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The multidimensional nature of commitment to change: an experimental study

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Abstract

The present study analyzes commitment to change no longer as a unidimensional construct, but rather as a multidimensional one. In fact, it can take three different declinations: affective, continuance, and normative commitment. This distinction is important because the three dimensions of commitment to change can have different implications for employees' intentions, emotions, and behaviors at the workplace. The objective of the present study is to test the multidimensional nature of commitment to change and analyze its relationships with other relevant variables.

In particular, the examined variables are communication, uncertainty, job satisfaction and short-term thinking. A quantitative research method was adopted in the study by administering a questionnaire to employees who have experienced or are experiencing change within the organization. Results and managerial implications are also discussed.

Chapter 1 - Challenges of the Global External Environment

1.1. Globalization and digitalization

This section explores the global industrial landscape, which has recently undergone numerous changes that have been imposed to enterprises. In fact, along with the economy's increasingly labile shape, businesses also have to cope with the dynamicity of a complex environment. Scholars such as Posada et al. (2015) argue that the economy is undergoing a worldwide movement aimed at improving the productivity and efficiency of industrial production. Additionally, the international development of firms and the transfer of inputs, technologies, skills, and information have driven the process of market integration. Lasi et al. (2014) believe that the drivers of this global movement are essentially two: digital transformation and globalization, where the latter can be understood as a true "*compression of the world*" (Robertson, 1992). The widening of corporate boundaries and confrontation with different realities have presented businesses with new challenges; for example, the boundaries between sectors have become increasingly blurred with the integration of products and services (Scholte, 2000). In fact, in addition to having to face larger competitors in the same territory, companies have to struggle to meet the preferences of customers belonging to different economic, managerial, social, behavioral and value systems (Scholte, 2000). The impact of globalization in a business perspective is reflected in the fact that the country of origin is no longer an essential factor for the organization's economic and competitive evolution. Rather, globalization offers enterprises significant opportunities and reconsiderations, such as the switch to an international configuration, dictated by the fact that the factors that determine its development are directly or indirectly international in nature.

The second driver of this global movement is the technology push. In recent years, development in the field of technology has appeared to be a determinant element affecting the

globalization process. Technological innovations and digital transformation are disruptively and almost radically reshaping the world, transforming human habits, social interactions, and changing economic, social, and cultural scenarios. The term used to describe the current era called Fourth Industrial Revolution or Industry 4.0 is defined as *"umbrella term for a new industrial paradigm"* that encompasses the advancement of new technologies such as Cyber-Physical System (CPS), Internet of Things (IoT), Internet of Services (IoS), Robotics, Big Data and analytics, Cloud and Augmented Reality, just to name a few (Pereira & Romero, 2017). Figure 1.1 shows an outline of the most impactful forms of technological innovation that are revolutionizing the industrial fabric.
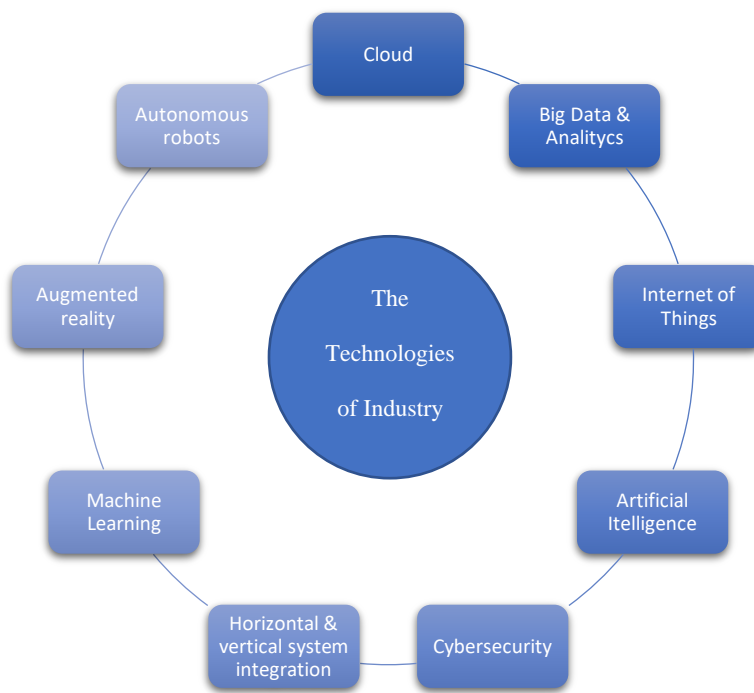
Figure 1.1: The nine technologies that are transforming industrial production.

Although some of the main forms of these technologies may have existed during the Third Industrial Revolution, today they are evolving to become much more sophisticated and integrated into society (Zain, 2020). For instance, new information and communication technologies (ICTs), the use of Big Data, and Artificial Intelligence are acting as enablers in the development of intelligent, autonomous, and self-learning products and processes (Matt, Modràk & Zsifkovits, 2020). In

addition, organizations today are moving to forms of decision-making that is becoming more and more data-driven, where employees integrate their judgment and skills with the recommendations of algorithms. Therefore, the Fourth Industrial Revolution describes a further step in which people, machines, and products are directly connected to each other and to their environment.

From a business perspective, there are increasing demands from stakeholders for greater responsiveness between the progress of digital technology and environmental issues (Von Kutzschenbach & Daub, 2021). Despite the potential offered by these technologies, they generate significant environmental impacts (i.e., WEEE), increasing stress on the Earth, its resources, and our society as a whole. Therefore, it would be appropriate to think of technology as a tool to aid in environmental sustainability. It would be necessary to ensure that these technologies are adequately harnessed, in order to achieve a sustainable global development (Von Kutzschenbach & Daub, 2021). For this reason, companies should take sustainability into account when defining their digitization roadmap.

In conclusion, the Fourth Industrial Revolution is contributing and will contribute to the radical competitive repositioning of enterprises under one specific condition: the opportunities offered by the multiple digital paradigms that characterize Industry 4.0 must be exploited to design innovative, digital and sustainable business models. This technological innovation that characterizes production processes and products must be accompanied by the strategic innovation of business models (Bagnoli & others, 2022).

1.2. The impact on organizational structure

The previous paragraph delved into modern challenges in the concept of globalization and digitization, where the latter is often confused with digital transformation, omitting that they are related but essentially different. On one hand, digitization refers to the use of new digital technologies to manage business processes innovatively and efficiently; on the other hand, digital transformation is a much broader phenomenon that is radically changing the society, economy and institutions, by

leveraging digitization as an enabling phenomenon (Vrana & Singh, 2021). In the 21st century, all business segments, regardless of size, history, tradition, and number of customers, have been impacted by a market aimed at transformation and digitization (Dudić et al, 2018).

Digital transformation, as it is conceived today, focuses mainly on the organizational impacts generated by advanced technologies and digital platforms, accelerating the attitude of adaptation, such as the adjustment of work processes, organizational structure, and corporate culture. In other words, the real challenge is not only to understand how IoT technologies, Big Data and digital collaboration platforms work, but especially to develop reference models and practices that can be used to introduce and increase digital technologies inside organizations and exploit its full potential to generate value in the marketplace. It has become increasingly important to integrate change capabilities within organizations. As a consequence, managers who wants to *"keep up with the times"* today must ask themselves how to redesign their company as a whole to operate efficiently and effectively in the digital age.

With reference to organizational structure, hierarchical organizational models - which are inflexible and characterized by a high degree of formalization - oftentimes don't have the ability to respond quickly to change (Petković & Lukić, 2014). In fact, if organizations remain rigid, bureaucratic and with strong internal and external boundaries, it appears slow and uncompetitive with respect to the labor market that is instead increasingly dynamic and hyperconnected. It becomes clear that the development and implementation of new forms of organizational structure is inevitable. Businesses, in order to accommodate change, must converge from a traditionally siloed structure to configurations characterized by openness and networking, with characteristics such as responsiveness, openness and effectiveness (Hughes, 2017). In short, organizations capable of self-organizing to respond to the evolving needs of markets and the possibilities offered by technology are now more necessary than ever, with the skills of establishing partnerships, identifying talent or finding experts faster than competitors. Organizations should be capable of using information and digitalized processes to seamlessly integrate both human and digital resources so that they can quickly

identify opportunities and reorganize to seize them in an ever-accelerating environment (Kotter, 2014).

The problem is that most of today's organizations are not designed to change proactively; they are designed to strive for efficiency in a disciplined manner and according to rules and hierarchy that are rather rigid and refractory to change (Venier, 2017). As a result, there is a gap between the speed of change in the external environment and the maximum possible speed of change in organizations.

According to several scholars and practitioners (Bryant, 2014; Lee & Edmondson, 2017) an organizational structure that is resilient and responsive in this scenario is characterized by:

- a flatter organizational structure.
- decentralized decision making.
- organization of work in teams.
- greater collaboration and coordination.
- faster knowledge transfer between employees.
- knowledge networking.
- proactive approach.
- horizontal communication.

Thus, in order to take advantage of this change and create a competitive advantage, it is firstly necessary to make organizations more flexible, resilient, and agile (Andriole et al., 2017). Then, it is also necessary to enable managers to be able to deal with the different variables that run through the organizational system, such as: the design and testing of digital coordination systems, human resource management logics, proactive management of organizational boundaries and organizational culture (Venier, 2017).

1.3. The impact on culture and individuals

The Fourth Industrial Revolution and the COVID-19 recession, often defined as twin forces, have contributed to a culture of digitization. In fact, the propensity and openness developed by people

and businesses towards the usage of digital technologies has been an event of unprecedented magnitude, as even people who were reluctant to use them, in their daily work and non-work routines, eventually did. Workers are facing a fundamental change in work practices, which now require new types of resilience and involve a program of retraining or updating digital skills (Elliott & Ross, 2019). With reference to the the skills and capabilities to be cultivated and promoted to implement digital transformation efficiently, the division into the two following categories can be useful: soft skills and digital skills.

- Soft skills: in the modern business organization, an increasingly central and relevant role is attributed to soft skills (i.e., interpersonal skills), which are independent of the so-called hard skills, (i.e., specific technical skills). A distinction can be made between internal soft skills, which relates to the way individuals interact with themselves, such as, for example, creativity, self-criticism, flexibility and problem solving; and external soft skills, which relate to the way individuals interact with others, such as, for example, interpersonal skills, collaborative skills, emotional intelligence, influence and leadership. Companies will, therefore, have to ask themselves what cross-skills are useful in the company and, when selecting personnel, choose those talents who have both the technical skills in line with the required job, but also a personality that is open, flexible and able to work positively with others (Gulati & Reaiche, 2020).

- Digital Skills: in view of the increasing affirmation of digital, among the hard skills required, it becomes a prerequisite to possess specific and qualified digital skills, the so-called digital skills. This term refers to a broad set of technological skills that enable people to derive information from data, make predictions, create content, and speed up processes through information technology and the Internet (Mauri, 2019). Digital skills are varied and are evolving as the digital transformation takes place. We can distinguish two types of digital skills: digital hard skills and digital soft skills. The former includes skills and technical abilities that are specific to a particular sector or professional figure, such as possessing skills

in the design, programming and development of a particular software. These skills have the peculiarity of having a high rate of obsolescence, since a software or platform in our working life could be replaced by others in a short period of time. Digital soft skills, on the other hand, refers to those attitudes and skills, which enable a person to effectively use technological tools to find new and useful information, for example, through reading analytical data. These skills (e.g., digital mindset, digital literacy) are very important, as they will remain relevant even as new technologies, approaches, and languages evolve and spread (Gulati & Reaiche, 2020).

With reference to the skills in demand in today's working environment, the 2020 edition of the World Economic Forum's "The Future of Jobs" report maps out the jobs and skills of the future. According to the World Economic Forum (2020), skills that will become increasingly important in the world of work by 2025 include critical thinking and analysis, as well as problem solving, self-management skills such as active learning, resilience, stress tolerance, and flexibility [see Figure 1.2].

Top 10 skills of 2025

- Analytical thinking and innovation
- Active learning and learning strategies
- Complex problem-solving
- Critical thinking and analysis
- Creativity, originality and initiative
- Leadership and social influence
- Technology use, monitoring and control
- Technology design and programming
- Resilience, stress tolerance and flexibility
- Reasoning, problem-solving and ideation

Type of skill
- Problem-solving
- Self-management
- Working with people
- Technology use and development

Figure 1.2: Top of skills of 2025. Source: World economic forum, 2020.

As digital transformation has affected skills, the way people work has also been affected by technological developments. Today, workers have a wealth of information at their disposal and can collaborate with colleagues on the other side of the world. In fact, digital platforms for knowledge-sharing are present everywhere within large organizations and have become focal points for geographically distant offices (Haas, Criscuolo & George, 2015). In addition, the demands of the current historical moment have led to the adoption of innovative ways of carrying out work activities, not entirely new but undertaken, such as smart working. With smart working for instance, it is possible to witness a new way of thinking and conceiving work itself, which is based on giving people their autonomy and flexibility back, choosing their own workplaces and working times.

The labor market is changing in the emergence of new sectors, new jobs, new ways of working and new professional figures, who are required to have new skills, which are increasingly up-to-date and

necessary to remain competitive in a world where digital is an integral part of almost every working and non-working activity. Change always brings about major challenges, which mainly affect individuals, especially those who are not always able to accept change calmly, because they fear negative consequences and feel that they are inadequate and incapable of handling it (Gupta, 2018). Every change entails resistance because every human tends to want to maintain their stability and their status quo (Keyes, 2000). Employee resistance to digital transformation stems from perceived insecurity about the possible changes this change may bring to working activities and responsibilities. It becomes necessary to overcome statements such as *"we have always done it this way",* in order to spur and facilitate a reshaping of work habits; hence, employees, managers and entire companies should develop an appropriate mindset to embrace this change, a true digital first thinking.

The top management and the HR department of a company will, therefore, have to place at the center of their action plan and projects a significant investment in human capital, through the definition of a people strategy, aimed at acquiring, motivating and involving people and aimed at having them develop an emotional-digital intelligence. A key role is reserved to HR managers who, together with top management, must be leaders in digital innovation, breaking down the forms of resistance that can be created along the way.

1.4. The importance of implementing a change management journey

The dynamics outlined in the previous paragraphs have highlighted how nowadays change is an integral part of every reality. Today, change is a phenomenon that is universally present in the experience of organizations of all times and types, so much so that it is argued that a state of continuous change has become almost routine (Luecke, 2003). We have seen the challenges that characterize the market and the work environment today, such as those arising from globalization, digital transformation, and increasingly topical will be those aimed at environmental sustainability. Today, organizations need to be responsive and proactive in the light of these changes. This entails

adaptation at the level of corporate structure (i.e., flatter structures, new job design, authority relationships and coordination mechanisms), organizational culture (i.e., new working methods and processes, and new contractual forms) and at the level of the individual (i.e., skills, behavior, and career aspirations). Figure 1.3 summarizes what has been described in the previous paragraphs.
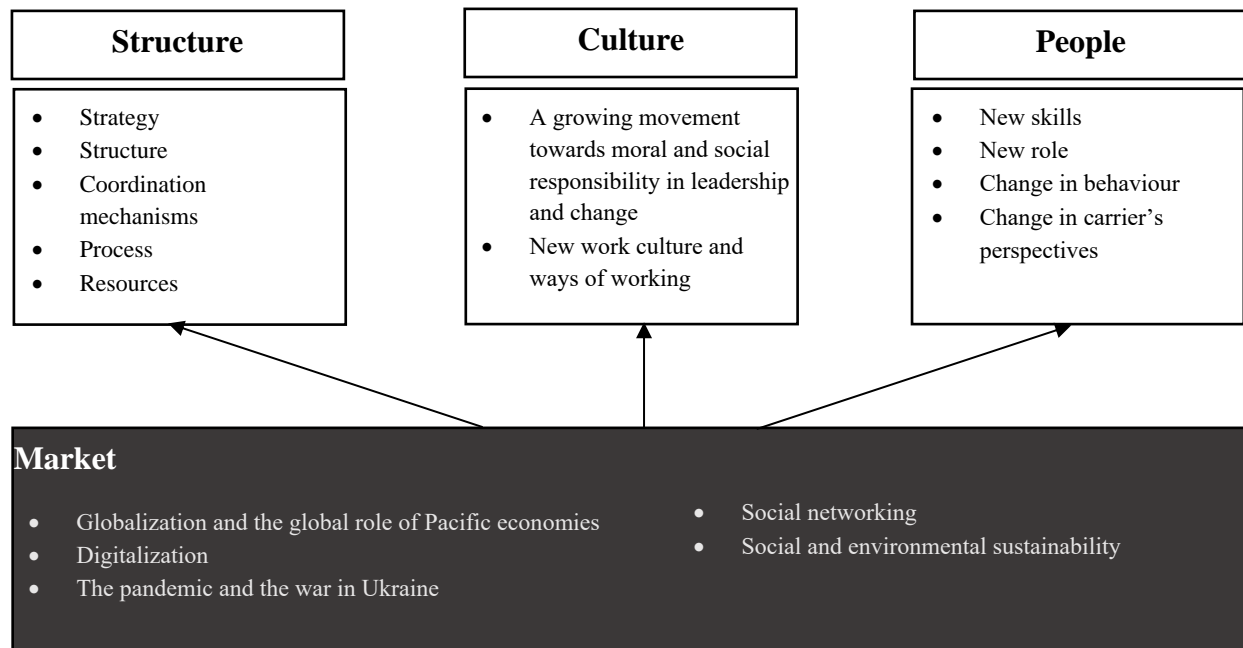
Structure	**Culture**	**People**
• Strategy • Structure • Coordination mechanisms • Process • Resources	• A growing movement towards moral and social responsibility in leadership and change • New work culture and ways of working	• New skills • New role • Change in behaviour • Change in carrier's perspectives

Market

• Globalization and the global role of Pacific economies
• Digitalization
• The pandemic and the war in Ukraine

• Social networking
• Social and environmental sustainability

Figure. 1.3: The challenges of the external global environment and the impact on company structure, culture, and people.

Therefore, the top management today faces a major challenge, which is to integrate change capabilities within their organization. It can be argued that in order to survive successfully in the long-term, companies must adapt to their environment, as a *"hedgehog tactic"* does not promise long-term success (Lauer, 2020). The real organizational advantage of technology comes from having an organization designed to be able to adapt with agility in parallel with the rapid development of the environment (Soule et al., 2016). This is essential to achieve a resilient organization, where changes can be anticipated and the transformation of all management and business models can be implemented efficiently and effectively, acting proactively towards this challenge without waiting for the

consequences. It becomes essential to align people's mindsets with the company's structure and vision, through a change management process, in order to achieve the set objectives with satisfactory results. The next chapter will explore the methods for applying an effective change management process.

Chapter 2 - Change Management

2.1. Definition of change management

As previously analyzed, organizations are experiencing the volatility, ambiguity and uncertainty that comes with this changing business climate. Salminen (2000) stated that companies change to better adapt to the environment or to mitigate internal discontinuities. For the fact that organizations today operate in environments in continuous development, they are under a greater pressure to change and develop (Kitchen & Daly, 2002). According to Kanter (2001), *"Implement change: the phrase sounds reasonable enough, yet change management is probably one of the most problematic and challenging tasks facing organizations today"* (Kanter et al., 2001). There is a consensus that organizational change is one of the main challenges for management, requiring the development of specific competencies and skills.

