.).

2.3.4. Development of new managerial and technological competences

The digital transformation of the RTBF requires the managers and also employees of the organization to develop new competencies in order to be efficient. Developing these new competencies also helped to favor mobility of employees and managers inside the company through a new platform that the RTBF has set up. Ms. Thiran noted that: « *Un des gros points*

quand même qui est important c'est pour moi, qui a été fort développé, c'est l'accompagnement de tous les membres du personnel parce que quand on dit simplement en 2018, on a changé toute la structure. C'est-à-dire que sur les 200 cadres, à peu près 80% de ces 200 cadres ont du repostuler et changer de fonction et donc repasser par un processus de sélection. [...] Donc je veux dire cet aspect-là d'accompagnement, on a fait énormément de travail sur tout ce qui était accompagnement de nos managers. ». All of that was done through the RTBF Academy that was set up in 2013 by the leadership and it built the first foundations to pass this transformation. The RTBF's managers also had to pass more certifications in terms of transversal project management in order to favor a transition to a culture that fits more the strategic plan behind the digital transformation. The RTBF's managers think that the human capital can make the difference for a successful transformation (RTBF, 2018; RTBF, 2019e; RTBF, 2019f; see Appendices C.3. & C.4.).

Moreover, Ms.Thiran explained that aspect of the RTBF Academy by saying: *« ...il faut que l'on travaille sur chaque personne. Il y a des personnes qui ont plus de mal que d'autres et à ce moment-là, c'est vraiment de se dire pour les quelques personnes qui vont avoir plus de difficultés d'apprendre de nouvelles compétences, qu'est-ce qu'on fait, comment on les accompagne, comment on les aide pour qu'ils soient au centre encore utiles dans la boîte. »* The RTBF Academy helps to the personal development of all employees in the organization because the leadership does not want to leave anyone behind. It wants to reinforce several competencies that can be managerial, editorial or technological. It is also encouraging more transversality, well-being, and adaptation amongst its employees. An important part of the RTBF Academy is the Digital Academy. The Digital Academy is more connected to the technological aspects of the digital transformation. It wants to sensitize all the employees inside the RTBF to the digital revolution (RTBF, 2018; see appendix C.3.).

In conclusion, the RTBF offers a lot of opportunities for its employees and especially for its managers to prepare themselves by developing skills and behaviors necessary for the digital transformation. The RTBF wants its managers to be active listeners and to support the empowerment of their employees by making them actors of their own careers. Through all these initiatives, the RTBF wants its managers to do regular reassessment on their competences in line with the actual context. Compared to the past, the acquisition of

competences happens at a faster rate and the RTBF wants to ensure the work sustainability (RTBF, 2018; see Appendix C.3.).

2.3.5. Leadershift

2.3.5.1. Leadershift programme

In order to go through this digital transformation, an important and long evolution of mindset, functioning methods, and managerial behaviors was required among the managers in order to support it. The digital transformation led to societal changes where the old style of leadership is no longer pertinent and will allow the RTBF to realize its strategic goals. Lots of the RTBF's managers were from the old school of top-down management and had to make a lot of efforts to change their leadership style. The RTBF noticed that it was giving too much attention to its performance and not enough attention to its managers. Ms.Thiran explained that: *« ...on essaie d'instaurer un nouveau style de leadership qui doit supporter la transformation de notre organisation et de notre nouveau modèle qui se base sur la responsabilité, la délégation, la transversalité, la gestion mode projet. »*. Thus, the RTBF wanted its leaders to adopt a horizontal, human and participative management, based on dialogue, accountability, and consultation; and also integrate measures that will increase well-being at work. Managers need to produce talents rather than consume them. The RTBF has thus created a leadershift programme to meet these requirements and remove a directive style of leadership (Giroux, 2018; RTBF, 2019g; see Appendices C.1., C.2., C.3., & C.6.).

This change of behavior and mindset was done through this programme of leadershift. As explained by Mr.Paijens: *«... le leadershift c'est d'apprendre justement des postures de managers qui peuvent être différentes en fonction aussi des contextes dans lesquels on vit. »*. Managers need to do these so-called “shifts” in terms of leadership. All the departments' managers did a meeting together to think about these poses needed for the RTBF of tomorrow. These managerial poses should not be used all the time (see Appendices C.1., C.2., & C.3.). The leadershift programme for department's managers and their own teams of managers (N-1) revolves around different axes that include:

- To be a strong and humble leader: managers are always present and supportive. Mr.Bonte said that: *« C'est cette attitude d'un management qui est présent, toujours*

supportif [...] qui est plus en support de ses équipes que dans cette posture de j'ai la connaissance, c'est moi qui décide. » (Giroux, 2017; see Appendix C.6).

- To be an inspiring leader and to give meaning to actions (Giroux, 2017).
- To stimulate collective success: managers need to create a sense of team spirit by being more collective (Giroux, 2017).
- To set up a participative style: managers need to set up a logic of accountability among their employees and the functioning methods with their teams. Mr.Bonte told that: *«...on est dans une logique plus de responsabilisation, de faire en sorte de mettre en place les modes de fonctionnement avec l'équipe. [...] toujours être dans cette logique de permettre à chacun d'exprimer son avis sur les choses et arriver à des formes de consensus en équipe qui permettent à chacun de fonctionner de manière efficace. » (see Appendix C.6).*
- To take a coaching attitude: managers need to listen to their employees and ask the right questions rather than tell them what to do. Mr.Bonte mentioned that: *“C'est cette attitude de pouvoir écouter les collaborateurs mais aussi poser les bonnes questions plutôt que de leur dire ce qu'ils ont à faire, les écouter, les amener eux à être responsables dans leur dynamique mais ils ont un soutien sur le volet humain et qui permet à la personne de grandir.» (see Appendix C.6).*

Moreover, with this leadership programme, managers are presented under their teams instead of above in the new organizational chart because they support their employees. The organizational chart is thus flatter and more agile. Classical hierarchical layers have disappeared in the organization. Key staffs are reduced to the bare minimum number of people needed. Finally, as explained by Mr.Paijens: *“...il y a ce qu'on appelait la RTBF Academy qui nous permet nous au management d'affiner nos faiblesses dans le leadership. » (Giroux, 2018; see Appendix C.2).*

2.3.5.2. Leadershift development plan

In order to adopt this leadershift programme, the HR department set up an accompanying plan with several steps to follow. Firstly, they asked 55 managers including departments' managers and middle-level managers (N-1) to take a step back to reassess their current behaviors and style of leadership before the digital transformation. It allowed them to reflect on what they needed to improve in terms of leadership dimensions necessary for the digital transformation's philosophy. This step back was done with an external coach and they worked on the different axes of the leadershift programme. As explained by Mr. Bonte: *“Il y a des prises de recul qui ont été faites avec chaque manager de manière à leur permettre de prendre conscience de cette nouvelle manière de travailler mais aussi de pouvoir identifier, se recentrer sur leur manière de fonctionner et les challenges qu'ils avaient à relever pour passer d'un mode à l'autre »* (RTBF, 2019h; see Appendices C.1., C.2., C.3., C.4., & C.6.).

