

**Digitalization and Leadership: Leadership Challenges and
Change in the Era of Digital Transformation**Srećko Goić¹

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ABSTRACT

Digitalization is a pervasive driver of organizational change, transforming technologies, business models, coordination mechanisms, and the daily experience of work. This process fundamentally reshapes leadership by diminishing the effectiveness of rigid hierarchies and increasing the demand for leaders capable of operating within fluid networks, guiding project-based collaboration, and sustaining trust in virtual and hybrid environments. This paper contends that digital transformation should be viewed not merely as a technical modernization initiative but as an ongoing leadership challenge, where soft skills such as empathy, communication, and collaborative influence are as critical as technical literacy. The analysis explores how continuous change, data-rich decision-making contexts, and ethical tensions related to surveillance, fairness, and autonomy impose new requirements on leaders at all organizational levels. Special emphasis is placed on the rise of projectization, the necessity for robust governance and data literacy, and the importance of inclusion and psychological safety in maintaining engagement within digitally mediated organizations. The findings indicate that organizations are more likely to succeed with digital transformation when they cultivate leaders who can align technology, structure, and culture while prioritizing human meaning and dignity throughout the change process. Conceptually, this article synthesizes dispersed insights on soft skills, projectization, and network governance into an integrated leadership perspective intended to inform both empirical research and leadership development practice.

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1. Introduction

Digitalization represents a significant force reshaping contemporary organizations. It transforms technologies, business models, communication patterns, and work processes. However, its most profound implications are evident in leadership: in the exercise of authority, decision-making, coordination of co-operation, and the maintenance of organizational trust amid ongoing change (Pedersen & Partners, 2024; Sheer Velocity, 2026).

This paper argues that digital transformation extends beyond technical modernization. It constitutes a broad organizational and social transition that changes the requirements for effective leadership. Specifically, it diminishes the relevance of rigid command-and-control models and elevates the importance of adaptability, collaboration, ethical judgment, project-oriented coordination, and human-centered change management (Pedersen & Partners, 2024; Forbes Technology Council, 2025; All Consulting Firms, 2025).

While digital transformation in organizations and higher education is a topic of considerable scholarly interest, this paper primarily addresses general leadership challenges in the era of digitalization. Higher education is considered separately as a special case, rather than serving as the main analytical framework (Aristovnik et al., 2023; Digital Clarity Group, 2025; Fisher College of Business, 2026).

The literature on digital leadership and digital transformation leadership has expanded rapidly, yet remains fragmented across strands focusing on leadership capabilities, digital transformation success factors, or sector-specific case studies such as higher education and the public sector (Mmakau & Sethibe, 2024; Carvalho et al., 2023). Much of this research emphasizes high-level competency lists or individual technologies and initiatives, often without fully integrating structural changes, soft-skill requirements, and project-based organizational forms (Bouwman et al., 2024; Suryadi et al., 2024). An integrated conceptual perspective that connects the shift from hierarchies to networks, the revaluation of soft skills, the projectization of work, and the ethical and governance pressures shaping leadership in digital environments remains underdeveloped (Ly, 2023; Zárate-

Torres et al., 2025). This article seeks to address this gap by synthesizing recent reports and scholarly contributions into a coherent leadership perspective centered on soft skills, project capability, and network governance.

Although digital transformation is frequently discussed in terms of tools and platforms, the deeper institutional challenge concerns whether organizations can absorb technological change without sacrificing coherence, legitimacy, or strategic focus. Leadership is therefore central, as technology adoption alone does not produce transformation unless accompanied by organizational learning, aligned incentives, and a shared sense of purpose (Pedersen & Partners, 2024; Sheer Velocity, 2026; All Consulting Firms, 2025). Thus, digitalization serves as a test of leadership maturity rather than merely a measure of technical modernization.

The article first outlines structural changes from hierarchies to networks, then analyzes the shift in competencies and the soft-skills paradox. It subsequently examines continuous change, trust and engagement, projectization, governance and ethics, and diversity and inclusion, before drawing strategic implications for organizations and higher education.

2. Approach

This article employs a conceptual and integrative approach, focusing on synthesizing existing knowledge rather than presenting original empirical data. It draws upon recent reports addressing skills needs and leadership gaps (SkillSea Project, 2020, 2023; SEA-EU, 2022, 2023; Project Management Institute, 2024), as well as contemporary academic and practitioner literature on digital transformation, digital leadership, and higher education governance (Aristovnik et al., 2023; Ly, 2023; Bouwmans et al., 2024; Obeidat, 2026).

The objective is not to conduct a systematic review in the strict methodological sense, but rather to synthesize convergent findings and arguments into an analytically coherent framework. This framework foregrounds soft skills, projectization, and network governance as essential dimensions of digital leadership practice (Mmakau & Sethibe, 2024; Aziz

et al., 2024). Integrative articles of this nature are increasingly utilized in digital leadership research to consolidate a fragmented field and to identify directions for future empirical studies.

