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**An overview of Agile Organizations, with a focus on Agile Leadership and
Organizational Change.**

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Abstract

Questo scritto offre una panoramica sulle organizzazioni Agili, analizzandone nel primo capitolo le caratteristiche chiave, la storia, e la sua diffusione attuale. Sono presentati i vantaggi e svantaggi di questo approccio, sempre più comune oggi giorno.

Nel secondo capitolo l'attenzione è spostata su una delle figure principali di queste organizzazioni: l'Agile Leader. Se ne studiano le qualità principali, con particolare enfasi sulla consapevolezza del sé. Come nel primo capitolo, anche in questo caso è riportato lo stato attuale delle cose. A differenza del metodo Agile, in continua crescita, gli studi sulla diffusione e padronanza dell'Agile Leadership forniscono risultati non particolarmente brillanti.

Nel corso del capitolo vari stili di leadership vengono toccati, e nell'ultimo paragrafo si espongono le due metodologie Agile più usate, ovverosia Scrum e Kanban.

Il terzo capitolo si concentra sui passi necessari per portare a termine con successo una trasformazione Agile, evidenziando l'importanza della cultura aziendale e il ruolo chiave del dipartimento di Risorse Umane, nell'alimentarla e promuoverla. Alcuni modelli vengono discussi, sia in merito all'individuazione e classificazione della cultura aziendale, sia in merito al suo cambiamento, e agli ostacoli che sono soliti sorgere in risposta al cambio.

Chiude questa Prova Finale un breve elenco di tecniche che incarnano la mentalità Agile, la cui adozione non richiede investimenti economici né cambiamenti strutturali. Si prestano quindi ad essere usate come il primo passo per diffondere il metodo Agile all'interno della propria impresa.

CHAPTER I

The Agile Organization

Introduction

In this first chapter we will discuss the characteristics of an Agile organization, its structure and its raison d'être. We'll see the advantages the Agile approach brings, and its downsides. An excursus on the events and the precursors that led to the birth of the Agile Manifesto will be presented, together with an overview of the actual diffusion of Agile.

The characteristics of an Agile Organization

The McKinsey Agile Tribe (2017, p.3) describes an Agile organization as “a network of teams within a people-centered culture that operates in rapid learning and fast decision cycles which are enabled by technology, and that is guided by a powerful common purpose to co-create value for all stakeholders”.

It's not a new concept, as already in 1995 Kidd came up with a quite similar description, defining an Agile organization as an organization that “unites organizational processes and people with advanced technology to meet customer demands for customized high-quality products and services within a relatively short time frame” (Kidd 1995 in 21st International Conference, PROFES 2020, p.20).

Meanwhile at that time the Agile approach was not widespread, nowadays with the progress of technology, the instability of the economic landscape and a boisterous socio-political environment, the relevance of the Agile organizational model is rising and acquiring more and more importance (Chatwani 2019, in Attar & Abdul-Kareem 2020, p.172). With the VUCA (volatility, uncertainty, complexity, ambiguity) environment becoming our permanent reality (Balog 2020), it's no surprise that sixty-eight percent of CEOs affirms that Agility has grown into a fundamental characteristic for the survival of businesses (KPMG 2019), as the Gallup report “The real future of work” (2018) confirms, stating that the companies not Agile, that are not able to rapidly adapt to change, will be soon outdated by their competitors and run out of business.

This agility is seen as the efficiency of organizations in readjusting continuously and consistently to change (Haneberg 2011 in Heilmann, Forsten-Astikainen & Kultalahti 2020, p.1293).

Information Technology

One fundamental element in Agile organizations is IT, since long time considered as one of the key factors to allow and boost innovation (Schein 1994 in Morton & Allen 1994, pp.125-146).

With his sociotechnical model, Schein (1994) underlined the importance of considering the technical capabilities and structure in the definition of the organizational culture since the first moment, as this would help to create tools that are aligned with the employees' habits and values. The alternative, relegating the IT system to a mere tool, will slow down the company, as for example in the case of the development of a more efficient IT tool than the actual one, that will not be implemented because employees are not willing to leave their present well-known system to learn the use of the new one.

Only when technical innovation is well instilled and accepted in the organizational culture, IT flexibility and constant improving will be possible.

Since in a VUCA environment companies' operating processes are frequently modified and adjusted, to respond to market changes, also technology must evolve constantly, in terms of architecture, structure and tools, to "enable quick reactions to business and stakeholder needs" (The McKinsey Agile Tribe 2017, p.16).

This IT flexibility is crucial as it's one of the primary drivers of the overall flexibility of an Agile organization (Plant & Murrell 1997).

People-focused approach

Agile organizations are people-centered organizations, that believe in trusting employees, empowering them, letting them express their opinions and act autonomously. They adopt the Theory Y of McGregor, the management approach that considers employees as people willing to work, whom motivation and commitment are the main drivers. In this vision, workers are considered capable of self-control and self-organization, with no need of strict micromanagement to control and direct them constantly (McGregor 1960 in Kopelman, Prottas & Davis 2008, p.255).

Employees are therefore stimulated to share their ideas freely, in an organization where its values and culture are continuously promoted, especially by the Agile leaders (The McKinsey Agile Tribe, 2017).

The structure

The structure differs from the one of traditional organizations that adopt a pyramidal hierarchy. The top-management hierarchical structure is maintained, but the remaining workforce is divided in a network of flexible and empowered teams (Brosseau et al. 2019). It's a flexible horizontal structure, as a consequence of employees' empowerment.

There are three main types of teams: cross functional, self-managing and flow-to-the-work pools.

The first type is used for product development, it reunites employees with different expertise, that work together to reach a common goal, usually under the guidance of a product/project owner, that set and prioritize the objectives of the team (McDonough III 2003).

Self-managing teams, used for sales, manufacturing or customer service, autonomously prioritize and delegate tasks among the team, deciding which is the best method to work (Schwaber & Beedle 2001 in Moe, Dingsøyr & Kvangardsnes 2009, p.2).

Flow-to-the-work pools are teams in which each member is assigned to specific tasks, that can change if priorities change. They are used for corporate services as HR and legal (Brosseau et al. 2019). The teams can be changed, and members reassigned, as internal mobility is seen as positive.

A stakeholders view

The focus is not only on employees, but on any stakeholder of the company, in contraposition with the shareholders' focus that characterizes traditional organizations. The goal of Agile organizations is not to maximize profit for the shareholders, but to create value for all the stakeholders.

They are customer-focused, constantly in contact with customers to obtain their feedback, through surveys, modular products, hackathons, etc.

Collaboration with suppliers is also fostered, to bring together different knowledge and skills to improve the quality of the process and the final product itself (The McKinsey Agile Tribe 2017).

The history of Agile

The Agile Manifesto was published in August 2001 by 17 anarchists, 17 eminent profiles in the field of software development. Anarchists, as they defined themselves, to detach themselves decisively from the classical methodologies in use at that time, which they considered rigid and inefficient, incompatible with the environment and the dynamic sector in which they operated. These 17 experts, each with their own theories and methodologies for managing projects, met in

February 2001 in a ski resort in the snowy mountains of Utah. Their goal was to find common principles between their methodologies, principles generally applicable to every project, that would facilitate and speed up software development (Beck et al. 2001).

Before analyzing in depth the Agile manifesto, it is interesting to analyze what were the stages and events that led to its creation, to the official birth of the Agile movement.

During the twentieth century, many methods and theories, based on principles and values today enclosed under the word Agile, were developed, all with a common point: the use of an iterative and incremental-development methodology (IID). The IID is based on the continuous control and review of the various processes, on continuous feedback, emphasizing the importance of communication, and on providing frequent deliveries to the end-user.

To sum up, it's a method that accept apporting continuous changes to the project, where dynamism and communication are keys (Paasivaara & Lassenius 2004).

Although the Agile methodology, and its precursors, were born in the IT field, more specifically in the field of software development, the first application of this IID methodology took place outside the IT world (Rigby, Sutherland & Takeuchi 2016). It dates to 1930, to the physicist and statistician Walter Shewart, of the Bell Company, who began to apply continuous improvement cycles Plan-Do-Study-Act (PDSA) (Lerman & Basili 2003), to improve the quality of his products (Jiang & Eberlein 2009). Shewart then taught his apprentice, W. Edwards Deming, what he had learned. Deming treasured these teachings, and after World War II, in Japan, he was hired by Toyota, to train hundreds of its managers, who then gave birth to the Toyota Production System, a pivotal point in the development of lean management (Rigby, Sutherland & Takeuchi 2016).

However, the main development of the methodologies prior to Agile was a reaction to the classical methodologies in software development (Abbas, Gravel & Wills 2008), in particular to the waterfall method, considered by its protesters an ineffective method (McCracken & Jackson 1980 in Lerman & Basili 2003; Brooks 1986 in Lerman & Basili 2003). The waterfall method assumes that it is possible to define at the beginning of the project's life cycle a complete set of requirements, in detail, recognizing and anticipating any future changes (Beck et al. 2001). Given the growing dynamism and unpredictability of the sector, some considered this assumption unfounded, to the point of calling the waterfall method "one of the greatest time wasters, with too many unknown" (Gilb 1985 in Abbas, Gravel & Wills 2008).

Lerman and Basili (2003) collected many examples of IID applications dating back to the 70s and 80s, in their article "Iterative and Incremental Development: A Brief History".

One of the first IID promotion and recommendation was a 1968 report by F.W. Zurcher and Brian Randell of the IBM T.J. Watson Research Center, which was then passed on to IBM management the following year, between the development recommendations.

Winston Royce, a few years later, in his article "Managing the Development of Large Software Systems" also promoted the use of IID models and his practices (1970).