Moreover, 35 highest ranked managers, after they took their new positions in the organizational chart, had to go to a development center where they did different exercises including role-plays that allowed them to develop several leadership skills. In the end, they received a report on their current defined leadership and had to elaborate a personal growth development plan for their leadershift competences over a certain period of time. The second step of this development plan will be about lower-level managers and will enter in motion in the course of 2019. Through this plan, the RTBF wanted its leaders to work more on their soft skills rather than hard skills (RTBF, 2019h; see Appendices C.1., C.2., C.3., C.4., & C.6.).

2.3.5.3. Leadershift improvement points

The main weakness that the RTBF's HR department noticed after looking at the results of the development centers was about the coaching and development attitude pose of the leadershift programme. Most of the departments' managers needed to develop that axis that is considered as one of the most important. This axis is about the responsibility of employees and managers taking more time to provide them with feedbacks by being less directive. Ms. Thiran described that aspect: *“C'est de développer cette posture de coach et qui dit posture de coach dit développer une des compétences de feedback et ça franchement développer les compétences de feedback, c'est quelque chose de très complexe à développer. Parce que tu verras quand tu seras dans le monde de l'entreprise, donner du feedback ce n'est pas facile, quand c'est pour*

dire bravo, on l'oublie donc on ne le dit pas. Donner du feedback qui est ça ne va pas bien mais il faut faire ceci, ça prend du temps [...] Donc il y a énormément d'impacts [...] La première compétence sur laquelle on veut travailler d'ailleurs, c'est prendre une posture de coach. ». Moreover, departments' managers also needed to take feedback into accounts from their employees to adjust their leadership style (RTBF, 2019h; see Appendices C.1., C.2., C.3., & C.5.).

However, when managers need to make decisions, they will be directive if required but will make sure to have the adhesion of the team. To adopt this pose of leader, top managers needed to give up this position of leader and embrace a position of coach. As explained by Ms.Gonfroid: “... *je suis beaucoup moins dans un rôle de leader, je suis plutôt dans un rôle de coach et donc c'est vraiment d'accompagner mes managers pour qu'ils grandissent et qu'ils prennent leur place dans l'équipe, d'amener l'équipe à prendre des décisions, de l'autonomie, de la responsabilisation.* ». The managers need to explain to their N-1s not what decisions to take but how to take these decisions without too much guidance. Once the employees have understood the goal to reach and chosen the method, they have to take their responsibilities and should not wait for the decision coming from above. Top managers had to give up a certain share of their authority because they are working with their N-1s and employees that are sometimes better than them in several fields. It was complicated for the higher-level managers to ask that from their middle-level managers seeing that they were used to managers taking all the decisions for them. These employees will thus need to learn how to function differently (RTBF, 2019h; see Appendices C.1., C.2., C.3., & C.5.).

Another weakness from the results of the development center was the encouragement of a participative style of management. Higher-level managers had to make changes to encourage a decision-making process that was participative and collaborative by taking into accounts the opinions of the middle-level managers and other employees. Higher-level managers are doing regular reassessments with their teams about what aspects they need to improve and what aspects worked well. They are making the employees participating in a framework that they have defined in order to avoid misuses of the participative style of leadership. Managers also need to transform themselves as active listeners. Listening to their employees will trigger the type of leader they need to be depending on the position in which their interlocutors put them and the context around the discussion. This can be illustrated by Ms.Thiran: « *...il faut définir*

un cadre clair quand on parle de mode participatif. [...] J'ai dû changer ma structure d'organisation de mes HR sur le terrain puisque le modèle d'entreprise évoluait et que donc les départements changeaient. [...] j'avais défini un certain nombre, un cadre et puis je dis dans ce cadre-là, vous réfléchissez tous les HR ensemble à la meilleure organisation par rapport aux besoins du business et puis vous revenez vers moi et lorsque votre proposition sera mature et quand votre proposition sera mature, je déciderai et je vous expliquerai la décision que j'ai prise sur base de votre input. Ca s'est fait de manière tout à fait participative. ». These 2 points of leadership improvements described above are really important to encourage the shift necessary in terms of leadership at the RTBF (RTBF, 2019h; see Appendices C.1., C.2., & C.3.).

2.3.5.4. Leadership behaviors required

Another responsibility of the RTBF's leaders was to set up and to support the new framework necessary to the transformation. Leaders needed to create a positive dynamic in the future to favor a learning company. It was important that the managers created a vision to which the different employees will adhere. They have to tell these employees when they are doing a great job or not and what they expect from them in terms of improvements because the employees want attention from the leaders. By doing this, higher-level managers demonstrate respect towards their employees by showing recognition. Moreover, it is important to inform the employees in a transparent way about the project and when goals are reached. Finally, as explained by Mr.Paijens: *« ...il a fallu qu'elle (Cécile Gonfroid, son manager, NDLR) délègue énormément et qu'elle accepte que des prises de décisions soient faites à des endroits où elle ne siège plus. Donc il y a cette relation de confiance qui dû être établie rapidement. ».* A relationship of trust had to be developed between top-managers and middle-level managers about the decisions of these middle-level managers (see Appendices C.1. & C.2.).

Then managers have to encourage changes from their employees by stimulating innovation in a structured and organized way that can bring added value to the RTBF. They are putting together people from different backgrounds to stimulate creativity. For example, they have set up the Change Advisory Board with people from different teams. Moreover, Mr.Bonte explained another example of innovation: *« ...on a 2 conseillers en innovation. Ce sont 2 personnes dans l'entreprise qui ont vocation à essayer de stimuler l'innovation, qui ont un budget propre et qui peuvent un peu au-delà de la structure un peu hiérarchique, permettre à*

des gens qui ont des idées de pouvoir les exprimer et de pouvoir de manière itérative essayer de les mettre en place. » (see Appendices C.1., C.2. & C.6.).

Finally, the leadership approach would only be possible by developing and following an integrated approach that is global, coordinated and coherent. This approach needs to reinforce important messages about digital transformation through the initiatives undertaken inside the organization. These initiatives should integrate themselves into the context of the digital transformation. The RTBF thinks it is important to standardize leadership practices. Adopting this leadership takes time but it is necessary to realize the vision of the RTBF with this new digital transformation. It will make the RTBF stronger and encourage its employees to surpass themselves. The RTBF has also added the new skills necessary for this leadership in its applications calls for the new managerial jobs. On around 200 managers, 80% had to reapply in another function (RTBF, 2019h; see Appendix C.3.).