Digitalization is frequently characterized as a process of technological adoption; however, in practice, it rapidly evolves into a leadership challenge. Although organizations may acquire new tools, integrate platforms, and expand data systems, the success of these investments largely depends on leaders' ability to redefine priorities, organize learning, align stakeholders, and support personnel through ongoing change (Sheer Velocity, 2026; All Consulting Firms, 2025).

Consequently, many digital transformation initiatives do not achieve the anticipated value. The primary issue is seldom the lack of technology; rather, it is often the disparity between technological capacity and organizational capability. Leaders may overestimate the automatic benefits of technology and underestimate the extent to which successful transformation relies on communication, shared purpose, skill development, governance, and trust (Pedersen & Partners, 2024; Carvalho et al., 2023; Digital Clarity Group, 2025).

3. Transitioning from Hierarchies to Networks

A primary structural consequence of digitalization is the transition from hierarchical to networked organizational forms. Traditional hierarchies rely on vertical chains of command, formal reporting lines, centralized approval, and stable divisions of labor. However, these arrangements often become inefficient and less responsive when organizations must adapt continuously to evolving technologies, stakeholder expectations, and competitive pressures (Korhonen et al., 2022; Headspring Executive, 2022).

In contrast, digital environments promote network-based coordination. Teams are formed across functional boundaries, projects engage multiple domains concurrently, and expertise is distributed throughout the organization rather than concentrated at the top. Decision-making frequently occurs closer to the point of action, while senior leaders focus on providing direction, alignment, and support instead of issuing detailed instructions at each stage (Lamaa, 2024; Korhonen et al., 2022; Headspring Executive, 2022).

This transformation has substantial implications for leadership practice. Influence increasingly outweighs formal authority, as individuals in digital organizations are expected to collaborate across boundaries where no single manager maintains complete control (Korhonen et al., 2022). Leaders must therefore develop the ability to build coalitions, establish credibility, and secure voluntary commitment from stakeholders with diverse expertise, priorities, and institutional affiliations (Golden Spikes, 2024; Korhonen et al., 2022).

The shift away from rigid hierarchy does not eliminate leadership; rather, it alters its mechanisms. Leadership now operates through coordination, facilitation, relational authority, and network legitimacy instead of relying solely on positional dominance (Korhonen et al., 2022; Ly, 2023).

This transition also influences organizational accountability. In hierarchical structures, accountability is typically maintained through reporting lines and direct supervision. In networked systems, accountability must be established through shared goals, transparent decision rights, and clear governance routines. Without these mechanisms, the benefits of agility may result in ambiguity, duplication, or conflicts regarding ownership (All Consulting Firms, 2025; Headspring Executive, 2022). Effective digital leadership therefore demands both flexibility and disciplined structural design.

4. Leadership Competencies and the Growing Importance of Soft Skills

A prominent effect of digital transformation is the rebalancing of leadership competencies. Leaders must now possess practical knowledge of digital tools, platform logic, analytics, cybersecurity, and the strategic implications of technologies such as artificial intelligence, cloud computing, and automation (All Consulting Firms, 2025; IE University, 2025; Bouwmans et al., 2024). However, technical proficiency alone is insufficient.

Effective digital leadership requires a hybrid competency profile that integrates technological fluency with social, cognitive, and ethical capabilities. Leaders must apply systems thinking to understand interdependencies, demonstrate empathy to address the hu-

man impact of change, communicate effectively to align distributed teams, and exercise sound judgment to navigate issues of privacy, fairness, and accountability (JRG Partners, 2026; Forbes Technology Council, 2025).

This dynamic introduces a paradox within digital leadership. As work becomes increasingly mediated by technology, human capabilities become even more essential. In hybrid and virtual environments, leaders must exert greater effort to build trust, foster engagement, cultivate a sense of belonging, and interpret signals that were previously conveyed informally through physical presence, observation, and routine interaction (Forbes Technology Council, 2025; Golden Spikes, 2024).

The SkillSea project provides valuable evidence of the mismatch between emerging work demands and existing skill profiles. Project reports highlight significant deficits not only in digital and cyber skills but also in creative thinking, teamwork, and leadership-related capacities among surveyed groups. These findings reinforce the assertion that digital transformation simultaneously elevates both technical and social skill requirements (SkillSea Project, 2020, 2023).

This shift in competencies also transforms how organizations should identify leadership potential. Traditional models often rewarded technical mastery or advancement through stable functions. In digital contexts, leadership potential is more likely to be demonstrated by individuals who can integrate expertise, facilitate communication between diverse groups, and maintain coordination amid ambiguity. Consequently, promotion systems based solely on tenure or functional excellence may overlook leaders best equipped for transformation-intensive environments (JRG Partners, 2026; University of Salford, 2025; Forbes Technology Council, 2025).