The first book that clearly mentioned and promoted IID was written by Tom Gilb, a systems engineer, in 1976, and approximately a decade later, in 1985, he developed the Evolutionary Value Delivery model, in which he underlined the importance of frequent interactions, providing the developing results to the end-user, and adjusting the objectives of the plan in real time.

In 1982 McCracken and Jackson structured a system development process in which the ultimate result of the project was the consequence of various modifications to the first prototype, or the next ones, without having a defined specific product at the beginning of the project lifecycle, as in the waterfall method, but rather adjusting and modulating the product based on the results obtained along the course of the project.

So, it was during the second half of the 20th century that the Agile methodologies spread, even if not so-called yet. Starting from the iterative and incremental-development methodology, many theories were developed, such as:

- Extreme Programming (XP) – created by 3 of the 17 signers of the Agile Manifesto (Beck, Cunningham and Jeffries), it's one of the first Agile methodologies, that takes traditional principles to extreme through a number of practices, as minimalist design, pair programming, constant testing, refactoring, continuous integration, coding standards and small releases (Paulk 2001).
- Scrum – conceived by the minds of Scummiotales, McKenna and Sutherland (signer of the Agile Manifesto), it's composed by two primary elements. The product backlogs, precise and complete to-do lists, and the sprints, recurring appointments dedicated to prioritizing actions and setting short terms objectives. In comparison with the XP is less focused on the technical aspects of software development and more on the managerial trait (Schwaber 1997).
- Feature driven development (FDD): born to solve a bank project in Singapore, by the collaboration of a project manager, Jeff de Luca, and the developer Peter Coad, it's a model divided in 5 principal phases. The first one is the development of an overall model, a general definition of the final product. There's then the building of a feature (functional requirement) list to obtain the

product, a planning based on those features, and then the designing and building by features, all this in constant communication with the client, to obtain feedback and readjust the outputs (Felsing & Palmer 2001).

- Crystal Clear: created by Cockburn, one of the Manifesto signers, for IBM in 1991. It's a people-centered methodology, it does not provide precise technical information about software development, it's rather focused on individuating the best conditions that improves a team efficiency, as clear communication, high morale, a good environment, frequent interactions, and honest feedback (Cockburn 2004).

On the beginning of the new century, more precisely on February 11th 2001, 17 of these software development experts reunited, to find some common principles between their methodologies.

As Fowler and Highsmith affirm in their comment to the "Agile Software Development Manifesto" (2001), it was not an easy attempt, since never similar had been tried before, and some methodologies were even conflicting between each other.

The uncertainty is evident in the statement of Cockburn after the three days reunion: "I personally didn't expect that this particular group of agilites to ever agree on anything substantive." (The History of the Manifesto, www.agilealliance.org).

In contrary with the expectations, the meeting was a success, it resulted being an historical milestone for a movement that rapidly spread all around the world. Beside the creation of the Manifesto, on that reunion a community was founded: the Agile Alliance. This organization grew over time and nowadays counts 72000 members (www.agilealliance.org). It organizes conferences, workshops, events and courses, all with a common purpose: the diffusion and the development of the Agile methodologies, all based on the values of the Agile Manifesto.

At the time the 2001 reunion took place, all the experts of these new methodologies (XP, RAD, SCRUM...) were referred to using the umbrella-term "lightweight" methodologists.

One of the objectives of the reunion was to find a new term, since many of the participants were against this denomination, as Cockburn said: "I'm not sure I want to be referred to as a 'lightweight' attending a 'lightweight methodologists' meeting. It sounds like a bunch of skinny, feeble-minded people trying to remember what day it is." (Fowler & Highsmith 2001, p.1).

Since those days, the moniker "lightweight" started disappearing, as a new word was defined to refer to those new methodologies: "Agile".

In the Manifesto, four key principles were defined:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

With the first affirmation, the importance of people is highlighted. In fact, the Agile methodology empowers the employees, inciting managers to wisely delegate, trusting their managees. Although recognizing the utility of good processes and tools, the main factor for a project's success are people, so it's fundamental to provide them a safe environment and focus on improving their morale. The other statements characterize one big difference between the classic methodologies and the Agile one: the different importance assigned to precise documentation and planning. For the classic methodologies was fundamental to write documentation in a detailed and comprehensive way, and to plan and study everything profoundly before starting, while Agile workers believed more in the "learn by doing" principle, therefore consider working on the software a constant part of the project. They accepted real-time changes, normalizing them, and instead of focusing on trying to anticipate every possible scenario, they focused on creating flexible structures and methodologies, able to intercept and adapt rapidly to change.

Agile in the 21st century

Agile organizations are widely spreading, and its expansion is recognized as one of the biggest trends of 2022 (Marr 2021). In the Global IT Internal Audit Survey of KPMG (2021) resulted that more of the 60% of Internal Audit functions started investing in Agile coaches, to make the audit process more dynamic and increase the rapidness of it. In addition, it was ascertained that the number of organizations moving forward Agile processes is increasing.

In 2018 Gallup interviewed employees of companies all around Europe to assess the diffusion of Agile organizations, defined in the surveys as companies that have "the mindset and the right tools and processes to respond quickly to business needs" (Gallup 2018, p.3). It resulted that one employee out of six considered his company Agile. Even more, one out of four employees "strongly agree" that they were empowered to share their opinions, to experiment, try, and learn by their mistakes, without fear of failure. In addition, one third of the employees "strongly agree" that their

companies stimulated them to find different and better approaches to do things, embodying the essential spirit of creativity and innovation of Agile organizations.

The employees who considered their companies Agile had also more faith in the company financial future, in its ability to do better of the competitors and they evaluated more positively the efforts made by the company to take care of their customers.

In the 2019 KPMG U.S. CEOs Outlook, a study that involved 400 CEOs to define the better way to become resilient as an organization, the 63% of CEOs agreed that in the following years they would have had to improve their innovation mechanisms and execution. In fact, the necessity of being rapid and reactive to the environment is spreading year after year. The report found that 68% of the CEOs considered Agility a crucial factor to survive, believing that being too slow leads to bankrupt. This percentage grew massively, as just in the precedent report it amounted only to 14%.

Agile: all that glitters is not gold

So far, we have analyzed the advantages and qualities of the Agile approach, but all that glitters is not gold, or, as Friedman used to say, there's no such thing as a free lunch (1975).

Elbanna and Sarker (2016) analyzed the risks of Agile, interviewing 112 employees of 28 different organizations that adopted the Agile Software Development methodology, 17 freelance developers and 8 ASD consultants.

With this study, many common problems emerged.

Preferring rapid changes to a well-structured and defined plan can be a double-edged sword, as choosing quickly can lead to hasty and inaccurate decisions, harmful in the long run. This risk becomes more tangible when the work is organized through Agile projects, where continuous deliveries to the customer are required, prior to the final product, and this increases the pressure and reduces the time to evaluate everything carefully.

In addition, continuous interaction with the various stakeholders can slow down the decision making and complicate the process, given the different priorities of each one.

Furthermore, the interaction between Agile teams and other not-Agile functions of the organization could create tension, as the operating pace is very different. Requests submitted by Agile teams may not be met on schedule, and this could lead to slowdowns and generate conflicts.

A different type of problem is given by the autonomy granted to each Agile team. Even if this freedom can be empowering and motivating, it comes with some issues.

Each team decides the tools and the Agile software management to use, and there's no trouble until the members of each team remain the same. But this lack of standardization can cause various problems. Merging teams becomes challenging, as the tools used are different, and this not only creates hostility in the choice of which tools integrate and which abandon, but it also requires time to learn how to use and master the new tools. The same problem arises when an employee is moved from a team to another.

There's also an economic aspect to take into consideration: having a toolset so various decreases the negotiation power with the tool owners, and the possible economies of scale in licensing.

It's fundamental to also take in account how the Agile desire to reduce documentation and intensify face-to-face communication provokes a reduction in knowledge retention. So, in case of turnover, the new arrivers could have difficulties in adapting rapidly, as there's little written data to rely on.

Same thing happens when a new team takes a project previously managed by another team, the lack of conspicuous written documentation will slow down all the process, causing then the exactly opposite effect of the Agile objective of accelerating everything.

Furthermore, Agile teams can adopt leaderships styles where there is not a figure more hierarchically powerful than the other members of the team (Miller 2018). This aspect will be further analyzed in the second chapter, while describing the Scrum Framework.

This approach can create misunderstandings and uncertainty when it's time to hold accountable the leader, since leadership is shared.

Conclusion

Agile has become an organizational structure and approach well spread, and the number of people aware of this concept, officially born in 2001 but in development since the 70s, is growing year by year. The characteristics to have in order to be perfectly Agile are many, as are its advantages, but it is important to do not underestimate its disadvantages.

To have an Agile organization, it is essential that the various Agile theories and techniques are disseminated and efficiently applied, and this is the task that the figure of the Agile leader, which we will analyze in the next chapter, must complete.

CHAPTER II

Agile Leadership

Introduction

After having defined Agile organizations, in this chapter we'll deeply analyze the importance and the characteristics of an Agile leader, with a brief overview on empowerment leadership and shared leadership, and the two most common Agile methodologies, Scrum and Kanban.

The characteristics of an Agile Leader

The main distinctive traits of an Agile leader are flexibility and openness to change, the core principles of the Agile concept (Fowler & Highsmith 2001).

Agility is becoming compelling due to the actual VUCA market, therefore having the ability to act rapidly anticipating the future changes of this complex and volatile environment, embracing them, is the prime skill required to an Agile leader (Horney, Pasmore & O'Shea 2010).

In fact, it's only with continuous changes that leaders can sustain success (Horney, Pasmore & O'Shea 2010), as the new normality requires adaptability and transformation, being it based on constant appearance of new possibilities and opportunities (Michels 2019).

Therefore, the capacity of fast and judicious decision-making, in an ambiguous and uncertain environment, is what characterizes an Agile leader (Joiner & Josephs 2007).

