

Axis 5: Competence levels and digital culture

Axis 5, focusing on the digital culture of an organization, describes softer, yet equally crucial aspects of a company's digital transformation. Unlike the first three axes, which directly influence the financial performance of an organization, the last three, especially Axis 5, emphasize the organizational behaviours critical for successful transformation. Experience in implementing digital transformations with client companies indicates that failures are often attributable to a lack of attention to organizational culture.

A transformational culture within an organization encompasses values, attitudes and practices that promote agility in the face of changing market and technological conditions. Such a culture values openness to change, innovativeness and a propensity for experimentation and judicious risk-taking. In organizations endowed with a strong transformation culture, employees are actively engaged in the change process and encouraged by leaders to be creative and inventive, which enhances agility.

Culture of Transformation						
Type 6	Transformative	Level 6	Consolidation of Changes and Integration into Organizational Culture	Cross-Organizational Project Teams	Collaboration with External Entities	Availability of Partners
Type 5	Passive	Level 5	Implementation of Organizational Change	Mentoring	R&D Process in the Organization	Access to Experts
Type 4	Autocratic	Level 4	Communication of Change Vision	Self-Education	Permission for Making Mistakes	Access to Training
Type 3	Directive	Level 3	Formulation of Vision and Change Strategy	External Trainings	Market Trend Analysis	Access to Technology
Type 2	Supporter	Level 2	Creation of a Coalition for Change	Internal Trainings	Experimentation	Access to Data
Type 1	Innovator	Level 1	Awareness of the Need for Change	Trade Shows and Conferences	Promotion of New Ideas in the Organization	Access to Capital
	1. Leadership Styles		2. Readiness for Change	3. Continuous Improvement	4. Culture of Innovation	5. Resource Availability

Figure 15

For digital transformation strategies to succeed, they must align with the organizational culture. New technologies and processes require shifts in both thought and action across all levels of the organization. Without a culture that supports innovation, flexibility and openness to change, even the most

meticulously developed digital strategies may encounter tepid support or outright resistance. Thus, it is imperative to cultivate an organizational culture that not only supports but champions the values integral to digital transformation. This axis will explore five key areas – leadership styles, readiness for change, continuous improvement, innovation culture and resource availability – each of which is crucial for fostering an environment conducive to sustainable digital growth.

Area 5A. Leadership attitudes

In the leadership aspect of digital transformation, we shift from evaluating on a 'Level 1–6' scale to using 'Type 1–6' to reflect that no single leadership attitude is inherently superior across all contexts. The aim is to discern predominant leadership traits within the organization and identify those that should be cultivated to promote readiness for transformation. This evaluation helps pinpoint the most visible leadership characteristics in the current organizational climate and identify potential areas for development. By understanding these dynamics, organizations can intentionally sculpt their leadership culture to align with modern demands and transformational challenges. Six types of leadership attitudes – passive, autocratic, directive, supportive, innovator and transformative – are assessed. The crucial task is to determine which are the prevalent attitudes and which should be developed to prepare the organization for successful transformation.

Type 1. Passive leadership is characterized by the leader's lack of active engagement in innovative processes and failure to motivate employees. A leader adopting this attitude leaves employees without help and support. The organization may experience stagnation as a result, and the lack of innovation and creativity in the company degrades competitiveness. A typical example of this attitude would be a leader who takes no action related to innovation and does not motivate employees to think creatively. Feeling abandoned and with their ideas for improvement ignored or trivialized, the employees who might drive change lose enthusiasm. Ultimately, market position is lost because competitors investing in innovation gain a competitive advantage.

Type 2. Autocratic leadership is an approach in which the leader makes decisions independently, without involving the team. It is characterized by a tendency to ignore suggestions and ideas from employees, significantly hindering innovation in the organization. Not being consulted, the team feels excluded from the decision-making process, and their contributions are not appreciated. As a result, innovation and creativity in the company are limited, degrading the organization's capacity to generate new ideas and to develop.