The increasing emphasis on soft skills within digital leadership reflects fundamental structural changes in the nature of work. Traditionally, supervision relied on physical co-presence, established routines, and direct observation. In digital environments, particularly in hybrid and remote contexts, these mechanisms are diminished or absent. As a result, leaders must employ more intentional communication, trust-

building, and emotional intelligence to replace the informal interactions that previously facilitated oversight (Forbes Technology Council, 2025; Golden Spikes, 2024). Empathy is particularly critical during digital transformation, as such transitions frequently generate uncertainty.

Employees may experience concerns about redundancy, face challenges with reskilling, or feel overwhelmed by concurrent technological changes. Leaders who approach change solely as a technical issue risk overlooking the emotional dimensions of transformation. In contrast, those who recognize uncertainty and offer support are more likely to maintain employee commitment and minimize resistance (Join The Collective, 2025; MSS Business Transformation Advisors, 2025).

Communication requirements also intensify in digital contexts. While digital platforms increase the volume of communication, they do not necessarily enhance understanding. Messages may become fragmented across multiple tools, priorities may compete for attention, and the lack of contextual cues can increase the likelihood of misunderstanding (Golden Spikes, 2024; Pramjeeth et al., 2024). Consequently, leaders must communicate with greater clarity, consistency, and interpretive discipline than in traditional settings (Forbes Technology Council, 2025; Golden Spikes, 2024).

Collaboration skills similarly increase in importance. Digital transformation frequently spans functional boundaries, necessitating coordination among technical experts, operational managers, administrative staff, project teams, and external partners. Leaders must facilitate effective collaboration among these stakeholders despite differences in expertise, terminology, timelines, and organizational culture (All Consulting Firms, 2025; Forbes Technology Council, 2025; SEA-EU, 2023).

Soft skills are also essential for reducing the implementation gap. Many transformation initiatives do not fail during the strategy design phase, but rather during the stages when changes must be communicated, adopted, normalized, and sustained. Leaders with advanced interpersonal skills are better equipped to identify early signs of anxiety, address emerging conflicts, and translate formal change programs into sustained

organizational practices (Johnson, 2024; Join The Collective, 2025; MSS Business Transformation Advisors, 2025). Thus, soft skills function as core operational mechanisms in digital transformation.

5. Leadership Challenges in Digital Transformation

Digitalization does not result in a single episode of change followed by stability. Rather, it establishes conditions of ongoing adjustment, characterized by continuous platform upgrades, workflow redesigns, task automation, emerging risks, and evolving expectations (All Consulting Firms, 2025; Sheer Velocity, 2026; Carvalho et al., 2023). In this context, leadership focuses less on managing a single transformation and more on developing organizational capacity for repeated transformation (Pedersen and Partners, 2024; Sheer Velocity, 2026).

This shift is demanding because it erodes the traditional managerial distinction between routine operations and change initiatives. In many organizations, change becomes integrated into normal operations, requiring leaders to guide teams through environments where uncertainty is recurrent rather than exceptional and adaptation is expected rather than occasional (Forbes Technology Council, 2025; Sheer Velocity, 2026; Pramjeeth et al., 2024).

Continuous change requires temporal discipline. Organizations risk becoming trapped in cycles of launching too many initiatives simultaneously, which can result in confusion and overload. Effective digital leaders recognize that successful adaptation depends on sequencing, prioritization, and organizational absorptive capacity (All Consulting Firms, 2025; Sheer Velocity, 2026; Project Management Institute, 2024).

A further characteristic of continuous change is that success becomes cumulative rather than episodic. Rather than evaluating the completion of individual initiatives, leaders must increasingly assess whether the organization is becoming more adaptive, collaborative, and capable of future change. This shift necessitates new indicators of progress, such as learning speed, cross-functional coordination, and adoption quality, in addition to formal completion milestones (All Consulting Firms, 2025; Project Management Institute, 2024).

5.1. Trust, Engagement, and Inclusion in Digital Work Environments

Trust has always been central to leadership; however, digitalization alters the mechanisms by which trust is established and maintained. In physical workplaces, trust typically develops through repeated informal interactions, spontaneous observation, and subtle cues regarding consistency and competence. In digital environments, many of these signals are weakened, delayed, or lost (Golden Spikes, 2024; Zárate-Torres et al., 2025).

As a result, trust becomes more fragile and must be cultivated intentionally. Leaders cannot assume that regular digital contact automatically generates confidence. Trust must be established through transparency, reliability, responsiveness, and demonstrable fairness (Golden Spikes, 2024; Headspring Executive, 2022).