All these above-mentioned changes must be done with a broad view, considering different perspectives and priorities, having clear in mind the strategy and the objectives of the organization.

Beside this first trait, the characteristics of an Agile leader are multiple: he/she is empathetic, understanding and emotionally intelligent (Stine 2016; Edmondson 2021), able to guide multifunctional teams in transversal projects, overcoming obstacles as generational and cultural differences, and geographic distance, meanwhile keeping up engagement and morale. Furthermore, he/she has to maintain an equilibrium between focusing on tasks and on relationships (Horney, Pasmore & O'Shea 2010).

With an open-minded approach, the Agile leader needs to be receptive and unbiased, capable of understanding when the actual methods have become inefficient, due to a VUCA environment, and not fall for the sunk cost fallacy (Coleman 2017). In fact, as Meyer and Meijers (2017) affirm, being an Agile leader means being able to alternate various leadership styles and methods, depending on the situation and the changing environment, and on what leaders desire to achieve in that situation. As Medinilla wrote (2012, in Attar & Abdul-Kareem 2020, p.184), Agile leaders repudiate the chain of command principle, practice shared management, regularly communicate and strengthen common vision and persistently seek the development of employees, organizations and the society as a whole.

In fact, as a people-centered person, the Agile leader strives for the improvement of his/her team, providing them the necessary tools for skills development, as for example trainings (Edmondson 2021).

Moreover, the Agile leader declares his/her commitment to create a safe environment where employees feel comfortable to express their skills and creativity, aiming for innovation and acting as a collective identity ready to embrace change (Akkaya, Koçyiğit, & Tabak 2018 in Attar & Abdul-Kareem 2020, p.183). In doing so, the Agile leader improves the overall company dynamism (Akkaya 2020). There are many terms to define these actions, for example Xu and Shen (2018), who categorized the various roles that an Agile leader needs to assume, indicate the leader who nurtures a protected environment as the Cultivator.

To create this environment, the Agile leader must be an ambassador of the corporate culture, promoting the Agile approach to all the stakeholders, and making the employees aware that change is not only accepted, but considered an opportunity to improve the company business, adapting to the VUCA world (Horney, Pasmore & O'Shea 2010).

The Agile leader not only aims to improve the technical skills of his/her team, and to guarantee a safe space in which the employees can express themselves, but, through empowerment leadership, actively promotes the assumption of responsibilities, and increase autonomy.

Increasing autonomy has many positive effects, the most important one is that there's a positive causal correlation between the worker autonomy and his/her happiness (Allas & Schaninger 2020).

This is achievable through psychological empowerment and structural empowerment. Psychological empowerment is the "individual's cognitive state characterized by a sense of perceived control, competence, and goal internalization" (Oladipo 2009, p.121). Employees can reach a state of psychological empowerment thanks to organizational values and culture that promote it, and with

the help of structural empowerment. With structural empowerment, actions and initiatives that stimulate employees' conduct are applied, to foster decision-making, increase the manifestation of personal opinions and improve teamwork (Tessem 2014 in Xu & Shen 2015, p. 3). An example is the scheduling of recurrent meetings in which each employee must express his/her opinion regarding a determinate matter. This helps shy and introvert employees, that usually would not share their opinions, to open to the other team members and communicate, increasing self-confidence and assertiveness.

The Agile leader is also responsible for creating strategies and implementing mechanisms that facilitate the becoming of an Agile organization (Attar & Abdul-Kareem 2020), as for instance promoting the organizational culture and engaging in change management (Holbeche 2015 in Attar & Abdul-Kareem 2020, p.184).

One remarkable swift that marks Agile organizations, in comparison with the traditional concept of organization, is the importance given to all stakeholders, removing the focus on the shareholders (The McKinsey Agile Tribe 2017).

It's then evident the role of the Agile leader in nurturing a hyper-connected environment where bonds between employees, suppliers, customers, and partners are nudged.

Collaboration is promoted, especially with the key profiles (suppliers, customers..) with which a relationship would have a positive innovative impact for both sides.

Another goal of the Agile leader is to avoid having departmental silos, a familiar concept to pyramidal rigid organizations. To achieve this goal, teamwork and joint participation between departments must be fostered, through transversal projects and a strong feeling of belonging to the company (Horney, Pasmore & O'Shea 2010).

Self-awareness: a fundamental skill

To achieve all these objectives, there's a crucial characteristic that an Agile leader must master: self-awareness (Edmondson 2021).

In order to be Agile and bring agility to the company, being aware of own qualities and flaws and how these characteristics affect behavior is required (McPherson 2016).

Furthermore, self-awareness is the steppingstone to achieve emotional intelligence, a key component of a successful manager (Goleman 1995).

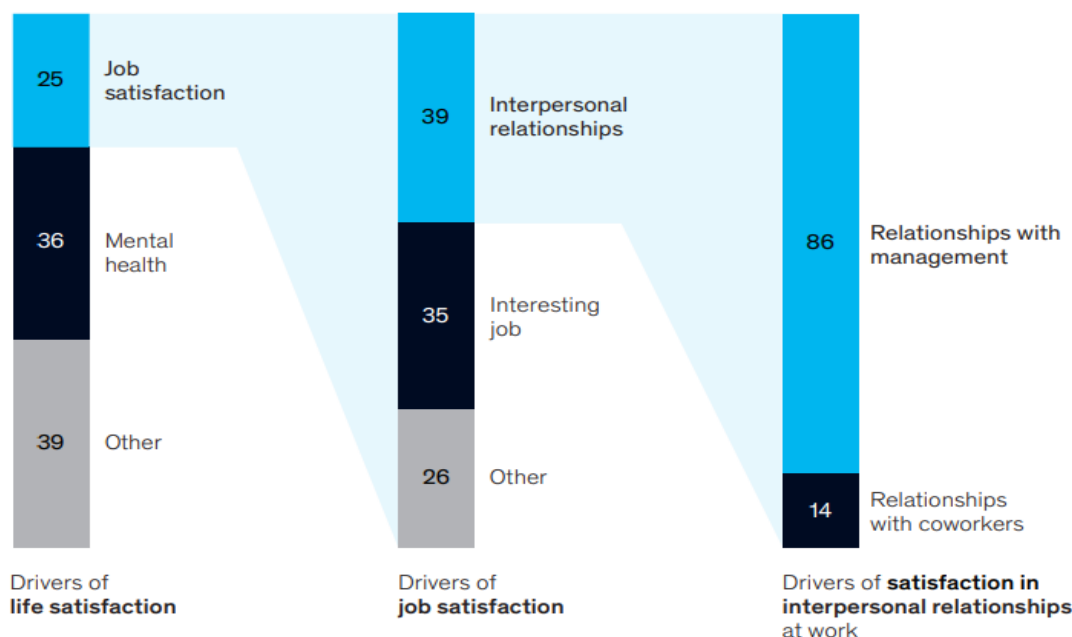
The benefits of self-awareness are many, as it makes us more confident and creative (Sala 2003 in Eurich 2018 p.2), key qualities to be Agile and embrace the constant change of this VUCA world serenely. Communication improves (Sutton, William & Allinson 2015 in Eurich 2018, p.2), it becomes easier to establish strong relationships (Fletcher & Bailey 2003 in Eurich 2018, p.2), leaders become more effective (Bass & Yammarino 1991 in Eurich 2018, p.3) and companies more profitable (Okpara & Edwin 2015 in Eurich 2018, p.3). Self-aware leaders are keener to accept and use others' opinions that go against their owns, and therefore are more open to change (McPherson 2016), the essence of the Agile approach. Self-awareness can be divided into two categories: internal self-awareness and external self-awareness. The former refers to the knowledge that a person has of himself/herself, in terms of values, flaws, qualities, passions, and the consciousness of how these factors influence feelings, emotions and self-control. Internal self-awareness is directly proportional to relationships satisfaction and job satisfaction, and to happiness, while is inversely proportional to stress, depression, and anxiety.

On the other side, being externally self-aware signifies knowing how the others consider us, in terms of the same elements listed above. People with high external self-awareness are more empathetic and more able to understand the others' perspectives. Leaders with this skill realize easier how they are seen by their employees, and this allows them to improve themselves and the relationship with them (Eurich 2018).

A clear communication between managers and employees is a distinctive feature of Agile organizations, as the Gallup report "The Real Future of Work" (2018) showed, finding out that in Agile companies the percentage of employees who receives daily (or almost daily) feedback by their managers is more than double of that percentage in no Agile organizations.

This aspect has a critical relevance in the life satisfaction of employees, as Allas and Schaninger (2020) highlighted in their article "The Boss Factor".

As shown in Figure 1, between our life satisfaction drivers, job satisfaction occupies the second place, as it weighs the 25% of our total satisfaction. The main factor that generates satisfaction in our jobs is the interpersonal relationships we have in the workplace. In comparison with the weight of the relationships with the colleagues, the relationship with the management has a weight staggeringly higher, as it's accountable for the 86% of the satisfaction that interpersonal relationships at work produce.



¹ Drivers of life satisfaction based on various UK and European surveys; drivers of job satisfaction and satisfaction in interpersonal relationships based on a 2015 International Social Survey Programme Work Orientations module (n = 27,732 respondents across 37 countries).

Source: Jan-Emmanuel De Neve et al., "Work and well-being: A global perspective," *Global Happiness Policy Report 2018*, February 10, 2018, happinesscouncil.org; Richard Layard, *Can we be happier?: Evidence and ethics*, London, UK: Pelican Books, 2020; McKinsey analysis

Figure 1: "The Boss Factor", Allas & Schaninger, 2020.

Therefore, having a leader with high external awareness is crucial for employees' happiness, as it will help the relationship and improve communication.

