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Management - Advanced Executive from the Nova School of Business and Economics.

IMPLEMENTING AGILE METHODOLOGIES IN A TRADITIONAL COMPANY

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Abstract (100 words maximum)

Purpose – Agility emerges as a success enabler as companies operate in a complex reality. Team performance and organizational structure are highlighted as core aspects related to agility.

Methodology – This case study addresses the specificities of agility in traditional organizations. People from a traditional Portuguese company were interviewed to gather feedback on how agile methodologies are applied.

Findings – The interviews indicate bureaucracy and team collaboration are the main tensions that need to be managed to improve this company's path to agility.

Originality – This work explores the example of a company in which traditional and agile ways of working coexist.

Keywords (minimum of four)

Agile, Digital Transformation, Complex Organizations, Organizational Culture

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Introduction

Over the last twenty years, agile methodologies opened a new chapter in project management. The agile manifesto (2001) was to address some pain points of software development, such as scope clarity, alignment with stakeholders, and the ability to deliver parts of the project in sequential stages – the idea of the minimum viable product (MVP) representing the core features that some project should comply with.

Despite being typically associated with software development, agile principles may also apply to other situations as well. In fact, some of the concepts behind lean manufacturing and the so-called Toyota Production System, which date back to the twentieth century, are commonly accepted as belonging to a broad concept of agile methodologies: adaptability, flexibility, and continuous improvement are ideas that we find either in factories or in software houses, and which can be related with the successful conception of several different products worldwide.

However, agility goes far beyond the project management approach, and there is much more to explore besides rituals and sequential delivery. For agile methodologies to work adequately, there is the need to reshape both team organization and culture, as to ensure that both are coherent with the flexibility that is needed to achieve agility:

- i. Agile teams are typically horizontally organized: each element has its specific role, and the idea is to focus on collaboration and following sprint goals. Taking software development as an example, there are different kinds of roles: operational, such as the dev team; more strategic, such as the product owner, but in the end all of them must work together without a specific “boss” role;
- ii. In what concerns culture, the challenge is to go from a hierarchical organization to a flatter one, in which each element has clear responsibilities. Rituals such as the sprint retrospective contribute, not only to getting to know what can be done better or which

situations need to be addressed differently but also enhance a more open and no-blame culture.

The previous two points can be related to several challenges within a large scope of companies from different segments: How to get projects done well and more efficiently? How to avoid toxic behaviors? How to attract generations that may be more interested in a certain project or context than in hierarchical titles?

Even if those problems are common to very different companies, we cannot state that agile methodologies are the solution for all those issues. Methodologies are implemented by humans and are thus subject to some derailments. Also, enhancing agility requires organizational changes that may not be easy to adopt in some companies or institutions.

Therefore, it is interesting to study what are the advantages and pitfalls of implementing agile methodologies. This case study aims to explore the paradoxes of the adoption of those frameworks in traditional companies. This kind of organization can be agile for specific scopes while remaining more traditional in its core areas, in which waterfall project management and daily operations coexist.

This work aims to identify the most effective changes traditional companies can make to enhance agility and address the most relevant tensions and difficulties that may subsist after those changes are carried out. As agility is a broad topic, the outcome of this work will be focused on both team performance and organizational flexibility.

This case study will cover the creation of an agile department within a traditional company in the utilities sector. The department is focused on IT and digital projects involving a broad range of areas within the company: sales, contracts, billing, and customer experience, among others.

Delivery indicators will allow us to compare both traditional and agile scenarios, and employee feedback will be gathered to assess how is this way of working perceived within the company.

The company

This work aims to study a multinational company based in Portugal, operating in the energy sector in the generation, distribution, and retail businesses. The operation is spread along Europe, America, and Asia, employing more than twelve thousand people worldwide. The different businesses clearly illustrate that different project management methods are needed:

- Generation needs waterfall methodology, as a powerplant will only be able to work after all its elements are assembled;
- Distribution grid requires known procedures and daily operations to be run properly;
- Retail will need both operations and salespeople to keep customers satisfied.

Nevertheless, there is a common need for all businesses: software that maximizes team performance, efficient operation, and, in some contexts, a way to connect and engage with customers. In a context where internal processes, regulatory issues, and client needs must be balanced, agile methodologies emerge as a plausible alternative to the traditional way of defining all parts of a project or product from the beginning – a framework in which it is typically more difficult to timely adjust according to unexpected needs.

