

Digital Transformation as an Organisational Change Process in Higher Education: A Qualitative Research at a Large Public University in Poland*

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Abstract

Digital transformation in higher education requires not only technology adoption but also effective organisational change management. While existing research has examined institutional strategies and technological infrastructure, limited attention has been paid to how system users perceive digitalisation during early implementation stages - a critical phase when resistance and uncertainty are most likely to emerge. This study addresses that gap by exploring user perceptions of digital transformation through the lens of change management theory. The research was conducted at a large public university in Poland undergoing digitalisation of administrative processes. An exploratory qualitative approach was adopted, involving four semi-structured interviews with administrative system users. The findings indicate that digital systems are generally perceived as beneficial for operational efficiency, but they also reveal challenges related to insufficient communication, unclear procedures, and inadequate preparation for change. These early-stage results highlight the importance of human-centered change strategies while ensuring alignment between technological implementation, organisational practices, and user competencies.

Keywords: digital transformation, change management, higher education, user perception

Introduction

The adoption of digital technologies constitutes a key driver of the transformation of modern education systems and has become a strategic priority for higher education institutions. Universities are increasingly implementing digital systems to boost their efficiency and to improve the quality of administrative processes. This change involves a transition from paper-based procedures to integrated digital platforms, shorter data processing times, better coordination between organisational units, and a reduced risk of errors. However, the mere availability of technological infrastructure does not guarantee the success of digital transformation. Its outcomes depend largely on how system users perceive new solutions and how they use them. Digital systems reshape everyday work practices, influencing task execution and patterns of interaction. Therefore, digital transformation should be viewed as an organisational change process rather than a purely technological implementation. In this context, system users play a critical role. Their perceptions, digital literacy, level of acceptance, and readiness directly influence the extent to which the intended benefits can be achieved (Patabang et al., 2024). Despite the increasingly widespread adoption of digital systems in higher education, research on user perceptions during the early stages of implementation remains limited, particularly in the case of public universities undergoing digital transformation in Poland. Existing studies indicate that the implementation of digital technologies in higher education administrative processes is associated with high levels of user satisfaction, mainly due to increased efficiency, faster data processing, enhanced transparency, and a reduction in manual, error-prone tasks (Sinjaya

et al., 2025). At the same time, prior research has identified a number of obstacles hindering effective digital transformation in higher education institutions, including limited technological infrastructure, varying levels of digital competence among staff, and resistance to organisational change (Brunetti et al., 2020). Furthermore, it has been shown that cultural resistance and insufficient training hinder the long-term sustainability of digital initiatives (Rafferty et al., 2013; Vial, 2021). These findings underscore the importance of understanding user perspectives, as resistance or a lack of preparedness can significantly reduce the effectiveness of implemented systems. The aim of this study is to examine system users' perceptions of digital transformation as an organisational change process at a large public university in Poland. This article presents preliminary findings based on qualitative interviews conducted with users of digital administrative systems, constituting the initial phase of a broader research project.

Theoretical Background

Digital transformation entails fundamental changes to the way organisations operate, requiring users to adopt new tools, modify established procedures, and develop new competencies (Vial, 2021; Verhoef et al., 2021). It extends beyond technological implementation and involves broader adjustments to organisational practices and behaviors. Change management theory provides relevant frameworks for analysing these processes. In particular, the 8-step model proposed by Kotter (1996) emphasises that successful organisational change depends on several interrelated factors, employee empowerment, and the institutionalisation of change within organisational structures. Effective communication is crucial for ensuring that users understand the purpose, scope and expected outcomes of change initiatives (Kotter, 1996; Armenakis & Harris, 2002). In its absence, uncertainty may increase, leading to lower levels of engagement and resistance to change. Equally important is the empowerment of employees, which includes access to training, ongoing support and the development of the competencies necessary to use the system effectively (Rafferty et al., 2013). The presence of early and visible benefits plays a reinforcing role, increasing user acceptance and encouraging continued engagement with new solutions (Kotter, 1996). In the context of digital transformation, these elements are particularly important - technological implementation alone does not guarantee successful adoption of change. Instead, it is widely recognised that organisational adaptation and user acceptance are key determinants of transformation outcomes (Vial, 2021). This study adopts change management theory, particularly Kotter's 8-step model, as an analytical framework to examine system users' perceptions of digital transformation.