It also affects leaders, as research tend to indicate that managers who believe they are helping other people consider their role more meaningful, and their happiness is positively influenced by it (Allas, Schaninger 2020).

Surprisingly, internal and external self-awareness show almost zero correlation between them (Eurich 2018).

Research of Hougaard, Carter and Afton (2018) analyzed more than 1000 leaders, spread in almost 800 companies (in 100 countries) and results showed that the level of self-awareness of high-level leaders is higher than the one of low-level leaders.

Unfortunately, effective self-awareness is far from being widespread, as the Eurich study (2018) found out, in which only 10-15% of the 5000 participants fitted the criteria to be really considered self-aware. It's then a rare skill, which development both in employees and leaders would be of great help for the company's Agility. Even adopting a broader perspective, the average skills set of

current managers is below what is necessary to be a great leader, data in hand only one in ten people has all the necessary skills (Beck & Harter 2014).

Self-awareness was included by Joiner and Josephs (2007) in the four key competencies for an Agile leadership, under the denomination “self-leadership Agility”. As in the two above mentioned studies, also Joiner and Josephs found out that only a minority (10%) of the leaders master the required skills for being an Agile leader in an effective way.

The other three competencies of their model are: context-setting agility, stakeholder agility and creative agility.

The first one refers to the ability of an Agile leader to deeply analyze the present environment, in order to foresee big changes and establish initiatives to undertake, defining their scope and expected outcomes. It also includes the capability of maintaining a visionary perspective, being able to focus both on the short and the long term. Xu and Shen (2018) indicate the leader who continuously scans the environment as the Observer, and the leader who guides the other employees to common goals, to reach a shared vision, as the Navigator. The Navigator, also referred to as transformational leader (Johnson et al. 2019), is fundamental especially at the beginning of a project, with new employees, and during organizational culture’s changes, as it’s in these moments that instilling a common purpose and common objectives is more important, as it will affect all the work done successively. The efforts made in this direction need to be increased, as nowadays almost half the employees globally have not a clear vision about what are the expectations of the company about them (Gallup 2018).

As for the stakeholder Agility, it’s vital to individuate, for each project or initiative, the main stakeholders, with whom collaboration will benefit the activity and improve its quality, thanks to the new inputs obtained.

Creative Agility indicates one of the crucial abilities required to an Agile leader, creativity, fundamental for operating in a constantly changing environment, full of new opportunities and threats.

Agile methodologies: Scrum and Kanban

The Agile methodologies developed over the years are many (Scrum, XP, Crystal, Kanban, RAD, etc.) (Fowler & Highsmith 2001), but which are the most used?

Digital.ai, a platform that fosters digitalization and Agile methodologies, answers this question every year, with his “Annual State of Agile Report”. The 15th State of Agile Survey took place between February and April 2021, with more than 1380 participants, coming from small, medium and big companies of more than 100 different countries all around the world.

Here there’s the result:

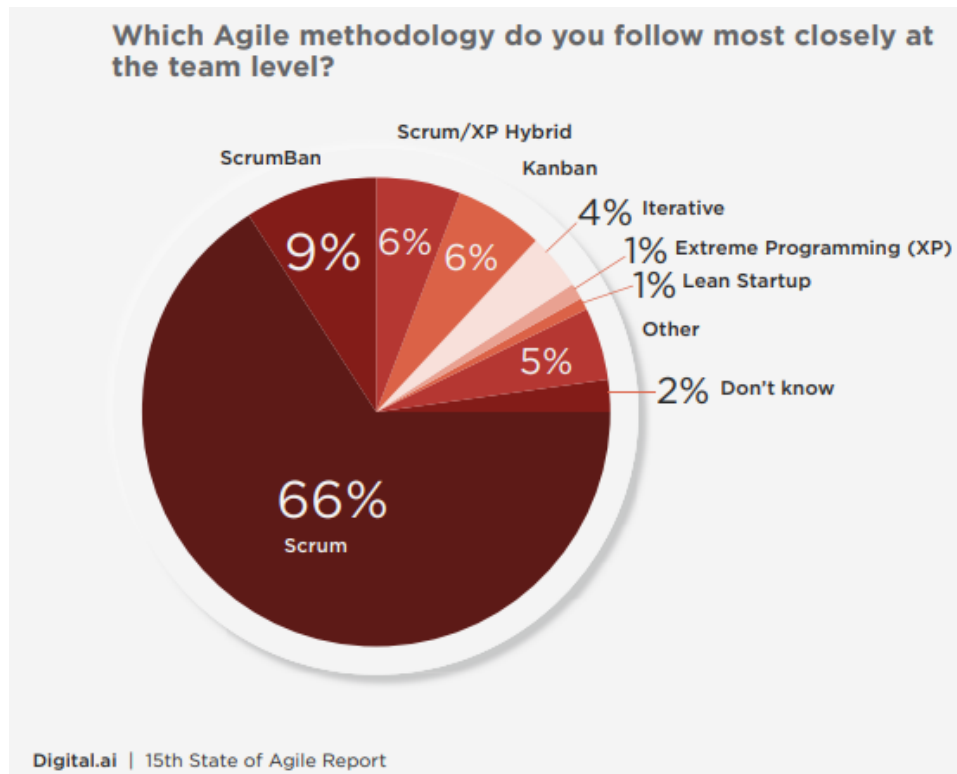


Figure 2: “15th State of Agile Survey”, Digital.ai, 2021.

Scrum turns out to be the most used Agile approach, without comparison with the other methodologies.

The second most widely used methodology, variants of Scrum aside, is the Kanban framework.

These methodologies share the same goals: break down complex problems in small tasks, avoid work overload, and help with time and task management (Huang & Kusiak 1996; Schwaber & Sutherland 2020).

These techniques gained relevance within Software Development (S.D.), but over the years they started to be applied outside of the S.D. field (Schwaber & Sutherland 2020). Due to this fact, and since this work does not concentrate on S.D. but on Agile methodologies and organizations with a broader perspective, the following explanation of Scrum will not be particularly technical, as it could be if referred strictly to S.D.

Scrum is divided in various phases. The first one consists in creating a list of all the requirements and actions needed to obtain the final objective of the project (Initial product backlog). In the next step, all these requirements will be prioritized and divided in groups (Sprint backlog). The team will then start work on one of these groups, and complete the requirements in a prescribed time period, that usually lasts 2-4 weeks. This procedure is called Sprint. Once the Sprint is set, it's not permitted to change it or to add new requirements. The intent of this rigid rule is to avoid work overload (Popli & Chahuan 2011).

During the Sprint, and between a Sprint and the successive one, there are various structured actions that need to take place.

After the Sprint started, to keep each member updated on the Sprint process, daily Scrum meetings are planned.

When the Sprint is completed, the team gathers to have the so-called Sprint review, where the results of the Sprint are shown. In addition to that, to reflect and improve, a Sprint retrospective meeting is organized, in which it's discussed what went smoothly during the Sprint, and what could be changed and improved.

The Scrum team has a set of defined roles: there's the Scrum master, the Product Owner, and the developers.

The Product Owner is the bridge between the external stakeholders and the developers, his/her responsibility is to understand the needs of the end-users and transmit them to the team, during the Product Backlog and the Sprint Backlog.

The Scrum master is the person that assures that all the Scrum phases and rules are carefully followed and respected.

In this framework there's not a designed Agile leader, as the principle applied is the one of shared leadership. Each member of the team has a role, but no one has more authority than his/her colleagues. The team is self-organized, it has the power to do everything considered significant to accomplish the final objective; decisions are not centralized, there's no single manager that decide and delegate the tasks (Schwaber & Beedle 2001 in Moe, Dingsøyr & Kvangardsnes 2009, p.2).

With this approach, leadership rotates, each time it's attributed to the individual that has the better skills and characteristics to face the current problem that the team is dealing with.

It's a technique that can work only in small teams, where each member is highly competent. If not, with one or two members outstanding the others, in terms of hard and soft skills, leadership rotation

will not happen, as those above-average members will end becoming the leaders of the team (Moe, Dingsøyr & Kvangardsnes 2009).

Giving this high autonomy to employees improves commitment, augment participation and increase the emotional attachment to the company (Fenton-O'Creevy 1998 in Moe, Dingsøyr & Kvangardsnes 2009, p.2).

Nonetheless, this leadership approach can generate arguments, in the case of contrasting opinions, since everyone has the same authority. It's also a problem in terms of accountability: when roles and authority are precisely structured, it's easier to point out a responsible in case something is not going as it should. With various leaders who have partial responsibilities, but not its entirety, it's complex to understand who must be hold accountable (Miller 2018).

Let's now analyze the Kanban approach, and his similarities and differences with Scrum.

Kanban is a method which main goals are offering visualization of the work and limit the work in progress (WIP), to avoid work overload.

As in the Initial Product Backlog, the first step is to write down all the requirements and actions needed to complete the project. These tasks will be written on note cards, that will be then positioned on a Kanban board. It's a board usually split in three categories: To Do, In Progress, Done. All the cards are initially positioned in the To Do column in order of priority, then the ones at the top are passed on In Progress. The particularity is that in this second column there's a limit of cards that can be positioned, a limit decided at the beginning of the project. When the limit is reached, no card can be added to the second column, and that's to limit the WIP.

Meanwhile in Scrum when a Sprint is set the requirements cannot change, Kanban is more flexible, so cards can be moved back and forth between columns, according to the actual priorities. In addition, in Kanban there are no required time boxes, as in the Scrum Sprints.

To sum up, Kanban is a simpler and less structured method in comparison to Scrum, there are no recurrent meetings, so continuous improvement is not fostered (as it's in Scrum with the Retrospective meeting), there are no time limitations neither specific defined roles, and there's more flexibility regarding the modification of requirements, and its priorities (Huang & Kusiak 1996; Burrows 2014; Schwaber & Sutherland 2020).