Type 3. Directive leadership focuses on guiding the team to achieve specific goals and results related to innovation. The leader is demanding and organized but can provide the team with the necessary resources and tools to help them achieve these goals. As an example of this attitude, we can cite Steve Jobs, the former CEO of Apple. Jobs was known for setting exceedingly high expectations for his team, especially regarding innovation and product quality. However, he also provided his team with the necessary tools and resources, such as technological innovations and financial support, contributing to the creation of innovative products. This leadership attitude can result in achieving ambitious innovation goals while maintaining control over the process.⁵⁰

Type 4. Supportive leadership is based on supporting and motivating employees to create new ideas and innovations. Such a leader creates a work environment in which people feel safe sharing ideas and taking risks. This attitude strongly encourages team members to think creatively and take initiative. A leader with a supportive attitude creates an atmosphere of trust in which employees feel that their ideas are valued. This, in turn, can contribute to the development of creativity and innovation in the organization because people are more willing to share ideas and experiment. An example of this attitude is Richard Branson, the founder of the Virgin Group. Branson is known for creating an organizational culture based on support and for motivating employees to innovate. Thanks to this approach, his company has become a source of numerous new products and services.⁵¹

Type 5. Innovator leadership constantly seeks new opportunities and ideas; it experiments and strives for innovation. Such a leader is open to risk and mistakes, as well as to feedback and suggestions from the team. The innovator continually seeks inspiration for further development, both in terms of operating methods and market offerings. This attitude is embodied by Elon Musk, the driving force behind companies such as SpaceX and Tesla. Musk is known for his willingness to take risks and invest in innovative projects. His approach inspires teams to think outside the box and strive for continuous development. For a leader with an innovator attitude, it is essential to encourage experimentation and not be afraid to make changes.⁵²

Type 6. Transformative leadership is a style in which the leader aims to bring about changes and transformation in the organization. Such a leader focuses on building vision and motivation to inspire others to act. At the same time, there is an emphasis on values, ethics and morality and the continuous development of employees. The main differentiator of this attitude is a rejection of the status quo and a continuous pursuit of improvement and change. Warren Buffett, the renowned investor and founder of Berkshire Hathaway, is an example of a transformative leader in the world of finance. His investment strategy, based on long-term thinking and ethical principles, changed how investors perceive the financial market. Buffett always emphasized the importance of honesty and continuous learning. This approach contributed not only to the success of his company but also to shaping ethical standards throughout the financial industry. Thus, a leader with a transformative attitude can bring about significant changes in the organization, especially in companies needing cultural revolution, innovation and a long-term strategy. Their ability to inspire others and consistently set and pursue goals contributes to the success of both the organization and its employees.⁵³

Area 5B. Readiness for change

This area assesses how prepared a company is to implement and adapt to new digital strategies and innovations. This evaluation focuses on the organization's agility and responsiveness to technological shifts and market demands. It gauges whether the workforce and leadership are predisposed to embrace transformation initiatives or to resist them due to entrenched habits or a fear of the unknown. The need for change must be recognized if any transition to new processes and technologies is to run smoothly.

Level 1. Recognizing the need for change. Organizations aiming for success and competitiveness must identify the need for change and take action to implement it. It is essential to understand why change is necessary, what might happen if it is not implemented, and what benefits might arise from new solutions. Implementing change can be challenging and may require sacrifices, but organizations that embrace the challenge and actively strive for improvement have a better chance of surviving and developing. As a negative example, Kodak, by failing to recognize the need for change and adaptation to the digital revolution in photography, lost its dominant market position.

Level 2. A coalition dedicated to implementing transformation. A group of individuals or a team work together to achieve a specific transformative goal. In the context of organizational transformation, a coalition may consist of employees, managers, project leaders and other individuals with a stake in the changes. The team's goals are to support and promote changes, to engage employees and encourage them to engage fully in the transformation, and to overcome resistance to change while also addressing conflicts. A coalition can also assist in identifying and resolving problems that may arise during the transformation process.

Level 3. Seeking a vision. Formulating a vision and strategy for digital transformation is a crucial part of the process. The vision should determine the direction in which the organization wants to go, and the strategy should describe the action plan and specific goals to be achieved by the transformation. Practice shows how important it is to involve all employees in creating the vision and change strategy and in implementing them. An

example of this level of excellence is a company in which employees from various departments are involved in creating the vision of change, identifying key challenges and developing a strategy, thereby enhancing the sense of ownership and commitment to the transformation plan.

Level 4. Communicating the vision. The vision of change must be formulated and presented in a way that is accessible to all employees. Communication should be two-way and consider the opinions and suggestions of employees so that the vision can be better adapted to the organization's actual needs. Continuous communication of progress and achievements is also crucial for maintaining motivation and engagement in the change process.