As stated previously, software development is prone to adopt agile methodologies. This work will discuss what has this company done to work in an agile way on software developments for its European retail business. Team organization will be explained, and the main goals will be analyzed.

From the first industrial revolution to digital transformation

It is commonly accepted that the world has witnessed four industrial revolutions (Pina e Cunha and Rego 2022). The first took place in 18th-century England and was leveraged by the adoption of steam engines and machinery to increase productivity. Later, in the nineteenth century, steam made possible two of the most relevant cornerstones of the second industrial revolution: the train and electricity. The third industrial revolution began in the twentieth century with the development of the first computers in the post-war world. Many authors agree (Pina e Cunha and Rego 2022) that currently we are witnessing the fourth industrial revolution, dominated by the general usage of the Internet, on-cloud software, and Internet of Things technologies.

This means that an about three centuries interval brought an almost complete disruption to the way we live. People have moved from the countryside to cities and the percentage of agriculture-related jobs dropped significantly since about the middle of the twentieth century (Our World in Data 2019). Technology has changed the way we live and also the way we work: evolving from manual to intellectual meant managers and leaders had to make their way from commanding and controlling to coaching and influencing their teams, which are expected to share their points of view and collaborate in the decision-making process (Munteanu et al. 2020; De Smet Michael Lurie Andrew St George 2018; Pina e Cunha and Rego 2022).

However, as previously stated, a digital revolution has been changing the world for about the last five decades. Repetitive tasks can be done by machines or algorithms and computational power is cheaper: a random smartphone has more computational power than the computers that were used to make possible the first man on the moon in 1969 (Kendall 2019). Therefore, a company or organization in a VUCA (volatile, uncertain, complex, ambiguous) context must be particularly prepared to address sudden conjunctural changes, to deal with an unpredictable future, and all this in an even more complex scenario, either technically or socially. In this context, digital transformation appears as a general need for most companies and organizations.

Startups, typically born in a digital reality, tend to use technology to solve some kind of problem or redefine the rules of established businesses. There are well-known examples of digital-born companies that have used technology to become game-changers in their businesses: Airbnb, Spotify, Uber, and several others are examples to this point (Gerster et al. 2019). Considering these kinds of companies, it is frequent to detect some common characteristics: these companies can rapidly scale up their businesses while maintaining a recognizable client-focused experience; a certain *motto*. These companies are typically agile.

What is Agile?

Although not all authors agree, the agility concept has its roots in some lean manufacturing methodologies. The Toyota Production System relies on a granular process break-down and clear communication: kanbans are used in factories to ensure all parts of the process are completed within quality acceptance criteria and make it easier to alert for the impact of some process' derailment on subsequent steps (Nonaka and Takeuchi 2021).

Moreira emphasizes that agility goes beyond methodologies and frameworks and states values and principles as the core of Agile (Moreira 2017). Thus, we shall focus on the concepts that are most commonly associated with agility. Back in 2001, a group of software developers agreed on a set of principles for efficient software development: the Agile Manifesto (Agile Manifesto 2001). That document did not focus on technical aspects; it focused on management and how software development could be leaner and more effective. The authors concluded that there were essential principles that should be followed:

- i) The client is the center of everything that is done – clients become part of the product development cycle, which should help to increase satisfaction and also help to minimize unnecessary complexity and consequent unnecessary resource waste;

- ii) The focus should be on communication and team autonomy – instead of extensive documentation, the Agile Manifesto claimed the importance of well-aligned teams that must be able to communicate clearly and frequently;
- iii) The developments should be incremental – as it is easily applied to several software, it is possible to start delivering value with a certain set of features, which are joined by new ones periodically, in an ever-evolving product;
- iv) Agile teams should be small (up to ten people) and agile teams must collaborate in a network, reducing silos. Considering the scrum approach, a team needs to have a scrum master (a facilitator role), a product owner who is responsible for strategy and prioritization, and a dev team delivering software components incrementally in sprints¹.

On the one hand, not every project can be accomplished this way: For example, building construction cannot be incremental – a building serves its purpose in its final state, and it is not realistic to think about delivering a house claiming that windows or electrical infrastructure will be delivered in a later release. On the other hand, Agile goes beyond the Agile Manifesto and is far more than applying scrum rituals to a software development team (Denning 2019; Lindvall et al. 2004; Hersle and Johansson 2019). Also, the Agile Manifesto stands as the base for at least ten different methodologies (Moreira 2017), with some authors claiming up to forty different ones (Denning 2019).