Let us begin to understand this by defining what change management means. The Change Management is a theory that has been developed to manage change, which is defined as *"the process of continually renewing an organization's direction, structure and capabilities to meet the changing needs of internal and external customers"* (Moran & Brightman, 2001). Over the years, there have been many definitions outlining the purpose of this process, but they all converge on the fact that it encompasses the set of structured activities, tools and resources that provide organizations with a key process to bring change within the company. Nelson (2003) describes organizational change as a continuous process of adjusting the strategy, processes, people, and structure of the organization. Therefore, organizational change is used to identify ways in which organizations modify their organizational systems and subsystems in order to survive in contexts characterized by uncertainty and need for constant change - driven by the innovativeness of successful experiences. According to Dunphy (1996), this is only possible if you have on board a workforce that fits the current organizational strategy. As French and Bell (1999) claimed, the organizational culture must also be

modified if permanent change is to be achieved. Therefore, change management also includes a focus on people's attitudes, beliefs, and thoughts. Indeed, one of the greatest challenges for organizations is to encourage their employees to take part in this change, to abandon old habits and build new ones. It is therefore possible to state that implementing change is a challenging process. That is why over the years many scholars have developed models to support a change management path, and mitigate the impact it can have on organizations and its resources. In fact, the formation of strategies alone cannot produce better results, but how these strategies are implemented also matters. A change management model acts as a compass that can facilitate or guide change efforts by determining the specific processes and steps to be followed, illustrating the various factors influencing change, or determining the levers used to succeed in the change management process. Although various change management models have been developed over the years, in the following paragraphs we will analyze the main ones among them, which have inspired many of the subsequent models of organizational change and transition.

2.2. Lewin's three-stage model: a theory of stability

The concept of change management dates back to the early to mid-1900s with German psychologist Kurt Lewin's formulation of the three-stage model. Lewin is considered the founding father of this theory (Cummings, Bridgman, & Brown, 2015) and he defines change as a temporary instability acting on the existing equilibrium and considers his model more as a theory of stability than of change (Lewin, 1951). Lewin argues that every organization has forces for change (driving) and forces for stability (resisting). These driving forces must therefore drive change, and they must be stronger than the barriers to change.

According to the author, a successful change process involves three phases (Burnes, 2004):

- Phase 1: *unfreezing*. The main objective in this phase, which of the three is probably the most complicated and delicate, is to overcome existing habits and initial resistance. By means of

good communication, it is necessary to create an awareness of the need for change in those involved, to motivate individuals and push them towards changing their balances. In fact, Lewin himself stated that *"to break through the shell of complacency and hypocrisy it is sometimes necessary to bring about emotional turmoil"* (Lewin, 1969 cited in Sarayreh, Khudair & Barakat, 2013). Crises often stimulate unfreezing, as it is happening today with Covid-19 and digitization. All restraining forces, such as a lack of employee skills, a culture based on efficiency rather than effectiveness and a strong hierarchical structure, should be mitigated to enable the creation of new business models, an innovative corporate culture and agile and flexible working methods. Instead, the driving forces should be increased through, for example, training (i.e., upskilling and reskilling plans).

- Phase 2: *changing*. The second phase is when the change is actually applied, and the situation starts to change - it is the real implementation phase. A situation is created in which circumstances are no longer as they were before, but at the same time a new balance is jet to be found. The transition must take place by spreading positivity, and involvement must be leveraged; therefore, willingness to listen and provide clarification is crucial in this phase. It is important to enhance the effect of the attractive ones by reducing the repulsive ones, and to consider which forces come into play in this phase and evaluate them, to push people towards the desired behavior.

- Phase 3: *refreezing*. An attempt is made in this phase to reestablish the new behavior with the new equilibrium, in such a way as to avoid reverting to the old attitudes. This phase often requires a change in organizational culture, standards, rules, and practices (Cumming & Huse, 1989). However, it is crucial that the new conduct is in line with the new environment, culture, and organization otherwise a cycle of disconfirmation will be created. According to Lewin, this alignment process had to be carried out at the group level and not at the individual level otherwise the change would not be successful (Cummings & Worley, 2001). This phase

should not be neglected in order not to run the risk of quickly reverting to old habits and a modus operandi.

2.3. Kotter's model: the 8-Step process for leading change

The second model examined is the model developed by leadership expert John Kotter. In 1995, Kotter published the book 'Leading Change', which contains the model for change management. According to the author, in order to manage successful change, there are eight steps that need to be taken (Kotter, 1995; Kotter, 2012):

1. *Create a sense of urgency.* A sense of urgency must be created around the need for change; the entire organization must understand its importance. This step is fundamental, because only in this way people understand the need for change and are more likely to commit to make it happen. The sense of urgency must be spread within the company and among management, so that the change is accepted at all levels.

2. *Create a guiding coalition.* A compact and cohesive team must be built so that all its members are moving in the same direction. An important step for the coalition to be able to achieve its goals is trust and common goals; for this purpose, it becomes important to find methods that are able to get the team members to know each other, to build trust and discuss in order to achieve a common goal. Furthermore, the team must be composed of both people with management skills and others with leadership skills. One must try to maintain a balance between the two types, as the former will keep the whole process under control, whereas the latter will drive the change.

3. *Develop a vision and strategies.* A good vision breaks down reluctance to change, providing the necessary motivation for the effort to change. A clear vision allows managers and employees to work independently because they are clear about what needs to be accomplished, without the need for constant monitoring of their actions. Companies

with a vision are able to devise a strategy to put it into practice, plan steps and timetables to implement it, and convert them into financial plans and targets, meanwhile maintaining consistency at all stages.

4. *Communicate the change vision*. The true power of a vision only reaches its potential when most people involved in the change process understand its goals and direction. The most common mistakes made by managers are due to insufficient communication of the new direction or the unconscious sending of contradictory messages. It is important that communication is two-way, because it allows for important feedback on whether one is on the right track and, if not, it is easier to reformulate the vision immediately than to continue in the wrong direction.

5. *Remove barriers to action*. Training during changes must be taken into account, because a potential new vision to be implemented requires different habits or new skills, so staff must be given the necessary tools to put it into practice. In addition, company systems must also be aligned with the new vision: everything from performance appraisal systems, remuneration, promotion decisions, and recruitment systems should be coherent with the vision, to avoid inconsistencies.

6. *Accomplish short-terms wins.* By this expression it is not meant that one should focus on immediate results while neglecting future ones, but to achieve visible success in the short-term in order for the change project to gain sufficient credibility. Kotter believes that management should focus on immediate future successes while leadership should focus more on long-term successes.

7. *Build on the change*. In a globalized world, all components of a society are interconnected in some way, which means that it becomes difficult to change something without changing everything. The consequence is that the initial change leads to countless other changes. Managing many change projects simultaneously is possible, but it is essential that senior

managers focus on overall change leadership, delegating the 'details' of leadership to the lowest possible levels of the organization.

8. *Institutionalize new approaches*. Corporate culture is a key element in organizations and change processes. As long as new behaviors are not rooted in social norms and shared values, they are prone to degrade as soon as the pressure for change subsides. This phase needs a lot of communication, discourse that makes the benefits of new approaches over previous ones.

2.4. The ADKAR Model: focus on the individual

Among the best-known models on change management, it is worth mentioning the one developed by Jeff Hiatt in 1994 for the company Prosci in collaboration with 1000 other companies from 59 different countries (Prosci, 2021). The main feature of this model that makes it different from many other models is that it puts the individual at the center. In fact, the acronym 'ADKAR' summarizes the five outcomes that each individual must achieve for change to be successful (Hiatt, 2006):

- *Awareness*. It represents an understanding of the nature of change, the reasons behind it and the risk incurred in its absence. In other words, it is about explaining why the change needs to be addressed. This is why it is essential to put in place communication activities that aim to make the individual understand the information that led the company to undertake that type of change.

- *Desire*. It represents the willingness to support and engage in a process of change. It is indeed important to make each individual develop the desire to change. To do this, it is essential to clarify what awaits each individual at the conclusion of the change management process. The desire is ultimately a personal choice, influenced by the nature of the change, the individual's personal situation and the intrinsic motivators that are unique to each person.

- *Knowledge*. It represents the practical knowledge that is needed to implement change. It includes the acquisition of knowledge and skills that are indispensable to exercise a new role within the organization; all the information regarding behaviors, processes, tools, systems, skills, rules and techniques that are necessary to implement change.

- *Ability*. They represent the right attitudes and behaviors that are needed to implement change. This might seem like a foregone conclusion from the previous step, but it is a matter of moving from the use of the tools to the actual adoption, which is a much broader and more mature concept. This is a particularly delicate phase, in which individual and corporate objectives find their first important point of contact. Practice and time are necessary, as is the optimization of the tools to be used.

- *Reinforcement*. It represents the internal and external factors for sustaining and consolidating a change. External reinforcements may include recognitions, rewards and celebrations related to the realization of the change. Internal reinforcements may be a person's internal satisfaction with the results achieved or other benefits derived from the change on a personal level.

The steps outlined in the model are not randomly placed, but rather describe the natural process of how a person experiences change. For example, desire cannot precede awareness, because it is awareness of the need to change that stimulates desire or triggers resistance to change. With the ADKAR model, it is possible to identify the gaps in the organizational change process, then identify the training, operational and information interventions that could be activated to cover them (Hiatt, 2006).

2.5. Reflections and critical points of the models

The models presented here are just a few of the many change management models in the literature, but they are the pioneers from which many others were inspired and still remain a basis for many current theories (Brisson-Banks, 2009).

Nevertheless, they have not escaped criticism over the years. For example, Kanter et al. (1992) claim that the approach used by Lewin is based on a static, simplistic, and mechanical view of organizational life, so much so that they see the organization as an ice cube. In contrast, Child (2005) believes that Lewin's rigid idea of *"refreezing"* is inappropriate for today's context, which instead requires to be flexible and to have a constant capacity to adapt over time. Nonetheless, his influence is such that, as Hendry (1996) commented, if one analyzes any account of the creation and management of change, the idea that change is a process that begins with a thawing out of old habits, acting on employee motivation, until arriving to a final consolidation will not be far from reality.

On the other hand, a criticism raised against Kotter's eight-step model, despite the fact that it is the most articulated and widely used model, as it relates to the limits of its adaptability to all circumstances. Kotter is aware of this, in fact, in the article published in the Harvard Business Review (1995) he states that *"a relatively simple vision is needed to guide people through major change, so a vision of the change process can reduce the rate of errors"*. In addition, it is a model that takes time to implement and therefore does not lend itself to crises where changes have to take place quickly. In order to be able to apply it, it is necessary to anticipate these events, such as crises or unexpected events, but in reality, it is not always possible to do so (Appelbaum et al., 2012).

As far as the A.D.K.A.R model is concerned, one of the criticisms is that this approach may be more successful in small and medium companies, given the complexity of governing too many individual-related variables (Expert Program Management, 2021).

In spite of the fact that the theories presented are valid and applicable to business contexts, it is noticeable that in all models the main criticism raised concerns on the lack of absolute adaptability to every situation. In support of this, studies conducted on organizational change by Dunphy and Stace (1993) show that no model is universally applicable. They point out that turbulent times require different responses in different circumstances; therefore, managers and consultants need

a change model that is essentially a basis on which to build the individual change model for the individual company.

It can be seen that these models have similar characteristics. For example, the initial concern of having to communicate the change, in particular, by raising awareness of the need to change is recognized. Similarly, the status quo strongly influences this initial phase as well as the final phase, where the risk of reverting to the pre-change state is present (Brisson-Banks, 2009). Furthermore, all three authors consider communication as a fundamental element to break down resistance arising from uncertainties and to communicate precisely the right information to best deal with change. It is also denoted how the evolution of the models has led the focus from group strategies to more individual strategies, where the individual's motivation to participate in the change becomes increasingly important. All three models show the complexity of this process. In particular, translating them into practice implies addressing several areas of change: the management of psychological factors influencing reactions to change and possible resistance, the management of learning processes, the redesigning of roles, functions and associated responsibilities, and finally the measurement of the performance of the change process.

Although the literature has provided such approaches to change, several reports have shown that the failure rate of change management projects ranges between 50-70% (Cabrey & Haughey, 2014; Michel, By, & Burnes, 2013), which is an important percentage, especially considering that less than 10% of failures are due to actual technical problems (Lewis & Seibold, 1998).

This shows how upgrades of structures, technologies and processes alone do not determine the success of change but facilitate it (Ulrich & Brockbank, 2005). It is people (i.e., the human component of the company) who determine its success. An individual who is inadequately prepared for change leads to negative reactions, which in turn cause lack of results to the total failure of the process. Therefore, resistance to change is a fundamental element that the change manager, together with the company's top manager, must work on in order to minimize it, as it will be elaborated in the next chapter.

Chapter 3 - Individuals' reactions to organisational change

3.1 The individual in a change process

In the previous chapter one relevant common feature across all the change management models described before is the importance of the participation of the various stakeholders involved in the change in its various stages, in terms of involvement and motivation. Since organizations are ultimately made up of people, organizational change implies their active participation in the change initiative and, in turn, personal change (Band, 1995; Steinburg, 1992; Dunphy and Dick, 1989). Thus, steering an organization towards change implies for top management to constructively balance human needs with those of the organization (Spiker and Lesser, 1995; Ackerman, 1986). Successful change management must therefore consider the individual's reaction to change in order to plan and implement it in the best possible way. Schmidt (1997) explains how individuals have a subjective perception of change and may see it as a force to be feared or an opportunity to be seized. In fact, employees' emotions and reactions to change can have a significant impact on the initiative as a whole.

This statement becomes even more relevant when change leads to the disruption of existing balances, the aforementioned 'status quo' inside the organizational structures, namely when the conditions of uncertainty occur that impact on established habits, patterns, procedures, and interpersonal relationships. This scenario surrounded by uncertainty leads people towards forms of defense, conservative attitudes and types of inertia or resistance to change initiatives.

In the words used by Kurt Lewin (1946), within his Field Theory, in order to understand or predict the individual's behavior in a change scenario, people and their environment must be considered as a constellation of interdependent factors. The name of the theory leads back to the psychological field or living space dominated by psychological forces that guide individuals' attitudes and their perception of reality (Martin, 2003). It is a subjective space, specific to the individual,

characterized by desires, aspirations, fears, experiences, and expectations. Therefore, to understand and intervene in a person's behaviour, it is necessary to consider everything about the person and their perceptual or psychological environment (Lewin, 1943).
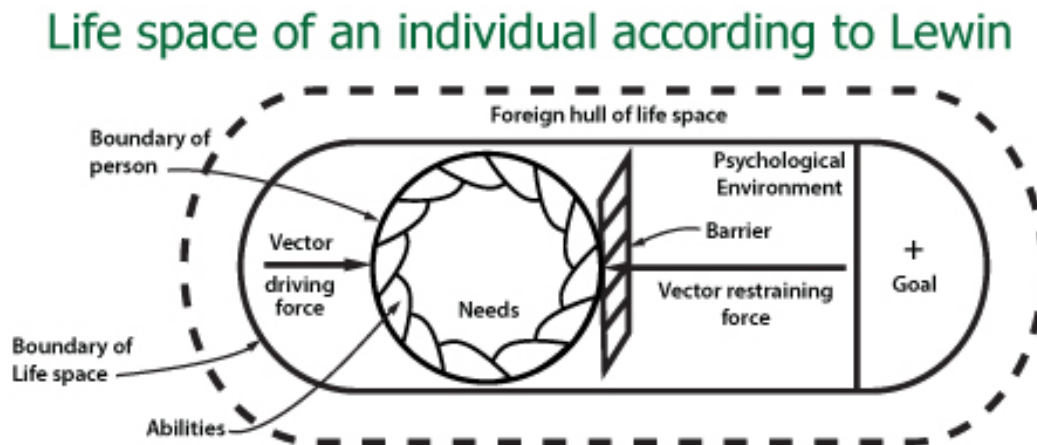
Life space of an individual according to Lewin

Foreign hull of life space

Boundary of person

Psychological Environment

Barrier

Vector driving force

Needs

Vector restraining force

+ Goal

Boundary of Life space

Abilities

Figure 3.1: Life space of an individual according to Lewin. Source: Lewin, 1943.

Lewin's basic idea was to design a social psychology that transferred the idea of field forces from physics to social areas (Lauer, 2020). According to Lewin, to reach their goals individuals are generally influenced by a set of both driving forces (forces that push toward change) and restraining forces (forces that oppose change), that alter individual's behavior. Indeed, in such situations, established routines, habits and behavior are challenged. According to this model, on the other hand, people generally tend to want to maintain their state of stability. A compromise of this stability (movement) generates a rearrangement of the whole field towards a new equilibrium determined by the power of the forces exerted (Burnes, 2004).

A fundamental consideration can therefore be deduced from this theory. Each person has a certain behavior that is influenced by a 'field of forces' that push, positively or negatively, towards a continuous search for equilibrium (Burnes, 2004). When the power exerted by the restraining forces is greater than the driving forces, a situation of resistance occurs and considering the dynamic context in which companies find themselves today, this would be fatal for the latter. Differently when the

driving forces have greater power than the resisting forces the individual is orientated to change with the aim of achieving a new form of equilibrium. Otherwise, a permanent change overloads the individual and could lead to a long-term loss of performance. If an organization wants to survive in long term, it must therefore establish a balance between these two opposing types of forces (Lauer, 2020).

Hence, in order to help us understand how an individual reacts to unknown situations and adversity, the psychologist and researcher Albert Ellis (1975) developed the A-B-C model where A is the adversity/situation/event, B is our belief about it and C is the consequence i.e., the behaviour that our belief causes. According to this model, 'A' (the activating event) does not cause 'C' (the emotional and behavioral consequence); instead, it is 'B' (an individual's belief) about 'A' that causes a specific behavior 'C' (Ellis and Harper, 1975). This interaction is illustrated in Figure 3.2.
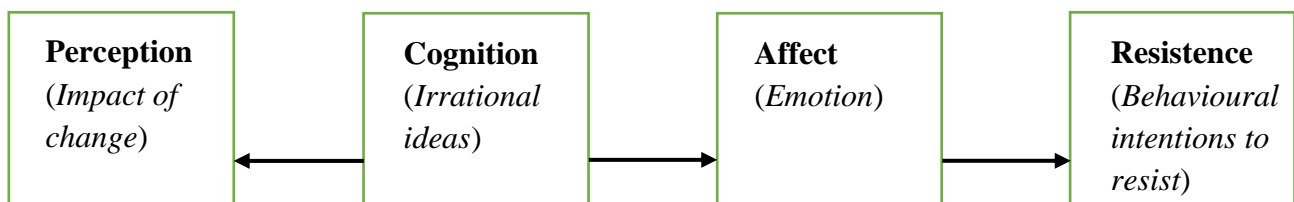
| **Perception** (*Impact of change*) | **Cognition** (*Irrational ideas*) | **Affect** (*Emotion*) | **Resistence** (*Behavioural intentions to resist*) |

Figure 3.2: The resistance braking forces. Source: Bovey & Hede, 2001.

