



TRANSFORMATIONAL LEADERSHIP, DIGITAL COMPETENCE, AND ADAPTIVE PERFORMANCE DURING ORGANIZATIONAL CHANGE: A QUALITATIVE CASE STUDY

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ABSTRACT

This study examines how digital transformation prompts technology firms to enhance human resources so employees adapt to technological changes and dynamic business needs. Success in organizational change depends not only on technology adoption but also on transformational leadership, digital competence, adaptive performance, and organizational support. The research analyzes how these four factors interrelate during PT DOT Indonesia's digital transformation using a qualitative case study. Data were collected via in-depth interviews with 12 purposively sampled informants (HR Manager, HR Officer, Project Manager, Team Leader, Software Engineer, UI/UX Designer, QA Engineer, Business Analyst, DevOps Engineer, and Mobile Developer). Data analysis followed Miles, Huberman, and Saldaña's interactive model through data condensation, display, and conclusion drawing, with open, axial, and selective coding. Findings show transformational leadership fosters continuous learning through coaching, empowerment, participation, and mentoring. Digital competence grows via self-directed learning, knowledge sharing, and technical mentoring, enhancing employees' ability to handle project changes and technological developments. Adaptive performance appears as flexibility, learning agility, problem-solving, and responsiveness to client needs. Organizational support through training, learning culture, sharing sessions, and collaboration strengthens employee readiness. The study indicates that the synergy among these factors is crucial for navigating digital transformation in technology-based companies.

1. INTRODUCTION

Digital transformation has become a key organizational strategy for enhancing competitiveness and sustaining business in the face of rapidly evolving technology. The integration of digital technologies, such as artificial intelligence (AI), cloud computing, automation, and agile software development, changes how organizations run business processes, manage human resources, and deliver services to customers. These changes require not only technological investment but also organizational readiness to develop human resources capable of adapting to an increasingly dynamic work environment (Schiuma et al., 2024). Therefore, the success of digital transformation is largely determined by an organization's ability to manage change through employee competency development and effective leadership.

The information technology industry is one of the sectors most affected by rapid digital development. Software development companies must continuously update technical competencies, adopt new technologies, and respond quickly to changing client needs. These conditions require employees to engage in continuous learning, work collaboratively, and adapt to changes in projects and the technologies used. Such adaptive capability is essential for maintaining organizational productivity amid ongoing change (Troise et al., 2021).

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A critical factor supporting successful digital transformation is transformational leadership. Transformational leaders focus not only on achieving organizational goals but also on inspiring, motivating, coaching, and empowering employees to grow. They promote a culture of innovation and learning so employees are more prepared to accept change and to experiment with new technologies (Bass & Riggio, 2006). In technology-based organizations, transformational leadership is especially important because changes often occur rapidly and require active involvement from all team members.

Beyond leadership, digital competence is a core capability employees must possess in the digital transformation era. Digital competence includes not only the ability to operate technology but also the ability to learn new tools, use digital information effectively, collaborate via technology, and solve problems through digital means (van Laar et al., 2020). Organizations that continuously build digital competence will have human resources better prepared to face technological changes and evolving business needs (González-Varona et al., 2024).

The ability to adapt to such changes is reflected in adaptive performance, an individual's capacity to adjust work behaviors, learn new skills, solve problems flexibly, and maintain performance when the work environment changes (Pulakos et al., 2000). In technology companies, adaptive performance is a crucial competence because client needs, software development methods, and technology usage change continuously. Employees with high adaptive performance tend to work more effectively when facing project changes or organizational digital transformation.

The success of digital transformation is also influenced by organizational support provided to employees. Organizational support can take the form of training, a continuous learning culture, knowledge-sharing programs, mentoring, and interemployee collaboration. According to Schiuma et al. (2024), organizations that foster a sustained learning culture more easily enhance digital competence and employee readiness for change. Such support creates a work environment that encourages learning, innovation, and adaptation to technological developments.

Theoretically, these four elements are deeply intertwined within a resource-based and dynamic capabilities framework. Transformational leadership acts as the primary catalyst that alters the socio-cultural environment of the firm, shifting it from a rigid structure to an agile learning ecosystem. This supportive ecosystem, fortified by deliberate organizational support mechanisms, directly nurtures the acquisition of advanced digital competence. Consequently, digital competence provides the cognitive and technical tools necessary for employees to manifest adaptive performance under highly volatile project conditions.