Agility beyond the methodology

Worley and Jules take the COVID-19 scenario to study what can the pandemic make us learn about companies. These authors define agility as the capability of timely carrying out effective changes resulting in competitive advantage. Also, sustainability is related to agility, as ESG (Environmental, Social, Governance) goals will only be achievable if there is the capacity to

¹ Sprints are expected to be short, usually taking from one to three weeks.

change (Worley and Jules 2020), and more specifically the ability to adapt businesses to sustainable development goals (Crnogaj, Tominc, and Rožman 2022).

The COVID-19 outbreak forced many companies to change their operation from a traditional office to a remote work context, where collaborative tools such as Zoom or Microsoft Teams played a core role. This is described by Jules and Worley as having been “agile by necessity”, whilst the challenge relies on the ambidexterity needed to be “agile by design” (Worley and Jules 2020; Gerster et al. 2019). This suggests that achieving agility may be more complex than forming teams with the scrum master and product owner roles – in fact, agility appears as a company characteristic that may not necessarily be related to software development.

Taking this into account, digital transformation cannot be reduced to its technological side. Actually, digital transformation requires flexibility and rapidness as context changes are frequent (Gerster et al. 2019). Thus, Furr, Ozcan, and Eisenhardt resume what is at stake regarding digital transformation: products vs. platforms, firms vs. ecosystems, and people vs. tools (Furr, Ozcan, and Eisenhardt 2022).

Achieving agility in traditional companies

As explained, digital transformation is also about people and processes. Then, if agility is needed to achieve this transformation, there are differences between agile companies (e.g. born-digital ones) and traditional companies, as the latter tend to rely on structured hierarchies with longer decision-making processes (Brosseau et al. 2019).

Despite much has been written about Agile methodologies, there is still a scarce number of academic studies addressing the challenges of agility in traditional companies (Hersle and Johansson 2019).

Several reports issued by McKinsey address agility and how to achieve it in larger and traditional organizations. The first aspect that emerges is the crucial role of people: leadership

must understand what agility is, and it is fundamental that there is an alignment on the goals and intended value of an agile transformation (Handscomb et al. 2018). Besides, it is necessary to support people in their adaptation to more autonomous roles, ensuring that the organization's structure is prepared to adjust both the way the main objectives are determined and the performance reviews are carried out (Darino et al. 2019). On the other hand, McKinsey suggests that while creating a pilot agile team for a certain project is a good way to test the concept and learn from it, a common mistake occurs when agility is addressed only in pilots and not as a strategic priority (Brosseau et al. 2019; Handscomb et al. 2018).

In an article from 2004, authors from several large companies map a route for agile software development (Lindvall et al. 2004). The study has its roots back in 1999, when the Software Experience Center consortium was established, allowing people from companies such as ABB, Mercedes-Benz, or Nokia, to share their knowledge and approaches regarding software development. They found that there is no common ground regarding methodology – each team or company needs to evaluate which practices are better suited for their intents. The consortium members also concluded that software quality and team morale have increased compared to non-agile development routines.

Agility in practice

But, as previously stated, agility can have a broader reach than software. In its 2017 book, Moreira points out that agility is not more than a way to achieve a goal. Agility can drive a company to an objective, which ultimately translates into better business results (Moreira 2017) or improved productivity (Li et al. 2023). Also, as we are working based on principles, a main concern arises for traditional companies: how to evolve from 'closed around itself' to 'have the client in the center of everything'? Besides the technological or project management issues, a relevant challenge turns out to be culture. Although a common approach tends to be the adoption of agile methodologies, it is fundamental to be aware that the company must change

its culture to truly embrace its customers and employees. To achieve this, customer feedback must be a core subject: interactions should be meaningful and a source of valuable input. This means that a company must adapt itself according to its customers' needs (no more "they can have the car in any color, provided that it is black"). Also, leaders and employees must avoid the certainty trap of pretending to know what a client wants better than themselves.

Regarding employees, agility relies on self-organized teams (Agile Manifesto 2001), which poses several implications:

- Teams should be accountable for their responsibilities as they have full ownership over their work;
- The values that govern the company and the main strategic goals must be clearly understood by everyone, leading to a better alignment, and reducing the silo effect.