Looking at the direction of the arrows depicted, we can see that the cognitive sphere appears as an independent variable, and it determines both the perception of a given change and the related emotions and thus the related behaviour.

From this model, we can deduce that the sphere to pay particular attention to is the cognitive one, because the ways in which it can positively or negatively influence in the different phases of change, for example, giving rise to forms of resistance. Furthermore, in a change process, the cognitive

component plays a very important role as it determines the understanding or meaning the person attaches to the change initiative which, in turn, determines the individuals' behavioral and affective reactions to change. Indeed, it is from the cognitive sphere, from the beliefs that are created and the meanings attributed to events or situations, that heuristics of thought can arise. They are mental shortcuts that individuals put in place in order to simplify the operations they have to perform in order to calculate the probability of events and their expected outcome (Pironti, 2012). These heuristics, in turn, lead to distortions of reality that are referred to as cognitive dissonances, which may take place unconsciously (Kahneman, 2012). This happens when the person is in a situation that is unknown to them, when they perceive a sense of uncertainty and insufficient time to gather more information (Kahneman, 2012).

These theories overexposed are mentioned because these dynamics can occur when organizational change takes place. Under these circumstances, people tend to interpret facts subjectively, according to their perceptions and declinations of reality. This happens in a purely arbitrary manner leading people to behave according to their own beliefs, and this can lead to a form of resistance in the individual (Bovey & Hede, 2001). It is therefore important to understand that resistance is a natural, physiological, and psychological reaction to changing situations whose future scenarios are unknown (Coetsee, 1999) and that cognitions drive human behavior. In a context of change, it therefore becomes important to convey to employees a positive belief that change is necessary and that it will have a positive impact on the organization and employees alike, hence, aligning individual vision with corporate vision (Rafferty et al., 2013).

It is therefore crucial to understand the importance of the cognitive sphere and to recognize from the outset the signs of resistance in order to manage them, putting plans in place and creating conditions that can lead to the reduction of cognitive dissonance and thus successfully implement organizational change.

3.2 The multidimensional nature of reactions to change

In the previous section it was explained how a change project embraced by an organization involves emotionally the employee who are part of it and the psychological background reactions relate to the change. In fact, change affects the psycho-emotional system of individuals, leading them to develop different forms of response in specific situations.

Furnham (1997) lists seven types of reactions of individuals involved in organizational change:

1. *Abandonment of the organization*. It occurs in extreme cases of total rejection of change projects because they are considered unsustainable by the subject, to the point of leaving the organization.

2. *Active resistance*. It happens within situations of strong individual opposition to the organization and to those involved in the change project. This reaction is particularly important to enlighten because the employee's intention is to undermine the basis of change to try to undo it. This would involve maintaining, as far as possible, their habits, ways of thinking or relationships in search of a new scenario that recreates what they already know.

3. *Passive opposition*. In cases where the change is considered hostile, but the power of influence is (or is considered to be) too weak to intervene, opposition manifests itself as a lack of participation in the actions or delay in their implementation without a true form of active resistance.

4. *Acquiescence*. This represents the individual's awareness of the inevitability of the change project but there is also a lack of consent for the same.

5. *Passive consent*. It is characterized by forms of uncritical acceptance and lack of active participation.

6. *Negotiated consent*. When the change is accepted but participation in it is mediated by forms of negotiation that could be contractual or relating to roles and tasks.

7. *Active support*. It represents the full acceptance of the project. The individual believes in the change project and participates in it proactively, with commitment and sponsorship within the organizational structure.

People's behavior and attitudes produce actions and reactions that influence the achievement of corporate objectives. But, as Piderit (2000) suggests, employees' reactions to an organizational change can be multidimensional, at least there are three dimensions: emotional, cognitive, and

intentional. Within this view, resistance to change comprises the set of responses to change that present all three negative components; conversely, commitment to change consists of the set of responses that are positive along all three dimensions. When, on the other hand, responses to a change initiative are neither purely negative nor positive - which is the most common type of initial response - they can be analyzed as cross-dimensional ambivalence in employees' responses to change (Piderit, 2000). This multidimensional view of employees' responses to change is useful for understanding how employees react and communicate their reactions to their managers, so the most appropriate process for managing them can be identified. For example, when employee's emotional reaction is ambivalent rather than unidirectional, they may be more likely to express their responses through humor (Rodrigues & Collinson, 1995) or through other indirect modes of communication (Drummond, 1998). In management terms, in this case, a purely informative communication by top management on the change initiative might not be very useful. Instead, frequent conversations of a more informal nature would be more effective, as this would create a conversational environment in which employees feel safe to openly express their concerns and critical thinking about the change (Piderit, 2000). Conversely, when employees' cognitive ambivalence experience towards a proposed change, but no negative emotional responses, i.e., they have already accepted the change but feel that a different perspective is needed, they may have a fairly direct reaction and communication of their thoughts (Piderit, 2000). In this case, in addition to communicating to their employees the motivations that led them to initiate the change project, agents could discover the importance of active listening, i.e., listening groups that allow employees to express their ideas about the change, thus making them feel part of the project.

Moreover, another aspect that should be considered is that employees' ideas, as well as emotions towards change may evolve over time and paying attention to this evolution could provide insights on how to successfully manage change initiatives.

3.2.1 Resistance to change

Wanting to delve into it and analyze the concept of resistance as an individual's reaction to an organizational change project, let us start from a definition of the latter. Resistance to change finds different definitions in the literature, as it turns out to be a broad and dynamic phenomenon (Waddell & Sohal, 1998; Oreg, 2006).

Resistance to change refers to behaviors and attitudes that individuals adopt in situations of change, both in individual actions and in intra/inter-group relations and in the management of resources and activities, i.e., at organizational system level. The term can also be interpreted as a set of forces that are put into place to maintain one's own stability (Cohen et al., 1973).

In line with Piderit's multidimensional view of attitudes toward an organizational change, Oreg (2006) in his study "*Personality, context and resistance to organizational change*" analyses resistance as a multidimensional attitude, highlighting its complexity. In fact, according to Oreg analyzing the phenomenon of resistance as a one-dimensional concept would mean saying that the way people behave under conditions of change completely corresponds to how they feel or what they think about it.

Instead, he observes that resistance to change may express itself across three possible (negative) dimensions, which includes affective, behavioral, and cognitive components. According to this view, the affective component of resistance refers to the negative emotions that an individual feels when faced with change (e.g. anger, anxiety, distress); on the other hand, the cognitive component refers to what the individual thinks about change (e.g., "change is not necessary" or "this change will not be beneficial"); lastly, the behavioral component refers to the actions or behaviors that the individual enacts in response to change (e.g., complaining about change, trying to convince others that change is bad).These three components are interdependent to each other. In fact, how people feel about a change often influences what they think and how they behave. However, the three-dimensional

conceptualization of resistance highlights the influence that certain variables may have on one of the three aspects of resistance, generating different types of work outcomes. In particular, affective resistance is more likely to be associated with affective outcomes, cognitive resistance with cognition-based outcomes and behavioral resistance with behavioral outcomes (Oreg, 2006). For example, experiencing feelings of anxiety (affective resistance) due to an organizational change may decrease job satisfaction (affective outcome), but does not necessarily increase intentions to leave the organization (behavioral outcome).

Indeed, while some sources of resistance may impact employees' emotions, others may influence their behavior more directly and still others may have a greater impact on what people think about the change.

There can be many reasons for the occurrence of individual and subjective forms of resistance. These include a lack of information, which may result from unclear and ineffective communication. In this situation, the individual is exposed to uncertainty and fear, for example, of not being able to handle new types of scenarios and situations; or uncertainty related to the impact that change may have on one's work identity, for example when change involves the restructuring of job roles and positions (Daft & Noe, 2000). Some workers may see change as an attack on their jobs, thus as a negative event (i.e., loss of determined positions, responsibilities) and consequently react defensively (Venier, 2017). Furthermore, according to several theorists (e.g., Tichy, 1983; Watson, 1971) resistance may stem from the natural tendency of individuals not to want to change their routine behaviors and attitudes in which each individual moves with confidence and mastery, to venture into uncharted territories with unknown dangers that may provoke a sense of loss of control. Another cause may lie in the lack of agreement with the strategies proposed by top management, which may make the targets of change appear unattainable and create skepticism about the company's future (Oreg, 2003). Moreover, when high professional motivation is not nurtured, resistance manifests itself in a lack of interest in implementing the actions necessary for successful change (Kotter, Schlesinger, 2008).

Each change can therefore trigger different reactions at an individual level, affecting the emotional or mental sphere, relationships, one's work identity and, more generally, the alteration of habits that are difficult to abandon.

In relation to these elements, Duck (1993) explains that the individual experiences change as something personal because in getting involved, people question what they thought, did and felt before. So, the way in which change is received may change: it may be received with enthusiasm or anger, fear or interest, uncertainty or confidence. Likewise, the employee's intentions may change to support or restrain the change.

3.2.2 Commitment to change

The commitment that an employee shows towards the change undertaken within their company is probably one of the most important factors for change to be fully successful. It represents the other side of the coin of resistance to change.

According to Porter (1968), organizational commitment consists of *"(a) a willingness on the part of employees to sustain high levels of effort on behalf of the organization, (b) a strong desire to remain in the organization, and (c) a shared understanding of the company's goals and vision"*.

Conner (1992), on the other hand, described commitment to change as "*the glue that provides the vital link between people and the goals of change*". Herscovitch & Meyer define it as "*a force (a mindset) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiativ*e" (Herscovitch & Meyer, 2002). Boles et al. (2007) defined "*organizational commitment as the feeling towards the organization and its values*".

Thus, over the years and especially in the last two decades, numerous studies have been carried out on the topic with an increasing number of instruments aimed at defining and measuring an employee's commitment to organizational change.

Leading scholars such as Meyer and Allen (1990) proposed a three-dimensional attitudinal construct of organizational commitment. They argued that an employee's commitment to change can

take three different declinations: (a) the desire to support change because he/she spontaneous desires it and believes in its intrinsic benefits (affective commitment to change, ACC); (b) participation in change because of the costs associated with not supporting it (continuous commitment to change, CCC); (c) finally, commitment understood as a sense of moral obligation (normative commitment to change, NCC).

According to this view, affective commitment is considered a more effective measure of organizational commitment, as it indirectly influences the other two dimensions of organizational commitment. (Cohen, 1996; Meyer et al., 2002). This distinction is important because the three dimensions of commitment to change can have very different implications for the employee's intentions, emotions, and behavior in the workplace. In fact, Meyer and Allen (1991) stated that an employee with a high ACC regularly attends work with maximum commitment and also does little extra to contribute to the success of the project. This is because the ACC reflects the employee's emotional attachment, psychological alignment with the change, intentions to support it and willingness to work towards its successful implementation (Herold et al, 2008).

In contrast, employees who stay mainly to avoid costs (continuity commitment) may do little more than what is necessary to maintain employment. They are, in fact, driven by the fear of losing their job or by attractive career advantages. However, this type of commitment has been shown to often correspond to stress reactions, burnout, and turnover intentions (Cunningham, 2006; Neves, 2009). Finally, those who participate in change because they are driven by a sense of moral obligation to the interests of the organization (normative commitment) are only willing to actively participate for the success of the change if they see it as part of their duty, or as a means of reciprocity of the benefits received.

The advantage of adopting Meyer and Allen's multidimensional perspective over previous one-dimensional models (e.g., Conner & Patterson, 1982; Klein & Sorra, 1996) is that it allows for a more person-centered approach rather than focusing on the general concept of commitment to change. Despite the advantage it brings to research, several features of Herscovitch and Meyer's (2002) study

limit its generalizability. The authors themselves called for more replication and verification of the validity of their thesis and a deeper study of the variables correlated with the three dimensions (Herscovitch and Meyer, 2002). The purpose of this paper is precisely to answer to the authors' appeals.

3.3 Enabling factors and tools for change

In Chapter 2.3 it was pointed out that there are limits to the adaptation of change management models to each company circumstance, given the complexity of internal and external company environments. For each change management model have been listed the actions that change agents need to implement to manage as well as possible each phase. Instead, now this paragraph is going to summarize some of the factors and tools that enable and facilitate organizational change.

In all three of the change management models explained above there is the idea that communication is a fundamental element, throughout the change process, to break down resistance arising from uncertainties and to communicate the right information to employees thus enabling them to better cope with change (Kotter and Cohen, 2002; Pollitt, 2004).

In the initial phase, it plays a particularly important role as it aligns the corporate vision with the individual vision. Indeed, once the vision has been developed, it must be communicated at both group and individual level (Hinings et al.,1991), thereby increasing understanding of and commitment to the change initiative (Kotter and Cohen, 2002). For this reason, the initial communication should provide, detailed and accurate information about what is happening. By doing so, employees will have an idea of how the change will affect their current job, what their new roles and responsibilities will be, thus avoiding personal misinterpretations and the emergence of resistance (Klein 1996).

To maintain a high level of commitment throughout the process, however, it is necessary for communication to be regular (Nadler and Tushman, 1990), as even a well-formulated message if communicated only once does not stick in the recipient's mind. In the same way, it is not

recommended to always communicate messages through the same channel, but to do so through different communication channels. In this way it will be possible to reach more people and increase the likelihood that it will be heard and remembered. It will therefore be advisable to implement a targeted internal communication strategy and create a synergy between the chosen communication channels that exploits the benefits that each of them can offer. Over the years, thanks to technological development, new means of internal communication have also emerged. Today, a message communicated via an informative e-mail is often overlooked, albeit unintentionally, by the employee (Klein, 1996). Instead, communication channels such as social media and the corporate mobile app are increasingly effective. Finally, we can state that it is important for communication to be two-way because it allows for important feedback on whether one is on the right track and, if not, it is easier to reformulate the vision immediately than to continue with blinkers on and head in the wrong direction (Kotter, 2012). Positive and proactive change also requires actively listening to employees' needs, ideas, and concerns regarding change. Indeed, it is not only important for management to give feedback but also for employees to have the opportunity to express their ideas and suggestions in order to increase participation. This exchange can take place, for example, by means of individual or group meetings that aim to understand employees' own thoughts and objections about change (Klein, 1996). One example is active listening groups, which are very useful during the transition phase of change. This ability to be a good listener makes it possible to become aware of and subsequently handle employees' concerns and resistance in a more appropriate and timely manner.

Another concept that the literature suggests is that employees are conditioned by forms of social influence. Social network theory sees individuals within social systems that influence their thoughts and attitudes (Erickson, 1988). In other words, the social systems within which an employee works condition the thoughts and attitudes the employee has within the organization (Burkhardt, 1994; Gibbons, 2004). This statement also proves to be true when situations of organizational change occur. In fact, individuals with social influence express a view of resistance to change and the employee is more likely to conform to this thought (Brown & Quarter, 1994). The instinct of

conformity drives people to align their thinking with that of the group. If the majority of the group shares a certain thought, the instinct of conformity drives the individual to conclude that they are probably right and more or less consciously question their own perceptions (Thaler, 2008). It is therefore possible, through proper management of these dynamics, to encourage socially beneficial behavior and discourage forms of opposition. Indeed, socially influential individuals send a strong signal to others based on how they perceive change and how much they believe in its value (Thaler, 2008). Whether managers, employees, or co-workers, change management models have shown how important the figure of the change ambassador is. It is important that the ambassador of change has certain characteristics: the ambassador of change must be an inter-functional person on various levels of the organization, a proactive person who holds the trust of his/her peers, excellent interpersonal and communication skills, and must receive approval from his/her superior in order to be able to dedicate time to these activities (Barrett, 2002). In corporate realities, this figure is also often held by departmental supervisors, as they are the first direct report between management figures and employees. They can indeed communicate the rationale and status of the change in such a way that information gaps are mitigated, and dichotomous thinking does not lead employees to perceive the change as something detrimental (Klein, 1996).

Another important element that facilitates successful organizational change is the trust that the employee has in the leadership. Bouckenooghe et al. (2009) stated that an employee's perception of the change leader's capabilities is positively correlated with greater approval of and commitment to the proposed change project. In these cases, a certain leadership style, called transformational leadership, a concept developed under the guidance of Bernard Bass (1998), has been defined as a facilitator of change. Transformational leadership is oriented towards fostering changes in the way members of the organization think and act, as it focuses its relationship with employees on more emotional levers (Bass, 1990). It focuses more on team building, employee empowerment, aligning individual organizational goals and building a culture open to change. Herold et al. (2008) also conducted a study confirming that transformational leadership, along with good change management

practices, is associated with higher levels of commitment to change. This is because transformational leaders articulate a clear vision of change and communicate a model that is consistent with that vision, thereby fostering an understanding of group goals (Podsakoff, MacKenzie, & Bommer, 1996). Opening up to this new leadership philosophy can be a complex journey, as managers and leaders have to reinvent themselves in what way. As Mahatma Gandhi teaches us "*Be the change you want to see in the world*", in fact the transformational leader must first of all be a change agent of himself. Last but not least, as Garvin (1993) suggests change must be seen as a learning process. This process can also be activated thanks to the support of a training course, which if well managed and planned through the use of appropriate teaching methodologies, can generate a change in people's behavior, leading to better work performance (Amicucci and Gabrielli, 2013). In fact, several researchers have found that training contributes positively to the complete realization of a path of transformation (Schneider et al.,1994; Alvesson, 2002). We can say that if communication answers the question "why", training answers the question "how" (Gotsill & Meryl 2007). As Williams and Williams (2007) state, in the absence of effective training, the benefits of adopting a new system or change more generally may not be achieved and the investment will be wasted. Furthermore, through training, the sense of unfitness or fear of not knowing how to handle certain situations/tools or systems hitherto unknown to them is reduced. Training is important as it enables the development of understanding and the necessary skills, values or references relating to the change initiative (Bramley, 1989; Karen & alt., 2010). It is therefore important to activate the set of suitable training processes, initiatives, and tools with the aim of enabling people to acquire, maintain and develop both technical (hard skills) and transversal (soft skills) competences, necessary to enable them to orient themselves in scenarios in which change is increasingly a constant dimension with which to relate and deal.

Chapter 4 – The Experimental Study

4.1 Description of the Organization

The banking sector is being examined, as it has undergone rapid transformation in recent years due to digitization, regulatory changes, demographic trends, and changing customer habits and expectations.

Precisely, the analyzed company is Bank A[1], which has been involved in a significant cultural and organizational transformation in recent years, with the implementation of new way of working that support collaboration and innovation, such as the transition toward an Agile organizational configuration. This working method is based on the principles of the "*Manifesto for Agile Software Development*", which was renamed the "*Agile Manifesto*" (Becket al., 2001). Concisely, Agile methodology is an incremental and iterative project management framework. It proceeds in steps (called splits) with short-term feedback loops, which allow the priorities of each phase to be adjusted according to the objectives and needs of stakeholders (Hoda et al., 2008). Further, the focus was on the collection of substantial results, in a change making optic. Those are in contrast with traditional development models, such as the waterfall model at the top of the pyramid. In fact, production processes move in an increasingly turbulent market, characterized by considerable competition, and demands for higher productivity, speed, and quality. A context that has led to a change in the nature of the projects to be managed, for which traditional management principles, (i.e., waterfall) are often no longer sufficient.