While previous studies have examined relationships among transformational leadership, digital competence, and organizational performance (Ciampi et al., 2021; González-Varona et al., 2024; Dewi et al., 2025), they have predominantly relied on quantitative structures that evaluate variables in isolation. The specific novelty of this study lies in its integrated qualitative exploration within an Indonesian software development enterprise, PT DOT Indonesia. The Indonesian tech sector operates within a unique cultural landscape characterized by high collectivism, meaning that top-down leadership styles must harmoniously merge with peer-driven knowledge sharing to build technical resilience. Investigating this nexus qualitatively allows for an under-the-hood examination of the real-time socio-technical workflows and lived human experiences during rapid digital disruption.

To guide this investigation, the study addresses the following explicit research questions:

- RQ1:** How do transformational leadership practices shape the continuous learning culture and technical growth of employees during digital transformation?
- RQ2:** In what ways do employees perceive that their digital competence manifests as adaptive performance when managing fluctuating project specifications?
- RQ3:** How does structured organizational support reinforce the synergy between leadership and individual adaptability?

2. METHODS

This study used a qualitative approach with a case study design to obtain an in-depth understanding of the relationships among transformational leadership, digital competence, adaptive performance, and organizational support in facilitating digital transformation at PT DOT Indonesia. A qualitative approach

was chosen because the study aims to explore employees' experiences, perceptions, and interpretations of leadership practices, digital competence development, adaptive capabilities, and organizational support during the change process. This approach enables the researcher to understand the phenomenon within the real context experienced by informants, producing a more comprehensive depiction of the dynamics of digital transformation in the organization.

The study was conducted at PT DOT Indonesia, a company engaged in software development and digital transformation services, over a three-month period from October to December 2025. The company was selected because it actively implements various digital technologies in its business processes and promotes a continuous learning culture to support employee competency development. During the data collection phase, the primary researcher acted as an objective outside interviewer, maintaining a neutral stance to prevent internal corporate hierarchies from biasing the narratives shared by the participants.

Informants were selected using purposive sampling, choosing individuals considered to possess relevant experience and knowledge about the company's digital transformation process. Criteria for informants included employees directly involved in software development, human resource management, or project decision making, enabling them to provide information relevant to the research focus. Twelve informants were interviewed: HR Manager (\$I_1\$), HR Officer (\$I_2\$), Project Manager (\$I_3\$), Team Leader Backend (\$I_4\$), Team Leader Frontend (\$I_5\$), Senior Software Engineer (\$I_6\$), Junior Software Engineer (\$I_7\$), UI/UX Designer (\$I_8\$), QA Engineer (\$I_9\$), Business Analyst (\$I_{10}\$), DevOps Engineer (\$I_{11}\$), and Mobile Developer (\$I_{12}\$). Data saturation was rigorously monitored and determined using the concept of code repetition; by the 10th interview, no new conceptual codes or unique contextual insights were emerging from the transcripts, and the final two interviews served to definitively confirm the established thematic structure. Each semi-structured interview was conducted either in a private meeting room or via secure video conferencing, lasting between 45 to 70 minutes per session.

Strict ethical protocols were implemented throughout the research. Prior to each interview, informed-consent procedures were executed where participants signed a disclosure agreement detailing the voluntary nature of their involvement and their right to withdraw at any time. To guarantee absolute confidentiality protection, all personal identifying markers were removed, and all interviewees were assigned anonymous alphanumeric codes (\$I_1\$ through \$I_{12}\$). Formal institutional ethical approval was obtained from the internal review board before entering the field. All interviews were recorded with explicit permission and transcribed verbatim to facilitate data analysis.

Data analysis followed the interactive model of Miles, Huberman, and Saldaña (2014), which comprises three stages: data condensation, data display, and conclusion drawing and verification. In the data condensation stage, the researcher selected, simplified, and organized interview results according to the research focus. Data were then presented as narratives, tables, and thematic matrices to facilitate identification of inter-theme relationship patterns. The final stage involved iterative conclusion drawing throughout the analysis until valid findings were obtained.

To strengthen the analysis process, the study applied thematic analysis through three coding stages: open coding, axial coding, and selective coding. Open coding identified key concepts from each interview excerpt, such as participative leadership, coaching, digital learning, knowledge sharing, adaptability, and organizational support. During axial coding, related codes were grouped into four main categories: Transformational Leadership, Digital Competence, Adaptive Performance, and Organizational Support. In the selective coding stage, these categories were integrated into major themes explaining relationships among variables: Transformational Leadership Encourages Continuous Learning; Digital Competence Improves Employees' Adaptive Performance; and Organizational Support Strengthens Employee Readiness for Change.

Data trustworthiness was maintained through source triangulation and member checking. Source triangulation compared information obtained from informants across different positions and functions to develop a more comprehensive understanding of the studied phenomenon. Member checking involved confirming the researcher's interpretations with several informants to ensure findings accurately reflected

their experiences and views. The application of these two techniques enhanced the credibility, dependability, confirmability, and transferability of the research results.

