DIGITAL TRANSFORMATION UNLEASHED: HOW TO DETECT AND ELIMINATE AGILE ANTI-PATTERNS IN ORGANIZATIONAL CULTURE

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ABSTRACT

The search for growth and sustainability in any organization largely depends on its ability to carry out digital transformation and agility processes. These processes are essential to adapt to an increasingly changing and competitive business environment, allowing companies to be more efficient and effective in creating an unbreakable bond with their customers.

This manuscript addresses the importance of detecting and eliminating anti-patterns in organizational culture for a successful digital and agile transformation. During the early stages of the transformation process, prejudices and paradigms rooted in the organization can become an obstacle to change. The goal of this writing is to offer a practical guide for leaders and teams in organizations seeking successful cultural transformation. Effective strategies are proposed to overcome the challenges faced by organizations during this early stage. In summary, the key steps to be followed in the initial stages of digital transformation with agility are described, including the importance of establishing strong leadership, defining a clear vision and scope of the transformational process, among others. A set of recommendations will be provided to overcome recurring anti-patterns, such as lack of stakeholder participation and commitment, lack of proper planning, and confusion of roles and responsibilities.

Keywords Agile, agility, scrum, culture, digital transformation, anti-patterns

1 Introduction

Digital Transformation [1] and agility are key processes for any organization seeking growth and sustainability in their businesses [2, 3]. However, the early stages of this process can be filled with biases, misguided expectations, and unfounded paradigms. Therefore, it is crucial to highlight the importance of the first stage of this process, in which the current reality of the organization must be analyzed, evaluating its strategies, processes, technology, people, and culture [4]. This analysis is essential to define the routes to follow in the transformation process [5].

However, during this early stage, the current culture, knowledge, traditional practices, and comfort zone of teams and individuals can be an obstacle to change [6, 7]. It is common to encounter resistance to change due to biases and paradigms rooted in the organization [5]. Therefore, it is essential to address this problem sensitively and effectively to encourage the adoption of new ways of working [6, 7]. In this sense, it is crucial to establish a consensus with the client to define the strategic vision [8], expectations, and inflection point necessary to initiate cultural transformation from the leadership of the organization [9].

In this manuscript, we will address the first major challenge of cultural transformation: fostering a mindset change for the adoption of new habits and ways of working [10, 6, 11]. We will describe the challenges that organizations face in this early stage and propose effective strategies to overcome them. In summary, this text aims to offer a practical guide for leaders and teams of organizations seeking successful cultural transformation [7, 12] in the context of agility and digital transformation [3].

2   Problem

The clash between a traditional culture, rigid and rooted in the habits of employees, and new collaborative, flexible, and efficient communication methods [13] can become a significant barrier to adopting agility [4] and the success of a digital transformation process[1]. In addition, the variety of definitions that the organization handles for agility and the belief that each person has the right answer make it difficult to detect opportunities for improvement and put the progress and success of the process at risk [4, 5].

Some recurring practices that provide opportunities for adjustment and/or course correction are:

- Lack of participation and commitment from stakeholders,
- Poor product definition,
- Inadequate planning and lack of detailed analysis and dependencies,
- Confusion of roles and responsibilities,
- Ineffective meetings,
- Reporting to non-existent bosses and high micromanagement,
- Individualism and ineffective communication,
- Demotivation and reciprocal distrust, and
- Lack of commitment.

If the team or organization is unwilling to change their way of working, facilitators and change agents who will lead the transformation will face significant difficulties in achieving acceptance of the proposed model and launching a proper agile cultural transformation process[6]. This can hinder the achievement of the broad benefits that can be obtained, such as:

- Improvements in collaboration, commitment, and communication [13],
- Increase in experimentation and innovation [2],
- Advancement in flexibility and timely adaptation [14],
- Sustainable growth [13],
- Progress in motivation and productivity [13], and
- Improvements in empathy and cross-trust [6, 13].

Therefore, the first major challenge is to fully understand the transformational purpose in the organization [8] and why it is necessary to implement it [11, 10]. This requires approaching it empathetically, which opens the doors to the following steps in implementation. In this aspect, it is absolutely relevant to early detect the culture and anti-patterns [15] that can unbalance or cause the transformation process to fail[5].

