

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

Dinko Canales-Alvarnez 
Tata Consultancy Services | TCS Latam
Santiago
dinko.canales@tcs.com

Roberto Moraga-Diaz 
Tata Consultancy Services | TCS Latam
Santiago
roberto.moraga@tcs.com

ABSTRACT

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

This manuscript addresses the importance of detecting and eliminating antipatterns in organizational culture for successful digital and agile transformation. During the early stages of the transformation process, biases and paradigms deeply ingrained in the organization can become a hindrance to change.

The objective 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 that organizations face during this initial stage, delving into the key steps to follow in the early stages of digital transformation with agility, including the importance of establishing solid leadership, defining and communicating a clear vision along with a specific and clearly defined scope of the transformation process, among others.

A set of recommendations will be provided to overcome recurrent antipatterns, such as the lack of participation and commitment from stakeholders, the lack of proper planning, and confusion of roles and responsibilities.

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

1 Introduction

Digital transformation and agility [1] are key processes for any organization seeking growth and sustainability in their business [2, 3]. However, the initial 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 paths to follow in the transformation process [5].

However, during this initial stage, the current culture, knowledge, traditional practices, and comfort zone of teams and individuals can be a barrier to change [6, 7]. Resistance to change is common due to biases and paradigms entrenched in the organization [5]. Therefore, it is essential to address this issue sensitively and effectively to encourage the adoption of new ways of working [6, 7]. In this sense, it is crucial to establish consensus with the client to define the strategic vision [8], expectations, and tipping point necessary to initiate cultural transformation from the organization's leadership [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 initial 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 gap between the traditional and ingrained culture of employees and new methods of communication, collaboration, and efficiency can generate significant tension in any organization seeking to improve its productivity and adapt to market changes. The clash between traditional culture and new methods of work and technology can lead to resistance to change, making it difficult to adopt new, more efficient and productive ways of working [13]. It is important for organizations to address this cultural tension and promote a collaborative environment in which employees are involved, trained, and encouraged to embrace a culture of innovation and continuous improvement [12]. By finding a balance between preserving organizational values and culture, and adopting new technologies and trends, greater productivity and performance can be achieved in the organization. [14, 4, 1, 5].

Some of the most recurrent practices that provide opportunities for adjustment or course correction are:

- Lack of stakeholder participation and commitment,
- Poor definition of products,
- Inadequate iteration planning,
- Lack of detailed analysis and identification of dependencies,
- Confusion of roles and responsibilities,
- Ineffective meetings,
- Reports to non-existent bosses and high micromanagement,
- Individualism and ineffective communication,
- Demotivation and mutual 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 [14],
- Increase in experimentation and innovation [2],
- Advancement in flexibility and timely adaptation [15],
- Sustainable growth [14],
- Progress in motivation and productivity [14], and
- Improvements in empathy and cross-trust [6, 14].

Therefore, the first major challenge is to fully understand the purpose of the transformation in the organization [8] and why it is necessary to implement it [11, 10]. This requires approaching it empathetically and sensitively to what is established, which opens the doors to the following steps in implementation. In this regard, it is absolutely relevant to early detect the culture and antipatterns [16] that can unbalance or cause the transformation process to fail [5].

The concept of antipattern [17] applies to something that initially seems attractive and appears to be an easy solution to implement, but eventually, far from solving a problem, ends up causing even more problems. Antipatterns are hidden within the good practices of the framework that is intended to be implemented and seem to be part of the system [16]. Therefore, it is crucial to early identify them and take timely corrective measures [17].

2.1 Agile anti-patterns

Agile frameworks propose sustained mutual control based on reciprocal trust, fostering collaboration, adaptation, and joint learning [18, 19, 20]. With "controlled freedom," teams have the possibility to do everything they consider right as long as they respect the flexible, moldable, and adaptable structure of the applied framework. This approach works very

well until the team starts to go beyond the established limits. At that point, bad practices can arise that trigger various problems [17].

When antipatterns appear, the team can lose focus on the iteration goal and the product vision to be developed, leading to a loss of concentration and weakening the cohesion of the team. Additionally, excessive pressure on developers is often a frequent problem, especially close to the end of the iteration [21, 16]. To solve this, collaborative planning is needed with a shared understanding of the iteration goal and the product vision. Added to this, it is necessary to generate trust in the developers' decisions, without forgetting that we are working in an environment of uncertainty and that it is here where a continuous empirical process of inspection and adaptation is what allows us to reduce risks [17].

Another common problem is having too many meetings. In these cases, it is necessary to respect the timing of each meeting and look for efficient communication methods, such as using collaborative tools [22]. Similarly, a lack of understanding of the Product Owner's role [18] 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 [21]. However, it is the developers, based on their capabilities, who will decide the scope of the iteration.

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 [17, 21].