3. RESULTS AND DISCUSSIONS

Transformational Leadership in Building a Learning Culture

The findings show that transformational leadership is a key factor driving the emergence of a learning culture at PT DOT Indonesia. Leaders do not only perform supervisory functions over task execution, but also act as facilitators who provide direction, guidance, and opportunities for employees to be involved in decision-making processes. Those practices create a work environment more open to idea exchange, collaboration, and continuous learning.

This mechanism relies heavily on the psychological safety built by team leaders, allowing technical teams to voice engineering concerns early without fear of reprisal. For instance, the HR Manager emphasized the strategic intent behind this approach:

"We purposefully train our team leads to move away from rigid command-and-control. Our transformation requires people to innovate, and that only happens when leaders actively coach and empower their subordinates to make technical decisions."

A participative leadership culture provides space for every team member to develop capabilities and convey ideas in project completion. Besides increasing employee engagement, this approach also reduces resistance to the implementation of new technologies because the change process is carried out gradually through discussion, mentoring, and empowerment of team members. This dynamic is clearly visible on the engineering floor, as noted by the Team Leader Backend:

"When we had to migrate our core microservices to a new framework, I didn't just impose it. We sat down, discussed the technical roadblocks together, and I mentored the junior devs through the rough patches. It builds massive trust."

These findings align with Bass and Riggio (2006), who explain that transformational leaders can increase employee motivation, creativity, and commitment through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. González-Varona et al. (2024) also indicate that the success of digital transformation is influenced by leaders' ability to build an organizational culture that supports learning and innovation.

Digital Competence as a Driver of Adaptive Performance

The analysis reveals that digital competence is perceived as the primary capability that enables employees to adapt to technological changes and project dynamics. This competence develops not only through formal training, but also through self-directed learning, knowledge sharing, technical mentoring, and inter-employee collaboration in task completion.

The software development ecosystem possesses highly distinctive characteristics, technologies deprecate rapidly, and frameworks undergo major shifts every few quarters. Consequently, digital competence cannot remain static; it is heavily driven by peer-to-peer mechanisms like rigorous code reviews and collaborative debugging. The UI/UX Designer noted how this collaborative competence translates into real-time project agility:

"Mastering Figma or new prototyping tools is just the baseline. The real digital competence shows up when a client changes the project requirements mid-sprint, and we can immediately leverage our shared technical knowledge to redesign the interface within days without breaking the workflow."

A work environment that encourages continuous learning enables employees to master new technologies more quickly, understand framework changes, and adjust work methods according to project needs. This process shapes individuals' ability to learn autonomously while also leveraging team members' experiences as learning resources. The findings indicate that improvements in digital competence are deeply intertwined with employees' perceived adaptive capacity. Individuals who possess strong digital competence appear to be more prepared to face technological changes, able to solve problems more effectively, and maintain productivity when project requirements change.

These findings support van Laar et al. (2020), who state that digital competence not only includes mastery of technology, but also the ability to learn, think critically, communicate digitally, and solve

problems. González-Varona et al. (2024) also affirm that digital competence is a strategic capability that determines organizational success in implementing digital transformation.

Adaptive Performance in Facing Organizational Change

Adaptive performance is the tangible outcome of employees' ability to adjust to changes in the work environment. The study results indicate that adaptive capacity is reflected in flexibility in carrying out tasks, speed in learning new technologies, problem-solving ability, and responsiveness to changes in customer or project needs.

In software development companies such as PT DOT Indonesia, changing client requirements and technological developments are conditions that occur continuously. Therefore, adaptive capacity becomes an important competence that enables employees to maintain work quality even when facing dynamic changes. Adaptive performance is not only influenced by individual characteristics, but is also formed through learning processes supported by leadership and the organizational environment. The Project Manager highlighted how this manifests in sprint deliveries:

"In our world, requirements change weekly. Employees who show high adaptive performance don't panic when a feature is pivoted. They adapt their engineering mindset, pick up the necessary documentation, and pivot the code seamlessly."

In contrast to some traditional corporate sectors where change is met with rigid bureaucratic friction, the software-centric nature of PT DOT Indonesia necessitates an immediate, decentralized response to disruption. These findings are in line with Pulakos et al. (2000), who explain that adaptive performance includes an individual's ability to face new situations, learn new skills, solve problems creatively, and maintain work effectiveness under changing conditions.

Organizational Support in Strengthening Readiness to Face Digital Transformation

In addition to leadership and digital competence, this study indicates that organizational support is a critical factor that strengthens employees' readiness to face digital transformation. This support is realized through the provision of training, a culture of continuous learning, sharing sessions, project evaluations, and cross-team collaboration.