The most important element of Kanban is the Kanban board, a useful tool that helps visualize the work flow and the state of the project, physically or also digitally, with applications as Trello, ProofHub or Kanbanize.

Since its utility, the habit of having a visualization board has been integrated into the Scrum framework, to the point that many of the Scrum masters applies these two methodologies together. This fusion has taken the name of Scrumban, a Scrum approach that uses some of the Kanban characteristics, to increase flexibility and have a clearer visualization of the actual state of the project (Schwaber & Sutherland 2020).

Conclusion

There are various Agile leadership styles, each one with their pro and cons, and many Agile methodologies that can help organize and speed up work, but one of the main difficulties is to find the right Agile leaders that can efficiently implement the organizational change to become an Agile organization. As we have seen, research shows that only a small minority of leaders have what it takes to be an Agile leader (Joiner & Josephs 2007; Beck & Harter 2014; Eurich 2018). It's understandable, as to be an Agile leader a great variety of skills are required. Great intrapersonal and interpersonal skills are necessary, emotional intelligence must be at a high level, the ability to anticipate future changes is fundamental, as it is the open-mindedness to constantly accept changes, renouncing to the current tools and strategies, to periodically learn new things and design new plans. It's evident that the Agile leader cannot succeed alone, without support. Where does this support come from? It's the question to which the third chapter will try to answer, analyzing the fundamental role of Human Resources in an Agile organization.

CHAPTER III

HR for Agile & Agile for HR

Introduction

As we saw, leaders are a key component for organizations that want to become Agile, but as individuals their power is limited. An infrastructure is needed, that can launch and sustain a structured process to foster Agile, to support and increase the efforts of individuals.

This is the role that the Human Resources department must undertake (Gómez 2021).

It's in fact this department the responsible for internal communication in the company, and for promoting its culture and vision (Dias 2011).

In this chapter we'll see what organizational culture is, how Human Resources influences it, which are the factors to take into consideration before and during an organizational change, and some specific Agile techniques.

Organizational culture

On paper, organizational culture represents “the deeply rooted values and beliefs that are shared by personnel in an organization” (Sun 2008, p.137). Or as Schein (1991, p.313) explained in detail, “organizational culture is the pattern of basic assumptions which a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, which have worked well enough to be considered valid, and therefore to be taught to new members as the correct way to perceive, think and feel in relation to those problems...it is the assumptions which lie behind values and which determine the behavior patterns and the visible artifacts such as architecture, office layout, dress codes, and so on”.

If companies were people, it would be the personality of them. Organizational culture it's reflected, in fact, in the collective patterns of behavior and thinking of the employees (Sun 2008).

The top management can try to create a culture from scratch, writing down the core values of the organization and its way to do things, but not always what is on paper represents the actual reality, nor can be translated to it. It's mainly the responsibility of Human Resources to successfully propagate and instill it in the employees and in the company everyday life.

No matter what the culture sustains, the basis to spread it consists in clear communication, both written and verbal, through email, videos, or meetings, and with blackboards and posters spread around the offices.

Specific events and workshops can be organized, to share the culture or some specific aspect of it. For instance, if care for the environment is one of the core values, a workshop to inform the employees about how to make more sustainable day-to-day actions would be a possible option to reinforce this value.

If the company marks the importance of continuous personal improvement, a coherent action would be to frequently organize trainings. For companies who aim to affirm themselves as distinctly international, offering language courses to the employees would help to reach the objective and strengthen this aspect of the culture.

Each culture is distinct and malleable, and evolves during time (Bellot 2011). Each individual is different, and has different values, so not every type of organizational culture works for everyone. Trying to change people's mindset forcing them in believing values not compatible with their personalities is difficult and requires a lot of time and effort.

To deal with this problem at its root, during the selection processes importance must be given not only to the technical skills of the candidates, but also to their personalities, evaluating them according to the organizational values, to understand if they would be a good fit in the work environment.

Communication, events organization, recruitment, trainings, are all functions of the Human Resources department (Rubió 2016).

So, if a company decides to begin a transformational change toward an Agile culture, the Human Resources department will play a fundamental role (Gómez 2021).

The first step to take once it's been decided that a change is necessary, is to understand the starting point, to analyze carefully the current situation, and then establish an action plan.

Unfortunately, it is not always easy to understand deeply one's corporate culture, especially if it was not precisely defined from the beginning but it arose spontaneously over time.

Moreover, culture is not an evident phenomenon, but it's composed by unwritten and nonverbal actions that are "undetectable most of the time" (Cameron & Quinn 1999 in Bellot 2011).

To overcome this problem, many tools were developed over the last century, aimed at understanding and analyzing corporate cultures. Over time, the methods that acquired more and more importance have been the mixed ones, those that combine qualitative and quantitative

analysis, giving rise to complex systems consisting of field observation, surveys, interviews, focus groups and questionnaires (Bellot 2011). Mixed systems are considered the most successful in explaining error variance, allowing a deeper comprehension of the culture as a construct (Alvesson & Berg 1992 in Bellot 2011), and offering more opportunities for data analysis (Fleeger 1993 in Bellot 2011).

One of the most cited in the scientific literature, and most based on the scientific method (Bellot 2011) is the Organizational Culture Assessment Instrument (OCAI; Cameron & Quinn 1999).

The OCAI is based on a six-dimensions assessment, aimed to “identify existing organizational culture, as a prelude to cultural change” (Heritage et al. 2014, p.1). It’s a survey (Figure 3) that can be completed by anyone in the organization, and the authors suggest providing the survey to various people, of different roles, to increase diversity in the cultural analysis.

Figure 2.1 The Organizational Culture Assessment Instrument–Current Profile

<i>I. Dominant Characteristics</i>	<i>Now</i>	<i>Preferred</i>
A The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.		
B The organization is a dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.		
C The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.		
D The organization is a very controlled and structured place. Formal procedures generally govern what people do.		
Total	100	100
<i>2. Organizational Leadership</i>	<i>Now</i>	<i>Preferred</i>
A The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.		
B The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.		
C The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.		
D The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.		
Total	100	100

3. Management of Employees		Now	Preferred
A	The management style in the organization is characterized by teamwork, consensus, and participation.		
B	The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.		
C	The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.		
D	The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.		
Total		100	100
4. Organization Glue		Now	Preferred
A	The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.		
B	The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.		
C	The glue that holds the organization together is the emphasis on achievement and goal accomplishment.		
D	The glue that holds the organization together is formal rules and policies. Maintaining a smoothly running organization is important.		
Total		100	100
5. Strategic Emphases		Now	Preferred
A	The organization emphasizes human development. High trust, openness, and participation persist.		
B	The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.		
C	The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.		
D	The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.		
Total		100	100
6. Criteria of Success		Now	Preferred
A	The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.		
B	The organization defines success on the basis of having unique or the newest products. It is a product leader and innovator.		
C	The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.		
D	The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.		
Total		100	100

Figure 3: “Organizational Culture Assessment Instrument”, Cameron & Quinn, 2011.

The assessment is formed by 24 questions based on six dimensions:

- Dominant characteristics
- Organizational leadership
- Management of employees
- Organizational glue
- Strategic emphases
- Criteria of success

Once the survey is completed, a series of averages are calculated, to identify the organizational culture with a four-factor model, “falling along two bisecting continua: stability versus flexibility in work approaches, and internal versus external focus of the organization”, as shown in Figure 4 (Heritage et al. 2014).

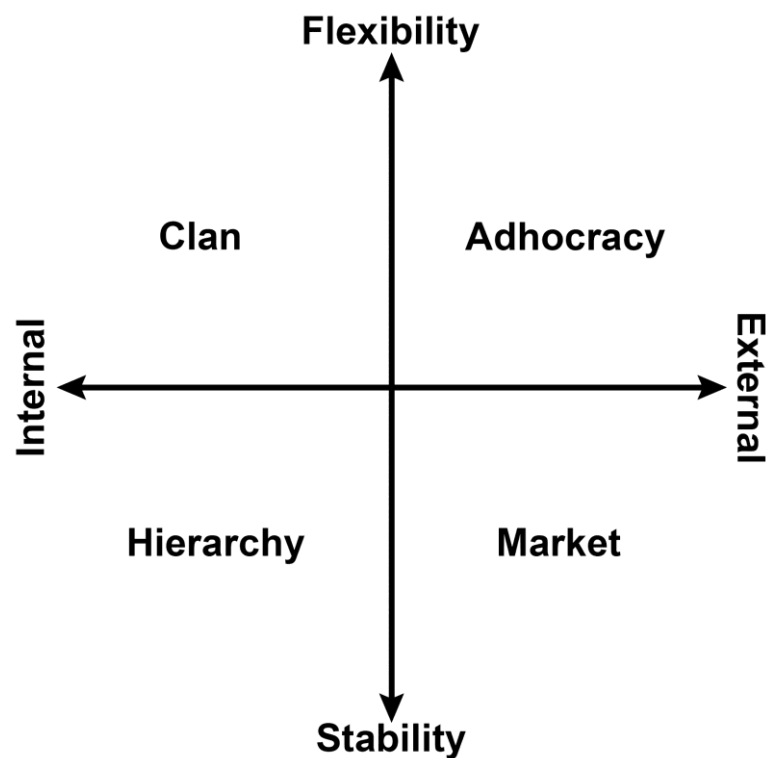


Figure 4: “Validation of the Organizational Culture Assessment Instrument”, Heritage et al. 2014.

Based on these factors, the company will be classified as a clan, an adhocracy, a hierarchy, or a market.

A clan is a family type organization, where commitment and loyalty to the company are highly valued, the environment is friendly and personal information are shared, leaders are seen as mentors, the focus is on people, and morale, teamwork and cohesion are considered vital for the business.

In an adhocracy, the focus is on entrepreneurship, creativity is fostered, and employees are encouraged to try and take risks, and leaders themselves are innovators, with low-risk adversity.