While assuring that teams can have ownership and that there is a positive and collaborative culture, a company will typically improve employee motivation, satisfaction, and, ultimately, engagement. This means that agility will force traditional companies to adapt their internal structures alongside culture. Both can only be achieved if leadership believes and steers according to agile principles (Boisnier and Chatman 2008).

A common way to restructure teams is then group people by specific products, in a squad, each one with its product owner and a set of other functions (Gerster et al. 2019). Different squads that operate within the same ecosystem (or more simply, that aim to achieve the same strategic goal) are called tribes. In this organization, there are cross-functional areas such as finance or human resources, which can operate in two main ways: either cross-product support (the area serves several products within a tribe) or cross-product projects (members of each relevant squad are assigned to the project) (Gerster et al. 2019). Either way, the bottom line is big projects are implemented by several small teams working in a network (Hersle and Johansson

2019), which should emphasize the need for constant communication, as the outcome strongly depends on the success of each small team's work (Denning 2019). Also, Saeeda et al state that despite Agile being designed for small-scale developments, it is very appealing to large-scale as well. This poses two main challenges: interdependencies between different teams, and orchestration between Agile and non-Agile teams (Saeeda, Ahmad, and Gustavsson 2023).

Denning also points out a relevant topic: despite the tendency for agile teams to have a flatter structure, hierarchies do still exist, as top management points the direction and the goals that must be achieved. Moreover, teams' autonomy and constant feedback loops enhanced by agility mean that there is less room for poor performance (Denning 2019). Besides, a recent article by Foss and Klein stands for the need for hierarchies, as they can be critical to coordinating human interactions, particularly in environments facing rapid changes and significant interdependencies (Foss and Klein 2023).

Agile teams also demand changes regarding the people experience departments. In fact, the need for frequent adaptation should be complemented by different training models and different reward systems that emphasize continuous learning (Boisnier and Chatman 2008).

Finally, another relevant point is funding, as iterative processes may imply a more flexible way of financing projects over time – certainly, a crucial dimension when considering agility.

Highlighting flexible structures

Bearing this context in mind, this work will focus on two main topics. On one hand, team performance, and, on the other hand, the most relevant challenges regarding organizational structure, and how to tackle them.

Good team performance will correspond to an ability to deliver with predictability while maintaining high-quality standards. The result should lead to satisfied customers and, ultimately, to better business results.

Besides, team performance may be affected by team morale and external constraints. Thus, an Agile team needs to be sufficiently autonomous to overcome challenges in a project's context. In traditional companies, this may collide with established structures, decision levels, or even career paths.

Then, flexibility emerges as a core subject that influences agility.

How is the company organized?

Before going into detail on the challenges the observed company faces, it is important to understand how it is organized. Agile was introduced circa 2013 in a few small teams, operating within very specific contexts. There were several IT projects at the time, but agile pilots were adopted for certain controlled scopes only. Moreover, regardless of the project's nature, IT developments were managed by different business or support units, according to their needs. The main step that was taken regarding agility took place in 2017 when a transversal area was created for IT developments in the retail business.

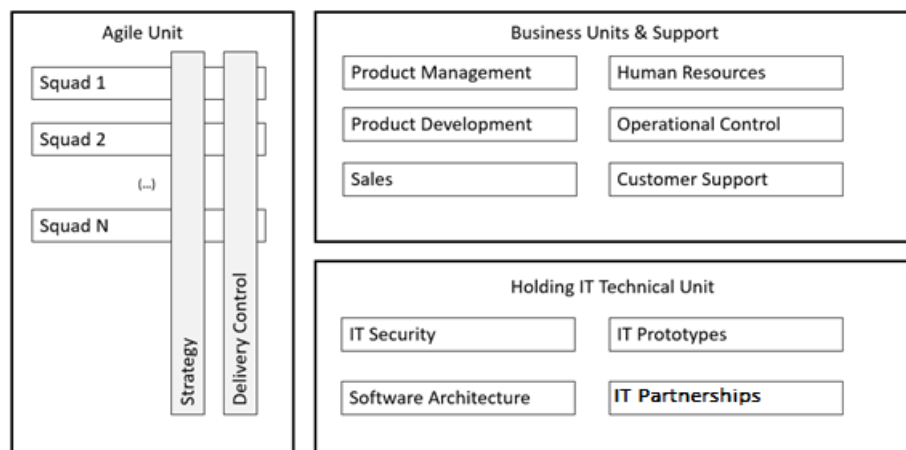


Figure 1 – The Agile Unit in the context of the studied company

In Figure 1, a diagram schematizes the company's organization. The following aspects must be highlighted:

- i) The Agile Unit is composed of several agile squads and strategy and delivery teams, the latter two being responsible for centralized supervision of all the squads;
- ii) IT architecture and security are managed by a holding department, which has assigned technicians to focus on each squad's subjects and technologies;
- iii) Each squad will serve either or both B2B and B2C segments, which typically do not work according to structured agile methodologies. Both cases' stakeholders belong to the teams illustrated under "Business Units & Support".

From these topics, emerges that one of the crucial changes was getting all the IT projects under the same ecosystem, and operating according to an increasingly common framework.

Given that aspects such as flexibility are not easy to approach quantitatively, qualitative research was performed to get a complete overview of this reality.

In the next section, we will gather the feedback of several people within the company through six semi-structured questions, as a way of understanding how this approach to agility is perceived. By comparing the implementation of Agile in this company with the examples provided by the literature, we aim to point out relevant changes in the organization and how they affect the business.

Interviewing internal stakeholders

As to have a deeper understanding of both delivery and organizational challenges, nine people with different responsibilities² were invited to answer the following questionnaire on Microsoft Forms:

1. In your opinion, what is agility?

² See Appendix 1 for the interviewee characterization

2. What was the main advantage of working according to Agile?
3. In your opinion, which was the main challenge when adopting agile methodologies?
4. How do you evaluate the delivery of the several squads?
5. Beyond digitalization, do you consider this an agile company? Why?
6. Does the company's structure enhance agility? Why?

With these questions, the aim is to begin by understanding what agility is for each participant, as it is important to check whether there is a conceptual common ground. Then, we proceed to their view on the adoption of agile methodologies, as a way of making a qualitative assessment of its impact on the business. The last two questions focus on the business and company design, aiming to explore aspects beyond technology or IT delivery.

Appendix 2 details team composition and dimensions, as a way of providing more knowledge about the organization.

Agility and its advantages

The first two questions revealed that the interviewed people have a common concept of agility and perceive its advantages within the company similarly.

All the answers point out the ability to adapt and change scope over time as a definition for agility. 55% of the answers associate this concept with a world where feedback comes from all directions and rapid changes are needed, as is the case of regulatory issues or IT security.

From this point, arises that iterative and sequential delivery is an advantage of working according to Agile, as it enhances that functional parts of a project are ready and usable before the delivery of its entire scope, as referred by two-thirds of the participants. Also, two participants referred to transparency as an advantage of agile methodologies, because the

frequent iterations require constant alignment with stakeholders, thus making it easier to detect problems along the way – and anticipate scope changes or different technical solutions for a specific challenge. “The transparency between technical and business teams”, as summarized by Participant #3, is then something that removes obstacles between these two functional areas, enhancing their communication and, ultimately, contributing to better-suited deliverables.

Challenges of agility in the Company

While the concept and its main advantages got agreement from all the participants, challenges started to highlight different sensitivities in this regard.

The first issue that comes out as a challenge is the alignment between different teams. Participant #8 mentions the obstacles found when an IT Agile team needed to collaborate with other IT teams working according to waterfall project management. On the other hand, Participant #4 refers that “Agile does not cope well with deadlines”, illustrating that the iterative approach may mean there is a need to address unpredicted technical challenges, with an impact on the delivery of the product’s ‘final’ version.

In fact, this is one of the most relevant tensions to be balanced when adopting agile methodologies, as on one hand IT teams must clarify scope as most effectively as possible, and on the other hand business should be prepared to get products delivered incrementally.

These tensions are related to another challenge that 55% of the participants point out: mindset. As Participant #1 indicates, “the world is still much oriented towards knowing the endgame and when will it be achieved from the beginning”, leading to work according to waterfall project management split into Agile-like sprints. Also, Participant #7 states that “methodology on its own is not all (...). For an agile team to work, people must be embedded in an Agile mindset and work as a whole team, instead of independent groups”.

How is the delivery perceived?