Methodology

This study adopts an exploratory qualitative approach and forms part of an ongoing research project. The study was conducted at a large public university in Poland, which has recently implemented digital systems to support administrative processes. The systems support processes such as staff-related administration and internal documentation workflows. The preliminary findings presented in this article are based on four semi-structured interviews with users of the systems and constitute the initial qualitative phase of a broader research project. Each semi-structured face-to-face interview lasted approximately 45 minutes and focused on the participants' experiences before and after the system implementation, with particular emphasis on communication, training, and the day-to-day use of the system. The collected data were analysed using thematic analysis (Braun & Clarke, 2006) to identify recurring patterns related to the perception of change and the adoption of the system. The qualitative phase aims to provide an initial understanding of users' perspectives and to supply information useful for designing subsequent stages of the research.

Preliminary Findings

The preliminary findings identified several key issues relating to users' perceptions of digital transformation:

- Communication and awareness of changes

Communication emerged as a central factor in shaping users' experiences. Participants reported that information regarding the system implementation was sometimes insufficient or provided too late. One participant stated: "We only received information about the system shortly before implementation. We felt that a done deal had been presented to us." This led to a sense of limited involvement and insufficient preparation. Another participant emphasised that communication was sometimes excessive but unclear: "There were lots of emails, but it wasn't always clear exactly what was happening and what we were supposed to do." These findings suggest that both insufficient and poorly organised communication can cause uncertainty.

- Training and user readiness

Training and testing were identified as important enabling factors. Participants emphasised that system testing facilitated understanding of system functionality prior to real-world use. One participant explained: “The tests helped a lot. They allowed me to understand how the system works before I started using it in real-life situations.” However, training materials were not always perceived as effective. Another participant noted: “The written instructions were too long. It was easier when someone showed me directly what to do.” Importantly, participants highlighted that the main challenge was not the system itself, but user readiness, underscoring the importance of user empowerment.

- Perceived benefits and acceptance

Despite the initial challenges, participants recognised clear benefits. They noted that the system had improved efficiency and reduced paper consumption. One participant stated: “Work now proceeds more quickly, and everything is in one place.” Another participant highlighted the increased transparency: “It’s easier to track what’s been done and what still needs to be done.” These early benefits supported gradual user acceptance. One participant remarked: “At first, I accepted it because I had to. Later, I began to see the benefits.” This suggests that perceived usefulness evolves through continued system use.

- Organisational consistency and clarity of procedures

Participants emphasised the importance of organisational coherence. One participant stated: “The system works well, but sometimes there is a lack of clear procedures or division of responsibilities.” This led to uncertainty. Another participant added: “Digitalisation alone is not enough. People need to know exactly what they are responsible for.” This suggests that technological implementation must be accompanied by organisational adjustments.

- Human factors and adaptation

Human factors played an important role. Participants highlighted differences in digital skills. One participant stated: “It is more difficult for people who are less familiar with technology.” This indicates that users’ competencies and digital literacy influence the adoption to the solution.

Discussion and Conclusion

This study provides preliminary insights into how system users perceive digital transformation as a process of organisational change. The findings confirm that digital transformation goes beyond mere technological implementation and encompasses both organisational and human dimensions (Vial, 2021). The results indicate a partial and uneven alignment with change management theory. Communication played an important role, although its effectiveness varied, reflecting Kotter’s observations regarding its significance in change processes. Training and system testing supported user readiness, which is consistent with the concept of empowerment, whilst early operational benefits contributed to gradual user acceptance. At the same time, the findings reveal challenges related to organisational adaptation. In particular, the lack of clearly defined procedures and responsibilities suggests that technological implementation was not fully supported by corresponding organisational adjustments. This study adds to the literature by providing empirical insight into user perceptions at the early stage of digital transformation, a phase that remains underexplored in higher education research. The results offer further insight into digital transformation in higher education and have practical implications. Universities should ensure effective communication, provide appropriate training, and adapt organisational procedures to digital systems. The study is subject to limitations, particularly the small sample size and its focus on a single institutional context. Given that the research is still ongoing, the current results should be treated as preliminary. Further qualitative data collection is required, including additional interviews with users, in particular with administrative staff, to deepen the analysis and broaden the empirical basis. In parallel, a quantitative survey is currently being developed, which will be integrated into the system, enabling a more comprehensive analysis and verification of the results. Expanding the research sample and dataset will be essential for drawing more reliable and generalisable conclusions, while the current findings already point to the importance of organizational and human factors in digital transformation. Taken together, the preliminary findings indicate that the success of digital transformation depends not only on technological implementation, but also on its alignment with organisational practices and user experiences.

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