2.3.6. Role of the middle-level management

Middle-level managers are considered as important bridges between the departments' managers and the employees in the digital transformation. As illustrated by Ms. Gonfroid: *“Le middle-management, ce sont des relais très importants avec le personnel et c’est pour moi dans la transformation, ils avaient un rôle très important de communication et d’expliquer la transformation. Olivier (son N-1, NDLR), si tu veux pour moi, un il a dû prendre une responsabilité plus importante puisqu’il est au comité opérationnel. Donc on a donné si tu veux plus de responsabilités aux cadres intermédiaires que par le passé. Donc comme ça, ils ont plus d’implication dans la gestion de l’entreprise et l’organisation de l’entreprise. Et l’autre point, c’est qu’ils ont un rôle important pour moi de faire, d’expliquer la transformation, de la faire comprendre, de mener les projets, de gérer les équipes. Donc ce sont des gestionnaires, ce sont aussi des gestionnaires d’équipe et de budget et de ressources quoi. »* They stimulated curiosity in their teams about what is happening in their industry for them to adapt. After making employees open-minded to changes, they will only be able to create adhesion. The middle-level managers have a more local foot in the daily life of the organization. The top managers are establishing the goals for the business and the middle-level managers are there to support these objectives within the means of the RTBF. They also need to manage the projects and the teams. They are also adopting with their employees the

leadership poses of coaching and delegation that their managers had with them (see Appendices C.1. & C.2.).

2.3.7. Communication methods from the managers

According to the leaders of the RTBF, the message concerning the digital transformation needs to be repeated by the managers 7 times in 7 different methods. Ms.Gonfroid said that: “...dans Prosci, dans la gestion du changement, il faut répéter 7 fois le changement, 7 fois l'information pour que le personnel et l'agent l'assimilent. ». As a leader, it is really important to be able to explain the reasons for this digital transformation to all the employees for them to accept it. Having a participative approach and efficient communication will increase the chances of success according to the managing director. The leadership also needs to make sure that the “how” of the transformation is clear. All these moments of communication allow the managers to work on their leadership pose by showing a shift. The managers have to be active listeners and show empathy while connecting to the field reality. According to the RTBF’s leadership, it is important to have an aligned communication approach from all the leaders (Faidherbe, 2018; Giroux, 2018; Pierard, 2017; RTBF, 2019h; see Appendix C.1.).

The different methods used by the RTBF’s higher-level managers to communicate this message include:

- Breakfasts with the managing director and the executive team to have a transparent and constructive discussion. It is an informal talk to reinforce the connection between all the employees (Giroux, 2018; RTBF, 2019h).
- Vision 2022 Tour: it is a roadshow with the higher-level managers that go in the different offices across the country in order to assume and reassure about the transformation. They meet all the employees during this roadshow. It is important to demonstrate transparency and connection in the process (Giroux, 2018; RTBF, 2017; RTBF, 2019h; see Appendices C.1. & C.3.).
- Explicative videos on the internal communication channels. Ms.Thiran explained that: “On fait énormément, on a fait pas mal de vidéos donc où on montre des exemples. [...] Mais donc on prend des cas individuels, des cas personnels, des initiatives sur le

terrain qui vont dans la direction d'une transformation digitale. ». It helped making employees get on board of this transformation (Faidherbe, 2018; see Appendix C.3.).

- Digital Transformation Playbook (see Appendix C.4.).
- Personalized follow-up for each employee (Sacré, 2018).

Moreover, one of the most important methods used by the leaders to communicate their ambitions is the Vision 2022 Tour. Ms.Gonfroid said that: “*...on refait un roadshow [...] où tout le comité de direction, le comité exécutif, les équipes, le manager, on va de nouveau rencontrer le personnel pour réexpliquer la transfo et pour aussi répondre à leurs questions.* ». All the employees present are invited to give their opinions concerning the new values of the organization and what behaviors they should adopt and promote in the work environment. Employees will also need to show initiatives they have taken and what they have learned from these. Leaders want to show practical cases during this tour to decrease fear of the transformation (RTBF, 2017; see Appendices C.1. & C.4.).

After all of this, departments’ managers and their own middle-level managers (N-1) had to personalize their explanations again in their own teams. Ms.Gonfroid pointed out that: “*...il y a plus de 350 personnes qu'on a conviées et donc on a expliqué la structure [...] l'organisation globale; les ambitions; la stratégie [...] Puis chaque manager a dû cascader dans son équipe ces informations, les gens qui n'avaient pas pu venir, ils ont dû refaire une couche.* ». According to some managers, it was important to have transparency with the employees about everything that happened during the transformation in order to get everyone aligned on the common vision and to not have any disagreements. Leaders need to have a great sense of information sharing, exchange a lot with the employees and make them participating in the establishment of the strategy and vision in their departments. It is important that the communication from the leaders helped the general goals of the RTBF and not only the goals from their departments. The employees have to challenge some points of this transformation and not accept the transformation as it is. Ms.Thiran explained that: « *...où tous les six mois on prend un moment d'arrêt, de recul, de réflexion et puis on redéfinit ensemble pour les six mois qui viennent. [...] au niveau de la stratégie, de la vision de l'alignement de l'équipe, il faut la construire ensemble pour que tout le monde comprenne*

bien le pourquoi du comment. Voilà et c'est dans le mode participatif mais à nouveau dans un cadre avec des décisions qui se prennent à un moment donné. » (see Appendices C.1., C.2., C.3., & C.5.).

2.3.8. Agile methodologies used by RTBF's leaders

2.3.8.1. Prosci Change Management

An important agile methodology that managers had to learn to go through this digital transformation was the Prosci methodology. Mr.Bonte explained that: *“Pour la gestion du changement, on a commencé à former une trentaine de personnes à la RTBF qui sont certifiées Prosci. C’est une méthodologie [...] qui a fait ses preuves dans le monde et qui permet de grandir en compétences sur la gestion du changement* ». It helps the RTBF's managers with the activation of the leadership and with the management of the teams functioning. Change management needs to be a part of the RTBF's managers' ADN. In addition to that, they put Change Management Officers in the different teams. The Prosci methodology is based on the ADKAR model and helps to adapt quickly to the different internal and external changes in the company. It also helps to measure if a change process is effective and to see what parts of the process are overlooked. Depending on the part of the model, a manager will need to take a different role. It is a goal-oriented model that helps leaders facilitating change and supporting the employees by developing a human aspect to connect employees to the projects (Boca, 2013; Prosci, 2018; RTBF, 2017; RTBF, 2019h; see Appendices C.1., C.3., & C.6.). The ADKAR model is made up of 5 different stages that include:

- **Ability:**

It helps the managers to implement the required behaviors and skills they have learned. The RTBF is preparing action plans on the collective and individual levels. Ms.Thiran noted that: *“Comment je mets en place un processus qui donne les outils mais qui aussi aide à améliorer le sentiment ou en tout cas la confiance d'être capable de le pratiquer* » (see Appendix C.3.).