Level 5. Implementing change. Implementing change initiatives involves taking specific actions to introduce and carry out changes. Implementing changes requires that we plan, define goals and directions, and identify the people and resources needed for change. It is also essential to define criteria for assessing progress and results.

Level 6. Institutionalizing and inculturating change. At this stage, the objective is to make the transformation integral to the company's working methods and culture. It is important to regularly assess the effectiveness of implemented changes and modify the strategy accordingly. Also important is that adequate training and support be given to help employees adapt to the new priorities and ways of working. This requires that the leadership continuously engage in the transformation process and promote the newly implemented solutions.

Area 5C. Continuous professional development

This area emphasizes the ongoing education and skill enhancement of employees within an organization. This facet of digital transformation is essential for maintaining a workforce that is not only proficient with current technologies but also adaptable to future innovations. By prioritizing continuous learning, organizations can ensure that their teams remain competitive and are well-prepared to cope with new difficulties and technologies as they arise. This area assesses the effectiveness of training programmes, the accessibility of learning resources and the overall commitment of the organization to fostering an environment of lifelong learning and professional growth.

Level 1. Outside contact. Trade fairs and conferences are popular venues for developing skills within the organization. At such industry events, company representatives and specialists meet to share knowledge and experience, learn about the latest trends and technologies, and establish business contacts. Conferences, in turn, allow experts to share their knowledge and experience in a specific field. Lectures panel discussions and workshops engage employees in developing skills and acquiring new competencies. Conferences also provide an excellent opportunity for business networking and exchanging experiences with other specialists in the industry.

Level 2. Internal training. The training system within an organization plays a crucial role in transforming its culture, requiring employees to stay updated with the latest trends and technologies through regular training that enhances both technical and soft skills such as communication and leadership. This system should be adaptable to different learning styles and tailored to employee needs, fostering an environment that values continuous learning and improvement. Moreover, internal training – whether conducted by in-house specialists or external experts – focuses on enhancing skills, developing potential and increasing knowledge, indicating the company's commitment to employee development and integrating training into its cultural fabric.

Level 3. External training. Training provided by external companies brings in seasoned specialists who offer fresh perspectives and diverse problem-solving techniques, enhancing the organizational transformation process by

integrating an external view on necessary changes. While external training exposes employees to a broader range of experts and knowledge, potentially breaking organizational insularity, it may not always align perfectly with the immediate needs of the company. In contrast, internal training is more adaptable to specific organizational contexts but might simply circulate pre-existing knowledge within the company. This suggests a strategic blend of both internal and external training could optimize learning outcomes and adaptation to change.

Level 4. Self-development. Self-education is a continual process of individual acquisition of knowledge, skills and experience without the need for formal education, such as through reading books and articles or participating in online training. Self-education allows individuals to develop in directions that most interest them in the way that best suits them. In the context of organizations, employees' self-education can, and should, be integrated into the transformation culture strategy.

Level 5. Working in project teams. Project teams consist of employees from various departments who collaborate on specific tasks or projects, leveraging their expertise towards a common objective. This team structure not only speeds up decision-making and boosts efficiency but also facilitates personal skill development and broader professional growth through cross-functional collaboration. For instance, when developing a new product or service, representatives from different departments can pool their specialized knowledge, enhancing the entire team's understanding of the project's challenges and potential solutions. This approach not only achieves better outcomes but also serves as a powerful educational experience within the context of real-world tasks.

Level 6. Mentoring. In this model, an experienced employee, the mentor, serves as a guide and support for a junior employee, the mentee. Mentors are carefully selected for their rich experience and competence in a specific field, with their main goals being to assist the mentee in understanding the demands of their job and tools and to guide them towards achieving their goals. Mentoring is often integrated into organizational training programmes but can also exist as an individual professional development programme for

employees. Through regular meetings, mentors share their knowledge and experience, help mentees develop practical skills, and provide advice on key issues related to their career paths. This process, based on a relationship of mutual trust, often significantly expands the mentee's competencies, boosting their achievements within the organization.

Area 5D. Culture of innovation

The ‘Culture of Innovation’ area focuses on fostering a workplace environment where creativity and novel ideas are not just welcomed but actively encouraged. In such organizations, employees are motivated to explore new solutions and innovative approaches, contributing to the organization’s continuous development. A strong innovation culture views mistakes as learning opportunities rather than setbacks, promoting a mindset of growth and resilience. This initiative-taking stance is crucial for maintaining agility and effectiveness in a rapidly evolving market, allowing the organization to capitalize on emerging opportunities and drive sustainable success.