An organizational culture that supports learning provides each individual an opportunity to continuously develop competencies in accordance with technological developments. This condition accelerates the process of knowledge transfer among team members while increasing organizational readiness to face changes that occur continuously. The systemic value of these sessions was explicitly described by the DevOps Engineer:

"The company hosts weekly tech-sharing slots and funds our cloud certifications. When management shows they are willing to invest in our learning infrastructure, it removes the stress of dealing with new automated deployment tools. We feel backed up."

The study findings indicate that organizational support does not operate independently, but rather strengthens the relationship between transformational leadership, digital competence, and adaptive performance. The higher the organizational support for learning processes, the greater individuals' perceived ability to adapt to technological changes and business needs. These results support Schiuma et al. (2024), who state that organizations that build a sustained learning culture will have human resource capabilities that are more adaptive in facing digital transformation.

Table 1 Summary of Research Findings by Theme

Theme	Main Findings	Implications for Digital Transformation
Transformational Leadership	Leaders implement participative leadership through discussion, mentoring, empowerment of team members, and providing opportunities to express ideas.	Increases employee engagement, strengthens a learning culture, and reduces resistance to technological change.
Digital Competence	Digital competence is developed through independent learning, knowledge sharing,	Accelerates mastery of new technologies and improves readiness to face project changes.

	code review, and use of learning platforms.	
Adaptive Performance	Employees are able to adjust to changes in client needs, technology, and work methods through flexibility and continuous learning.	Maintains productivity and project quality even when dynamic changes occur.
Organizational Support	The organization builds a continuous learning culture through training, sharing sessions, project evaluations, and cross-team collaboration.	Strengthens individual readiness in facing digital transformation and encourages continuous learning.

Based on Table 1, the four themes obtained show that digital transformation at PT DOT Indonesia does not depend solely on technology implementation, but is also influenced by the synergy among transformational leadership, digital competence, adaptive capability, and organizational support. These four themes complement one another in shaping both individual and organizational readiness to face continuous change.



Figure 1 Relationships Among Research Findings

Figure 1 illustrates the relationship among the findings obtained from the data analysis. Transformational leadership acts as an initial factor that builds a learning culture through mentoring, discussion, and employee empowerment. This learning culture encourages the development of digital competence, enabling employees to be better prepared for technological changes and project demands. Digital competence then enhances adaptive performance, which is reflected in flexibility, the ability to learn, and effective problem solving. On the other hand, organizational support serves as a reinforcing factor through the provision of training, sharing sessions, and a continuous learning culture that accelerates the learning process and increases organizational readiness to face digital transformation.

4. CONCLUSION

This study indicates that transformational leadership, digital competence, adaptive performance, and organizational support operate as interrelated factors that facilitate the perceived success of digital transformation at PT DOT Indonesia. Transformational leadership plays a key role in cultivating an open learning culture through participative approaches, mentoring, and employee empowerment, thereby encouraging greater individual engagement in facing organizational change. This learning culture becomes the foundation for developing digital competence, which enables employees to continuously update their knowledge and skills in line with technological developments.

The findings also indicate that improvements in digital competence are closely tied to the formation of adaptive performance, as reflected in employees' perceived ability to adjust to technological changes, volatile project requirements, and dynamic business demands. This adaptive capability is shaped not only by individual competence but is also heavily reinforced by structured organizational support through training, formal knowledge sharing, cross-team collaboration, and a continuous learning culture. The synergy among transformational leadership, digital competence, adaptive performance, and organizational support creates a powerful state of organizational readiness to face digital transformation in a sustainable manner. Theoretically, this study contributes significantly to Human Resource Management and Information Systems literature by shifting away from atomistic, quantitative evaluations to offer an integrated, context-specific framework. It exposes the precise socio-technical mechanisms, such as peer-driven code reviews, micro-mentoring, and leadership-backed psychological safety, that explain how macro-level digital transformation strategies successfully materialize into micro-level individual adaptive performance within a collaborative software development environment. From a practical perspective, the findings imply that organizations, especially technology-based companies, need to strengthen transformational leadership practices, develop continuous digital competence enhancement programs, and build an organizational culture that supports learning, collaboration, and knowledge sharing. Such strategies are expected to improve employee readiness for change while also supporting the successful implementation of digital transformation.

This study has limitations because it was conducted in only one company with a limited number of informants, so the findings reflect context-specific, perceived relationships that cannot be broadly generalized to all organizations. Therefore, future research is recommended to involve more organizations from various industry sectors and to use mixed methods or quantitative approaches to examine the relationships among variables more broadly and improve the generalizability of the findings.

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