Bank A is today engaged in adjusting its organizational structures, with the aim of increasing the quality, cost-effectiveness and efficiency of the services offered, in tune with the transformations of the economic and financial reality, and with the potential offered by technological innovations.

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[1] The expression "Bank A" has been used to protect the organization privacy and identity.

The objective that has moved Bank A to undertake this change within its functions is to provide a real competitive advantage through a constant adaptation to new standards and new technologies of an ever-changing world, in which speed has become the key factor for growth. In fact, customer expectations are also constantly evolving. New standards constantly emerge, and meeting customers' unmet needs increases their willingness to pay, thus placing the company as a leader in its field.

Bank A as a whole has a divisional structure according to a business dimension (product/service lines/market areas). Each division it is then internally organized according to a functional structure, and each division head is responsible for the business results. At the central level, there are the functions of a strategic or divisional support type.

Bank A aims to carry out a pervasive organizational overhaul that, piece by piece, can go so far to dismantle the traditional hierarchical pyramid by eliminating the forms of bureaucracy that have always characterized businesses in the banking sector. The scaling of Agile in the organization can have a serious impact on various elements, which is why it requires a careful management of the change path associated with its introduction. In fact, Bank A is treading the journey toward Agile in a cautious way, starting with some business divisions (ex. IT) to see the impact it may have at the organizational level The gradual extension of Agile would leverage the positive experiences and the power of contamination of the first people who have been involved.

The implementation of an Agile configuration in Bank A in some of its business functions was inspired by the Spotify model devised by Kniberg and Ivarsson (Kniberg and Ivarsson, 2012).

The functions are called Domains and, in summary, the elements that characterize them are (Figure 4.1):

- *Squads*: are agile interdisciplinary teams of up to 10 people, designed as if they were mini startups. In fact, they have all the skills needed to design, develop, and implement a specific product. Each team has a specific mission that drives the work. This way, the team is able to accommodate feedback from different stakeholders downstream of each sprint and reschedule its activities accordingly, thus ensuring maximum flexibility.

- *Product Owner (PO):* a squad does not have a formally appointed manager, but it does have a product owner who provides guidance regarding the team's priorities. The PO is responsible for maintaining a corresponding product backlog for their squad. However, unlike a manager, the PO is not involved in the operational aspects of the teams' work, but rather provides guidance and coordinates with the POs of other squads for coordination and vision.

- *Tribes:* Multiple squads that coordinate in a given area form a tribe. They are established on a permanent basis and number no less than ~40 and no more than ~150 people. The Tribe can be seen as the box that contains squads working on similar products and processes, solving a specific business problem, and joined by specific long-term mission.

- *Tribe Leader*: each tribe has a Tribe Leader who is responsible for coordinating the various teams and fostering collaboration among them.

- *Chapter:* within each tribe there are cross-functional teams (5-15 people) that work within the same area of expertise. Chapters are concerned with technical skill and career development and with setting better standards, principles, and best practices. Chapters do not have a backlog, but have tasks related to setting and maintaining standards of work and quality of solutions (i.e., "how" to work).

- *Guilds:* groups of people who are cross-tribe (unlike chapters who all belong to the same tribe).

- *Agile Coach*: the one whose job is to lead and maintain the agile culture within the various tribes. In fact, the coach's task is also to share the agile principles with the organization by trying to involve stakeholders outside the tribes (i.e., figures from the business).
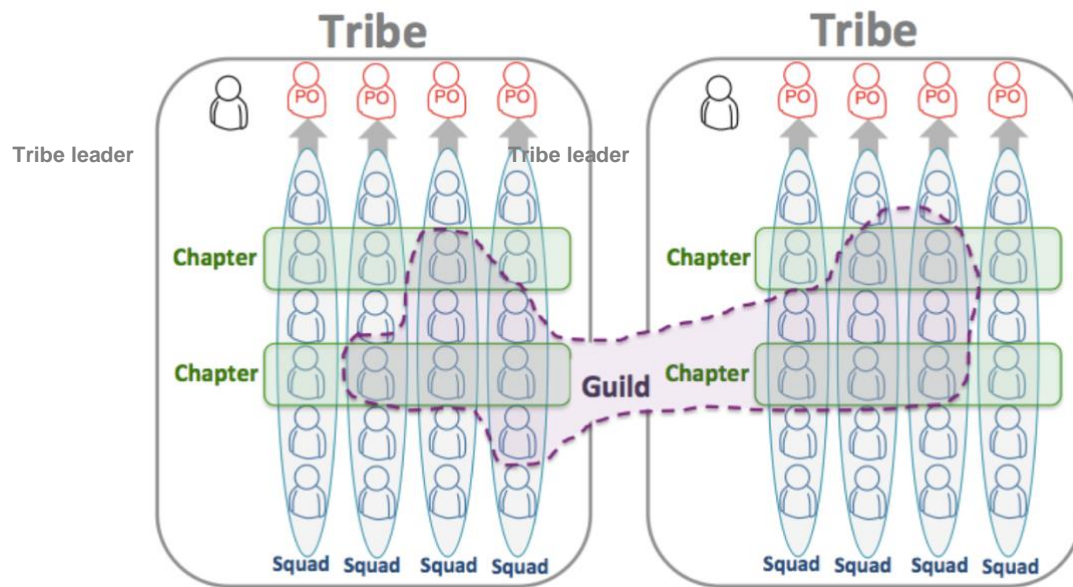
Figure 4.1*: Scaling Agile@Spotify model. Fonte: Kniberg H, Ivarsson A (2012).*

Agile@scale is challenging the beliefs of the banking sector, which today, like any other business, is being forced to adapt to a new and rapidly changing environment. This implies a radical cultural shift from a traditional model (which until recent times had proven strong and resilient over the years) to a disruptive new model that must adapt to the idea of a lean and technological bank.

Bank A and its employees are also part of this change, which is cultural before being organizational. In fact, executives and managers involved in agile@scale must deal with the shift from a hierarchical approach, characterized by command and control, to a decentralized one with autonomous teams. Employees themselves will have to get involved and take on more responsibility. In fact, unlike traditional teams, which are top-down structures, "agile teams" are bottom-up structures based on empowerment and mutual trust. From the perspective of internal procedures, this means moving from a "push," directive, prescriptive logic with rigid processes and procedures, to a "pull" logic centered on bottom-up communication, collaboration, and shared responsibility. Through this model, the distorting effects of traditional models such as functional barriers, multiple handovers, cascading planning, and lengthy decision-making processes are overcome. The leadership model also changes in Agile structures: managers will no longer adopt a transactional leadership attitude,

demanding update reports and monitoring; instead, they will adopt a transformational type of leadership, helping teams solve problems, defining vision and mission, and providing feedback. The emotional stress for these people who have always worked this way is extremely high.

Bank A employees themselves have had to challenge themselves and adapt to the new roles and rhythms within the squads. People do not become autonomous and collaborative overnight. People must challenge themselves on their own evolutionary path. In many cases, it is necessary to redesign people's career paths within the company to initiate that evolution of knowledge and skills needed, hence avoiding specialized technical skills and preferring a broader spectrum of skills (i.e., according to the "T-shaped" model, which sees the development of deep vertical skills flanked by the development of less in-depth horizontal skills). Therefore, bank employees involved in this change may have faced a new way of working in which their job role and position have been questioned. Conversely, at the organizational level, the centrality of teams clashes with pre-existing organizational silos, hence enforcing the emergence of new professional figures (i.e., chapters) and the disappearance of others (i.e., managers).

In conclusion, Agile@scale for Bank A is today bringing great challenges in terms of organization, culture, and work execution. Although its evolution across the organization is still ongoing, some positive results in terms of employees' perception and engagement are already arising.

4.2 Rationale

Given the dynamism and complexity of the changes affecting most companies today, employees' commitment to change is considered as an important element in the effective management of these processes. Many scholars believe that commitment is probably one of the most important factors for employees' support of change initiatives (Armenakis, Harris, & Feild, 1999; Coetsee, 1999; Conner, 1992; Conner & Patterson, 1982; Klein & Sorra, 1996). Furthermore, according to Conner and Patterson (1982), lack of employees' commitment to organizational change projects is the most prevalent factor leading to their failure.

In this research, the key variable will be commitment to change, understood as the employees' psychological state that drives the individual efforts toward change. The latter is analyzed according to the trifactorial perspective (i.e., affective, continuance and normative commitment), proposed by Herscovitch and Meyer (2002) and presented in Chapter 3. In brief, employees who show affective commitment to change truly believe in the value and benefits of change and do not act out of obligation (normative commitment) or out of fear of the costs of not supporting the change (continuance commitment). Despite the validity of the multifactorial structure of commitment to change, a number of features of Herscovitch and Meyer's study limit its generalizability. The authors themselves called for more replication and verification of the validity of their thesis and a deeper study of the variables correlated with the three dimensions (Herscovitch and Meyer, 2002). In response to the authors' call, in addition to confirming the multidimensional nature of commitment to change, the purpose of this research is to identify the interrelationships between the three components of commitment to change and the moderating effect of additional variables on the latter such as communication, uncertainty, job satisfaction and short-term focus.

This study will focus on affective commitment to change because, compared to normative and ongoing commitment, it reflects employees' voluntary and proactive desire to support change, hence, it is supposed to be the component of commitment most likely to contribute to a successful change initiative.

4.3 Hypotheses

The literature review discussed in this paper and the aim of making a contribution to research, led to the identification of four variables that - according to our hypotheses - influence the commitment to change of an employee involved in an organizational change process.

The first variable identified is communication. The latter, as extensively discussed in Chapter 3, is considered a fundamental and necessary variable throughout the organizational change process. Indeed, effective communication about why the change initiative is being undertaken, how it will be

pursued, and what the goal is to be achieved allows the company vision to be aligned with the individual vision (Hinings et al.,1991). In fact, it is important for top management, through communication, to inform employees about the change they want to make, providing information on what they need to do in order for the change to be successfully implemented (Battilana and Casciaro, 2013), including what are the expected outcomes, potential risks and benefits for employees. According to the present study and in line with previous research, good communication reduces uncertainty and increases job satisfaction (Bordia et al., 2004). In turn, this is believed to have an impact on employees' commitment to change. Therefore, this study aims to confirm that in order to develop high commitment to change, it is necessary to carry out quality communication to employees, highlighting the reasons and objectives of organizational change and keeping them updated throughout the change process.

The second variable is job satisfaction. The latter can be defined as the extent to which employees feel good or satisfied about their job (Odom et al., 1990). It can also be defined as a positive emotional state that results from the evaluation of experiences in the workplace (Locke, 1976), or the set of emotions and beliefs an individual has with respect to their job (George & Jones, 1999). The interest in this variable is linked to the fact that it is believed to influence the employee's commitment to the change proposed by the company along with a wide range of work behaviors and performances within organizations (George & Jones, 2008).

The third variable is uncertainty. This study analyses uncertainty as a psychological state of the individual that can be described as "*the subject's inability to predict something accurately*" (Milliken, 1987). Uncertainty can relate to the purpose, process and expected outcomes of change, from which implications for the employee's work identity and future prospects arise. It is believed that when employees are uncertain about how the change will affect their current job, they develop forms of resistance to change due to personal interpretations often resulting from a lack of information (Bordia et al., 2004). Thus, when employees develop a sense of uncertainty with respect to the

company's proposed change, they feel ill-equipped to deal with it actively and proactively and this negatively influences their commitment to change.

The fourth variable analyzed is short-term focus. In this study, this variable is understood as the individual's focus on the immediate eventualities and negative effects of a change rather than on the potential future benefits resulting from it (Oreg, 2003). Short-term focus, in fact, is associated with an intolerance to endure the adjustment periods that accompany a change, despite recognizing the benefits it may bring.

Based on these considerations, the following four hypotheses were formulated:

H1: Affective commitment to change (ACC) is positively correlated with communication quality and job satisfaction, whereas it is negatively correlated with uncertainty, short-term orientation, and impact.

H2: Continuance commitment to change (CCC) is negatively correlated with communication quality and job satisfaction, while it is positively correlated with uncertainty, short-term orientation, and impact.

H3: Normative commitment to change (NCC) is positively correlated with communication quality and job satisfaction, whereas it is negatively correlated with uncertainty, short-term orientation, and impact.

H4: Total commitment to change is positively correlated with communication quality and job satisfaction, whereas it is negatively correlated with uncertainty, short-term orientation, and impact.

Additionally, it has been hypothesized that the three variables defined above – namely, job satisfaction, uncertainty, and short-term focus - may also act as moderators of the direct relationship between commitment to change and communication. Hence, the following hypotheses are formulated accordingly:

H5: The positive relationship between affective commitment to change (ACC) and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

H6: The negative relationship between continuance commitment to change (CCC) and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

H7: The negative relationship between normative commitment to change (NCC) and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

H8: The positive relationship between total commitment to change and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

4.4 Methods

Participants

A total of 78 participants took part in the study (36 F, 41 M; 1 non-binary; mean age: 47,48 ± 8,762 s.d; mean years of education: 17,55 ± 2,729 s.d.), after providing informed consent in accordance with the 1964 Declaration of Helsinki and the APA ethical standards in the treatment of our human sample. Participants were informed of their right to discontinue participation at any time. Participants were invited to join the research by an e-mail sent by the HR department of the Organization, which supported the entire data collection process. The questionnaire was sent to a total of 140 employee, 78 questionnaires were returned with usable data, with a response rate of 56%. Data collection was administered via Qualtrics.

Participants in the questionnaire were selected based on the requirement to be an employee of Bank X and to be involved in the 'Agile' organizational change undertaken by the bank and still ongoing. In addition, the selected bank employees were asked to provide demographic information

such as age, education and gender, and professional information such as the division they work in and the role they hold. This information was requested in order to obtain a more precise understanding of the participants and to be able to identify useful variables for the analysis. Therefore, the educational level of the subjects was as follows: 21% of the participants had spent 13 years in education (i.e. high school diploma), 4% had spent 15 years in education (i.e. university degree), the majority (53%) had spent 18 years in education (i.e. master's degree) and the remaining 23% had spent 21 years in education (i.e. further postgraduate education, e.g., doctorate or other postgraduate degree). The age categories were: 24.4% of participants were between 30 and 40 years old, 42.3% between 41 and 50 years old, and 33.3% between 51 and 63 years old. On the other hand, gender adherence was fairly homogeneous, with 46.2% male participants, 52.6% female participants and 1.3% non-binary participants in the dataset.

In terms of job division, the distribution was as follows: 32.1% worked in the IT division, 21.8% in Model Transformation, 11.5% in Corporate Banking, 10.3% in Private Banking and Wealth Management, 10.3% in Retail Banking, 3.8% in Chief Operating Officer, 3.8% in Territory, 2.6% in General Management, 1.3% in X Domain, 1.3% in Y Domain, 1.3% as Tribe Lending.

The data are shown in Table 1 for a visual representation of the distribution of employees in the various company divisions.

Table 1. Distribution of employees who participated in the study in the company divisions.

	% Employee
IT	32,1 %
Model Transformation	21,8 %
Corporate Banking	11,5 %
Private Banking & Wealth Management	10,3 %
Retail Banking	10,3 %
Chief Operating Officer	3,8 %

Territory	3,8 %
Executive Board	2,6 %
Domain X	1,3 %
Domain Y	1,3 %
Tribe Lending	1,3 %

Finally, with reference to job position, reclassified according to the job positions of the new agile organization, the distribution was as follows: 79.5% of participants are part of a squad, 16.7% of participants are product owners and 3.8% are tribe leaders.

Procedure

After providing informed consent, a questionnaire was administered which is divided into two macro-areas: the first comprising the scales chosen to investigate the constructs being researched and the second aimed at collecting the participants' biographical and work information. The scales used in this study were selected to measure the constructs of interest for the research. Five scales that had already been used and validated in previous studies were identified.

Firstly, participants responded to items designed to measure commitment to change. In the present study, commitment to change is the dependent variable that is analyzed using the multidimensional perspective proposed by Herscovitch & Meyer (2002). It is considered that each of the three components of commitment (Affective, Continuative and Normative) develops according to different antecedents and has different implications for work behavior.

Second, respondents were asked to rate the communication of the change, that is, whether they had been informed and the degree of accuracy of the information about the organizational change undertaken (Bordia et al., 2004).

Third, respondents were asked to indicate how uncertain they were about the effects of the change on the structure of the organization and the nature of their work (Schweiger & Denisi, 1991; Bordia et al., 2004).

Fourth, respondents answered items designed to measure the degree of satisfaction and happiness they currently have with their job position (Warr, 1991).

Fifth, the scale was administered to measure the short-term focus an employee may have in dealing with change. Here, it is measured whether the employee is more interested in the short-term inconveniences of a change than in the possible long-term benefits (Oreg, 2003).

Then, participants were asked to provide a series of demographic and job-related information (described in the "Participants" section), aimed at understanding the factors that influence employees' commitment to actively participate in change as they believe in the value of change.

Finally, participants were asked how the strategic change implemented by the organization had affected their work.

Questionnaires

The questionnaire administered to Bank X employees who participated in Agile change is detailed below. As we have already mentioned, the questionnaire is composed of five validated scales, which in this study are merged with the aim of understanding which variables contribute to influencing the three dimensions of commitment to change.

The first scale concerns commitment to change, which in turn consists of three sub-scales with a total of 18 items, developed by Herscovitch and Meyer (2002). Specifically, the scale includes six items measuring affective commitment (e.g., "I believe in the value of this change"), six items assessing continuity commitment (e.g., "I have no choice but to go ahead with this change"), and six items assessing normative commitment (e.g., "I would feel guilty if I opposed this change"). Responses were provided using a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

The quality of communication from management to the individual about the organizational change the organization is implementing was measured by a seven-item scale developed by Bordia, Difonzo et al. (2004). Responses were formulated on a 7-point response format (1=strongly disagree to 7=strongly agree).

Subsequently, a nine-item scale was administered to measure the uncertainty perceived by the employee during the organizational change. The items, some of which were adapted from Schweiger and Denisi (1991), asked respondents to indicate how uncertain they were about the effects of the change on the structure of the organization, their own role and job duties (e.g. whether they would have to learn new skills, whether they would have to move to another section of the organization). The answers were formulated on a 7-point response scale (from 1= not at all uncertain to 7= very uncertain).

Job satisfaction was measured using a three-item scale developed by Warr (1991) with questions such as "I am extremely satisfied with my job and could not be more so". The answers were formulated on a 5-point Likert-type scale ranging from 1 (Not at all) to 5 (Extremely),

The fifth scale in the questionnaire refers to the short-term focus presented by Oreg (2003). This scale consists of items such as "When someone pushes me to change something, I tend to resist them even though I think the change will eventually benefit me" to assess the implicit resistance related to short-term focus. Responses to the items of this factor are requested on a 5-point Likert-type scale ranging from 1 (Not at all) to 5 (Extremely).

In the second part of the experiment, participants were asked to provide a series of open-ended demographic and occupational information (described in the 'Participants' section).

Finally, participants were asked how much the strategic change implemented by the organization had affected their work. The impact of the change was stated through a 7-point Likert-type scale ranging from 1 (Not at all) to 7 (Extremely).