Level 1. Promotion of new ideas. At this stage, organizations encourage their employees to engage in generating innovative ideas. This is the moment when creativity is nurtured. This level is achieved by organizations that regularly organize hackathons and create dedicated platforms for employees to share their ideas. Furthermore, the most innovative proposals are acknowledged by rewarding employees.

Level 2. Experimentation. Organizations allow their employees to test new concepts and ideas in practice. Employees are given the opportunity to implement their ideas, which is a significant step in the process of creating innovation. At this stage, support mechanisms exist for experimental projects, but they are not fully developed. Organizations approach this process cautiously, encouraging employees to conduct research projects and prototyping. This approach minimizes the risk and costs of changes and allows for effective testing of ideas in real conditions.

Level 3. Active market trend analysis. This stage involves not only identifying trends but also seeking to understand their implications for the company’s operations. Organizations examine changes in customer preferences, market competition and innovations in their industry. This in-depth analysis enables organizations to better understand their environment and adjust their strategy. So, for example, a cosmetics company might use a detailed analysis of market trends to identify growing consumer interest in environmentally friendly products. Instead of remaining passive to these changes, the company

adjusts its offerings by introducing eco-friendly products, thus acquiring new customers and strengthening its market position.

Level 4. Acceptance of mistakes. Organizations at this stage understand that experimentation and seeking new solutions can sometimes lead to errors, but they are willing to accept this risk. Employees feel free to take risks and explore new ideas, even if it involves the chance of mistakes. Some companies, for example, run regular competitions for the biggest blunder of the week. As part of the competition, employees are encouraged to share mistakes that happened during the week. Though unusual, the contest aims to emphasize that every employee can make mistakes and that the company can accept mistakes as long as they lead to learning and improvement. This innovative approach to accepting mistakes aims to eliminate the fear of making mistakes and to create an atmosphere of experimentation. Employees, seeing that mistakes are part of the development and learning process, gain more confidence and willingness to try new solutions. This makes the organization more flexible and innovative.

Level 5. R&D integration into company strategy. Organizations at this stage invest significant resources in research, develop experimental activities, and design new solutions that are later tested in the form of prototypes. The R&D process is no longer a one-time event but a constant part of the pursuit of innovation within the organization. Employees recognize the role of this process in creating new products or services and strengthening the company's market position.

Level 6. Integration of external collaboration into company strategy. Organizations acknowledge that partnerships with other companies, research institutes or startups are crucial for accelerating the innovation process. By being open to collaboration with external entities, organizations gain access to new technologies, knowledge and perspectives that may be hard to obtain internally. This approach allows organizations to better leverage the innovation ecosystem and more quickly put out new solutions. An example here is a medical software company that partnered with a local university. They jointly researched advanced diagnostic tools. This collaboration provided the company access to the latest scientific and technological advancements and

expert knowledge from the university. This resulted in the faster introduction of advanced diagnostic tools to the market, benefiting both the company and the entire medical sector.

Area 5E. Resource availability

Resource availability is pivotal in assessing an organization's capacity to support and sustain transformational efforts. It involves securing not only the financial investments necessary for initiating change but also ensuring access to the appropriate tools, software and equipment that empower employees to execute and maintain new solutions. Additionally, employees must have sufficient time and be given the right opportunities to contribute meaningfully to these changes. Effective resource allocation directly influences the pace and success of innovation, enabling organizations to adapt swiftly and efficiently to new threats and opportunities in the digital landscape. This strategic approach to resource management fosters an environment where transformation can thrive, supported by a robust infrastructure of both material and human assets.

Level 1. Access to capital. Organizations direct their attention to ensuring adequate sources of funding for the transformation process. This is a key element of organizational transformation, as organizations must be prepared to finance planned initiatives and projects. The question is whether the company has a financial plan that includes expenses for implementing transformation initiatives.

Level 2. Access to training. The question here is whether various paths to training exist within the organization, including both internal and external training, mentoring programmes and self-learning. The example here is of a manufacturing company that was introducing a new management system. The company expanded its training programmes to cover various aspects of the new system. Employees were given access to internal training on operating the new software but also participated in webinars conducted by the system provider, allowing them to gain firsthand expert knowledge.