One of the goals of this case study is to evaluate delivery in an Agile context. From the answers to question 4, there seems to be a consensus that Agile teams within the company are delivering according to the business needs.

But besides the perception that one gets from the interviews, indicators confirm that delivery has actually increased compared to the previous traditional management scenario: one of the first squads multiplied by five times its delivery in six years. At the same time, the number of squads in the Agile unit went from ten to seventeen.

Notwithstanding, it is important to emphasize two different aspects that emerged with question 4:

- i) Even if the delivery is perceived as good, there is still ground for improvement regarding collaboration between different squads or even business units – 44% of the answers suggest that squads with fewer interdependencies tend to be able to have a quicker response to business needs: “a team’s agility is impacted by the agility of the teams that affect its work. It is a challenge to manage the different teams for them to be able to deliver without constraints caused by interdependencies”.
- ii) Delivery is not constant over time. Participant #6 recalls that the current delivery standards are achieved by generally mature teams, which already have a certain knowledge about the business and the goals that IT projects must achieve. That is: when embracing agility, one must consider that “in less mature teams, delivery speed will increase until stable delivery is reached”.

Agility beyond digitalization

The final two questions try to bring some light into the second goal of this work, related to agility as a broader concept and its implications on the company.

In what concerns identifying the company as an agile organization, the interviewed generally agree with this statement. Nevertheless, 55% of the answers point out a margin for improvement in this regard: “The company has made a great effort to be more agile, and it has already accomplished important evolutions. However, I think it is still behind the references of agility (on average, as different business units have different approaches to this subject), and there is considerable room for improvement”, as stated by Participant #4.

From the perspective of the several interviews, this room for improvement has its causes in both technology and company structure. The burden of legacy IT systems that are complex to evolve or replace, due to the extent of the business, is something that deeply affects the business’ capacity to respond to new challenges in a more-than-ever evolving sector. In what concerns organizational structure, the roots of a traditional business with considerable bureaucracy are noted by the interviewees.

The last question made some different perspectives emerge. In fact, while there is a general agreement on whether the company is agile, it is less than consensual that it is organized to enhance that agility. Both Participants #7 and #8 claim that over time there has been an effort to create multidisciplinary squads, as “the traditional department structure does not help one to achieve agility”.

On the other hand, Participants #4 and #6 refer to process improvement as something that is triggered within the squads or business units, more than a goal defined in a top-down approach. This is one relevant topic when analyzing agility in this large company: “Every role, and specifically the product owners, needs to be empowered to make quick decisions over their

products, and that is something that does not always happen”, argues Participant #2, before suggesting that the dimension and complexity of the organization originate some difficulty to allow that empowerment.

Another relevant aspect is brought to light by Participant #1: “We have relevant collaboration challenges due to deep cultural habits, and collaboration is key to achieving agility. (...) An example of a structure that promotes collaboration is the one we have in IT, where we have both business and technical expertise sharing responsibilities while trying to ensure that the output gathers the best from each stakeholder and maximize value for the company”.

The complementary perspectives around question 6 suggest that there may be tension between two different aspects: on one hand, leadership is stimulating the path for teams’ autonomy, making room for new ideas, and supporting the IT Agile ecosystem. On the other hand, the company’s structure and culture may be preventing it from being more efficient in the digital transformation.

Conclusion

The observed company has been making its way toward agility for more than five years. As other examples provided by the literature (Lindvall et al. 2004; Barlow et al. 2011), this company chose to create specific squads for IT and digital developments working according to Agile methodologies. IT project management was centralized in those squads, leading to a more synergetic approach between different projects. Despite some constraints that may arise, it was seen that the delivery has increased compared to the previous non-Agile scenario, following the trend referred by Li et al. (Li et al. 2023).

Considering the company’s structure, the interviews suggest that two main points need to keep being addressed:

- i) Collaboration, as the coordination of both agile teams and traditional business units originates some tensions (this can be seen as a collateral effect of centralizing IT developments out of the business units);
- ii) Empowerment, by giving each role adequate power to decide, tending to a flatter hierarchical structure.

Taking into account what has been discussed in the literature review and the feedback gathered in the questionnaires, there are several challenges for a traditional organization to be Agile. In this context, culture appears to be a critical point for its impact on collaboration and even empowerment is considerable. Also, as it is impossible to change a company's culture overnight, that is a relevant challenge when going Agile.