4.5 Analyses

Descriptive analyses

In order to determine the individual scores for each variable of interest, questionnaires were scored, and then z-transformed prior to statistical testing.

As a first step, we explored whether there exist variations across the job roles and responsibilities (i.e., tribe leader, product owner and squad) of the organization with respect to the variables of interest. In other words, here we investigated whether it is possible to identify different levels of commitment to change (affective, continuative, and normative), uncertainty, work satisfaction and impact across the job positions held by employees in the organization. However, the number of tribe leaders and product owner was too small to be investigated on their own (Tribe Leaders: N = 3; Product Owner: N = 13), hence, these two categories were collapsed into a single one for the statistical analysis. Thus, a series of one-way ANOVAs were computed on the dependent variables of interest using the 2-level factor job description (i.e., Tribe leader/Product Owner vs. Squad).

Hypothesis testing

In order to test hypothesis 1, 2 3 and 4, a series of multiple regressions were computed to investigate the variables that impacted upon affective, continuative, normative and total commitment to organizational change. Hence, the commitment to change dimensions were used as dependent variables in a series of multiple regression analyses, wherein the variables communication, uncertainty, work satisfaction, short term orientation and impact were used as regressors.

Secondly, in order to test hypothesis 5, 6, 7 and 8, based on the results of the regression analyses, a series of moderations were conducted using the package PROCESS (Hayes, 2015; Hayes & Preacher, 2014) for SPSS (IBM SPSS, 2020). In particular, commitment to change (i.e., affective, continuative, normative, and total) were used as dependent variables, the communication score was used as independent variable, while the uncertainty and satisfaction dimension were treated as

mediators in separate analyses. These analyses only included uncertainty and work satisfaction as mediators because, based on the results of the regression analyses, they were the only variables yielding a statistically significant effect. Finally, in all the analysis participants' age and years of education were included as covariates.

4.6 Results

Descriptive analyses

Means and standard deviations of the raw scores collected across all the scales and subscales are displayed in Table 2.

Table 2. Descriptive statistics: average and standard deviations of the raw scores obtained across the sample.

	Average	Standard Deviation
Education	17,55	2,729
Age	47,48	8,762
ACC	32,55	8,562
CCC	24,18	7,786
NCC	29,22	5,116
CC Tot	85,95	10,655
Communication	25,23	9,499
Uncertainty	32,73	10,612
Satisfaction	11,33	0,949
Short Term Orientation	11,88	7,509
Impact	3,38	0,943

A second set of analyses was conducted to evaluate possible differences in terms of commitment, uncertainty, work satisfaction and impact existing across the different job position in the company under investigation.

The results of the analyses conducted using the factor job position on the dependent variable affective commitment to change indicated that the main effect was statistically significant ($F_{1, 76}$ = 6.13, p < 0.05), hence suggesting that Tribe leaders and product owners displayed a higher level of affective commitment to change as compared to members of the squads (see Figure 4.2A).

The results of the analyses conducted using the factor job position on the dependent variable continuance commitment to change indicated that the main effect was only marginally significant ($F_{1, 76}$ = 3,76, p = 0.06), hence suggesting that Tribe leaders and product owners displayed a slightly lower level of continuance commitment to change as compared to members of the squads (see Figure 4.2B).

The results of the analyses conducted using the factor job position on the dependent variable normative commitment to change indicated that the main effect was not statistically significant ($F_{1, 76}$ = 0,63, p = 0.43), hence indicating that Tribe leaders and product owners displayed the same level of normative commitment to change of the members of the squads (see Figure 4.2C).

The results of the analyses conducted using the factor job position on the dependent variable total commitment to change indicated that the main effect was not statistically significant ($F_{1, 76}$ = 0,84 , p = 0.36), hence no difference was observed between the two groups in the overall level of commitment (see Figure 4.2D).
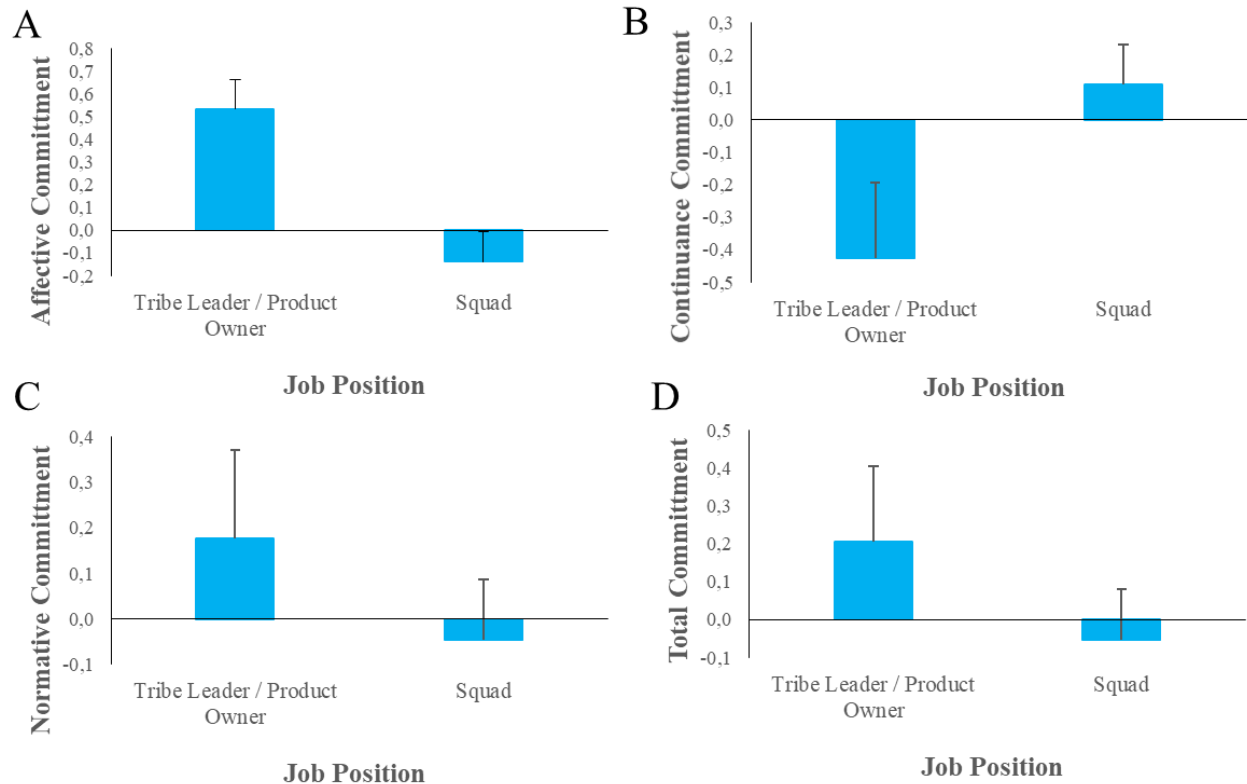
Figure 4.2. *Results of the ANOVA analysis conducted using the job position factor on the dependent variable affective commitment, ongoing commitment, normative commitment, and total commitment to change..*

The same analysis was conducted using the job position factor on the dependent variable communication. The analysis was found to be statistically significant ($F_{1,76} = 6.82$, $p < 0.05$), thus suggesting that tribe leaders and product owners possessed more information regarding change than team members. As we can see from the graph (Figure 4.3A), the difference in the quality of perceived communication is particularly significant.

Similarly, the analysis where the job position factor on the dependent variable of uncertainty was found to be statistically significant ($F_{1,76} = 9.69$, $p < 0.05$). This result, which can be seen in Figure 4.3B, suggests that team members are perceiving a much higher level of uncertainty during the change process than tribe leaders and product owners.

The same analysis carried out on the dependent variables of Job Satisfaction, Short-Term Orientation and Perceived Impact showed non-statistically significant differences for the two job

position clusters [Work Satisfaction ($F_{1, 76} = 0.15$, $p = 0.70$), Short-Term Orientation ($F_{1, 76} = 0.14$, $p = 0.71$) and Impact ($F_{1, 76} = 0.06$, $p = 0.80$)], as shown in figure 4.3 C, D and E.
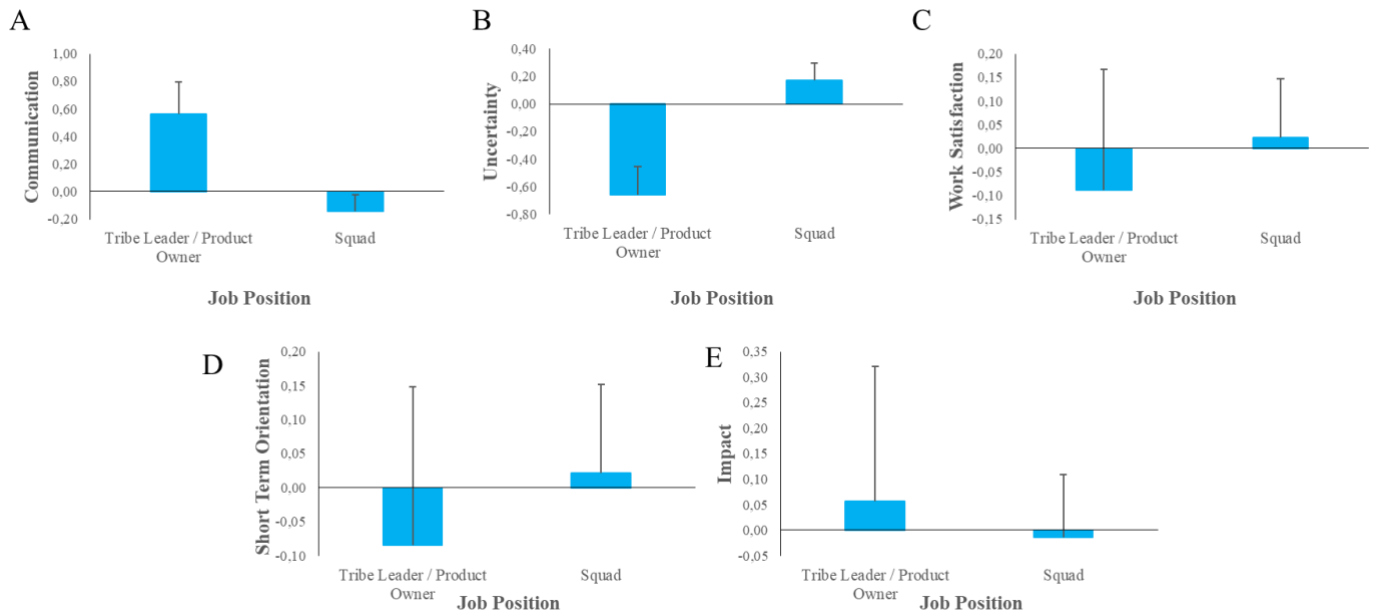

Figure 4.3. *Results of the ANOVA analysis conducted using the job position factor on the dependent variable communication, uncertainty, job satisfaction, short-term orientation, and perceived impact.*

Regression results

The first multiple regression analysis was conducted using the dependent variable affective commitment and the communication, uncertainty, work satisfaction, short-term orientation, and impact as regressors. The results, summarized in Table 2, showed a statistically significant effect of communication ($\beta = 0.46$, $p < 0.001$), uncertainty ($\beta = -0.32$, $p < 0.01$) and work satisfaction ($\beta = 0.19$, $p < 0.05$), while short-term orientation ($p = 0.32$) and impact ($p = 0.61$) did not yield any significant effect. Hence, hypothesis H1 is partially confirmed, as the results indicate that affective commitment appears to be enhanced by increasing levels of communication of the change initiative and work satisfaction, while high levels of uncertainty appear to negatively impact upon affective commitment to change, as predicted (see Figure 4.4). Nevertheless, no effect was found for short-term orientation and impact.

Table 2. *Results of the multiple regression conducted using the affective commitment as dependent variable and communication, uncertainty, work satisfaction, short-term orientation, and impact as regressors.*

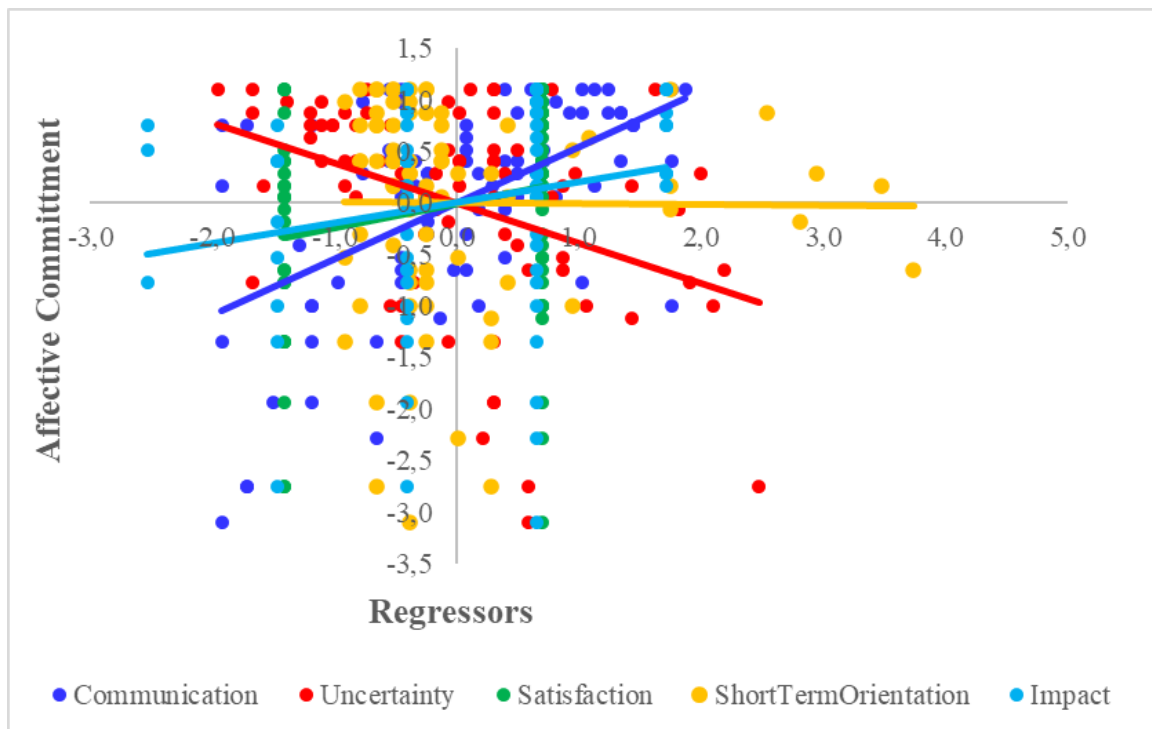|	β	t	p
Communication	0.456	4.899	0.000
Uncertainty	-0.323	-3.417	0.001
Work Satisfaction	0.191	2.116	0.038
Short-Term Orientation	0.092	1.000	0.321
Impact	0.047	0.509	0.612

Figure 4.4. *Results of the multiple regression conducted on the affective commitment to change.*

The second multiple regression analysis was performed using continuity commitment as the dependent variable and communication, uncertainty, job satisfaction, short-term orientation and impact as regressors. As can be seen from table 3, the results of this analysis showed a statistically significant effect of communication (β = - 0.25, p < 0.001) and uncertainty (β = 0.23, p < 0.01) on continuity commitment to change. While job satisfaction (p = 0.72), short-term orientation (p = 0.82) and impact (p = 0.28) did not produce any statistically significant effects. Therefore, Hypothesis H2

is partially confirmed, as the results indicate that continued commitment is negatively influenced by the quality of the communication made about the change initiative. In addition, it was confirmed that high levels of uncertainty generate an increase in continued commitment to change, thus leading the employee not to oppose the change only because of the cost that this action would bring to the employee (see Figure 4.5).

Table 3. Results of the multiple regression conducted using continuous commitment as the dependent variable and communication, uncertainty, job satisfaction, short-term orientation, and impact as regressors.

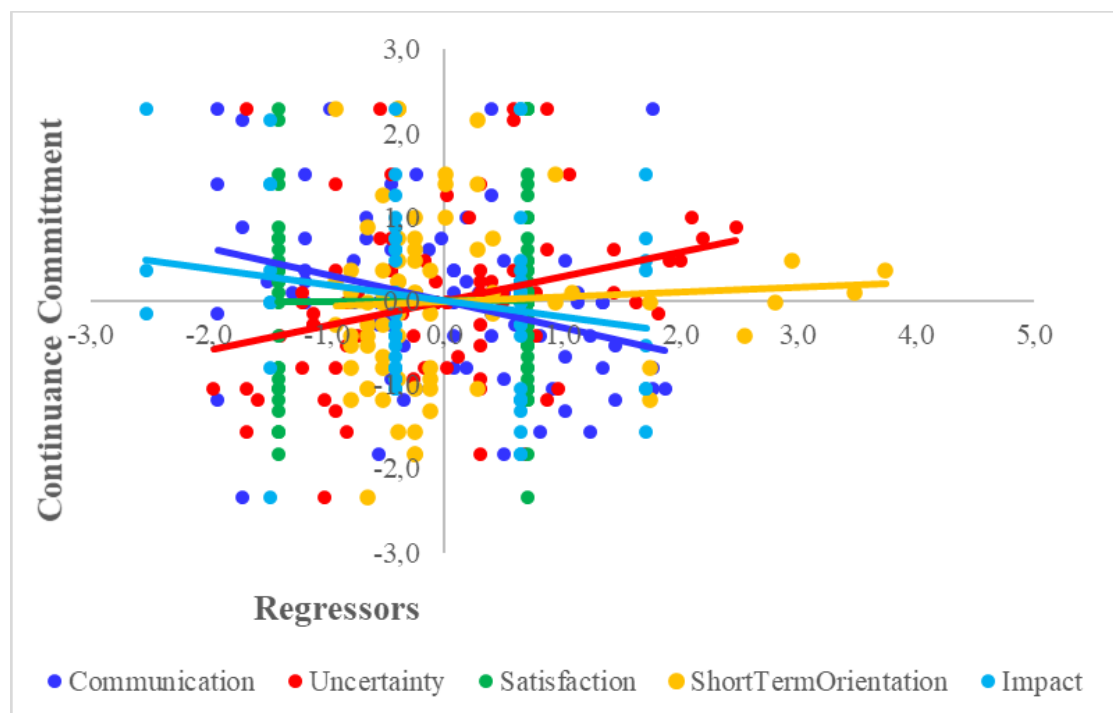|	beta	t	p
Communication	-0,248	-2,213	0,030
Uncertainty	0,233	2,044	0,045
Work Satisfaction	0,040	0,367	0,715
Short-Term Orientation	-0,025	-0,227	0,821
Impact	-0,119	-1,072	0,287

Figure 4.5. *Results of the multiple regression conducted on continuous commitment to change.*

The third multiple regression analysis was conducted using normative commitment to change as the dependent variable and communication, uncertainty, job satisfaction, short-term orientation and impact as regressors. The results, which are summarized in Table 4, showed a statistically significant effect of communication (β = 0.233, $p < 0.05$), and uncertainty (β = -0.293, $p < 0.01$), while job satisfaction (p = 0.18), short-term orientation (p = 0.48) and impact (p = 0.19) did not produce any statistically significant effects. The results confirm the positive relationship between communication and the normative component of change and a strong negative relationship between the latter and the uncertainty generated by the change initiative (see figure 4.6). However, the variables of job satisfaction, short-term orientation and impact did not prove to have an effect on the normative commitment to change. Therefore, hypothesis H3 is partially confirmed.