- **Desire:**

It is important to support and participate in the change. The RTBF's leadership wants to increase the desire of its employees to work on the transformation by showing the example (RTBF, 2019h; see Appendix C.3.).

- **Knowledge:**

It is important to provide information and training and to help its employees by giving them the ability to perform efficiently the change. Ms.Thiran noted that: "*Le K, c'est le knowledge, le knowledge ça veut dire les formations, est-ce que j'ai les outils.* » (see Appendix C.3.).

- **Awareness:**

It is important that the individual is aware of the needs for change. Ms.Thiran said that: "*c'est awareness [...] comment on fait comprendre qu'on doit changer.* ». For this dimension, the RTBF is defining the context and developing the storytelling to raise awareness about the change (see Appendix C.3.).

- **Reinforcement:**

It is necessary to encourage change once it has been made in order to make it last permanently. As illustrated by Ms.Thiran: "*Comment est-ce que je renforce ce changement [...] Par exemple un changement, les nouvelles compétences en leadership que j'ai mises en place dans tous les outils de descriptions de fonction, dans tous les recrutements, dans tous assessment centers, les development centers, dans les évaluations.* ». Through this dimension, the RTBF's leadership wants to avoid the employees to go back to their old ways of working by supporting continuously the dynamic of the transformation and communicating on the importance of this change (RTBF, 2019h; see Appendices C.3. & C.6.).

Through the Prosci methodology, the RTBF emphasizes a lot on the role of the new executive committee (COMEX). The executive committee plays an important role in the reinforcement of the change by showing the example. They need to support their team leaders by encouraging the right behaviors. The members of the COMEX need to provide continuous feedbacks so that their employees adopt the behaviors in line with the new digital transformation of the RTBF. It is important that the members of the COMEX provide a follow-up by looking at what, as leaders, they could continuously improve individually or as a

team. This positive dynamic needs to come from above. The COMEX is also important in activating the leadership inside the organization. Finally, all the leaders of the COMEX need to work together as a community that works and exchanges (RTBF, 2019h).

Moreover, the COMEX is also involved in the ability phase of the ADKAR model. They are responsible for their employees to implement the skills and behaviors required for this transformation. They need to make sure that the changes in behaviors required are implemented in all the teams of the organization. The members of the COMEX need to have an insightful discussion during their one-to-one with their team leaders. They have to talk to their team leaders about which competencies and skills they will have to adapt based on the reports from the development centers, their step back moments and their feedbacks. Their team leaders have to tell them how they plan to adopt these skills and behaviors (RTBF, 2019h).

2.3.8.2. Other agile methodologies

There are several other agile methodologies that the higher-level managers used to manage the change with this transformation. For example, managers had to pass several certifications about the agile participatory. Mr.Paijens mentioned that: « *On part sur des méthodes plus orientées Spotify. On travaille avec des méthodologies agiles telles que Scrum, Kanban.* ». Through these methodologies, leaders want to do regular reassessments of the organizational functioning in order to increase reactivity and to evaluate constantly their leadership style. Some departments' managers set up agile coaches in their departments to see how teams were working and what they could have improved. Moreover, several governance methods were set up by some managers to avoid launching a project without having clear information about who runs this project (see Appendices C.1., C.2., & C.5.).

2.3.9. Leaders' KPIs

Because of this digital transformation, a digital boardroom was set up by the chief officers to measure the main KPIs of the company. They revolved around four axes:

- KPIs about the audiences and market shares. It is more about the consumption of the RTBF's contents (see Appendix C.1.).

- KPIs about the financial aspects of the company (see Appendix C.1.).
- KPIs about human resources like the number of workers, internal mobility or training rate (see Appendix C.1.).
- KPIs about business processes related to digital productions for example (see Appendices C.1. & C.3.).

However, these KPIs are not specific to the digital transformation but more related to the company's performance in general. Ms.Gonfroid explained that: *“Mais des KPIs vraiment sur la transformation, on a des feuilles de route avec une roadmap chacun sur notre transformation et moi j'ai remis les choses en place [...] Donc j'ai des jalons mais j'ai pas des KPIs. »*. A dashboard with all the KPIs related to Vision 2022 is currently being built in order to measure the different ambitions. They are choosing these KPIs depending on the objectives of the digital transformation. Some of these KPIs will be related to the organizational agility, the cultural change or the number of people working in support functions. This dashboard will allow the RTBF to solve some of its problems like its reporting and traceability of performance abilities. 2018 was the year where they set up the organizational structure that will allow them to reach their objectives; the rest of the plan will then follow. For example, by 2020, the managers will set up an evaluation and goal system for all the employees and not only the managers. All these KPIs will also not be calculated manually but they will be automatized (see Appendices C.1., C.3., & C.4.).

2.3.10. Leaders' issues with the digital transformation

An important disadvantage for the RTBF's leadership with this digital transformation was the resistance to changes from their employees. Ms.Thiran noted that: *“...quand on veut se prémunir et se préparer par rapport à une vague qui va nous arriver dans les années qui viennent, c'est beaucoup plus complexe parce que l'être humain n'aime pas changer. »*. A digital transformation will always have an important human impact on employees inside the company and will always need the adhesion and the energy from the employees to work. These employees had to change their individual behaviors. It was complicated for the managers to satisfy the 2000 employees in the organization. The RTBF's managers thought

that maybe their communication approach was not efficient enough to remove all the doubts about the transformation and their future vision. As a result, some employees were only seeing the negative aspects of the transformation (Giroux, 2018; Lo Giudice, 2017; see Appendices C.1., C.2., C.4., C.5. & C.6.).

Managers thought about the changes for a long time and they expected their employees to adopt and integrate these changes in a short delay. Managers believed they should have taken more time to explain the different roles and responsibilities of each person in this new model and to provide them with better support rather than focusing the essential part of the transformation plan on higher-level employees. Some employees felt that they were not involved in the transformation and were lost in this new hierarchy. As noted by Ms.Gonfroid: *“Ceux qui sont encore restés sur le quai [...] ce sont ceux-là qu'il faut aller chercher et donc on a encore un travail que j'appelle d'évangélisation [...] de faire comprendre et d'expliquer le changement, à quoi ça sert de changer, pourquoi on a dû changer. »*. They also need to show them what it could bring them in terms of personal growth. It was complicated to inspire change among the employees with most of the current leaders being a little bit outdated in terms of digital and change management even if they are doing a lot of efforts. For example, some leaders of the RTBF are starting to use corporate social media to communicate with their employees (Giroux, 2018; Lo Giudice, 2017; see Appendices C.1., C.2., C.4., C.5. & C.6.).