Transparency is critical because digital settings can intensify uncertainty. When employees lack informal access to leaders or casual awareness of organizational developments, silence may be interpreted as indifference or concealment (Golden Spikes, 2024). Leaders must therefore explain decisions, articulate priorities, and acknowledge constraints more regularly than in the past (Golden Spikes, 2024; Headspring Executive, 2022).

Empowerment is also essential. Excessive digital monitoring can undermine trust, even when justified as a productivity measure. The temptation to employ surveillance-like tools increases in remote settings; however, such practices may weaken initiative, reduce psychological safety, and reinforce perceptions that leadership is focused on control rather than capability development (Golden Spikes, 2024; Pramjeeth et al., 2024).

Trust in digital environments also relies on procedural consistency. When leaders apply rules unevenly across on-site and remote workers, or across different time zones and work arrangements, employees may perceive hidden hierarchies that undermine legitimacy. Effective digital leaders must therefore communicate not only what decisions are made, but also how and why these decisions occur (Golden Spikes, 2024; Pramjeeth et al., 2024).

Maintaining engagement is among the most persistent challenges for leadership in digitally mediated organizations. Engagement relies not only on formal roles and incentives, but also on energy, recognition, identification with organizational purpose, and the sense of being seen and valued (Golden Spikes, 2024; Pramjeeth et al., 2024). Digitalization may weaken these conditions if leaders permit work to become purely transactional.

Hybrid and remote arrangements offer benefits such as flexibility and autonomy, but they can also foster isolation. Employees may engage in numerous interactions yet feel only weakly connected to their team or organization (Golden Spikes, 2024; Pramjeeth et al., 2024).

For this reason, digital leadership necessitates an active approach to fostering belonging. Leaders must connect everyday work to shared purpose, establish routines for recognition, and facilitate informal or relational interactions rather than reducing every encounter to task management (Golden Spikes, 2024; Join The Collective, 2025; MSS Business Transformation Advisors, 2025). In digital settings, organizational culture must be enacted more deliberately because it is less easily reproduced without physical co-presence.

Digital fatigue presents an additional challenge. Continuous connectivity can blur boundaries between work and personal life, reduce recovery time, and create a sense of perpetual availability (Pramjeeth et al., 2024). Leadership must therefore encompass boundary management, including protecting focus, limiting unnecessary coordination burdens, and recognizing that productivity in digital environments depends on both connectivity and cognitive space (Golden Spikes, 2024; Pramjeeth et al., 2024).

Belonging is also associated with fairness of visibility. In hybrid systems, employees who are physically present may receive greater informal access, faster feedback, and stronger social recognition than remote participants. If leaders do not actively address these dynamics, digital flexibility may coexist with unequal influence and diminished morale (Pramjeeth et al., 2024; Digital Clarity Group, 2025; IJLTER, 2024).

Digital organizations operate across multiple boundaries, including functional, geographic, cultural, linguistic, and generational divisions. This context increases the value of diversity, as varied perspectives can enhance learning and innovation, but it also renders leadership more demanding (University of Salford, 2025; SEA-EU, 2023; Pramjeeth et al., 2024).U, 2023; Pramjeeth et al., 2024).

Cultural and linguistic variation are significant because digital communication can obscure nuance. Tone may be misinterpreted, silence may carry different meanings across cultures, and assumptions about responsiveness or hierarchy may not transfer easily between teams (SEA-EU, 2023; Pramjeeth et al., 2024). Leaders therefore require cultural intelligence and explicit norms to reduce the risk of misunderstanding (University of Salford, 2025; SEA-EU, 2023).

Generational variation is important for similar reasons. Different cohorts often possess varying levels of technological familiarity, expectations regarding work flexibility, and assumptions about authority, feedback, and career development (University of Salford, 2025). Effective digital leadership avoids reducing these differences to stereotypes and recognizes that inclusive management requires diverse communication and support strategies (University of Salford, 2025; Pramjeeth et al., 2024).

Digital inclusion also relies on practical conditions. Access to high-quality equipment, stable connectivity, uninterrupted time, and private workspace is unevenly distributed. Leaders who assume a uniform digital experience may inadvertently privilege individuals with superior resources and greater visibility (Pramjeeth et al., 2024; Digital Clarity Group, 2025).

Inclusion also requires attentiveness to whose voices are heard in digital interactions. Online meetings, written collaboration tools, and asynchronous discussion spaces do not inherently distribute participation equally. Some participants benefit from language fluency, platform familiarity, time-zone alignment, or confidence in visible settings. Leaders must structure digital interactions to ensure participation is intentional rather than left to chance (SEA-EU, 2023; Pramjeeth et al., 2024; IJLTER, 2024).