Table 4. *Results of the multiple regression conducted using normative commitment as dependent variable and communication, uncertainty, job satisfaction, short-term orientation, and impact as regressors.*

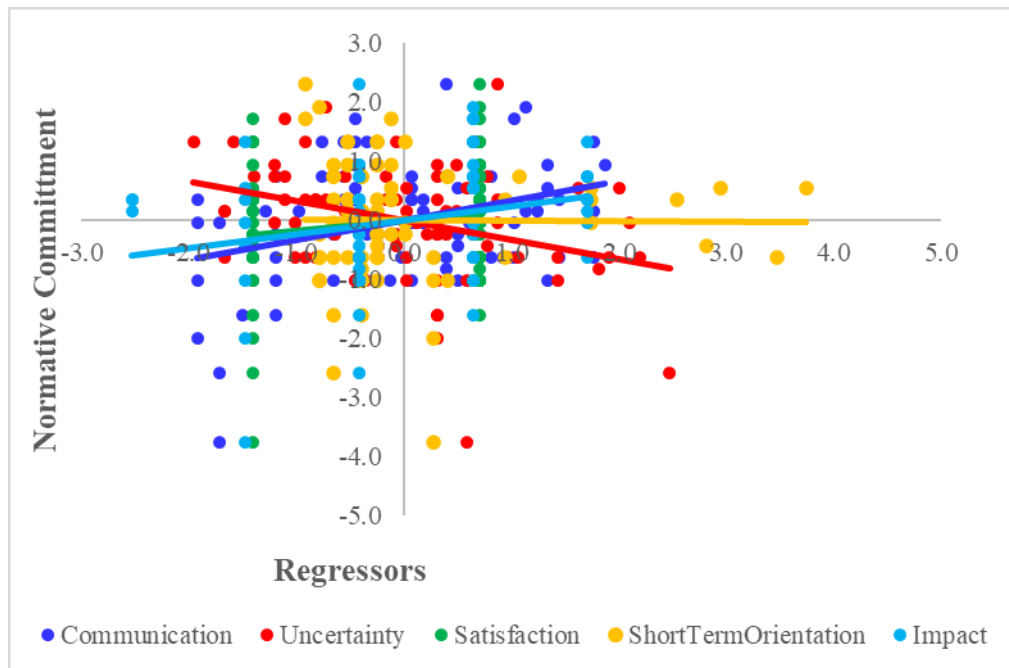|	beta	t	p
Communication	0,233	2,158	0,034
Uncertainty	-0,293	-2,674	0,009
Job Satisfaction	0,142	1,360	0,178
Short-Term Orientation	0,076	0,709	0,481
Impact	0,142	1,329	0,188

Figure 4.6. *Results of the multiple regression conducted on normative commitment to change.*

The fourth regression analysis concerns total commitment as a dependent variable, which is studied in relation to the variables of communication, uncertainty, job satisfaction, short-term orientation, and impact, used as regressors. As can be seen from table 5, the results show that communication has a statistically significant effect ($\beta = 0.233$, $p < 0.01$), as does uncertainty ($\beta = -0.293$, $p < 0.05$), and job satisfaction ($\beta = 0.233$, $p < 0.03$). Whereas short-term orientation ($p = 0.48$) and impact ($p = 0.19$) had no significant effect on the dependent variable. Thus, commitment to change, taken as a total dimension, is positively influenced by increasing levels of communication and job satisfaction, while high levels of uncertainty have a negative impact on it, as was expected (see figure 4.7). In contrast, short-term orientation and the perceived impact of employees did not prove to have a statistically significant effect on total commitment to change. Thus, hypothesis H4 was partially confirmed.

Table 5. *Results of the multiple regression conducted using total commitment to change as dependent variable and communication, uncertainty, job satisfaction, short-term orientation, and impact as regressors.*

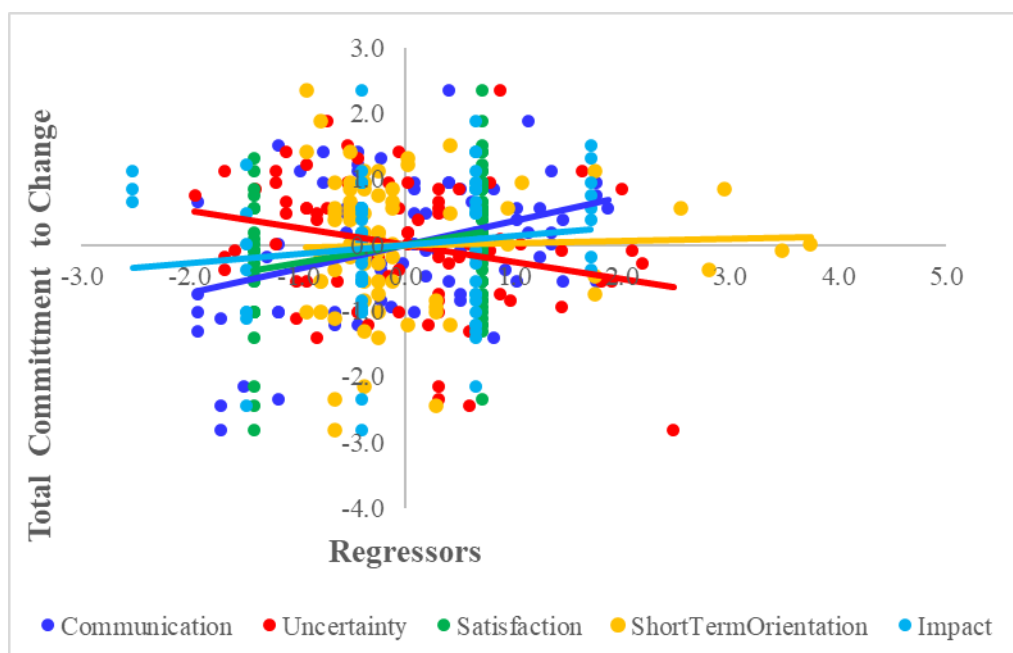|	beta	t	p
Communication	0,297	2,775	0,007
Uncertainty	-0,230	-2,118	0,038
Job Satisfaction	0,251	2,420	0,018
Short-Term Orientation	0,092	0,868	0,388
Impact	0,019	0,178	0,859

Figure 4.7. *Results of the multiple regression conducted on total commitment to change.*

Moderation results

In this set of analyses, according to hypothesis 5, 6, 7 and 8, we aimed at further disentangling the relationship between commitment to change and the variables that appeared to significantly affect this dimension, based on the results of the multiple regression analyses.

The first model was run using the affective commitment to change as a dependent variable, communication as independent variable, and uncertainty as moderator. The results showed that the model was overall statistically significant ($R = 0.66$, $R^2 = 0.43$, $F_{5, 71} = 10.86$, $p < 0.001$). The detailed results of the model are displayed in table 6. The main effect of communication was found significant

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(β = 0.50, p < 0.001), along with the main effect of uncertainty (β = -0.31, p < 0.01). More importantly, the communication by uncertainty interaction was also significant (β = 0.21, p < 0.05), hence indicating that uncertainty moderates the relationship between affective commitment and communication. In particular, as shown in Figure 4.8A, the effect of communication increases as the level of uncertainty increases, hence, it is most relevant when the uncertainty is high as compared to when it is low. Finally, the covariates age (β = -0.01, p = 0.30) and years of education (β = -0.03, p = 0.42) were found non-significant.

Table 6. Results of the moderation analysis conducted using affective commitment to change as dependent variable, communication as independent variable and uncertainty as moderator.

	β	SE	t	p	LLCI	ULCI
Communication	0.50	0.09	53779.00	0.00	0.32	0.69
Uncertainty	-0.31	0.09	-33630.00	0.00	-0.49	-0.13
Communication by Uncertainty	0.21	0.09	22362.00	0.03	0.02	0.39
Age	-0.01	0.01	-10348.00	0.30	-0.03	0.01
Years of Education	-0.03	0.04	-0.80	0.42	-0.10	0.04

The second model was run using the affective commitment to change as a dependent variable, communication as independent variable, and work satisfaction as moderator. The model was overall significant (R = 0.61, R^2 = 0.38, $F_{5, 71}$ = 8.55, p < 0.001). The detailed results of the model are shown in table 7. As in the previous model, the main effect of communication was found significant (β = 0.52, p < 0.001), while the main effect of satisfaction failed to reach the significance threshold (β = 0.16, p = 0.10). Nevertheless, the communication by satisfaction interaction was statistically significant (β = -0.20, p < 0.05), hence indicating that also the level of work satisfaction moderates the relationship between affective commitment to change and communication. In particular as shown in figure 4.8B, when the satisfaction is low, the relationship between communication and affective

commitment is much stronger as compared to high level of work satisfaction. Finally, the covariates age (β = -0.01, p = 0.55) and years of education (β = -0.02, p = 0.58) were non-significant.

Table 7. Results of the moderation analysis conducted using affective commitment to change as dependent variable, communication as independent variable and job satisfaction as moderator.

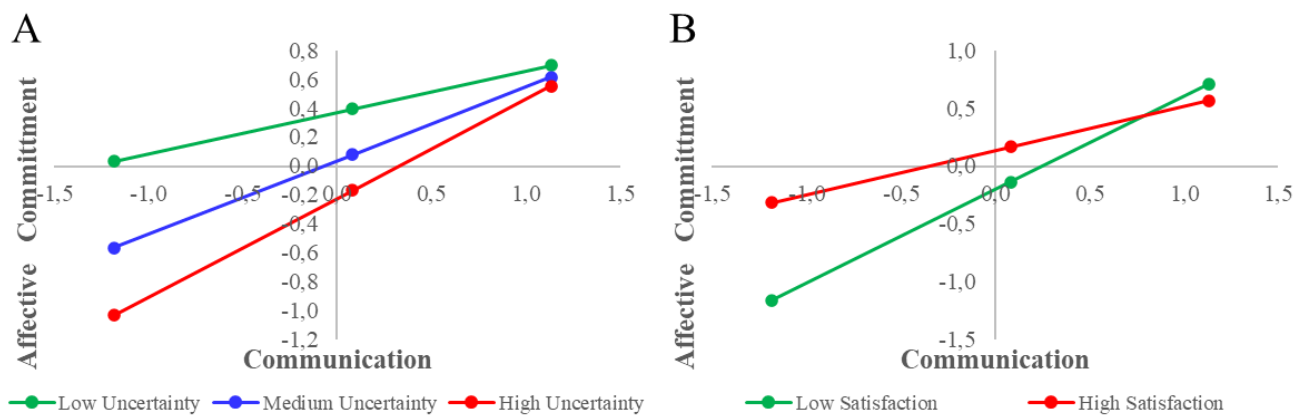|	β	SE	t	p	LLCI	ULCI
Communication	0.52	0.10	5.47	0.00	0.33	0.71
Work Satisfaction	0.16	0.10	1.66	0.10	-0.03	0.35
Communication by Work Satisfaction	-0.20	0.10	-2.10	0.04	-0.39	-0.01
Age	-0.01	0.01	-0.61	0.55	-0.03	0.02
Years of Education	-0.02	0.04	-0.55	0.58	-0.10	0.05

Figure 4.8. Results of the moderation analysis conducted on affective commitment to change.

The same analysis was performed for continuative commitment to change, which was entered as the dependent variable while communication was entered as the independent variable and uncertainty as the moderator. The results showed that the model was statistically significant overall (R = 0.47, R^2 = 0.22, $F_{5, 71}$ = 10.86, p < 0.05). The detailed results of the model are displayed in table 8. From this analysis, we can see that the effect of communication was significant (β = -0.25, p < 0.05). The effect of uncertainty was also found to be statistically (β = 0.24, p < 0.05). In spite of this, however, the interaction of communication by uncertainty (β = 0.48, p = 0.66) was not found to be significant, thus indicating that as uncertainty varies, the relationship between continuous

engagement and communication does not vary. This can also be seen from Figure 4.9, where all three variables show the same slope and never intersect. Finally, the covariate age ($\beta = 0.02$, $p = 0.12$) was not found to be statistically significant while years of education ($\beta = 0.09$, $p > 0.05$) was found to be significant.

In the case of continuative commitment to change, only the model with uncertainty as moderator was computed, as the other variables were all found non-significant in the regression analysis.

Table 8. *Results of the moderation analysis conducted using continuous commitment to change as dependent variable, communication as independent variable and uncertainty as moderator.*

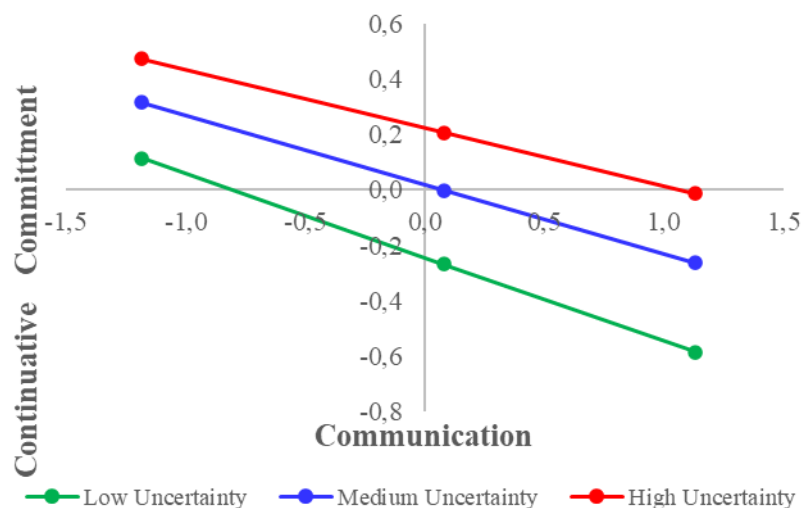|	beta	SE	t	p	LLC	ULCI
Communication	-0,25	0,11	-2,28	0,02	-0,47	-0,03
Uncertainty	0,24	0,11	2,25	0,03	0,03	0,45
Communication by Uncertainty	0,48	0,11	0,44	0,66	-0.17	0,26
Age	0,02	0,01	1,58	0,12	-0,00	0,04
Years of Education	0,09	0,04	2,35	0,02	0,15	0,18

Figure 4.9. *Results of the moderation analysis conducted on the continuative commitment to change.*

An additional analysis was conducted using normative commitment to change as the dependent variable, communication as the independent variable and uncertainty as the moderator.

The results showed that the model was statistically significant (R = 0.51, R^2 = 0.26, $F_{5, 71}$ = 5.05, p < 0.001). The detailed results of the model are displayed in table 9. The main effect of communication was significant (β = 0.31, p < 0.001), together with the main effect of uncertainty (β = -0.29, p < 0.01). More importantly, the interaction of communication by uncertainty was also significant (β = 0.27, p < 0.01), thus indicating that uncertainty moderates the relationship between normative commitment and communication. Specifically, as shown in Figure 4.10, the effect of communication increases as the level of uncertainty increases, thus, it is more significant when uncertainty is high than when it is low. Finally, the covariates age (β = 0.00, p = 0.71) and years of education (β = 0.04, p = 0.33) were found to be non-significant.

Table 9. Results of the moderation analysis conducted using normative commitment to change as dependent variable, communication as independent variable and uncertainty as moderator.

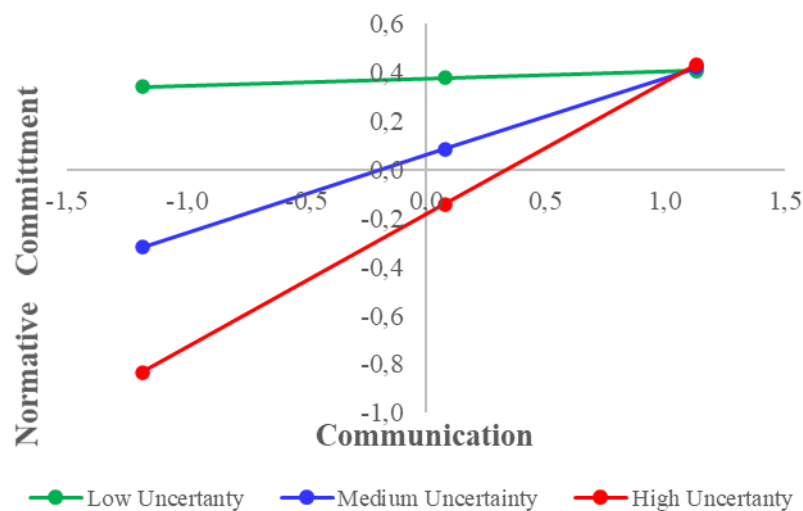|	beta	SE	t	p	LLC	ULCI
Communication	0,31	0,11	2,94	0,00	0,10	0,52
Uncertainty	-0,29	0,10	-2,80	0,01	-0,50	-0,08
Communication for Uncertainty	0,27	0,10	2,57	0,01	0,06	0,48
Age	0,00	0,01	0,38	0,71	-0,02	0,03
Years of Education	0,04	0,04	0,99	0,33	-0,04	0,12

Figure 4.10. Results of the moderation analysis conducted on the normative commitment to change

For the final set of analysis, a first model was carried out on the total commitment to change (dependent variable) and again using communication as the independent variable and uncertainty as the moderator. The results showed that the model was statistically significant (R = 0.55, R^2 = 0.30, F

$_{5,\ 71}$ = 6.08, p < 0.001). The analysis shows that communication plays an important role on commitment to change (β = 0.37, p < 0.001) indicating that the more communication is made about change, the higher the employees' commitment. Uncertainty was also found to be significant (β = -0.21, p < 0.05), indicating that higher uncertainty decreases commitment. Finally, the interaction of communication by uncertainty was found to be significant, (β = 0.33, p < 0.001), thus suggesting that the effect of communication on employees' commitment is moderated by the level of uncertainty they perceive. Thus, communication is more relevant when uncertainty is high than when it is low (Figure 4.10 A). Finally, the covariates age (β = 0.01, p = 0.51) and years of education (β = 0.07, p = 0.09) were found to be non-significant. Table 10 shows the detailed results of the model.

Table 10. *Results of the moderation analysis conducted using total commitment to change as dependent variable, communication as independent variable and uncertainty as moderator*

	beta	SE	t	p	LLC	ULCI
Communication	0,37	0,10	3,59	0,00	0,17	0,58
Uncertainty	-0,21	0,10	-2,08	0,04	-0,41	-0,01
Communication for Uncertainty	0,33	0,10	3,24	0,00	0,13	0,53
Age	0,01	0,01	0,66	0,51	-0,02	0,03
Years of Education	0,07	0,04	1,72	0,09	-0,01	0,14

The same analysis was carried out, however, using job satisfaction as a moderator. The model was found to be globally significant (R = 0.48, R^2 = 0.23, F $_{5,\ 71}$ = 4.26, p < 0.001). The detailed results of the model are shown in Table 11. As in the previous model, both communication (β = 0.34, p < 0.001) and job satisfaction (β = 0.22, p < 0.05) were found to be statistically significant. However, the interaction communication by satisfaction was found to be non-significant (β = -0.14, p = 0.19), thus indicating the level of job satisfaction does not moderate the relationship between total commitment to change and communication (Figure 4.10 B). Finally, the covariates age (β = 0.01, p = 0.42) and years of education (β = 0.07, p =0.11) were not significant.