However, the managing director said that changes would more concern the processes than the teams on the field. According to him, there was not an important disruption for the employees. Moreover, the RTBF had to keep a certain top-down logic in order to validate some of the digital transformation principles. As Mr.Bonte explained: *“...quand on est dans des exercices stratégiques et de changements d'organisation, c'est difficile de ne pas avoir une logique un peu top-down.”* (Sacré, 2018; see Appendix C.6.).

Then before the digital transformation, the RTBF had a small team that was really efficient in the digital field and placed the RTBF in the digital industry. However, with this new convergent model of the digital transformation, the RTBF did not consider the digital as a unit but as a mean to reach its audiences. As a result, the digital side is less expressed, less central and less recognizable in the organization. The RTBF's leaders tried to bring the entire

organization step by step towards the digital rather than keeping a small team that could work faster in this field. Therefore, the RTBF did lose time in the digital field (see Appendix C.6.).

2.3.11. Leaders' vision on the RTBF's future

During the first steps of the design of the digital transformation, the leaders thought about a strategic plan that was going to last over 6 years from 2016 to 2022. However, all the leaders agreed that 6 years were not enough to accomplish completely this digital transformation plan. There is still a lot of work in development in order to remove the remains of their old top-down approach of management. Leaders need to think about how to make the digital transformation model work in a logic of continuous improvement as illustrated by Mr. Bonte: *“C'est de voir comment, sur base d'un modèle théorique qui a été décrit, aider les managers à le faire fonctionner au quotidien dans une logique d'amélioration continue, qui est amenée à perdurer. [...] on devrait à partir de maintenant se transformer de manière régulière et ne plus devoir faire des méga-transformations [...]”*. For the leaders of the RTBF, it is not possible anymore to rest on their laurels and to think they have succeeded but instead, they need to reassess themselves all the time. In 2022, they will think about the new strategic issues in their environment and the management will need to act depending on them (see Appendices C.1., C.3., C.4., & C.6.).

Finally, the RTBF is asking a lot of its managers nowadays and it leads to people asking themselves if they want to adopt this position of leadership seeing how demanding the transformation is. As Ms. Thiran noted: *“... ce sont d'abord des êtres humains avant d'être manager et donc si on sait les outiller à pouvoir vivre dans ce monde incertain qui change continuellement et s'adapter à toutes sortes de situations [...] qui ne sont pas prévues, je crois qu'on sera en capacité de pouvoir continuer à évoluer”*. The RTBF is still working on this aspect and the leadership believes that there are a lot of people able to do it in the organization (see Appendix C.3.).

2.4. Summary of the empirical analysis

In this part, we will present the summary of the results of the empirical analysis. They will be presented in the following tables:

Table 1: Leadershift axes

Leadershift axes	Leadership behaviors and practices
To be a strong and humbe leader	<ul style="list-style-type: none"> - Lead by example - Give up the position of manager and adopt a position of leader
To stimulate collective success	<ul style="list-style-type: none"> - Collaborative management and favor positivity - Align employees and managers on the vision
To set up a participative style	<ul style="list-style-type: none"> - Participation of the employees in the design of the transformation - Take feedbacks into account and challenge yourself regularly - Stimulation of creativity, risk-taking, and transparency - Decrease fear of employees towards failure
To be an inspiring leader	<ul style="list-style-type: none"> - Create a sense of fulfillment with the transformation's vision - Recognition of employees' achievements
To take a coaching attitude	<ul style="list-style-type: none"> - Empower employees and develop their competencies - Less directive style of leadership and give more autonomy - Favor the emergence of new leaders - Provide continuous feedbacks to employees

Table 2: Digital aspects of leadership

Dimensions	Leadership practices
Speed of decision-making	- New projects to improve automation and decision-making processes
Governing bodies	- Creation of new governing bodies with more decentralization
Agile methods	- Use of new methods like Scrum, Prosci or Kanban
Innovation approach	<ul style="list-style-type: none"> - Logic of continuous improvement - Definition of a new framework to take decisions - Flatter organizational chart with removal of silos
Creation of new managerial positions	- Emergence of new types of leader amongst the middle-level managers with a focus on new digital and leadership skills
Communication	- Use of new innovative communication channels

Table 3: Negative aspects of the digital transformation

Disadvantages	Leaders' point of view
Insufficient humanization of the transformation	- Not enough involvement of all the employees in the transformation and too much focus on managers
Resistance to change	- Difficulties of employees to challenge themselves
Inefficient communication	- Employees lost in the new hierarchical structure - Outdated management practices
Pressure on manager	- Important increase of responsibilities on managers' shoulders

3. Discussion, conclusion, and limitations

This chapter will connect what we found in the practical case with the literature review. Firstly, we will answer the research question of this Master's thesis by looking at the main results of the case study and their relationship with the appropriate literature. Then managerial implications and research limitations will be described. Finally, we will identify possible directions for future research.

3.1. Analysis and discussion

In this part, we will discuss the theoretical results with the empirical results in order to try to give an answer to the research question: How does digital transformation affect the leadership of managers in a large public service organization? This research question was about the impact of the digital transformation on the different leadership practices of the RTBF's managers. It emerged from the data that there are several leadership changes because of the digital transformation.

3.1.1. Previous style of leadership

Firstly, the leadership style of the RTBF before the digital transformation was related to a top-down approach. This style of leadership could be linked to several theories of leadership. The first theory would be the Managerial Grid. The Managerial Grid was set up to evaluate the efficiency of leadership based on concern for people and production (Blake et al., 1964). Seeing how pyramidal was the hierarchical structure of the RTBF before the digital transformation, the leadership style of their leaders could be located in the bottom-right of the Managerial Grid with a lot of importance on production and not that much on employees. Managers of the RTBF were strict about the different processes to follow with their workers

because of lots of rules and regulations. In the end, it cost a lot of time to validate all the decisions. The style of leadership was directive and managers did not encourage the development of their employees by making them accountable for their actions. The main concerns were about the delivery of the service to customers. It was not a sustainable way for leaders to follow and the digital transformation led to this change of leadership.