In a hierarchy, all the company is precisely structured and organized, everyone has a precise role and the chain of command is clearly defined. The focus is on efficiency and smooth functioning.

In a market culture, focus is put on competitiveness, KPI's achievements, and outperforming the competitors. It's a goal-oriented environment, demanding and ambitious.

The assessment will also reveal the ambitions of the company in terms of organizational change, and depending on the starting point and the objective, some strategies are suggested (David et al. 2018).

The change process

Once the present situation is well understood, there are various steps to follow to obtain an effective change. It's complicated to outline a detailed plan, especially if the transformation toward Agile has been dictated and made necessary by a volatile and ambiguous environment. However, it is possible to stick to some guiding principles, such as the 5 devised by Melanie Franklin (2014), an Agile change expert:

1. Define and establish (reasonable) deadlines for the change. It will positively influence the productivity and will make the project more concrete.
2. Consider the change process a collaboration activity between all the stakeholders, and not a top-down decision. If change is seen as an imposition, and not as a voluntary choice, it could result ineffective, vanishing all the efforts.
3. Be sure that the change meets a business need. Define the expected benefits and the acceptance criteria to consider the change a success.
4. The plan is flexible and an evolving solution. It's not possible to calculate every aspect of the change process, even more so in a VUCA environment, so it's normal to modify and

adjust the plan during the change process. As with the Kanban approach, it's clear in advance that new requirements and priorities, unexpected at the beginning, could come up.

5. Adopt an iterative approach (the core of Agile), develop one aspect of the change, realize it, analyze and reflect on the results to see what can be improved the next time, as in Scrum with the Sprint retrospective meeting.

Adhering to these principles, the change can be initiated. Various models concerning change management have been developed, which adopt different perspectives, some focusing on the practical steps to follow, such as Kotter's 8 Steps to transformation (Kotter 2012) and the ADKAR model (Hiatt 2006), others on the psychological dynamic process that change arouses in the human being, like the Kurt Lewin's 3 Step Model (Schein 1996).

In his work "Kurt Lewin's Change Theory in the Field and in the Classroom: Notes Toward a Model of Managed Learning", Schein (1996) brilliantly analyzed the profound and unconscious fears that push the human being to hinder the change, often making useless the attempts done to change organizational culture, also known as "the way things are done around here" (Drennan 1992).

In general, human change can be seen as the psychological dynamic journey that involves "painful unlearning without loss of ego identity and difficult relearning as one cognitively attempted to restructure one's thoughts, perceptions, feelings, and attitudes" (Schein 1996).

The first step of Lewin's model is the Unfreezing. The first problem when trying to instill change is to overcome the status quo, to successfully alter the "quasi-stationary equilibrium" (Sarayreh, Khudair & Barakat 2013), or, in other words, to unfreeze it.

To do so, it's necessary to create a driving force that alters the equilibrium, a need for change. It can be done showing the flaws of the present situation, his disadvantages, and the benefits that change would apport. This action it's effective if it causes "survival anxiety" (or "survival guilt"), the understanding that not changing will generate negative consequences that can prevent us from reaching our goals. Acceptance of the necessity of change could be denied even when clear evidence is present, if the change (consciously or unconsciously) frightens us, as this fear causes in us what's called "learning anxiety". Learning anxiety is the feeling that accepting that the actual situation is wrong or imperfect, means that a new phase of learning and adjustment will be required, and this unlocks our inner fears of failing, of not being able to learn and become effective in the new system proposed, with a consequent decrease of self-esteem and happiness.

To reduce this sensation and make survival anxiety prevail against learning anxiety, some degree of “psychological safety” must be provided to the employee.

This safety can be provided understanding the fears hidden behind the hostility shown against change and proposing tools and initiatives that decrease them. It can be done offering high quality trainings that will help employees understand the new system, personal coaching to the ones most reluctant or most in difficulty, encouraging teamwork and through fostering a work environment where errors are accepted and seen as an inevitable part of the process.

To fasten the process, leaders must lead by example, being promoters of the change, as they increase the psychological safety of employees and act as a role model, source of inspiration (Schein 1968, Van Maanen and Schein 1979 in Schein 1996, p.32).

After unfreezing and change, the last phase of Lewin’s model is refreezing, intended as a consolidation of the change, to avoid regression to the old way. The objective is to create a new quasi-stationary equilibrium. Lewin considered possible change only as a group activity, because individual change in behavior it’s not sustainable if the environment of the individual is not aligned with it. Lewin believed that “the group to which an individual belongs is the ground for his perceptions, his feelings and his actions” (1948, in Sarayreh, Khudair & Barakat 2013). For instance, it’s ineffective for a manager to go taking a course on employees’ empowerment, if when he goes back to work his company’s culture allows only an autocratic behavior, where micromanagement and strict control are required (Schein 1996).

Other models, as the ADKAR and the Kotter’s one, share the same principles, even if with a less psychological approach.

In both models the first steps are generating awareness of the change and, more importantly, creating desire for change, through emotions and a sense of urgency, comparable to the “learning anxiety” of Lewin (Hiatt 2006; Kotter 2012). The next phases of the ADKAR model, after Awareness and Desire, are Knowledge, Ability and Reinforcement. As in Lewin’s model, after having informed and inspired the employee to change, and explained the benefits expected (Awareness & Desire), trainings, coaching and all the necessary tools must be provided, to make the change possible and easy to the employee (Knowledge).

Once all these actions have been taken, a welcoming environment where the employees can try and experiment the knowledge acquired must be created (Ability), and celebration and rewards of the changes, once obtained, should be awarded (Reinforcement).

We have seen the utility of leading by example (Schein 1996), and the 2nd step of Kotter's 8 Steps of transformation (Kotter 2012) focuses exactly on this point, offering a structured and practical way to do so. Kotter suggests uniting the efforts of the various managers, creating a "powerful guiding coalition". A single person, even if charming and charismatic, does not have all the skills set (power, expertise, relationships etc.) necessary to overthrow the status quo, apart in the case of small organizations. That's the reason to create a coalition of the people in the company that most believe in the change, making sure to include some of the top management, to make the coalition more powerful and respected.

As Franklin (2014), also Kotter highlights the importance of having a clear well-defined vision, and proposes a quick rule-of-thumb: if you cannot explain the vision behind a change process in five minutes or less, generating comprehension and sparkling interest, there's a problem.

Since organizational change is a mid-long term process, Kotter suggests planning short terms objectives, that can be celebrated once reached, to keep high the commitment and the motivation to change.

To realize the organizational change toward an Agile company, beside all these aspects, some specifics factors must be taken in account. For a traditional hierarchical company, becoming 100% Agile is a huge transformation. As one CEO said, "We are 3,000 people on a giant cruise ship. But what we need to be is 3,000 people in a few hundred yachts. So, how do I get my people safely into those smaller boats?". It requires to restructure the entire governance setup, to review the internal budgeting as funding decisions will be taken more often, to change the performance management system from one that usually rewards individual performance to one that prioritizes teamwork, to reorganize the physical spaces, as multiple teams would have to work side by side, interacting frequently, and to redefine roles and career paths, as new positions will arise (Product Owners, Scrum masters, Tribe leads etc.). New skills, new knowledge, and a brand-new mindset must be acquired, and doing so internally would result incredibly difficult. The habit is to hire Agile coaches and organize intensive bootcamps, to rapidly obtain a switch to Agile mentality, without which all efforts are useless (Brosseau et al. 2019).

This is perfectly coherent with the results of Naslünd and Kale's (2020) literature review on Agile transformations, which find out that the most cited critical success factors are:

providing trainings for the employees; creating an Agile mindset; facilitating internal and external coaching.

Another key factor, one of the most important for the authors, is having the top management committed and supporting the employees. This is not strictly correlated to Agile transformations, but to change processes in general (Naslünd & Kale 2020). Kotter believes that without the commitment of at least the 75% of the managers, any change will fail (Kotter 1995 in Naslünd & Kale 2020, p.500).

Agile techniques

There are various ways to organize the change. It could be an “all-in”, a transformational change that include all the organization at the same time, or it could be used a “step-wise” approach, a more common way, where many small tests are conducted (Brosseau et al. 2019), then expanded to various teams, one entire department, and so on till reaching a full transformation.

Gómez (2021) suggests using the second approach, and that the first department that can try to become Agile should be the Human Resources one. Doing so, when the time to expand Agile to all the organization will come, the HR department will already have experienced what works and what doesn't, which are the main obstacles, and the most useful Agile practices, and this will allow a more efficient communication to the other departments, facilitating the transformation.

Keeping in mind that Agile is a way of being, a mindset, and not just a set of techniques, let's see some practical Agile methods which can be implemented quite easily and without elevated costs, to start the transformation toward Agile (Gómez 2021).

Daily stand-up meeting

Usually used during the Sprints of the Scrum framework, it can be adjusted to other contexts.

It's a brief meeting of 10-20 minutes (depending on the number of participants), where each person must answer some questions like these ones:

- What did I do yesterday of what I planned to?
- What will I do today?
- Was there some obstacle that I overcome? What did I learn in doing so?

The particularity of the meeting is that everyone is standing and has just 1-3 minutes to talk, to avoid prolongating the meeting uselessly.

The goal of the meeting is to create an environment where everyone has a bigger picture of what's going on, feels part of a community where can share his/her learnings, and furthermore in this way internal silos will be avoided.

If the people participating are not sharing a common project or tasks, the frequency should be reduced to 2-3 times per week. It all depends on the specific situation.

Retrospective meeting

Based on the iterative and incremental approach, the scope of this meeting is to reflect and improve. It's a monthly meeting, that involves all the HR department, that should last between one and two hours.

This meeting is not about business, rather about people.