Table 11. *Results of the moderation analysis conducted using continuous commitment to change as dependent variable, communication as independent variable and job satisfaction as moderator*

	beta	SE	t	p	LLC	ULCI

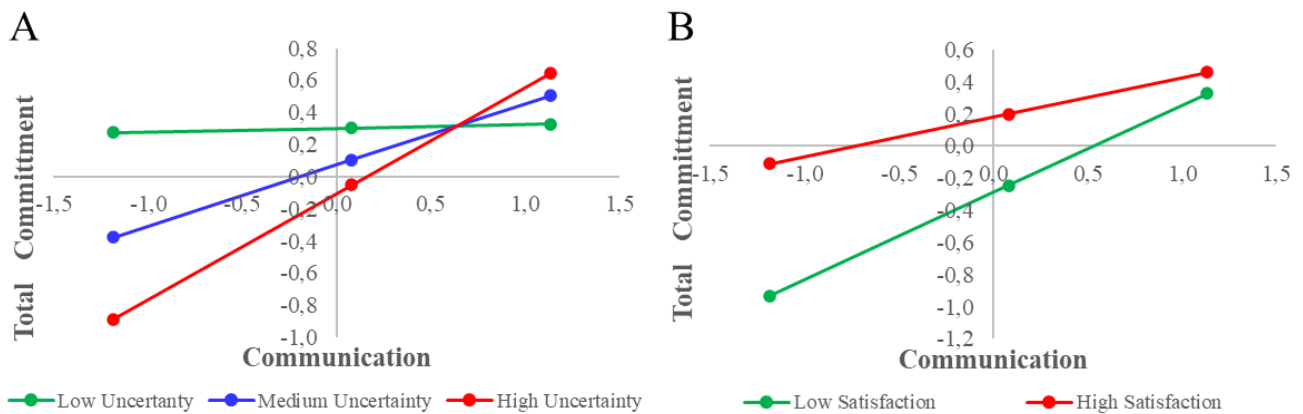|						
Communication	0,34	0,11	3,27	0,00	0,13	0,55
Job Satisfaction	0,22	0,11	2,09	0,04	0,01	0,44
Communication for Job Satisfaction	-0,14	0,11	-1,33	0,19	-0,35	0,07
Age	0,01	0,01	0,81	0,42	-0,02	0,04
Years of Education	0,07	0,04	1,62	0,11	-0,02	0,15

Figure 4.10. *Results of the moderation analysis conducted on the total commitment to change*

4.7 Discussion

Identifying the factors that contribute to the successful implementation of change initiatives is important for modern organizations, especially considering the high failure rate reported in the relevant literature. In this study, we analyzed a case of a change of organizational structure within several divisions in the company examined, which moved from a purely hierarchical divisional model to an agile, cross-divisional structure. A change that now affects and will continue to affect several organizations in the future.

The change has therefore affected the organization at different levels and in different divisions, requiring the active participation of employees, as they have experienced a change in various aspects of their work. However, the changes may have different impacts on the roles, responsibilities, and personal needs within different units (Burke & Litwin, 1992). Therefore, as a first analysis, we performed a series of ANOVAs to understand whether the commitment to change

was different for tribe leaders and product owners as compared to team members. This analysis showed that the affective commitment to change is higher for tribe leaders and product owners than for team members. This can be explained by the fact that tribe leaders and product owners are often more aware of change and have more information to embrace it and believe in its value. This statement is in turn confirmed by the results of the same analysis for communication and uncertainty. In fact, it was confirmed that tribe leaders and product owners had more information at their disposal and their level of uncertainty was significantly lower than team members. An explanation to this result could be that the change process followed a top-down logic, whereby a tribe leader had access to additional relevant information that was not comparable with the information given to a team member. Additionally, with the increasing level of knowledge on a certain topic, there is a decreasing sense of uncertainty or unknown perceived in relation to that topic. That is why a leader or product owner has a lower level of uncertainty about their future, whereas a team member does not possess all the information to allow them to satisfy their uncertainty regarding it. This gap can be bridged by a more accurate communication strategy initiated by managers towards their subordinates. Often, however, sharing sensitive information may be difficult for management, and even inappropriate at a given time. The scholars Richardson and Denton (1996) in their article "Communicating change" mention a paradox that often occurs in companies during periods of change: employees want more information precisely when managers cannot provide it. In fact, management often waits until it has all the information before communicating it. Richardson and Denton (1996) respond to this paradox by stating that managers should answer employees' questions that can be answered by communicating what is known, and for those that cannot be answered managers should explain why it cannot be done. Providing change communications in a timely manner and addressing employees' concerns is a strategy that leads to increased employee engagement and awareness on what is happening, and as such has a positive impact on commitment to change (Choi, 2011; Herscovitch and Meyer, 2002).

With reference to the other two components of commitment to change, continuance and normative commitment, and commitment to change as a whole, did not show statistically significant different results in the two job positions examined. The same applies to the variables of job satisfaction and short-term orientation. However, it should be noted that the lack of statistically significant effects may also be due to the differences in terms of number of participants across the two groups, which may have impacted upon the statistical power, hence preventing to observe significant effects.

Nevertheless, the heart of the research was to understand the variables, among those examined, that affect the three components of commitment to change (affective, continuative, and normative commitment to change). A regression analysis was therefore performed and overall, the results supported the predicted model. Furthermore, consistent with previous research, the multidimensional nature of commitment to change was verified, and the three components were distinguishable as they reported different yet correlated results with respect to the variables they were related to. The results indicated that the variables of communication and uncertainty, together with job satisfaction, are the best predictors of employee commitment to change. In contrast, the effect of the other variables (short-term thinking, perceived impact), in the current research, so not play a significant role in the development of commitment toward the change initiative, as they were found non-significant.

Specifically, with reference to the affective component of commitment to change, which is our focus, we confirmed the importance of the role of communication in stimulating the employee's desire to participate in change as they are fully convinced of its value for the organization. The analysis shows that the relationship between affective commitment and communication is positive and very high and is positively moderated by uncertainty (i.e., it becomes stronger as the perceived level of uncertainty increases). We can comment on this by saying that if the employee is experiencing a change but knows perfectly well what to expect, communication is always of value but of relative importance. On the other hand, when, for example, the employee is involved in a change of organizational structure, the level of perceived uncertainty is medium to high because there is a change in the role

or department, as well as other aspects related to the individual's work identity. In this case, implementing an efficient and quality communication plan is not only important but also a necessary and indispensable condition to bring people on board, stimulating the employee's desire to participate proactively in the change. Job satisfaction was also found to be significant in relation to affective commitment. In other words, the greater the affection and emotional attachment the employee has for their job the greater the support provided for the success of the change, because their emotional attachment to the job is strong. Furthermore, we see that age was not found to be a significant factor for affective commitment. This result may have been limited by the model examined as the age difference was not very large among the participants of the dataset, while education has only marginal effect (i.e., as education increases the employee's affective attachment to change increases). It is important for the organization to know the variables that affect this component of commitment because, as Meyer and Allen (1991) suggested, employees who wish to remain (affective commitment) are likely to attend work regularly, perform their assigned tasks to the best of their ability and perform extra tasks in an optic of collaboration.

Similar results to those of affective commitment were found for normative commitment to change. This finding is in line with previous research that supports the existence of a correlation between affective and normative commitment (Cohen, 1996; Meyer et al., 2002). Only the effect of job satisfaction differs in the two commitment dimensions, as for normative commitment to change this was not found to be statistically significant. This finding confirms that people who are motivated by a normative commitment to change do not base their commitment on more personal motivations but are driven to active participation because they are motivated by a sense of duty to their managers and the organization in general. We can say that normative commitment is based on the Aristotelian concepts of 'good name' and 'good faith'. It can be viewed as an internalization goal, as the duty to the company is understood and therefore internalized. The worker commits to change because they feel that committing to it is part of the (implicit or explicit) employment contract they have entered into, and therefore they feel a duty to defend the job.

Differently, ongoing commitment to change goes in the opposite direction to the other two dimensions of commitment. Continuance commitment in terms of behavior is considered non-productive for the change plan (Bouckenooghe, 2012; Neves, 2011; Parish, Cadwallader, & Busch, 2008). The downside of continuance commitment to change, it to say that employees only commit because of the perceived costs of not committing, makes it undesirable for organizations as they are unwilling to make additional commitments to contribute to the success of the change (Herscovitch & Meyer, 2002). The analysis shows that the greater the uncertainty perceived by the employee, the greater the continued commitment to change. The study showed that through efficient communication methods, the continuous dimension of commitment to change can be improved. This aspect is essential, as it underlines the power that communication has on an organizational change process. Thus, the quality of communication can lead to the reduction of people choosing to commit to the high cost of opposing organizational change.

Finally, we analyzed the combination of all three dimensions of change commitment to explore HRM practices that can promote the positive effects of organizational change. Our analysis confirms the importance of communication on commitment to change and that it is the best predictor of change commitment. Finally, we see how the interaction of communication by uncertainty was found to be significant. Here, we see the effect as a whole because it takes into account the entire variance of commitment, communication and uncertainty, thus indicating that the effect of communication on employee commitment is moderated by the level of uncertainty they perceive. It is therefore important to keep an eye on the level of uncertainty that people perceive, because this is the factor that causes commitment to collapse. As a consequence, a good change leader will have to keep this evidence under control and manage uncertainty through a good communication plan that will get people on board with organizational change, and ultimately enable its real success.

The main message of this study is that not all forms of employee commitment to change are equal. Although commitment, regardless of its shape, may lead to minimal compliance with actions aimed at implementing change, an affective and normative commitment is likely to be required to

ensure a willingness to work in cooperation with others, to exert additional effort and to achieve the goals of change in the medium to long term.

4.8 Limitations and future research

Based on this analysis, a number of themes and issues that emerged can be further explored. Firstly, the dataset can be expanded to a larger group of subjects with less homogeneity in the division in which they work, in order to gain a more complete picture of potential stigma within the job role.0. Having studied the importance of communication, it would also be interesting for research to investigate an open two-way communication, to reduce the fear of so-called 'organizational silence', (i.e., withholding opinions and considerations), which is often detrimental to employees' commitment to change (Morrison and Milliken, 2000).

Conclusions

Conclusions can be drawn regarding the topics that highlighted specific aspects of change management, including the management of individuals' reactions to organizational change. Specifically, the subject of investigation of this paper was the experimental analysis conducted on the case of Bank A, leveraging on its involvement in a significant cultural and organizational transformation in recent years. Further, the COVID-19 pandemic and digital transformation have accelerated the banking ecosystem to undertake this change in order to adapt to new standards, new technologies, and changing customer expectations.

In the case studied, an organizational transformation was implemented in some business units, leaving others yet unchanged; such transformation also brought by a substantial cultural shift for the employees involved. Since people are the backbone of the organization, change management always involves major challenges that primarily involve technical and social aspects surrounding employees (Lawrence, 1969). The technical aspect refers to operations put in place, such as converging from a

traditionally siloed structure to configurations characterized by greater openness and agility. The social aspect, on the other hand, concerns the management of the human component along this path, thus integrating into the concepts of change management also the psychological determinants (Desjardins, 2017). The change agent, who is tasked with guiding the organization through this transition, must envision and maintain a constructive balance between human and organizational needs (Spiker and Lesser, 1995; Ackerman, 1986). Change, in fact, affects the psycho-emotional system of individuals, leading them to develop different forms of response in specific situations. In fact, in order to successfully implement change, it is necessary to take into consideration the individual's perception of it, as the individual may understand it as a force to be feared, or conversely an opportunity to be seized (Schmidt, 1997). As Piderit (2000) suggests, employees' reactions to organizational change can be multidimensional in nature, encompassing at least three dimensions: emotional, cognitive, and intentional. Resistance to change comprises the set of responses with all three negative components; in contrast, commitment to change consists of the set of positive responses along all three dimensions.

The present study focused on commitment to change, as Hersovitch and Meyer (2002) confirmed the trifactorial nature of commitment to change, namely: affective, continuance and normative commitment. In line with previous research, their analysis showed that affective commitment appears to be the component that contributes most to the success of change. This is because it reflects not only positive attitudes toward change, but also psychological alignment with it and willingness to work toward its successful implementation (Herold et al., 2008). Affective commitment also appeared to be affected by job satisfaction in the professional environment, in line with previous studies reporting this association (Settles et al., 2013). The main suggested solutions examined in the paper are Kurt Lewin's Three Stages, John Paul Kotter's Leadership-based approach, and Jeff Hiatt's A.D.K.A.R. model. In all three models, the importance of communication a crucial tool for change management; indeed, communication can be used as a tool to influence the cognitive sphere and consequently the individual's emotions and behaviors (Desjardins, 2017).

Through a regression analysis, the present study confirms the positive correlation between quality communication and commitment to change. This result highlights that it is crucial to implement efficient communication strategies to achieve alignment at the psychological level between the individual and the corporate vision and stimulate the employee's willingness to participate proactively in change. It is however appropriate for the communication plan to coincide with the various phases of the project that the company implements (Klein, 1996).

In general, three phases have been identified: initial communication phase, middle phase of transition from old to new, and final phase of consolidation of new organizational practices.

Especially, it was seen that in an initial phase, a preliminary internal analysis is important that can extrapolate internal opportunities and critical issues. Based on these findings, a targeted communication plan can allow the mitigation of initial forms of resistance that could be generated by aversion to the loss of the status quo. It can also prove effective to outline among management those who will be able to take charge of communication management. In fact, it is critical to have the skills (i.e., empathy, emotional intelligence) to create awareness of the need for change, instill confidence, and motivate people to change their balances. In contrast, when one is at a middle stage, characterized by a state of initial adaptation to change, the transition must take place by spreading positivity and leveraging involvement. However, it remains a delicate phase to which management must pay special attention in order to prevent the spread of negative thoughts. In the final stage, to best consolidate changes, it is necessary to implement staff participation policies, with the aim of confronting staff with the results achieved and making them understand the importance of the path taken. For management, on the other hand, it can be a great way to better understand what is not working or has not worked. As a final consideration, it may be useful to provide check stages throughout the journey on the progress of the change plan, with questionnaires and two-way feedback, so that objectives can be calibrated, and emerging issues can be resolved. Thus, good communication is characterized by constant sharing of data and information, facilitates the process by which change will become a

personal goal of each employee, preventing the development of negative cognitions and behavioral consequences such as resistance to change.

Furthermore, the added value of the current study can be fund in the results of the moderation analysis. Indeed, this data highlight that communication assumes a particular importance in light of specific situations – namely, when uncertainty is high and job satisfaction is low. Hence, it is possible to hypothesize that a good quality communication can mitigate the attribution of negative meanings to corporate change, fostered by high uncertainty and low job satisfaction.

In conclusion, beliefs are not only limited to determining our emotions or actions but can actually play a decisive role in the change process. What links motivation to psychological growth is not only the result of a drive for the constant change to which society and the times inexorably subject us, but it also depends on our inherent desire for knowledge, which allows a greater awareness of personal capabilities and movement toward new goals.

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Annexes

Survey

Pensando al cambiamento strategico attuato dalla vostra organizzazione a cui ha partecipato, rispondete alle seguenti domande, su una scala di tipo Likert a 7 punti che va da 1 (fortemente in disaccordo) a 7 (fortemente d'accordo). Non ci sono risposte giuste o sbagliate: selezionate l'opzione che meglio descrive il vostro pensiero.

Affective Commitment

1. Credo nel valore di questo cambiamento.
2. Questo cambiamento è una buona strategia per questa organizzazione.
3. Penso che la direzione stia commettendo un errore introducendo questo cambiamento.
4. Questo cambiamento ha uno scopo importante.
5. Le cose andrebbero meglio senza questo cambiamento.
6. Questo cambiamento non è necessario

Continuative Commitment

7. Non ho altra scelta che accettare questa modifica.
8. Sento la pressione di dover accettare questo cambiamento.
9. La posta in gioco è troppo alta per resistere a questo cambiamento.
10. Sarebbe troppo costoso per me oppormi a questo cambiamento.
11. Sarebbe rischioso esprimersi contro questo cambiamento.
12. Resistere a questo cambiamento non è un'opzione praticabile per me.

Normative commitment

13. Sento il dovere di impegnarmi per questo cambiamento.
14. Non credo che sarebbe giusto da parte mia oppormi a questo cambiamento.
15. Non mi sentirei male ad oppormi a questo cambiamento.
16. Sarebbe irresponsabile da parte mia oppormi a questo cambiamento.
17. Mi sentirei in colpa ad oppormi a questo cambiamento.
18. Non mi sento obbligato a sostenere questo cambiamento.

Quality of communication

Ora, vi preghiamo di concentrare la vostra attenzione in particolare sulle informazioni e sulla comunicazione che la vostra organizzazione ha dedicato al recente cambiamento strategico.

Valutate ogni opzione su una scala di tipo Likert a 7 punti che va da 1 (fortemente in disaccordo) a 7 (fortemente d'accordo). Non ci sono risposte giuste o sbagliate: selezionate l'opzione che meglio descrive il vostro pensiero.

19. I manager vi hanno tenuti informati durante tutto il processo di cambiamento, anche dopo l'annuncio ufficiale.
20. La comunicazione del cambiamento includeva informazioni riguardo il percorso di trasformazione intrapreso dall'azienda
21. I manager hanno affrontato le vostre preoccupazioni personali riguardo al cambiamento.
22. La comunicazione era accurata.
23. I manager hanno fornito il maggior numero di informazioni possibili.
24. I manager hanno coinvolto i dipendenti nel processo di cambiamento e nelle decisioni prese.
25. I manager hanno comunicato le ragioni del cambiamento.

Uncertainty

Rispetto all'iniziativa di cambiamento strategico, la preghiamo di indicare, su una scala di tipo Likert a 7 punti che va da 1 (Per niente incerto) a 7 (Molto incerto), quanto si sente incerto sugli effetti del cambiamento rispetto ai seguenti elementi:

26. Se dovrete trasferirvi in un'altra sezione dell'organizzazione.
27. Il livello di influenza che si avrà sui cambiamenti del proprio lavoro.
28. Se la cultura dell'organizzazione cambierà.
29. Se vi adatterete alla cultura della "nuova" organizzazione.
30. Se si potrà lavorare con le persone con cui si è diventati amici.
31. La possibilità di una promozione.
32. Se dovrete imparare nuove abilità lavorative.
33. La misura in cui il vostro ruolo/le vostre mansioni cambieranno.
34. Se la vostra retribuzione/salario cambierà.