Another leadership theory that could fit the old style of leadership of the RTBF's managers would be one part of the Situational Leadership model. The model describes 4 styles of leadership based on the readiness level of the group or the individual (Hersey & Blanchard, 1988). The one style of leadership that managers of the RTBF would have been related to before the transformation would be the "Telling" style. This style was displayed by the RTBF's managers based on how much guidance and validation their employees needed from them. Employees needed precise explanations about all the tasks and decisions in the organization.

3.1.2. Change in leadership style

Firstly, the digital disruption leads to digital transformation and therefore, it creates the necessity for managers to reassess and rethink their methods, their organizational functioning, and processes (Rogers, 2016). A disruption is created by the arrival of new entrants on the market of the incumbent (Christensen, 2013). The digital transformation led the managers of the RTBF to reassess and rethink their methods of functioning and they changed their style of leadership in the first place with the leadership programme. This digital transformation was due to the digital disruption created by the arrival of new competitors on the market of the RTBF like Netflix or Facebook that changed the methods of consumption.

This change of leadership style was based on the leadership programme where they had to learn different poses of leadership and use them depending on the context in which they were acting. The style that was partially displayed the most in the different leadership poses was the transformational leadership. According to Holten and Brenner (2015), transformational leadership favors organizational change and increases optimism towards the digital transformation. It inspires followers to change and increases commitment. There were also other leadership styles that were shown within the digital transformation process.

3.1.2.1. Transformational leadership

The transformational leadership is made up of four different elements: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The different axes of the leadership programme are expressed partially in these different elements (Bass & Riggio, 2006; Bono & Judge, 2004). They will be explained below.

- **Idealized influence:**

Leaders will lead by showing high standards in terms of conduct or ethics and they will also lead by example with employees (Bass & Riggio, 2006; Bono & Judge, 2004). Managers of the RTBF are expressing this aspect through the first pose of the leadership programme: to be a strong and humble leader. Managers of the executive committee (COMEX) are leading by example with their employees so that they will imitate them and work together on the transformation. They gave up this position of chief in a way and started to be more a leader.

- **Inspirational motivation:**

Leaders have a shared vision for the future of the organization and are giving a sense of purpose to their employees (Bass & Riggio, 2006; Bono & Judge, 2004). Managers of the RTBF are expressing this aspect through the second and third poses of the leadership programme: to be an inspiring leader and to give meaning to actions; and to stimulate collective success. They tried to give a sense of fulfillment to their employees in their work by empowering them and creating a positive work environment.

The vision is considered important for the RTBF's leadership and a lot of managers interviewed emphasized how essential it was to go through this process with all the employees. Showing a common vision to follow is close to what the Digital Masters do to develop their leadership capabilities according to Bonnet et al. (2014). Creating this digital vision allowed everyone in the management team and the employees to be aligned on how to proceed with the transformation and the digital roadmap to follow. This vision was one of the first steps of the digital transformation and built the foundations of this transformation. They are also using the new values of the transformation to stimulate the adhesion of their employees. They are expressing the connection value by creating an environment that favors team spirit and collaboration. Managers are also demonstrating the respect value where they recognize what their employees have done.

- **Intellectual stimulation:**

Leaders are able to modify the corporate culture and they will encourage innovation, risk-taking and cross-functional work without giving any critics (Bass & Riggio, 2006; Bono & Judge, 2004; Kane et al., 2017). According to Kane et al. (2015), risk-taking and cross-functional work are essential values that leaders should promote to get a successful digital transformation. Bonnet et al. (2014) also advised that employees co-create the digital transformation roadmap with the leaders of the organization to increase involvement.

Managers of the RTBF are expressing this aspect through the fourth pose of the leadership programme: to set up a participative style. Because of the digital transformation, they had to rethink the organizational functioning with the participation of their employees in the redesign phase with, for example, the Vision 2022 Tour where employees gave their opinions on the new values and behaviors under the digital transformation. Managers modified the corporate culture of the RTBF with new values to follow that included, among others, audacity, diversity, and transparency.

Then they reinforced these 3 values by encouraging creativity and taking initiative with their employees. They also started to accept that the ideas of their employees could differ from theirs and tried to trust them in their decisions by making them less scared of failure. It means that employees are now able to express their opinions and feedback to their managers. As a result, managers are taking these feedbacks into account to adapt their leadership style and to review continuously their goals and projects. Finally, managers of the RTBF tried to be as much transparent as they could with all the information concerning the digital transformation during the different communication events organized with the employees to align everyone on the same goal.

- **Individual consideration:**

Leaders will identify and adapt to the needs and potential of their employees and act as coaches by helping them develop their skills (Bass & Riggio, 2006; Bono & Judge, 2004). Moreover, the digital transformation leads managers to develop the required digital skills and to favor the development of these digital skills amongst their employees (Bonnet et al., 2014; Hess et al., 2016; Kane et al., 2017).

Managers of the RTBF display this element with the fifth pose of the leadership programme: to take a coaching attitude. They acted as a coach for their employees and helped them in their personal growth through the development of several competencies so that they became expert in their field and were ready to succeed. They were also less directive and provided them with several feedbacks. Furthermore, managers trained their employees to make decisions and to be more responsible. The RTBF's leadership also developed an environment suitable for their employees and managers to acquire the required skills in agility, change management or transversality for the digital transformation thanks to the RTBF Academy.

Moreover, executives of the RTBF have helped the middle-level managers in their personal growth so that they started to take decisions by themselves and took a position of leadership. They also adapted continuously their coaching style depending on the situation. Finally, the leadership programme allowed the main managers of the RTBF to develop the leadership required for the digital transformation through personal reassessment and exercise in a development center. After the development center, they had to think to which leadership competencies they wanted to develop in line with the digital transformation.

3.1.2.2. Situational Leadership

Moreover, the new leadership style of the RTBF could also be related to some parts of the Situational Leadership model where leaders adapt their style of leadership depending on how ready their followers are. There are four styles of leadership described in this theory but we are only interested in two of them: participating and delegating. Participating is about being supportive and communicative and not providing too many directions. Delegating is about giving autonomy to followers to perform different tasks (Hersey & Blanchard, 1988). The RTBF's managers started to delegate a lot more with the transformation and gave more autonomy to their employees by trusting them. These two styles could be related to three axes of the leadership programme that are: to be a strong and humble leader; to set up a participative style; and to take a coaching attitude. Managers of the RTBF are supporting and showing appreciation towards the decisions of their employees and they stop providing too much guidance for them to make decisions.