5.2. Projectization and the changing logic of work

Digital transformation is typically implemented through multiple projects, pilots, system upgrades, integrations, redesigns, and experiments occurring simultaneously across the organization (Project Management Institute, 2024; WU Executive Academy, 2020; Carvalho et al., 2023). As a result, the project increasingly serves as the core unit of organizational change. While traditional departmental structures remain important, much of the most consequential work is now organized through cross-functional initiatives with defined goals, timelines, stakeholders, and learning cycles (Project Management Institute, 2024; WU Executive Academy, 2020).

PMI materials emphasize that project capability in the digital age requires more than scheduling discipline. It encompasses data-driven decision-making, collaborative leadership, security and privacy awareness, regulatory understanding, and an innovative mindset (Project Management Institute, 2024). These expectations align with the broader assertion that digital leadership integrates technical and social capabilities rather than treating them as alternatives (All Consulting Firms, 2025; Project Management Institute, 2024).

The projectization of work also transforms senior leadership roles. Executives are now expected to oversee portfolios of transformation initiatives rather than merely supervise stable business units. This shift requires prioritization, governance, resource balancing, and the capacity to prevent strategic fragmentation when different teams pursue competing digital agendas (WU Executive Academy, 2020; Sheer Velocity, 2026).

Projectization also alters leadership identity. Leaders are no longer defined solely by their hierarchical position or the size of their permanent unit. Increasingly, they are evaluated based on their ability to mobilize temporary coalitions, secure adoption across functions, and transition initiatives from experimentation to institutionalized practice. As a result, project literacy becomes relevant not only for project managers but for leaders at all organizational levels (Project Management Institute, 2024; WU Executive Academy, 2020; IE University, 2025).

5.3. Governance, data, and decision-making

Digitalization transforms the informational foundation of leadership. Organizations now possess greater access to data, dashboards, predictive tools, and metrics than ever before. While this expansion creates opportunities for evidence-informed decision-making, it also introduces new distortions if leaders conflate available data with meaningful understanding (All Consulting Firms, 2025; Carvalho et al., 2023).

Data literacy is therefore essential, but it should be regarded as a leadership capability rather than solely a technical skill. Leaders must understand what data reveal, what they omit, how data are generated, and how metrics influence organizational behavior (All Consulting Firms, 2025; Project Management Institute, 2024; IE University, 2025).

Governance becomes more important for this reason. As digital systems proliferate, organizations face risks of duplication, inconsistency, data silos, and weak accountability. Without governance, separate digital initiatives may generate local efficiencies while undermining system-wide coherence (All Consulting Firms, 2025; Carvalho et al., 2023; Digital Clarity Group, 2025).

This governance challenge is particularly evident when organizations implement AI-supported or algorithmic systems. Even if these tools enhance efficiency, leaders remain accountable for fairness, transparency, and the legitimacy of decision-making processes. Ethical judgment cannot be delegated to software (JRG Partners, 2026; Forbes Technology Council, 2025; Pramjeeth et al., 2024).

Data-rich environments can also create an illusion of certainty. Dashboards may lead leaders to believe that all relevant phenomena are visible and measurable, although critical aspects of organizational life, such as trust, fatigue, resistance, creativity, or ethical concern, are only partially captured by formal indicators. Effective digital leadership therefore requires combining quantitative evidence with interpretive judgment and contextual awareness (All Consulting Firms, 2025; Forbes Technology Council, 2025; Carvalho et al., 2023).

5.4. Data Governance, Ethical Decision-Making, and Human Consequences of Digitalization

Leadership in the digital era cannot be fully understood without consideration of ethics. Digital systems offer opportunities for efficiency and innovation, but they also raise concerns regarding surveillance, bias, privacy, autonomy, and accountability (Forbes Technology Council, 2025; Join The Collective, 2025; Pramjeeth et al., 2024).

One ethical tension involves visibility and control. Digital platforms frequently render employee activity more measurable, which can facilitate coordination but may also encourage intrusive monitoring. Leaders who normalize constant surveillance may achieve short-term compliance at the expense of long-term trust and professional dignity (Golden Spikes, 2024; Pramjeeth et al., 2024).

A further ethical issue relates to the use of data in evaluation and decision-making. If leaders depend on incomplete or biased indicators, digital systems may reinforce existing inequalities while appearing neutral (Forbes Technology Council, 2025; Pramjeeth et al., 2024). This concern is especially significant in recruitment, performance assessment, learning analytics, and resource allocation (Pramjeeth et al., 2024; IJLTER, 2024).

Digital transformation also produces distributive consequences. Some employees gain influence as their skills become more valuable, while others may feel displaced, deskilled, or marginalized. Leadership is thus responsible not only for achieving efficiency gains but also for managing transitions in ways that preserve dignity, fairness, and access to learning (SkillSea Project, 2020, 2023; Johnson, 2024). Leaders influence which tools are adopted, what kinds of monitoring are normalized, how consent is interpreted, and whether data practices are explained transparently.