Job satisfaction

Pensando al suo lavoro in generale, la preghiamo di indicare, su una scala di tipo Likert a 5 punti che va da 1 (Per niente) a 5 (Estremamente), quanto è d'accordo con le seguenti affermazioni:

35. Il mio lavoro mi piace molto e non potrebbe piacermi di più.

36. Sono estremamente soddisfatto del mio lavoro e non potrei esserlo di più.

37. Sono estremamente felice del mio lavoro e non potrei esserlo di più

Short-term thinking

38. Cambiare programma mi sembra una vera seccatura.

39. Spesso mi sento a disagio anche di fronte a cambiamenti che potrebbero migliorare la mia vita.

40. Quando qualcuno mi fa pressione per cambiare qualcosa, tendo a resistere anche se penso che il cambiamento possa in ultima analisi giovarmi.

41. A volte mi capita di evitare cambiamenti che so essere positivi per me.

42. Una volta che ho fatto dei progetti, è difficile che li cambi.

General Information

43. *Indichi la sua età***:**

    _____

44. *Indichi il suo genere*:
    a. Maschio
    b. Femmina
    c. Non-binario

45. *Indichi il titolo di studio più elevato conseguito*
    a. Diploma di scuola superiore
    b. Laurea triennale
    c. Laurea specialistica
    d. Master/istruzione post-laurea
    e. Dottorato di ricerca

46. *In quale divisione/funzione della sua azienda lavora?*
    _____

47. *Quanto ha influito sul suo lavoro il cambiamento strategico attuato dalla sua organizzazione?*
    1 - Per niente .... 7 Estremamente

Summary

Literature Review

Challenges of the global external environment: an overview

The current historical context, where the focus is constantly on development, economic growth, and competition, sees companies under constant pressure to adapt to a changing marketplace. The challenges that prevalently shape today's market and work environment stem from globalization, digital transformation, and environmental sustainability requirements.

Organizations must be responsive and proactive to embrace these changes and integrate them internally. This involves adaptation at the level of corporate structure (e.g., flat structures, new job design, authority relationships and coordination mechanisms), organizational culture (e.g., new work methods and processes and new contractual forms) and at the level of the individual (e.g., new skills and career aspirations).

Nevertheless, numerous organizations are not designed for proactive change; they are designed according to rather rigid rules and hierarchy that are resistant to it (Venier, 2017). The result is a mismatch between the speed of change in the external environment and the maximum possible pace of change in organizations. In particular, hierarchical organizational models, which are inflexible and characterized by a high degree of formalization, are those exposed to the higher level of risk, as they lack the potential to respond quickly to change (Petković & Lukić, 2014). According to several scholars and practitioners (Bryant, 2014; Lee & Edmondson, 2017), a resilient and responsive organizational structure needs to be flatter, with decentralized decision-making, organization of work in teams, horizontal communication, and mutual trust.

In terms of internal procedures, this means moving from a "push", directive logic with rigid processes and procedures, to a "pull" logic, focused on bottom-up communication, collaboration, and shared responsibility. The leadership model is also changing, as managers will adopt a transformational type

of leadership, helping teams solve problems, defining vision and mission, and providing feedbacks. It is, therefore, a matter of governance before it is a matter of technology.

Change management can be defined as *"the process of continuously renewing an organization's direction, structure, and capabilities to meet the changing needs of internal and external customers"* (Moran & Brightman, 2001). It includes the set of structured activities, tools, and resources to bring about change within the company.

One of the greatest challenges for organizations is to encourage their employees to take part in this change and to abandon old beliefs in order to build new ones (French and Bell,1999). Over time, various scholars have provided countless solutions and models developed on the concept of change management. The main ones examined in the paper are Kurt Lewin's three stages, John Paul Kotter's 8-step model and Jeff Hiatt's A.D.K.A.R. model. All three models show the complexity of this process and the importance of managing the psychological factors that influence reactions to change. They also provide the basis on which managers can build the individual change model for their individual company, shifting the focus from group strategies to more individual strategies, where the individual's motivation to participate in change becomes increasingly important.

As a first step, the initial concern in communicating the change is represented by "creating that sense of urgency", as defined by Kotter (Kotter, 1995). Attention must be paid at this stage to how the information is communicated, as employees may perceive the change as a threat to the previous balance (Brisson-Banks, 2009) or perceive that they do not have the resources/competencies to deal with it. The most common mistakes made by managers are due to insufficient communication on the side of the new management or unconsciously sending contradictory messages. This can generate emotions such as fear, uncertainty, or anger, which are often in contrast with the spirit that should drive change (Kahneman, 2012). To avoid some of these negative feelings and attitudes, it is important for top management to share the reasons behind change, along with its vision, further highlighting the tools that the company provides to support its employees throughout the journey (Kotter, 2012).

Transition must take place by spreading positivity, and leveraging involvement (Lewin, 1951). It is important to seek a direct connection with employees through listening and motivation, thus making the employee feel part of the change vision (Piderit, 2000).

Finally, all three models emphasize the importance of consolidating change. Here reference is made to corporate culture: it is essential that new behaviors are in line with the new environment, culture, and structure, otherwise a cycle of disconfirmation will be created (Lewin, 1951). This phase should not be neglected to avoid running the risk of quickly reverting to old habits and a *modus operandi* (Hiatt, 2006).

The individual in a change process

As seen in the previous section, successful change management must take into account the reactions of individuals, in order to plan and implement it in the best way possible. An individual who is not prepared and predisposed to change often negatively reacts to it, and this in turn causes lack of results and sometimes total failure of the process. Schmidt (1997) explains how individuals have a subjective perception of change and may see it as a force to be feared or an opportunity to be seized. This statement becomes even more relevant when change leads to the disruption of existing equilibria, the aforementioned 'status quo' within organizational structures, that is, when conditions of uncertainty occur that affect established habits, patterns, procedures, and interpersonal relationships.

People and their environment should be considered as an interdependent set of factors. According to Lewin, people generally struggle to maintain their state of stability, or equilibrium. when such stability is compromised (movement), the whole system seeks to rearrange and find a new equilibrium, as a consequence of the strength of the forces exerted (Burnes, 2004). To understand how an individual reacts to unfamiliar situations and adversities, psychologist and researcher Albert Ellis (1975) developed the ABC model in which A is the adversity/situation/event, B is our belief about it, and C is the consequence, that is, the behavior (or emotional reaction) caused by the belief.

These theories are relevant to understand how organizational change occurs. Change affects the psycho-emotional system of individuals, hence producing different responses to specific situations. In a change process, in fact, the cognitive component plays a very important role because it determines the understanding or meaning that the person attributes to the change initiative, which in turn determines the consequent behavioral and affective reactions. It is from the cognitive sphere, from the beliefs that are created that heuristics of thought can arise. These are mental shortcuts that individuals put in place to simplify the operations they must perform to calculate the probability of events and their expected outcome (Pironti, 2012).

Therefore, in a context of change, it becomes important to convey to employees a positive belief that change is necessary and will have a positive impact, aligning the individual's vision with the company's (Rafferty et al., 2013).

The multidimensional nature of reactions to change

It has been shown how people's behaviors and attitudes produce actions and reactions that influence the achievement of business goals. As Piderit (2000) suggests, employees' reactions to organizational change can be of three dimensions: emotional, cognitive, and intentional. In this perspective, resistance to change comprises the set of negative responses to change along all three dimensions; conversely, commitment to change consists of the set of positive responses along all three dimensions. There can be many reasons for the occurrence of individual and subjective forms of resistance, among which the lack of information, which can result from unclear and ineffective communication. In this case, the individual feels exposed to uncertainty and fear of not being able to handle new scenarios and situations, or not being able to handle the impact that change may have on their work identity (Daft & Noe, 2000). In fact, in the absence of adequate communication, some workers may see change as an attack on their jobs, thus as a negative event (i.e., loss of determined positions, responsibilities) and consequently react defensively (Venier, 2017). In addition, according to several theorists (e.g., Tichy, 1983; Watson, 1971), resistance may result from the natural tendency of

individuals to refrain from changing their routinized behaviors and attitudes, a tis would impair their confidence. Commitment and resilience are, on the other hand, among the most important factors for the full success of change.

Scholars such as Meyer and Allen (1990) proposed a three-dimensional attitudinal construct of organizational commitment. They argued that an employee's commitment to change can take three different declinations: (a) a desire to support change because they spontaneously desire it and believe in its intrinsic benefits (i.e., affective commitment to change, ACC); (b) participation in change because of the costs associated with not supporting it (i.e., continuous commitment to change, CCC); and (c), commitment understood as a sense of moral obligation (i.e., normative commitment to change, NCC). According to this view, affective commitment is considered the most effective measure of organizational commitment because it indirectly influences the other two dimensions of organizational commitment (Cohen, 1996; Meyer et al., 2002).

In contrast, employees who commit primarily to avoid costs (continuance commitment) may do little more than is necessary to maintain employment. They are, in fact, driven by fear of losing their jobs or attractive career benefits. However, it has been shown that this type of commitment often corresponds to stress reactions, burnout, and turnover intentions (Cunningham, 2006; Neves, 2009; Rizzuto, 2004). Finally, those who participate in change because they are driven by a sense of moral obligation to the interests of the organization (normative commitment) are willing to actively participate for the success of the change only if they see it as part of their duty, or as a means of reciprocity of the benefits received. This distinction is important because the three dimensions of commitment to change can have very different implications for the employee's intentions, emotions, and behavior in the workplace. In fact, Meyer and Allen (1991) stated that an employee with a high ACC regularly attends work with maximum commitment and also does highly contributes to the success of the project. This is because ACC reflects the employee's emotional attachment, psychological alignment with the change, intentions to support it, and willingness to work toward its successful implementation (Herold et al, 2008).

Despite the benefit it brings to the research, several features of Herscovitch and Meyer's (2002) study limit its generalizability. The authors themselves called for more replication and verification of the validity of their thesis and a more in-depth study of the variables related to the three dimensions (Herscovitch and Meyer, 2002). The purpose of this contribution is precisely to respond to the authors' appeals. In the present study, in addition to verifying the multifactorial nature of commitment to change, it aims at analyzing the correlation of these components with other relevant variables.

Experimental Study

Description of the organization

The company analyzed is Bank A, which today is engaged in adjusting its organizational structures. Bank A is implementing Agile methodology in order to take full advantage of the potential offered by technological innovation and to cope with changing customer habits and expectations . It is based on the principles of the "Manifesto for Agile Software Development," renamed "Agile Manifesto" (Becket al., 2001). In brief, Agile methodology is an incremental and iterative project management framework. It proceeds in steps (splits) with short-term feedback loops, allowing the priorities of each phase to be adjusted according to the goals and needs of stakeholders (Hoda et al., 2008). The change undertaken appers to be cultural rather than organizational. In fact, executives and managers involved in agile@scale must come to terms with the shift from a hierarchical approach, characterized by command and control, to a decentralized one with autonomous teams. Bank A aims to achieve a pervasive organizational renewal that, piece by piece, can go so far as to dismantle the traditional hierarchical pyramid by eliminating the forms of bureaucracy that have always characterized organizations in the banking sector.

Hypotheses

The literature review discussed in this paper and the goal of making a research contribution led to the identification of four variables that - according to our hypotheses – may influence the commitment

to change of employees involved in an organizational change process. These variables are: i., communication, ii., job satisfaction (George & Jones, 1999; Locke, 1976), iii., uncertainty (Milliken, 1987); iv., short-term focus (Oreg, 2003).

Based on these variables, the following four hypotheses were formulated:

H1: Affective commitment to change (ACC) is positively correlated with communication quality and job satisfaction, while it is negatively correlated with uncertainty, short-term orientation, and impact.

H2: Continuous commitment to change (CCC) is negatively correlated with communication quality and job satisfaction, while it is positively correlated with uncertainty, short-term orientation, and impact.

H3: Normative commitment to change (NCC) is positively correlated with communication quality and job satisfaction, while it is negatively correlated with uncertainty, short-term orientation, and impact.

H4: Total commitment to change is positively correlated with communication quality and job satisfaction, while it is negatively correlated with uncertainty, short-term orientation, and impact.

Furthermore, it was hypothesized that the above three variables may also act as moderators of the direct relationship between commitment to change and communication. Therefore:

H5: The positive relationship between affective commitment to change (ACC) and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

H6: The negative relationship between continuous commitment to change (CCC) and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

H7: The negative relationship between normative commitment to change (NCC) and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

H8: The positive relationship between total commitment to change and communication is moderated by job satisfaction, uncertainty, short-term orientation, and impact.

Methodology

Participants were selected based on the requirement of being employees of Bank A and to be involved in "Agile" organizational change. A total of 78 participants took part in the study (36 F, 41 M; 1 non-binary; mean age: 47.48 ± 8.762 sd; mean years of education: 17.55 ± 2.729 sd). Upon the participants' consent, a questionnaire was administered with the aim of measuring the variables of interest described above along with demographical and work-related information. As a first step, some descriptive analysis were run to investigate whether different levels of commitment to change (affective, continuous, and normative), uncertainty, job satisfaction, and impact can be identified among the job positions held by employees in the organization. Therefore, a series of one-way ANOVAs were calculated on the dependent variables of interest using the two-level factor of the job description.

In order to test Hypotheses 1, 2 3, and 4, a series of multiple regressions were computed to investigate the variables that affected affective, continuous, normative, and total commitment to organizational change. Therefore, commitment to change dimensions were used as the dependent variable in a series of multiple regression analyses, in which the variables communication, uncertainty, job satisfaction, short-term orientation, and impact were used as regressors.

Second, to test hypotheses 5, 6, 7, and 8, based on the results of the regression analyses, a series of moderations were conducted using the PROCESS package (Hayes, 2015; Hayes and Preacher, 2014) for SPSS (IBM SPSS, 2020). Specifically, commitment to change (i.e., affective, continuous, normative, and total) was used as the dependent variable, communication score was used as the independent variable, and uncertainty and satisfaction dimensions were treated as mediators in separate analyses. These analyses included only uncertainty and job satisfaction as mediators because, based on the results of the regression analyses, they were the only variables to produce a statistically

significant effect. Finally, participants' age and years of education were included as covariates in all analyses.

Results and Discussion

The change analyzed affected the organization at different levels and in different divisions. Through ANOVA analysis, it was found that affective commitment to change is higher for tribe leaders and product owners than for team members ($F_{1, 76}= 6.13$, $p < 0.05$). This may be explained by the fact that they are often more aware of the change and have more information to embrace it and believe in its value. This statement is in turn confirmed by the results of the same analysis for communication and uncertainty. In fact, it was confirmed that tribe leaders and product owners had more information at their disposal, as shown by the higher level of perceived communication ($F_{1.76} = 6.82$, $p < 0.05$), as well as their lower level of uncertainty than squad members ($F_{1.76} = 9.69$, $p < 0.05$). One explanation for this result could be that the change process followed a top-down logic, whereby a tribe leader had access to additional relevant information that was not comparable with the information provided to a team member.

For the CCC variable, the effect was only marginally significant ($F_{1, 76} = 3.76$, $p = 0.06$), thus suggesting that tribe leaders and product owners showed a slight lower level of ongoing commitment to change. The other variables did not yield statistically significant results.

However, the core of the research was to understand the variables, which influence the components of commitment to change (ACC, CCC, NCC and TCC). A regression analysis was then performed, and overall, the results supported the predicted hypotheses. The results indicated that the variables of communication and uncertainty, along with job satisfaction, are the best predictors of employees' commitment to change. In contrast, the effect of the other variables (short-term thinking, perceived impact), in the current research, did not produce a statistically significant result.

Specifically, with regard to ACC, communication ($\beta = 0.46$, $p < 0.001$), uncertainty ($\beta = -0.32$, $p < 0.01$) and job satisfaction ($\beta = 0.19$, $p < 0.05$) showed a statistically significant effect. Furthermore,

through moderation analysis, it was shown that the relationship between affective commitment and communication is positive and very high, and is moderated by uncertainty (i.e., it becomes stronger as the level of perceived uncertainty increases), hence highlighting that communication is more and more relevant when the perceived uncertainty is higher. It is possible to state that when the employee is involved in a change of organizational structure, the level of perceived uncertainty is medium to high. In this case, implementing an efficient and quality communication plan is not only important but also a necessary condition for engaging people, stimulating the employee's psychological alignment with the organization and willingness to participate proactively in the change.

Job satisfaction was also significant in relation to affective engagement ($\beta = 0.19$, $p < 0.05$) with positive relationship. In addition, the moderation analysis showed that job satisfaction moderates the relationship between affective commitment to change and communication. Thus, when satisfaction is low, the relationship between communication and affective commitment is much stronger ($\beta = -0.20$, $p < 0.05$), thus highlighting the relevance of good communication, when employees are already dissatisfied.

Similar results to those obtained with the affective commitment were also found for normative commitment to change. This result is in line with previous research that supports the existence of a correlation between affective and normative commitment (Cohen, 1996; Meyer et al., 2002). Only the effect of job satisfaction differs in the two dimensions of commitment, as for normative commitment it was not statistically significant. This finding confirms that people motivated by normative commitment to change do not base their commitment on more personal motivations but are driven to active participation because they are motivated by a sense of duty to their managers and the organization in general.

On the other hand, continuative commitment to change goes in the opposite direction of the other two dimensions of commitment. The results of the regression analysis showed a statistically significant effect of communication ($\beta = -0.25$, $p < 0.001$) and uncertainty ($\beta = 0.23$, $p < 0.01$) on CCC. Therefore, the greater the employee's perceived uncertainty, the greater the continuative

commitment to change; conversely, communication positively impacted upon the continuative dimension of commitment to change can be improved. This reduces the percentage of people who choose to accept the change because not doing so would imply a high cost to them.

Finally, we analyzed total commitment to change to explore human resource management practices that can promote the positive effects of organizational change. The moderation effect on the overall level of commitment indicated a significant interaction between communication and uncertainty, thus indicating that the effect of communication on employee commitment is moderated by the level of uncertainty they perceive. For such reason, it is important to keep an eye on the level of uncertainty that people perceive, because this is the factor that brings down commitment, and that calls for an improved level of communication of the change vision.

Conclusions

In line with previous research and in response to the call of management scholars, Hersovitch & Meyer (2002) claimed that the multidimensional nature of commitment to change was verified in that the three components are reported as different though related results. In fact, considering commitment to change as a one-dimensional variable may be reductive. This distinction is important because the three dimensions of commitment to change can have very different implications for employee intentions, emotions, and behavior in the workplace. For example, an employee who is moved by continuative commitment may have in the long to medium term stress reactions, resistance, burnout, and turnover intentions (Cunningham, 2006; Neves, 2009; Rizzuto, 2004). In contrast, an employee moved by affective commitment will proactively engage in the successful implementation of change (Hersovitch & Meyer, 2002). Specifically, the added value of the study result is the strong positive correlation between the affective component of change and communication. Thus, we can say that good communication, characterized by constant sharing of data and information, facilitates the process by which change will become a personal goal of each employee, preventing the development of negative meanings and beliefs, as well as behavioral consequences toward the change initiative,

such as resistance to change. Furthermore, the results also highlight the conditions in which communication assumes a crucial value – namely, when uncertainty is high and job satisfaction is low - for the development of commitment to change and, in turn, successful change initiatives.

What binds motivation to psychological growth is not only the result of a drive for constant change to which society and the environment inexorably demand, but it also depends on personal inherent desire, which should be activated to bring meaningful change. Quality communication aimed at aligning corporate vision with individual vision is, according to this study, an excellent catalyst for commitment to change.