3 Solution

In an era where digital transformation is essential for business survival and success, companies are increasingly adopting agile approaches to achieve the necessary efficiency and innovation [15, 2]. However, the 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 a strong leadership: Agile cultural transformation requires energetic and committed leadership capable of making quick and effective decisions to drive change [5]. Leaders must be visible and transparent in their commitment [6], inspiring the entire team and helping to overcome possible obstacles [23, 9].
2. Define a clear vision: A clear vision is essential for any cultural transformation process [8]. It is necessary to know the strategic objectives of the organization to define the direction in which the transformational process wants to go. The vision must be shared throughout the organization to ensure understanding and alignment of wills within the organization. Understanding the vision [5] is a crucial step in defining a solid transformation roadmap and avoiding future counterproductive patterns.
3. Define the scope of the transformation process: It is important to define the scope of the process and ensure that it is aligned with the organization's vision and strategic objectives. This will help avoid lack of clarity in the process, focusing the effort and necessary capabilities for its development. This scope should be reflected in a Transformation Backlog that must be approached in an iterative and incremental manner [7, 10], so that the organization can take incremental steps in an evolutionary and organic way, which will frequently undergo an inspection and adaptation process [18], thereby increasing the probability of success in the transformation journey.
4. Form a transformation team: To achieve effective agile cultural transformation, a committed and multidisciplinary team is required to work closely with organizational leaders [23]. This team must be aligned with the process vision and have the ability to adapt and evolve as the transformation progresses [8]. This team will create and sustain the movement of change and transformation within the organization, generating waves of inspiration, transparency, and trust, above the vertical pressure of top-down mandates.

In addition to these key steps, it is important to develop active and constant surveillance to identify agile anti-patterns that may arise during the transformation process and establish effective strategies to overcome them. This process should be participatory and led by the transformation team, and as anti-patterns are detected, they should be transparent and visualized in the transformation backlog to prioritize and define actionable steps to correct these cultural deviations [7]. This will allow organizational leaders to avoid potential obstacles and ensure the success of the process.

Following these key steps from the outset of a transformational process will allow leaders, facilitators, and change agents to establish a solid foundation for agile cultural transformation, avoiding the main anti-patterns that can hinder the success of the process and allowing the organization to achieve the efficiency and innovation necessary to face the challenges of the current market [15, 23].

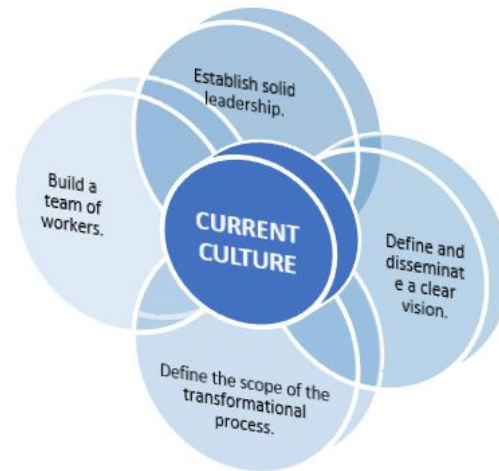


Figure 1: Key steps for cultural transformation.

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 [24, 25], we have identified six key recommendations to help companies initiate the necessary cultural change:

1. Understanding 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 [13]. Identifying antipatterns and obstacles that hinder the adoption of an agile culture is key to prepare for the challenges that will arise during the transformation [4, 1].
2. Working on antipatterns: Identifying and addressing antipatterns is an essential step to achieving cultural transformation [5]. Working together with teams to detect and eradicate these potential obstacles is fundamental to promoting an agile culture and ensuring a successful transition [26, 21].
3. Having committed leadership: Solid and committed leadership is essential to driving change and promoting agile transformation. These leaders must be willing to make tough decisions to ensure the success of the transformation [5], such as moving from a vertical structure of hierarchies and functional silos to a horizontal network-based and customer-centric approach [11, 23, 27].
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 objectives of the change and how they can contribute to it [13, 5, 28].
5. Pilots and experimentation: Conducting pilots and experiments on a small scale is an excellent way to demonstrate the benefits of agile digital transformation and obtain valuable feedback. This also helps the company to test new technologies and agile practices before implementing them on a large scale [11, 28, 7].
6. Measurement and continuous improvement: Measuring and evaluating progress towards agile digital transformation is essential for continuously improving the process and ensuring long-term success. This allows the company to identify areas for improvement and make necessary adjustments to ensure the success of cultural transformation [12, 5].

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 to address the challenges of cultural transformation by facilitating the transition towards a more agile and innovative culture.



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

4 Conclusions

Leading a successful agile digital transformation requires an understanding of the organization’s culture and previous knowledge. Without careful planning and a well-defined strategy, antipatterns can hinder the project and make success difficult to achieve. Overcoming these obstacles requires a strategic approach and a firm commitment from senior leadership and the leadership team to convey and drive new beliefs, methods, and ways.

It is important to remember that identifying and overcoming agility antipatterns is an ongoing process throughout this transformation journey and even beyond the departure of consultants supporting this path. The successful implementation of any agile framework should be a co-created, empathetic, and organic social process that also requires a constant focus on continuous improvement for the adoption and evolution of agile practices that will drive high performance and transformation success. A culture in constant reinforcement is essential to inspire and energize all stakeholders in the pursuit of new and better value for their customers [9, 29].

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 adopting agility as a mindset and not just as a tool and 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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