Ethical failure often emerges gradually through small procedural decisions rather than dramatic violations, which is why ethical literacy must be embedded into ordinary leadership routines (Forbes Technology Council, 2025; Join The Collective, 2025; Pramjeeth et al., 2024).

Digital transformation may fail for various reasons,

but several recurrent risks are closely associated with leadership. The first is technocentrism, which is the assumption that acquiring tools or platforms automatically produces transformation (Pedersen and Partners, 2024; Carvalho et al., 2023; Digital Clarity Group, 2025). This perspective narrows leadership to implementation oversight and overlooks culture, capability, governance, and institutional purpose (Pedersen and Partners, 2024; All Consulting Firms, 2025).

The second risk is control inflation. When uncertainty increases, leaders may respond by imposing additional approvals, monitoring, reporting requirements, or more frequent meetings. Although these measures are intended to restore order, they can impede adaptation, weaken trust, and discourage initiative (Golden Spikes, 2024; Headspring Executive, 2022).

A third risk is strategic fragmentation. As different units pursue local digital solutions, organizations may accumulate projects without integration. In such cases, transformation becomes a series of disconnected experiments rather than a cumulative strategic process (Carvalho et al., 2023; Digital Clarity Group, 2025).

A fourth risk is skill imbalance. Organizations may prioritize technical upskilling while neglecting leadership development, communication capabilities, and change management. This approach produces teams capable of operating systems but unable to align around purpose, manage conflict, or support adoption (SkillSea Project, 2020, 2023; Johnson, 2024).

A fifth risk is change fatigue. Repeated initiatives without prioritization or adequate support can foster cynicism, even when each individual project appears justified. In such contexts, leadership failure stems not from the ambition to change, but from the inability to stage and absorb change sustainably (Join The Collective, 2025; Sheer Velocity, 2026; MSS Business Transformation Advisors, 2025).

Leadership failure may also result from symbolic inconsistency. If leaders advocate for agility while maintaining approval-heavy routines, or celebrate innovation while penalizing informed risk-taking,

employees receive contradictory signals. In digital transformation, such contradictions are especially damaging because they undermine credibility and slow adoption when coordinated experimentation is most critical (Forbes Technology Council, 2025; Sheer Velocity, 2026; Headspring Executive, 2022).

6. Strategic and Managerial Implications for Organizations

Organizations seeking to thrive amid digital transformation require leadership systems designed for adaptability rather than solely for stability. This process begins with redefining leadership selection and development. While technical literacy remains important, it should be assessed alongside communication skills, empathy, collaborative influence, and the capacity to guide teams through uncertainty (JRG Partners, 2026; Forbes Technology Council, 2025; Johnson, 2024).

Leadership development should increasingly emphasize experiential learning. Since digital leadership requires navigating complex environments, organizations benefit when emerging leaders engage in transformation projects, cross-functional initiatives, and settings that demand both analytical reasoning and social coordination (Forbes Technology Council, 2025; Project Management Institute, 2024).

Organizational design represents another critical strategic consideration. When leadership expectations prioritize agility but organizational structures remain fragmented or overly reliant on hierarchical approvals, digital transformation efforts are likely to stall (Golden Spikes, 2024; Headspring Executive, 2022). Leaders require systems that enable rapid feedback, flexible team formation, transparent communication, and clear governance, while avoiding both disorder and excessive centralization (All Consulting Firms, 2025; Golden Spikes, 2024; Headspring Executive, 2022).

Project capability should be regarded as a strategic asset. In the digital era, organizations that consistently translate strategic intentions into coordinated implementation achieve greater success (Project Management Institute, 2024; WU Executive Academy, 2020). Consequently, project literacy, portfolio over-

sight, and adoption-focused execution must be recognized as core components of leadership architecture, rather than as mere technical support functions (Project Management Institute, 2024; WU Executive Academy, 2020; IE University, 2025).

A key practical implication is that leadership development, organizational design, and technology governance must be managed as interconnected agendas. Digital transformation is most effective when these domains are aligned. Investment in technology platforms without corresponding investment in leadership capability results in underutilized systems. Similarly, investment in leadership without structural reform leads to frustration, while structural change without clear purpose causes fatigue. Therefore, achieving strategic coherence is among the most significant leadership accomplishments in the digital era (All Consulting Firms, 2025; Project Management Institute, 2024; Digital Clarity Group, 2025).

For practitioners, four priorities are identified.

First, leadership selection and succession criteria should be revised. Organizations that prioritize only technical expertise or functional seniority may be misaligned with digital environments and should explicitly assess empathy, collaborative influence, data literacy, and ethical judgment (JRG Partners, 2026; Forbes Technology Council, 2025; University of Salford, 2025).