In fact, a retrospective analysis of the previously introduced Software Experience Center consortium (Lindvall et al. 2004) shows that cross-team communication was a challenge in companies such as Nokia or Motorola; a problem that was addressed by ensuring each multifunctional team shared the same space and focused in specific 'detachable' parts of a project. Since 2004, when the article about this consortium was published, remote work started to be an alternative, thus making the point of the physical space a debate on itself (Pina e Cunha and Rego 2022). However, the thesis of Hersle and Johansson reveals that for similar contexts members of agile teams find it hard to allocate the right skills within a cross-functional team, as complexity leads to a greater number of collaborations that may become more difficult to manage (Hersle and Johansson 2019). Hence, one can conclude that the constraints on the collaboration side, as reported by several participants in this case's questionnaire, are related to the company's complexity. One way to deal with this aspect would be to bring more knowledge from the business units to the agile cross-functional teams, trying to bring an increased sense of partnership. Notwithstanding, the literature points out interdependencies as a difficult issue to manage in large organizations

(Almeida and Espinheira 2021; Saeeda, Ahmad, and Gustavsson 2023). Thus, it seems relevant to keep working on the orchestration of different IT squads, whose scopes are interconnected.

In a 2018 document from McKinsey, cultural changes were highlighted as the top challenge companies face when embracing agility (De Smet Michael Lurie Andrew St George 2018). One of the reasons for this lies in empowerment (Crnogaj, Tominc, and Rožman 2022), which was also referred to in the answers to this work's questionnaire. McKinsey suggests different ways to enhance empowerment, namely the adoption of flatter structures with no middle management roles (Darino et al. 2019). As previously referred, a distinct way is defended by Foss and Klein, who find hierarchies essential to manage interdependencies and solve collaboration issues (Foss and Klein 2023). In the studied company, there are several management layers in both the agile and traditional teams. This may affect empowerment, as management layers are associated with different decision power levels. However, the adoption of a strictly flat structure may not help to solve collaboration and orchestration challenges. Thus, one possible takeaway is that the current structure can be leaner, but without removing all the middle management layers.

Another aspect can be related to both empowerment and collaboration: the power to decide evolves from a hierarchical basis to a dialogue-based agreement (Hersle and Johansson 2019). In this analysis, the interviewees reveal that there is already some autonomy within the different teams, but nevertheless the culture needs to keep evolving in this regard.

Interestingly, the topics related to people development and rewards, highlighted in Boisnier and Chatman's book (Boisnier and Chatman 2008), were not addressed by any of the participants in this case study's survey. That does not necessarily mean that this company's reality contradicts the authors; instead, it would be a pertinent dimension to address in future investigations.

In brief, this work shows that agility improved IT delivery in a traditional company, as pointed out by several bibliographical references. It also allows us to conclude that the technological side (as in, considering the delivery only) may be “easier” to tackle than the cultural aspects that are needed to fulfill the potential of an Agile approach. This case study suggests traditional companies face challenges regarding collaboration and empowerment, as both literature and interviews point to that sense. Even though both dimensions are related to a company’s culture, the latter involves deeper changes in the organization, as it is strongly related to leadership methods (Hersle and Johansson 2019). The role of the leaders emerges as fundamental to this transition, because the greater the coherence between culture and Agile methodologies concepts is, the more effective the result of the transformation to the company will be.

In any case, turning a traditional company into an agile business is surely a considerable accomplishment for leaders.

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Appendix 1

The table below characterizes the organization's members who were interviewed in the context of this case study.

Participant	Member	Gender	# People in the respective department/team
Participant #1	Agile Unit Strategy Manager	Female	5
Participant #2	Digital Unit Director	Female	33
Participant #3	Holding Director for Digital	Male	100
Participant #4	Product Dev. Manager	Male	4
Participant #5	Product Owner 1	Female	12
Participant #6	Product Owner 2	Male	14
Participant #7	Agile Deputy Director	Male	13
Participant #8	Scrum Master	Male	27
Participant #9	Segment Manager	Female	9

Appendix 2

The table below schematizes the different teams within the studied company.

Team	# People	Participants
Agile Unit Strategy Team	5	Participant #1
Digital Business Unit	33	Participants #2, #5, #6, #7 and #8
Holding Director for Digital	100	Participant #3
Product Development	9	Participant #4
B2B Segment Management	9	Participant #9