During it, reflections and experiences are shared, about the way of doing things, the obstacles and difficulties encountered, the personal improvements made, the problems between colleagues, the emotions felt, especially if someone experienced often negative emotions as stress, anxiety etc., as they could lead to burnout, if ignored. As sensible points could be touched, it's fundamental to approach the meeting with an open mentality, without getting on the defensive, and maintaining calm tones, dialoguing, and not arguing.

The objective is to improve communications, relationships between colleagues, the way work is done, both individually and as a team, and the work environment, sharing all the problems experienced and proposing solutions.

There are some procedures (set of questions) that can be followed, to structure the meeting and make it work smoothly. All these questions must be first answered individually in writing, then put together, for example writing them on post-it and then putting them on a blackboard.

1. Mad – Sad – Glad: Write one thing that during the last month made you mad, one sad and one glad.
2. 4 Quadrants: Considering the way of working, what did you saw and heard? What did surprise you? What did you realize? What would you do differently?
3. The ending: before ending the meeting, create a plan of action for the next month, based on the following questions: what will we keep doing that help us improve? What will we start doing that help us improve? What will we stop doing that did not help us improve?

MoSCoW Prioritization with TimeBoxing

The MoSCoW is a method that helps prioritizing tasks, to proceed faster and efficiently.

Before starting a project (or a workday) divide all the tasks in four categories: Must, Should, Could, Won't, in order of importance and urgency.

The things that go in the first category are the most important or urgent ones, without them the project could not proceed. Be sure to check with the client (if there's one) that your Must list is correct. It can help you adding things on Must that you had not considered so important, or on the contrary it can reduce the workload, if the client says that some of the things are not so urgent.

Before starting to complete the tasks, a time box (time limit) to each task should be assigned, to help concentration and focus, and to avoid the Parkinson law, that states: "work expands so as to fill the time available for its completion" (Parkinson 1957, p.2). If we have an entire morning to create, for instance, a PowerPoint presentation, it will require us all morning, even if we would have been able to complete it in just two hours, having scheduled a time box (Parkinson 1957; Gómez 2021).

Collaborative feedback

In the previous techniques results evident that transparent communication and good teamwork are important for efficient Agile. To achieve so, feedback must be delivered frequently and in an effective manner. Collaborative feedback is a way to do so. Based on the NonViolent Communication of Rosenberg (1999, in Gómez 2021), its goal is to provide feedback in an objective and assertive way, and it's divided in three phases:

1. Describe objectively the event, without comments or opinions.
2. Explain how this event or action make you feel, and why.
3. Propose different behaviors for next time.

When the same situation happens, and the person behaves differently, be sure to make him/her know that you noticed his/her change and appreciated the effort.

Conclusion

In this chapter we saw the factors that must be taken into consideration during an organizational change, highlighting the importance of organizational culture. As it's complex to change the entire organization at the same time, and it's more recommendable to do it slowly, point by point (Brousseau et al. 2019), we saw some Agile techniques that could be implemented to start the

transformation, as they require no economic investment, and they can help changing the mindset toward an Agile one.

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Bibliography

- Abbas N., Gravell A., Wills G., “Historical Roots of Agile Methods: Where Did ‘Agile Thinking’ Come From?”, International Conference on Agile Processes in Software Engineering and Extreme Programming, pp. 94-103, Springer, 2008.
https://doi.org/10.1007/978-3-540-68255-4_10
- Agarwal R., Prasad J., Tanniru M., Lynch J., “Risks of Rapid Application Development” Communications of the ACM 43, pp.177-188, 2000.
<https://doi.org/10.1145/352515.352516>
- Aghina W., Ahlbäck K., De Smet A., Fahrbach C., Handscomb C., Lackey G., Lurie M., Murarka M., Salo O., Seem E., Woxholth J., “The 5 Trademarks of Agile Organizations”, McKinsey Company, 2017.
<https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-five-trademarks-of-agile-organizations>
- Akkaya B., “Review of Leadership Styles in Perspective of Dynamic Capabilities: An Empirical Research on Managers in Manufacturing Firms”, Journal of Administrative Sciences 18, pp.389-407, 2020.
<https://doi.org/10.35408/comuybd.681427>
- Allas T.,Schaninger B., “The Boss Factor: Making the World a Better Place through Workplace Relationships”, The McKinsey Quarterly, 2020.
<https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-boss-factor-making-the-world-a-better-place-through-workplace-relationships>
- Angwin D., Whittington R., Regner P., Johnson G., Scholes K., “Exploring Strategy”, Pearson, 2019.
- Attar M., Abdul-Kareem A., “The Role of Agile Leadership in Organisational Agility”, Agile Business Leadership Methods for Industry 4.0, pp. 171–191, Emerald Publishing Limited, 2020.
<https://doi.org/10.1108/978-1-80043-380-920201011>
- Bachmann T., “Functional Group Positions and Contact Behavior in Problem-Solving Groups”, Gruppe. Interaktion. Organisation. Zeitschrift Für Angewandte Organisationspsychologie (GIO) 53, pp. 131–44, Springer, 2022.
<https://doi.org/10.1007/s11612-021-00613-6>
- Balog K., “The Concept and Competitiveness of Agile Organization in the Fourth Industrial Revolution’s Drift”, Strategic Management 25, pp. 14–27, 2020.
<https://doi.org/10.5937/StraMan2003014B>
- Beck R., Harter J., “Why Good Managers Are So Rare”, Harvard Business Review, 2014.
<https://hbr.org/2014/03/why-good-managers-are-so-rare>
- Bellot J., “Defining and Assessing Organizational Culture”, Nursing Forum 46, pp 29–37, 2011.
<https://doi.org/10.1111/j.1744-6198.2010.00207.x>
- Beynon-Davies P., Carne C., Mackay H., Tudhope D., “Rapid Application Development (RAD): An Empirical Review”, European Journal of Information Systems 8, pp. 211-23, 1999.
<https://doi.org/10.1057/palgrave.ejis.3000325>
- Brosseau D., Ebrahim S., Handscomb C., Thaker S., “The Journey to an Agile Organization”, McKinsey & Company, 2009.
<https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-journey-to-an-agile-organization>
- Burrows M., “Kanban from the inside: Understand the Kanban Method, Connect It to What You

- Already Know, Introduce It with Impact”, Blue Hole Press, 2014.
- Cameron K., Quinn R., “Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework”, John Wiley & Sons, 2011.
- Cockburn A., “Crystal Clear: A Human-Powered Methodology for Small Teams: A Human-Powered Methodology for Small Teams”, Pearson Education, 2004.
- Coleman J., “The Best Strategic Leaders Balance Agility and Consistency”, Harvard Business Review, 2017.
<https://hbr.org/2017/01/the-best-strategic-leaders-balance-agility-and-consistency>.
- David S., Valas S., Raghunathan R., “Assessing Organization Culture – A Review on the OCAI Instrument”, International Conference on Management and Information Systems, pp.182-188, 2018.
<http://www.icmis.net/icmis18/ICMIS18CD/pdf/S216-final.pdf>
- Davis R., Cates S., “The Implementation of the Organizational Culture Assessment Instrument in Creating a Successful Organizational Cultural Change”, International Journal of Business & Public Administration 15, pp. 71–94, 2018.
https://www.researchgate.net/publication/325930056_THE_IMPLEMENTATION_OF_THE_ORGANIZATIONAL_CULTURE_ASSESSMENT_INSTRUMENT_IN_CREATION_OF_A_SUCCESSFUL_ORGANIZATIONAL_CULTURAL_CHANGE
- Dias L., “Beginning Management of Human Resources”, Flat World Knowledge, 2011.
- Drennan D., “Transforming Company Culture: Getting Your Company from Where You Are Now to Where You Want to Be”, McGraw-Hill Book Co., 1992.
- Edmondson M., “Agile Leadership in a Volatile World: It Calls for Self-Awareness, Thinking Differently, and Creating Organizational Change”, Planning for Higher Education, 2021.
<https://www.scup.org/resource/agile-leadership-in-a-volatile-world/>
- Elbanna A., Sarker S., “The Risks of Agile Software Development: Learning from Adopters”, IEEE Software 33, pp. 72–79, 2016.
<https://doi.org/10.1109/MS.2015.150>.
- Eurich T., “What Self-Awareness Really Is (and How to Cultivate It)”, Harvard Business Review, 2018.
https://membership.amavic.com.au/files/What%20self-awareness%20is%20and%20how%20to%20cultivate%20it_HBR_2018.pdf
- Fitzgerald B., “A Preliminary Investigation of Rapid Application Development in Practice”, Methodologies for Developing and Managing Emerging Technology Based Information Systems, Springer, 1999.
https://doi.org/10.1007/978-1-4471-3629-3_8
- Fitzgerald B., Stol K., O’Sullivan R., O’Brien D., “Scaling Agile Methods to Regulated Environments: An Industry Case Study”, 35th International Conference on Software Engineering (ICSE), pp. 863–72, 2013.
<https://doi.org/10.1109/ICSE.2013.6606635>.
- Fowler M., Highsmith J., “The Agile Manifesto”, 2001.
http://www.awslad.com/wp-content/uploads/2010/01/The_Agile_Manifesto_SDMagazine1.pdf
- Frank E., “Organisational ‘Culture’: Some Implications for Managers and Trainers”, Journal of European Industrial Training 11, pp. 29–32, 1987.
<https://doi.org/10.1108/eb002235>.
- Franklin M., “Agile Change Management: A Practical Framework for Successful Change Planning and Implementation”, Kogan Page Publishers, 2021.
- Friedman M., “There’s No Such Thing as a Free Lunch”, Open Court, 1975.