Second, leadership development should be experiential, incorporating rotational assignments, transformation project roles, and structured ethical reflection, rather than relying solely on classroom instruction (Forbes Technology Council, 2025; Project Management Institute, 2024; IE University, 2025).

Third, executives overseeing transformation portfolios should manage projectization as an organizational design challenge by sequencing priorities, resolving resource conflicts, and building cumulative capability, rather than treating each initiative in isolation (WU Executive Academy, 2020; Sheer Velocity, 2026).

Fourth, data and AI governance should be recognized as a leadership accountability, with boards

requiring regular audit reporting on algorithmic systems used in HR and operational decisions (Forbes Technology Council, 2025; Pramjeeth et al., 2024).

7. Higher Education as a Distinct Case

Higher education offers a particularly illustrative context for examining the leadership challenges associated with digitalization. Universities are influenced by the same broad forces as other organizations, such as platformization, datafication, hybrid work, and increasing demands for digital competence. However, they function within institutional conditions that render organizational change especially complex (Pramjeeth et al., 2024; Carvalho et al., 2023; Digital Clarity Group, 2025).

Governance is a significant factor. Authority in higher education institutions is typically distributed among faculty bodies, administrative structures, and executive leadership. This distribution makes it more challenging to implement centralized digital strategies compared to more hierarchical organizations (Pramjeeth et al., 2024; Digital Clarity Group, 2025; Fisher College of Business, 2026). Consequently, digital leadership in universities relies less on directive approaches and more on persuasion, coalition-building, and aligning digital initiatives with academic values and the institutional mission (Pramjeeth et al., 2024; Digital Clarity Group, 2025).

The literature indicates that digital transformation in higher education is frequently fragmented. A multivocal review found that only one in four institutions had a digital strategy, and many had initiated isolated digital transformation projects that were not integrated into a comprehensive institutional plan (Carvalho et al., 2023). Earlier systematic reviews similarly suggested that digital transformation in higher education remains an emerging field, with holistic approaches still underdeveloped (Carvalho et al., 2023; IJLTER, 2024).

These findings support the broader argument presented in this paper. Digital leadership in higher education extends beyond the acquisition of educational technology or administrative systems. It involves establishing coherent institutional direction across teaching, research, administration, data management, and student services, while upholding academic au-

tonomy and addressing disparities in digital readiness throughout the institution (Pramjeeth et al., 2024; Carvalho et al., 2023; Suryadi et al., 2024).

Higher education further demonstrates that digital leadership is constrained by cultural factors as much as by structural ones. Faculty autonomy, disciplinary identities, and traditions of shared governance influence both the pace and nature of change. Therefore, effective digital leadership in universities relies on building legitimacy, fostering participatory communication, and framing digital transformation as a means to enhance the institutional mission rather than solely to improve efficiency (Pramjeeth et al., 2024; Digital Clarity Group, 2025; Muljani et al., 2025).

8. Conclusions

Digitalization is not only transforming organizations; it is transforming the meaning and practice of leadership. Leadership must now function effectively in environments that are more networked, data-rich, project-based, ethically exposed, and continuously changing than those for which many traditional models were designed (Pedersen and Partners, 2024; Sheer Velocity, 2026; Carvalho et al., 2023).

The evidence assembled in this paper supports several interconnected conclusions: leadership is moving toward networked coordination and influence; technical capability and soft skills are inseparable in effective digital leaders; project logic has become a core strategic competence; and trust, inclusion, and ethical judgment are central conditions of successful digital change, not peripheral concerns (Korhonen et al., 2022; JRG Partners, 2026; Project Management Institute, 2024; Forbes Technology Council, 2025; Pramjeeth et al., 2024).

The reflections presented in this paper yield significant implications for theory, policy, and managerial decision-making.

8.1. Theoretical contributions

This paper offers a conceptual contribution by integrating three dimensions of digital leadership—soft-skill rebalancing, projectization, and network governance—into a unified framework, whereas ex-

isting approaches typically address these as separate domains (Ly, 2023; Mmakau and Sethibe, 2024; Bouwmans et al., 2024). It further challenges the prevailing technocentric perspective in transformation research. Rather than positioning leadership as a moderating variable within technology adoption frameworks, this analysis elevates leadership behavior—particularly soft-skill deployment, ethical judgment, and trust-building—as the primary explanatory factor for transformation success or failure (Carvalho et al., 2023; Zárate-Torres et al., 2025; Aziz et al., 2024). Additionally, the paper extends network governance concepts, originally developed for inter-organizational contexts (Korhonen et al., 2022), to intra-organizational digital environments where authority is distributed and coordination relies on credibility rather than hierarchy.