Level 3. Access to experts. The focus is on whether employees consistently access expert knowledge through both external consultations and internal training. This approach evaluates whether an organization is committed to ongoing employee development and effectively integrates expert knowledge into its transformation strategy. For instance, a marketing agency has established a continuous relationship with an SEO expert who not only

conducts workshops but also provides ongoing support, enhancing the team's skills and the agency's processes. This sustained engagement with specialists not only boosts employee capabilities but also significantly enhances the agency's marketing success, thereby increasing customer satisfaction and competitive edge. This exemplifies an organization's strategic use of experts as a core component of its innovative culture.

Level 4. Access to data. Organizations move from basic data analysis to advanced use of data in the decision-making process. The question is whether the organization has appropriate information systems and databases and focuses on securing and utilizing them. At this point, the organization realizes that data are an essential foundation for fact-based decision-making. An example could be a logistics company utilizing advanced IT tools for shipment analysis. Through a data warehouse, the company can precisely monitor, analyse and forecast shipment traffic. Decisions such as optimizing delivery routes or inventory management are data-driven rather than intuitive. Furthermore, the company emphasizes data security, which is crucial when dealing with shipment information.

Level 5. Access to technology. Organizations concentrate on providing employees with access to modern tools and technologies. The question of whether employees have access to modern technologies supported by appropriate training and technical assistance is crucial in the context of organizational transformation. Organizations realize that innovations often require tools that allow for more advanced actions, and they invest in them. Our example here is that of an advertising agency deciding to invest in the latest graphic design and data analysis software. This gives employees access to advanced tools to create effective advertising campaigns and analyse their outcomes. Furthermore, the company secures training for employees, enabling them to use the new technologies effectively. This is an example of an organization that understands that investments in modern technologies contribute to improving efficiency and competitiveness.

Level 6. Access to partners. Organizations pay special attention to the ability to collaborate with external entities. This collaboration is crucial in the context of organizational transformation because external partners can bring

knowledge, experience and capital that expedite innovative processes. The example here is a software company and a technical university entering into a strategic partnership. The university provides the company with research and knowledge in technology, and, in return, the company offers internships to university students. This mutual benefit accelerates the innovation process and contributes to the development of both parties. For the university, it means that its knowledge finds practical application and that it can provide students access to real projects. For the software company, it means access to the latest research and young, talented employees.

Axis 6: Cybersecurity

In the digital age, cybersecurity has transcended its past role as a mere safeguard to become a fundamental pillar of operational integrity and trust. As organizations increasingly digitalize their operations, the importance of robust cybersecurity measures has never been more critical. Accordingly, this sixth axis of digital transformation explores how deeply an organization has ingrained security practices into its digital and operational fabric. The relentless evolution of cyber threats means that a proactive stance on cybersecurity is not just advisable; it is imperative for protecting sensitive customer data, ensuring privacy and maintaining the trust that is so crucial to sustaining reputation and financial viability.

Cybersecurity					
Level 6	Monitoring and evaluation of strategy implementation	VPN	Identity verification and authentication	ISO 27001 certification	Documentation maintenance
Level 5	Human resource management	Authorization and authentication systems	Threat monitoring and detection	Cybersecurity audit plan	Testing of contingency plans
Level 4	Security policies	Security information and event management (SIEM) systems	Backup and disaster recovery (BDR)	Internal nominated auditors	Regular employee training
Level 3	Action plan	Intrusion detection systems (IDS)	Access controls	Implemented and executed security testing system	Establishment of standard operating procedures
Level 2	Risk analysis matrix	Antivirus	Password security	Training implementation plan	Setting priorities
Level 1	Strategy document and risk management methods	Firewall	Data encryption	Description of the cybersecurity training system	Threat identification
	1. Strategy and risk management	2. Network and System Protection	3. Data Protection	4. Education and quality system	5. Emergency plan / Contingency plan

Figure 16

This axis evaluates an organization's cybersecurity maturity across five distinct but interconnected areas: strategy and risk management, protection of networks and systems, data security, education and training, and emergency planning. Each area is assessed on a graduated scale that corresponds to the depth and sophistication of cybersecurity measures in place. From the basics of securing network perimeters to the complexities of managing a comprehensive emergency response, this axis provides a structured framework to gauge how prepared an organization is to defend against and respond to cyber incidents with the potential to disrupt operations and compromise data