3.1.2.3. Digital leadership

There are also some other aspects of the new leadership style of the RTBF's managers that did not fit the transformational theory or the Situational Leadership model completely. These aspects represent the digital characteristics of this new leadership style that could be called digital leadership. The different elements of this digital leadership will be explained below:

- **Governing mechanisms:**

The digital transformation impacts the leadership of managers in terms of new governing bodies that need to be set up. These governing bodies are necessary to steer the company in the right direction. They favor coordination of initiatives and the sharing of resources across the organization (Bonnet et al., 2014; Hess et al., 2016; Horlacher & Hess, 2016). The RTBF set 3 new governing bodies that impacted the leadership of their managers. The departments' managers who are members of the new executive committee had to give some of their decision-making abilities to their team leaders who are members of the new operational committee. The executive committee is way more focused on the general strategy than the daily operations, which are the responsibilities of the operational committee. Members of the operational committee had to take new responsibilities and leadership roles with more authority. The new "Turfu" committee was also made up to challenge on the digital levels the classical leaders of the organization to make them stay objective towards the future.

- **Agile approach:**

Agile methodologies allow organizations to be more responsive to environmental changes. It also favors taking feedbacks into accounts through regular meetings to review goals and objectives (Mergel, 2016; Piro, 2019; Wells, 2014). The RTBF's managers have started to use new agile methodologies like Prosci or Scrum. Prosci helped the managers of the RTBF to improve their skills in terms of change management and to the development of their different leadership poses. Moreover, through the Prosci methodology, the executive committee provided feedback to their employees so that they aligned their behaviors in line with the digital transformation.

- **A new approach to innovation:**

According to Ducrey and Vivier (2017) and Babinet (2016), organizations that are successful with their digital transformation have a new approach to innovation in a framework defined

by their leaders and have adopted the notion of continuous improvement. Managers need to stimulate the environment to favor these innovations and the digital transformation will lead to a change of organizational structure. Adopting horizontal management with more decentralization and autonomy is also important in this new approach to innovation.

The RTBF's managers have tried to go towards this philosophy by encouraging innovation that could benefit the organization. They have set up 2 advisors in innovation to help stimulating innovation and experimentation amongst employees. Managers are also starting to think that the RTBF should do continuous improvement regularly instead of only one transformation and not do anything afterward. The organizational chart of the RTBF has also changed by being flatter. Employees have way more autonomy and departments are no longer working in silos but together in 360° vision with convergence and transversality. The managers are now seen under their team and they are providing support and a framework for their employees to make decisions. They are leading through a network of communities and teams rather than through a hierarchy. They also gave up their waterfall approach from the past.

- **KPIs:**

According to Fitzgerald et al. (2013), a digital transformation should lead the leaders to align incentives with clear KPIs to favor the transformation. However, the RTBF's managers have not yet developed their KPIs but they are instead following a strategy of milestones to reach. The KPIs related to the transformation are on the verge to be developed soon.

- **Digital Champion:**

Bonnet et al. (2014) advise to develop new leadership positions like Chief Digital Officer (CDO) in the organization or hire people with technical knowledge. The CDO is responsible to lead the digital transformation on the local level. He plays an important role in the communication around the digital transformation to counter the resistance to change. The RTBF did not develop the role of CDO but they have changed greatly their organizational structure by opening new managerial positions to fill in with different digital leadership skills required. This position of CDO would be closely related to the new role of the middle-level managers in the organization. These middle-level managers are trying to arise curiosity and to

create adhesion around the digital transformation. They are more involved in the daily life of the employees than the executives and will support the goals established by the executives.

- **Digital literacy and communication channels:**

The digital transformation impacted the communication approach from the RTBF's leaders. Leaders had to learn to use different communication channels to lead this digital transformation forward. The RTBF's managers used these communication channels to communicate their ambitions and the reasons for the transformation to their employees. Managers of the RTBF were more or less effective by using corporate social media or internal communication channels such as meetings and roadshows. According to Kane et al. (2015) and Ducrey et Vivier (2017), using technological communication channels will demonstrate the digital literacy of the managers to the employees.

Bonnet et al. (2014) also said that by using other non-traditional communication channels, leaders would be able to encourage the participation of their employees in the digital transformation and increase their adhesion. The RTBF's managers did exactly that by asking online the opinions of their employees on what behaviors or skills were necessary for this digital transformation. These results showed how important it is for managers to learn to use different communication channels to engage the organization at scale.

- **Speed of decision-making:**

The digital transformation impacts the speed of decision-making amongst leaders by improving access to information (Bharadwaj et al., 2013). The RTBF has digitalized several of its business processes through initiatives like Numprod or its Human Resources Information System. They have also made better use of the Big Data. All of this led the managers of the RTBF to have more transparency concerning what is happening in the organization and increases the speed of decision-making.

3.1.2.4. Negative aspects of the digital transformation for the leadership

According to Westermann (2016), managers need to take way more into account the human aspect in the digital transformation and not go to extreme lengths to move forward the transformation. Otherwise, it would impact negatively the creativity and innovation of their employees. People are considered as the heart of the company and should not be neglected.

There can be some skepticism towards change from the managers and employees when the organization is large and rigid. Managers should make sure to make the employees collaborate with technologies to move forward the transformation and they need to reinvent themselves continuously in terms of skills and leadership (Ducrey & Vivier, 2017; Kolbjørnsrud et al., 2017).

The digital transformation led the RTBF's managers to encounter some of these problems with an important resistance to change from the employees. The leadership of the RTBF said that its communication approach about the transformation could have been better to remove the doubts. It was maybe due to the fact that some of their managers were not up-to-date in terms of management and digital strategy. Managers said that they focused too much the plan on them and they did not involve enough the employees. However, for a digital transformation to be successful, it will need the adhesion of all the employees. Some employees were lost in the new hierarchical structure and did not understand their new roles and responsibilities. Better methods of communications could have been used to tell their ambitions. Finally, the digital transformation had a negative impact on the role of the managers of the RTBF because of the enormous pressure it creates on their shoulders to move forward this transformation. However, the RTBF is trying to support their managers through its leadership initiative. Managers had to take a step back on their leadership style and had to think about what leadership they needed to develop for the transformation.

3.1.2.5. Conclusion

As a result, what is the impact of the digital transformation on the leadership of the RTBF's managers? Does it have not much impact on leaders who will keep using traditional leadership practices and learn from their lessons? Or will the digital transformation lead to having adventurous leaders who will have exciting expectations towards the future? The answer to these questions will be a little bit of both. As explained above, managers of the RTBF expressed aspects from classical leadership theories like the transformational leadership theory and the Situational Leadership model. However, they also expressed some elements that did not really fit in under these two theories but more under the digital leadership characteristic. Therefore, leaders of the RTBF tried to express a balanced mix of these theories with some problems. It is important to keep in mind some core fundamentals of good leadership and not focus too much on the technological aspect of the transformation. At

the same time, managers need to keep an agile mindset and to develop pertinent digital skills to improve continuously. The RTBF's managers have more or less expressed this result but they still went through some problems on the communication level and employees involvement.