- Godwyn M., Gittel J., "Sociology of Organizations: Structures and Relationships", SAGE Publications, 2011.
- Gómez J., "66 Ideas Para Ser Agile En RR.HH.", Self-published, 2021.
- Greineder M., Leicht N., "Agile Leadership - a Comparison of Agile Leadership Styles", 33rd Bled EConference – Enabling Technology for a Sustainable Society - Online Conference Proceedings, pp. 277–90, University of Maribor Press, 2020.
<https://doi.org/10.18690/978-961-286-362-3.19>.
- Hallberg U., Schaufeli W., "‘Same Same’ But Different?: Can Work Engagement Be Discriminated from Job Involvement and Organizational Commitment?", *European Psychologist* 11, pp. 119–27, 2006.
<https://doi.org/10.1027/1016-9040.11.2.119>.
- Heilmann P., Forsten-Astikainen R., Kultalahti S., "Agile HRM Practices of SMEs", *Journal of Small Business Management* 58, pp. 1291–1306, 2020.
<https://doi.org/10.1111/jsbm.12483>.
- Heritage B., Pollock C., and Roberts L., "Validation of the Organizational Culture Assessment Instrument", *PLOS ONE* 9, 2014.
<https://doi.org/10.1371/journal.pone.0092879>.
- Hiatt J., "ADKAR: A Model for Change in Business, Government, and Our Community", Prosci, 2006.
- Hirschberg M., "Rapid Application Development (RAD): A Brief Overview", *Software Tech News*, 1998.
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.197.6572&rep=rep1&type=pdf>
- Horney N., Pasmore B., O’Shea T., "Leadership Agility: A Business Imperative for a VUCA World", *People & Strategy* 33, pp. 33-38, 2010.
<https://agilityconsulting.com/wp-content/uploads/2022/01/Leadership-Agility-in-a-VUCA-World-HRPS.pdf>
- Hougaard R., Carter J., and Afton M., "Self-Awareness Can Help Leaders More Than an MBA Can", *Harvard Business Review*, 2018.
<https://hbr.org/2018/01/self-awareness-can-help-leaders-more-than-an-mba-can>.
- Huang C., Kusiak A., "Overview of Kanban Systems", *International Journal of Computer Integrated Manufacturing*, pp. 169–89, 1996.
<https://doi.org/10.1080/095119296131643>.
- Jiang L., Eberlein A., "An Analysis of the History of Classical Software Development and Agile Development", *IEEE International Conference on Systems, Man and Cybernetics*, pp. 3733–38, 2009.
<https://doi.org/10.1109/ICSMC.2009.5346888>.
- Joiner B., Josephs S., "Developing Agile Leaders", *Industrial and Commercial Training* 39, pp. 35–42, 2007.
<https://doi.org/10.1108/00197850710721381>.
- Kopelman R., Prottas D., Davis A., "Douglas McGregor’s Theory X and Y: Toward a Construct-Valid Measure", *Journal of Managerial Issues* 20, pp. 255–71, 2008.
<https://www.jstor.org/stable/40604607>
- Kotter J., "Leading Change", Harvard Business Press, 2012.
<https://books.google.it/books?id=xpGX1EWL EMC&lpg=PR7&ots=TdZ2LgTtHB&dq=Kotter%20J.%2C%20%E2%80%9CLeading%20Change%E2%80%9D%2C%20Harvard%20Business%20Press%2C%202012&lr&pg=PR7#v=onepage&q=Kotter%20J.,%20%E2%80%9CLeading%20Change%E2%80%9D,%20Harvard%20Business%20Press,%202012&f=false>

- KPMG, “Agile or Irrelevant: Redefining Resilience”, KPMG, 2019.
<https://info.kpmg.us/agile-or-irrelevant.html>
- KPMG, “Agile, Resilient & Transformative”, KPMG, 2021.
<https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/08/agile-resilient-and-transformative-report.pdf>
- Langfred C., “The Paradox of Self-Management: Individual and Group Autonomy in Work Groups”, *Journal of Organizational Behavior* 21, pp. 563–85, 2000.
<https://doi.org/10.4314/ejc.v2i1.52661>
- Larman C., Basili V., “Iterative and Incremental Developments. a Brief History”, *Computer* 36, pp. 47–56, 2003.
<https://doi.org/10.1109/MC.2003.1204375>.
- Love J., Roper S., “Organizing Innovation: Complementarities between Cross-Functional Teams”, *Technovation* 29, pp. 192–203, 2009.
<https://doi.org/10.1016/j.technovation.2008.07.008>.
- Mahdavi-Hezave R., Ramsin R., “FDMD: Feature-Driven Methodology Development”, *International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE)*, pp. 229–37, 2015.
<https://dl.acm.org/doi/10.5220/0005384202290237>
- Marr B., “The 8 Biggest Business Trends In 2022”, *Forbes*, 2021.
<https://www.forbes.com/sites/bernardmarr/2021/11/01/the-8-biggest-business-trends-in-2022/>.
- McDonough III E., “Investigation of Factors Contributing to the Success of Cross-Functional Teams”, *Journal of Product Innovation Management* 17, pp. 221–35, 2009.
<https://doi.org/10.1111/1540-5885.1730221>.
- McPherson B., “Agile, Adaptive Leaders”, *Human Resource Management International Digest* 24, pp. 1–3, 2016.
<https://doi.org/10.1108/HRMID-11-2015-0171>.
- Michels D., “Change Is Changing: Coping With The Death Of Traditional Change Management”, *Forbes*, 2019.
<https://www.forbes.com/sites/davidmichels/2019/04/22/change-is-changing-coping-with-the-death-of-traditional-change-management/>.
- Miller K., “15 Advantages and Disadvantages of Distributed Leadership Styles”, *FutureofWorking.Com* (blog), 2018.
<https://futureofworking.com/15-advantages-and-disadvantages-of-distributed-leadership-styles/>.
- Mitchell I., “Twenty Top Fails in Executive Agile Leadership”, *Best Agile articles in 2018*, 2018.
https://www.researchgate.net/profile/Nirmaljeet-Malhotra-2/publication/344548924_006_Best_Agile_Articles_of_2018_Fin/links/5f7f8b91a6fdccfd7b51cf05/006-Best-Agile-Articles-of-2018-Fin.pdf#page=198
- Moe N., Dingsøyr T., Kvangardsnes Ø., “Understanding Shared Leadership in Agile Development: A Case Study”, *42nd Hawaii International Conference on System Sciences*, pp. 1–10, IEEE, 2009.
<https://doi.org/10.1109/HICSS.2009.480>.
- Naslund D., Kale R., “Is Agile the Latest Management Fad? A Review of Success Factors of Agile Transformations”, *International Journal of Quality and Service Sciences* 12, pp. 489–504, 2020.
<https://doi.org/10.1108/IJQSS-12-2019-0142>.
- Oladipo S., “Psychological Empowerment and Development”, *Edo Journal of Counselling* 2, pp.

- 119-126, 2009.
<https://doi.org/10.4314/ejc.v2i1.52661>
- Paasivaara M., Lassenius C., “Using Iterative and Incremental Processes in Global Software Development”, 26th International Conference on Software Engineering, pp. 42–47, 2004.
<https://doi.org/10.1049/ic:20040312>.
- Palmer S., Felsing M., “A Practical Guide to Feature-Driven Development”, Pearson Education, 2001.
- Paulk M.C., “Extreme Programming from a CMM Perspective”, IEEE Software 18, pp. 19-26, 2001.
<https://doi.org/10.1109/52.965798>.
- Popli R., Chauhan N., “Scrum: An Agile Framework”, International Journal of Information Technology and Knowledge Management 4, pp. 147-149, 2011.
<http://csjournals.com/IJITKM/PDF%204-1/30.Rashmi%20Popli1%20&%20Naresh%20Chauhan2.pdf>
- Rigby D., Sutherland J., Takeuchi H., “The Secret History of Agile Innovation”, Harvard Business Review, 2016.
<https://hbr.org/2016/04/the-secret-history-of-agile-innovation>
- Rubió T., “Recursos Humanos: Dirección y Gestión de Personas En Las Organizaciones”, Ediciones Octaedro, 2016.
- Sarayreh B., Khudair H., “Comparative Study: The Kurt Lewin of Change Management”, International Journal of Computer and Information Technology 2, pp. 626-29, 2013.
<https://ijcit.com/archives/volume2/issue4/Paper020413.pdf>
- Schein E.H., “Kurt Lewin’s Change Theory in the Field and in the Classroom: Notes toward a Model of Managed Learning”, Systems Practice 9, pp.27-46, 1996.
<http://dspace.mit.edu/bitstream/handle/1721.1/2576/SWP-3821-32871445.pdf>
- Schwaber K., “SCRUM Development Process”, Business Object Design and Implementation, pp. 117–34, Springer, 1997.
https://doi.org/10.1007/978-1-4471-0947-1_11.
- Sun S., “Organizational Culture and Its Themes”, International Journal of Business and Management 3, pp. 137-141, 2008.
<https://doi.org/10.5539/ijbm.v3n12p137>
- Tessem B., “Individual Empowerment of Agile and Non-Agile Software Developers in Small Teams”, Information and Software Technology 56, pp. 873–89, 2014.
<https://doi.org/10.1016/j.infsof.2014.02.005>.
- Xu P., Shen Y., “Leading Agile Teams: An Exploratory Study of Leadership Styles in Agile Software Development”, Twenty-first Americas Conference on Information Systems, 2015.
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.942.5582&rep=rep1&type=pdf>
- Xu P., Shen Y., “The Role of Leadership in Agile Software Development”, International research workshop on IT project management, 2018.
<https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1004&context=irwitpm2018>
- Zavyalova E., Sokolov D., Lisovskaya A., “Agile vs Traditional Project Management Approaches: Comparing Human Resource Management Architectures”, International Journal of Organizational Analysis 28, pp. 1095–1112, 2020.
<https://doi.org/10.1108/IJOA-08-2019-1857>.