The concept of anti-pattern[16] applies to something that initially seems attractive and appears to be a solution that is easy to implement, but eventually, far from solving a problem, ends up causing even more problems. Anti-patterns are hidden within the good practices of the framework that is intended to be implemented and seem to be part of the system[15]. Therefore, it is crucial to identify them early and take timely corrective measures [16].

2.1   Agile anti-patterns

The agile framework is known for proposing a sustained mutual control based on reciprocal trust, which fosters collaboration, adaptation, and joint learning [17, 18, 19]. With "controlled freedom", teams have the possibility to do everything they consider right as long as they respect the flexible, moldable, and adaptable framework structure. This approach works very well until the team begins to go beyond the established limits. At that point, bad practices can arise that can trigger various problems [16].

When anti-patterns appear, the team may lose focus on the short-term sprint, leading to a loss of concentration and the generation of errors or findings that should not be resolved individually but reported to follow another course. In addition, excessive pressure on developers is often a frequent problem, as the end of the sprint approaches and there are several items to be completed [20, 15]. To solve this, deep and detailed planning is needed that takes into account the needs, dependencies, and complexities of each item, allowing for an adequate estimation of the detected uncertainty [16].

Constant alertness can also be a problem, especially as the end of the project approaches. In these cases, complexity and criticality increase, generating stress that is not recommended for anyone. It is essential to plan exhaustively, identifying risks, dependencies, effort, and complexity of each item in order to make an adequate estimation of the detected uncertainty and not overload the development team[16].

Another common problem is holding too many meetings. In these cases, it is necessary to respect the timing of each meeting and look for efficient communication methods, such as shared tools or documentation [21]. Likewise, a lack of understanding of the product owner's role can also generate problems. It is important to remember that the product owner is the representative of the users in the team and delivers the prioritization of the product features to be built [20]. However, it is the team, based on their capabilities, who will decide the scope of the sprint.

Finally, there are anti-patterns that arise from a lack of understanding of the agile philosophy, a lack of adoption of its values and principles, and in some cases, a lack of commitment. These causes can easily appear in any team, even those with experience working with agility. That's why it is essential to avoid falling into routine and always maintain a high guard to prevent the appearance of anti-patterns in experienced teams[16, 20].

3   Solution

In an era where digital transformation is fundamental for business survival and success, companies are increasingly adopting agile approaches to achieve the necessary efficiency and innovation [14, 2]. However, agile cultural transformation is not an easy task and often faces many challenges along the way. In this section, we will describe the key steps that must be followed in the initial stages of digital transformation with agility.

1. Establish strong leadership: Agile cultural transformation requires strong and committed leadership, capable of making quick and effective decisions to drive change[5]. Leaders must be visible and transparent in their commitment [6], which will inspire the whole team and help overcome potential obstacles [22, 9].

2. Define a clear vision: A clear vision is essential for any cultural transformation process [8]. It is necessary to define business objectives and the direction in which you want to go with the transformational process. The vision must be shared throughout the organization to ensure its understanding. Understanding the vision[5] is a crucial step in defining a solid transformation plan and avoiding future anti-patterns.

3. Define the scope of the transformational process: It is important to define the scope of the process and ensure that it is aligned with the vision and business objectives. This will help avoid lack of clarity in the project and ensure the success of the transformation.

4. Form a team: To achieve effective agile cultural transformation, a committed and multidisciplinary team is required to work closely with organizational leaders [22]. This team must be aligned with the process vision and have the ability to adapt and evolve as the transformation progresses [8].
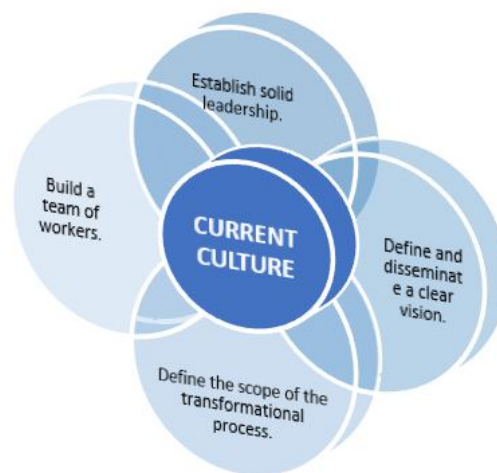

Figure 1: Key steps for cultural transformation.