8.2. Policy implications

At the policy level, digital upskilling programs must move beyond technical training to include collaborative, communicative, and leadership-related competencies — a gap well documented in the SkillSea and SEA-EU materials (SkillSea Project, 2020, 2023; SEA-EU, 2022, 2023). Funding instruments such as Erasmus+ and the European Skills Agenda should reflect this. Higher education policy should support coherent institutional digital strategies rather than fragmented technology initiatives, and accreditation processes could usefully require evidence of integrated digital governance.

Labor market policy must also address the distributive consequences of digitalization through re-training programs and social protection frameworks designed for non-linear careers, since leaving these transitions to organizational discretion risks widening inequality (Johnson, 2024). Finally, data governance regulation — including the European AI Act — should incorporate leadership development components alongside technical and legal compliance requirements (Forbes Technology Council, 2025; JRG Partners, 2026).

8.3. Limitations and suggestions for future research

Several limitations warrant consideration. This paper employs a conceptual and integrative approach; the framework synthesizes findings from peer-

reviewed articles, practitioner reports, and conference papers with varying methodological rigor, and it has not undergone empirical validation (Ly, 2023; Bouwmans et al., 2024; Pedersen and Partners, 2024; Mmakau and Sethibe, 2024). Geographic coverage is uneven, as much of the practitioner literature reflects North American and Western European contexts, limiting generalizability to low-resource settings, public sector organizations, or small enterprises. The analysis also centers on organizational-level dynamics and does not systematically address individual leader psychology or micro-level behavioral mechanisms (Aziz et al., 2024; Zárate-Torres et al., 2025). Additionally, the rapid pace of technological change necessitates ongoing empirical updates to the framework as artificial intelligence and related developments continue to reshape organizational life.

The most immediate priority for future research is empirical validation of the integrated three-dimensional model using survey instruments and structural equation modeling or multi-level analysis across diverse organizations (Ly, 2023; Mmakau and Sethibe, 2024; Bouwmans et al., 2024).

Longitudinal research designs are particularly valuable, as cross-sectional studies cannot capture the processes by which leaders and organizations develop digital capability over time. Tracking leadership teams through multi-year transformation programs would provide deeper insight into sequencing and absorptive capacity (Aziz et al., 2024; Obeidat, 2026; Carvalho et al., 2023). Sector-comparative research is also necessary to determine which elements of the framework are universal and which are context-dependent, with higher education meriting special attention due to its dual role as a site of transformation and a developer of future leaders (Aristovnik et al., 2023; Pramjeeth et al., 2024; IJLTER, 2024).

Finally, research on ethics and AI in leadership contexts, including how leaders address algorithmic accountability in practice, and rigorous evaluation of leadership development programs in digital environments, represent high-priority directions for advancing both theory and practice (Zárate-Torres et al., 2025; Forbes Technology Council, 2025; Project Management Institute, 2024).

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Дигитализација и лидерство: изазови лидерства и промјене у ери дигиталне трансформације

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Кључне ријечи:
дигитално лидерство;
дигитална трансформација;
меке вјештине;
пројектизација;
управљање у високом образовању

JEL класификација: D23, M10, O33

Дигитализација је свеprisутан покретач организационих промјена који трансформише технологије, пословне моделе, механизме координације и свакодневно искуство рада. Тај процес из темеља преобликује лидерство тако што умањује ефикасност ригидних хијерархија и повећава потребу за лидерима способним да дјелују унутар флуидних мрежа, усмјеравају пројектно засновану сарадњу и одржавају повјерење у виртуелним и хибридним окружењима. У раду се заступа став да дигиталну трансформацију не треба посматрати само као иницијативу техничке модернизације, већ као трајан лидерски изазов у којем су меке вјештине, попут емпатије, комуникације и сарадничког утицаја, једнако важне као и техничка писменост. Анализа испитује како непрекидне промјене, контексти одлучивања богати подацима и етичке тензије у вези с надзором, правичношћу и аутономијом намећу нове захтјеве лидерима на свим организационим нивоима. Посебан нагласак стављен је на јачање пројектизације, неопходност чврстог управљачког оквира и писмености у раду с подацима, те на значај инклузије и психолошке сигурности за одржавање ангажованости у дигитално посредованим организацијама. Налази указују на то да организације имају веће изгледе за успјех у дигиталној трансформацији када развијају лидере који могу да ускладе технологију, структуру и културу, дајући при томе предност људском смислу и достојанству током цијелог процеса промјена. У концептуалном смислу, чланак синтетички расути увиде о неким вјештинама, пројектизацији и мрежном управљању у интегрисану лидерску перспективу, чија је намјена да послужи као основа како за емпијска истраживања, тако и за праксу развоја лидера.

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