3.2. Theoretical implications for managers

It was explained in this Master's thesis that the literature on the digital transformation and leadership practices was limited. This Master's thesis contributed to the literature by explaining the hybrid style of leadership between transformational leadership and digital leadership expressed by the leaders of the RTBF to drive this digital transformation.

After answering the research question, we identified some implications for managers to follow on the leadership level. These implications are recommendations of what they should do or not. A lot of companies and their managers will go through their digital transformation in a different way compared to the RTBF. However, a general approach might be concluded from this Master's thesis.

There are different methods to follow for managers of an organization to move forward a digital transformation. Several of these leadership practices are considered as traditional and it is important for these managers to also use non-traditional leadership methods like explained above. They need to show to their employees that they will own the transformation. It is also important for these organizations to understand where they need to improve for this process and they will know which actions to take.

Firstly, it is important to stimulate a culture of experimentation and innovation amongst the employees. Leaders should create an environment where these employees will be able to innovate and create new things. The main goal would be to learn from these experiences.

Secondly, managers need to create a place that will favor the emergence of new leaders. Seeing how unpredictable and changing the business environment is nowadays, there is not enough time for leaders to give all the instructions on what to do. Leaders need to make sure that their middle-level managers understand the main strategy behind the digital transformation and let them make decisions.

Thirdly, leaders need to develop continuously their digital skills. Digital innovations are increasingly changing over the years and change the business environment. Leaders need to make sure that they understand the new emerging trends. Moreover, leaders could hire new employees that will be considered as Digital Champions and will have all the knowledge necessary for the digital transformation.

Finally, leaders need to align all the employees on a common vision around the digital transformation through an effective communication plan.

3.3. Limitations

There are different limitations that need to be taken into consideration for this Master's thesis. After identifying all these limitations, we will be able to develop the remaining questions for future research. Qualitative studies support us in order to understand how something operates but does not completely answer to the research question. Through this Master's thesis, we wanted to see the impact of digital transformation on the leadership of managers in traditional organizations. However, by illustrating this matter with only one company (the RTBF), it is complicated to generalize because the situation could be different for other companies. It might have been interesting to compare the situation with a similar company.

Moreover, qualitative studies depend mostly on the interpretation of interviews by the interviewee. Therefore, some biases might appear. To avoid this, we tried to interview managers from all the levels of the organization with different opinions on the matter, but not all actors have been interviewed. Another bias might come from the interpretation of the events by the interviewer.

Afterward, the fact that the RTBF is part of the public service industry needs to be taken into account. The leadership of the RTBF does not have total freedom in terms of missions and objectives to accomplish seeing that political representatives determine these aspects. The RTBF might have approached its digital transformation in a different way if it did not have these rules to follow.

3.4. Remaining questions and future research

After giving different recommendations to managers, possible subjects for further research have been discovered. Firstly, this paper is mostly based on interviews. Therefore, there were some interpretations and some biases emerged. It would have been insightful to use several companies in different industries and countries. A larger sample of companies would have been maybe better to find a general answer to the question.

Secondly, the different operations of an organization in response to the digital transformation concern different fields where further research could be done. The RTBF seems to have invested a lot in this transformation in several areas. It would be interesting to know if there is an ideal strategy to follow. If an organization does not invest enough, it might suffer badly and compromise its future development. The organization also might invest too much compared to its environment and it could also create some dangers. A digital transformation strategy concerns so many areas of an organization like corporate culture, governance or technological capabilities. Therefore, it would be pertinent to understand all these elements in order to design the perfect digital transformation plan to follow.

Moreover, some causes of digital transformation have been explored through this thesis but it would be interesting to see how managers in other organizations observe these causes whether they are external or internal. Most of the managers at the RTBF felt that this digital transformation was a matter of survival for the organization because otherwise, it would have suffered badly. Managers in other organizations might have a quieter approach. It would be insightful to see what impacts their approach to digital disruption and if this approach affects the digital transformation.

Afterward, quantitative research could have been used to complete and corroborate the relevance of the results given by this Master's thesis. Furthermore, an analysis that follows the managers of the RTBF overtime after the completion of the digital transformation would give more insights on how their behaviors, skills and personal growth seeing that the transformation of the RTBF is recent. It would be interesting to see if the leadership changes would last over time or if it is just short-term and things would go back to normal after a certain period. Then it would be interesting to see what other methods managers use in several organizations to communicate effectively and move forward the digital transformation. It was

described in this thesis that managers thought they could have used a better way to communicate as a leader their ambitions to their employees.

As a conclusion, the topic of leadership has been deeply studied by researchers but the subject of digital transformation is only recently getting attention from the academic field. A particular attention should be given to the relationship between these two concepts seeing the great impact of the digital transformation on leadership nowadays. Finally, there are some interesting areas like the ones described above on the topic that remain to explore. This could be a good way for academic researchers to carry on with investigation on the impact of digital transformation in traditional companies.

Conclusion

Digital transformation and leadership practices are both concepts that a lot of businesses are involved with in today's world. Therefore, we took an exploratory look at digital transformation and leadership of organizations and the following research question was formulated: How does digital transformation affect the leadership of managers in a large public service organization? The objective was to show an understanding of this phenomenon in the RTBF.

In the first part of this Master's thesis, several findings have been found thanks to the large literature review. Several concepts that included digitalization, digital disruption, digital transformation, and leadership were explained. Digital disruption is having an important impact on the different aspects of our society. In response to these changes, traditional businesses need to go a digital transformation to stay relevant in the environment and ensure their survival. Therefore, digital transformation is creating a lot of changes for the top managers in terms of leadership seeing how complex and important are the organizational changes. This literature review had for objective to find results about the relationship between the digital transformation and leadership but it remains scarce. Through the literature review, we developed a set of principles that characterize the digital transformation and we defined the different theories of leadership.

In the second part of this Master's thesis, one case has been analyzed. We looked at the impact of the digital transformation on leadership amongst RTBF's managers by discussing it with relevant literature. Furthermore, several recommendations were given for managers to drive successfully the digital transformation forward and limitations of the empirical study were discussed.

Companies that go through a digital transformation need to have all the tools necessary to set up this important change in order to make sure that this transformation will be successful. It is essential that leaders understand the digital transformation and show a willingness to take into account these changes. There is a wide variety of leadership characteristics for a leader to have to make this transformation happen. He needs to combine traditional leadership practices with digital leadership practices to create a hybrid style of leadership. By doing this, he will be able to take advantage of the digital transformation opportunities. The results of this study will help managers to become leaders of the change.

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