In addition to these key steps, it is important to identify the most common anti-patterns that may arise during the transformation process and establish effective strategies to overcome them. This will enable organizational leaders to avoid potential obstacles and ensure the success of the project.

Following these key steps in the initial stages will allow organizational leaders to establish a solid foundation for agile cultural transformation, avoiding the main anti-patterns that can hinder the success of the process and enabling the organization to achieve the necessary efficiency and innovation to face the challenges of the current market.

3.1   Recommendations

The Agile cultural transformation can be a challenging path for companies, but by following the appropriate recommendations, a successful transition to an agile culture can be achieved. Based on the experience of agile transformation projects [23, 24], we have identified six key recommendations to help companies initiate the necessary cultural change:

Figure 2: Stages of digital transformation with agility. Image courtesy of D.C.A.

1. Understand the current culture of the organization: It is crucial to understand the current culture of the organization and determine which elements need to be changed to support agile digital transformation. Identifying anti-patterns and obstacles that prevent the adoption of agile culture is key to prepare for the challenges that will arise during the transformation[4, 1]

2. Work on anti-patterns: Identifying and addressing anti-patterns is an essential step in achieving cultural transformation. Working together with teams to detect and eradicate these potential obstacles is fundamental to promote an agile culture and ensure a successful transition[25, 20].

3. Have committed leadership: Strong and committed leadership is essential to drive change and promote agile transformation. These leaders must be willing to make tough decisions to ensure the success of the transformation[5].

4. Communication and training: Communicating the vision of agile digital transformation and providing training to all members of the organization is essential to ensure that everyone understands the goals of the change and how they can contribute to it[5].

5. Pilots and experimentation: Conducting pilots and experimentation on a small scale is an excellent way to demonstrate the benefits of agile digital transformation and obtain valuable feedback [2]. This also helps the company test new technologies and agile practices before implementing them on a large scale[13].

6. Measurement and continuous improvement: Measuring and evaluating progress towards agile digital transformation is essential to continuously improve the process [12, 26] and ensure long-term success. This allows the company to identify areas for improvement and make necessary adjustments to ensure the success of cultural transformation [11].

To achieve a successful Agile cultural transformation, it is important to highlight that understanding the current culture and identifying anti-patterns are key steps to prepare and overcome any obstacles in the organizational transformation path.

These recommendations will help companies face the challenges of Agile cultural transformation and move towards a more agile and efficient culture.

4   Conclusions

To lead a successful agile digital transformation, it is necessary to understand the culture and previous knowledge of the organization. Without careful planning and a well-defined strategy, anti-patterns can hinder the project and make success difficult. Overcoming these obstacles requires a strategic approach and a firm commitment from senior management and the leadership team to convey and drive the new methods and ways.

It is important to remember that identifying and overcoming agility anti-patterns is a continuous process throughout this transformational journey and even beyond the departure of consultants supporting this path. The successful implementation of any agile framework must be a co-created, empathetic, and organic social process, which also requires a constant focus on continuous improvement for the adoption and evolution of agile practices that will drive high performance and the success of the transformational process. A culture in constant reinforcement is essential to inspire and energize all stakeholders in the search for new and better value for their customers [9, 27].

Agile digital transformation is a unique opportunity for organizations to advance and stay ahead in a changing and competitive world. If approached with the right mindset, agile digital transformation can generate significant benefits in terms of efficiency, innovation, and customer satisfaction. The key to success lies in embracing agility as a mentality and not just as a tool, and in committing to a continuous process of improvement and growth.

Author contributions

Conceptualization, D.C.A. and R.M.D.; Formal analysis, D.C.A. and R.M.D.; Methodology, D.C.A. and R.M.D.; Project administration, D.C.A.; Resources, D.C.A. and R.M.D.; Software, D.C.A. and R.M.D..; Supervision, R.M.D..; Validation, D.C.A. and R.M.D..; Writing—original draft, D.C.A. and R.M.D.; Writing—review and editing, D.C.A. and R.M.D. All authors have read and agreed to the published version of the manuscript.

Competing interests

No conflicting interests were disclosed.

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