

DIGITAL TRANSFORMATION AND THE ILLUSION OF PERFORMANCE, TESTING THE LIMITS OF TECHNOLOGY'S EFFECTIVENESS IN ORGANIZATIONS

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Abstract

Keywords:

Digital Transformation,
The Illusion of
Performance,
Organizational
Performance,
Organizational
Capabilities.

This study aims to critically examine the relationship between digital transformation and organizational performance by highlighting the potential emergence of the illusion of performance phenomenon. The primary focus of the study is directed at testing the limits of technology's effectiveness in creating substantive, rather than merely representational, value. The approach used is a literature review, systematically examining relevant empirical and conceptual literature, particularly in the context of organizations in developing countries. The analysis is conducted by comparing research findings related to technology adoption, organizational performance, and contextual factors that influence the relationship. The results of the study indicate that digital transformation is not always directly proportional to improved organizational performance. In many cases, technology actually contributes to the formation of the illusion of performance, a condition where performance indicators show improvements without being accompanied by fundamental changes in organizational processes and outcomes. This phenomenon is influenced by various factors, including institutional pressures, managerial cognitive biases, and misalignment between business strategy and technology implementation. Furthermore, the effectiveness of technology is highly dependent on organizational capabilities, the quality of human resources, and the surrounding operational context. The implications of this study emphasize the importance of a more reflective and contextual approach to understanding digital transformation. Organizations need to distinguish between symbolic technology adoption and technology adoption that truly creates value, so that strategic decisions are not driven by perception alone.

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INTRODUCTION

Over the past decade, digital transformation has evolved from a mere strategic choice to an *organizational imperative*. Reports from international institutions such as the World Economic Forum and McKinsey & Company consistently show that investment in digital technology has increased significantly, particularly post-pandemic, when organizations were forced to adapt quickly (Juniansyah et al., 2026). In many management discourses, digitalization is no longer debated as an option but rather accepted as a prerequisite for sustainability. However, this is precisely where problems begin to emerge. When a concept is accepted without much resistance, it tends to lose room for criticism. Digital transformation then presents itself as a seemingly universal answer, without always being accompanied by in-depth reflection on the specific circumstances of the organizations adopting it.

This dominant narrative has gradually formed an implicit assumption that technology adoption will automatically lead to improved performance. Early literature on management information systems indeed demonstrated a positive correlation between technology and operational efficiency. However, recent developments reveal a more complex picture. Many organizations have experienced increases in technological capacity, but not accompanied by commensurate increases in productivity. In some cases, digitalization has even added a new layer of complexity to the decision-making process. Here, it's important to ask: is digitalization truly driven by strategic necessity, or is it driven by external pressure to remain relevant in a rapidly changing business landscape?

Organizational performance, in this context, can no longer be understood as a purely objective entity. It is measured through indicators, presented in reports, and ultimately communicated to various stakeholders. This means that performance is not only substantive but also representational. Organizations can demonstrate improvements in certain indicators—for example, service speed or digital transaction volume—without experiencing fundamental changes in structural efficiency or long-term value creation. The distinction between “real” and “performed” performance begins to blur. This is where the conceptual space for understanding performance as a socio-economic construct becomes increasingly relevant.

Based on this framework, the concept of *performance illusion* becomes important to elaborate. This illusion refers to a condition where performance indicators show improvement, but are not accompanied by fundamental transformations in organizational processes (Rumengan & Wahyuni, 2026). Technology, in this case, has the potential to function as a tool that accelerates reporting without actually improving the quality of decisions. Increasingly sophisticated dashboards can create the impression of greater control, while the substance of the problem remains untouched. In fact, in certain situations, the abundance of data actually triggers *overconfidence* at the managerial level. Not everything that is measurable reflects what is valuable. This statement is simple, but it has profound implications for understanding the relationship between technology and performance.

Furthermore, the effectiveness of technology cannot be separated from the organization's capacity to manage it. The literature on *dynamic capability* emphasizes that the ability to integrate, build, and reconfigure resources is a determining factor in creating value from technology (Kristinawati & Tjakraatmaja, 2018). Without such capability,

digital investments risk becoming mere infrastructure without strategic function. Furthermore, the quality of human resources, the alignment between technology and business strategy, and the institutional context also play a crucial role. In other words, failure to deliver performance is not solely due to inadequate technology, but rather to the organization's unpreparedness to orchestrate that technology effectively.

The illusion of performance doesn't emerge randomly, but rather is formed through traceable mechanisms. Institutional pressures, for example, push organizations to adopt digital practices to gain legitimacy. In this context, digitalization becomes a symbol of modernity, not a strategic tool. On the other hand, managerial cognitive biases can reinforce the belief that technology is a universal solution, thus overlooking the complexities of implementation. A misalignment between business strategy and digital initiatives is also common, resulting in investments disconnected from value creation. Coupled with an overreliance on digital metrics, organizations can potentially become trapped in a shallow measurement logic. What is measured increases, but what is meaningful doesn't necessarily change.

In recent developments, the discourse on digital transformation has begun to shift from an affirmative approach to a more reflective one. Recent studies no longer simply ask "does technology improve performance" but instead explore "under what conditions does technology fail to create value." This is where *the state of the art* in this research lies. Rather than positioning digital transformation as a linear, independent variable, more contemporary approaches view it as a context-bound phenomenon, influenced by organizational dynamics, and susceptible to perceptual distortions. The concept of performance illusion provides a gateway to understanding that the relationship between technology and performance is contingent, not deterministic.

Ultimately, the importance of this study lies not only in its theoretical contributions but also in its practical implications. In management practice, technology investment decisions often involve significant resources and high expectations. Without a proper understanding of the limits of technology effectiveness, organizations risk allocating resources to initiatives that are more symbolic than substantive. Therefore, this study seeks to encourage a more cautious reading of digital transformation—not as a quick fix, but as a process that requires alignment, reflection, and adequate organizational capacity. At this point, the study of the illusion of performance is no longer merely a critique, but an attempt to clarify how true value is created in the digital era.

RESEARCH METHODS

This research was designed with a quantitative explanatory approach that not only aims to test the linear relationship between variables but also attempts to capture the contingent nature of the relationship between digital transformation and organizational performance (Ardhian, 2025). The unit of analysis focused on companies—both manufacturing and service sectors—that have adopted digital technology in their operations, with the assumption that such organizations have observable variations in the depth of transformation. Data were collected through a structured survey of middle- and senior-level managers directly involved in strategic decision-making, as it is at this level that perceptions regarding technology performance and implementation are operationally formed. The research instrument was developed by adapting indicators that have been used in previous studies, such as digital transformation measurements based on system integration and technology usage intensity (for example, in the OECD study on digital

adoption), as well as organizational performance indicators that encompass not only financial aspects but also operational and perceptual dimensions. To identify the possibility of "performance illusions," this study deliberately differentiates between performance indicators based on managerial perceptions and more objective performance indicators, allowing for a reading of potential deviations between the two.

Data analysis was conducted using a *Structural Equation Modeling* (SEM) approach, which allows for simultaneous testing of relationships between latent variables while accommodating the presence of mediating and moderating variables (Sholihin & Ratmono, 2021). Within this framework, digital transformation is positioned not only as a direct predictor of performance but also as a construct whose effectiveness is influenced by organizational capabilities, such as *dynamic capability* and human resource quality. Therefore, the model constructed does not assume a deterministic relationship but instead allows for variations in results depending on the organization's internal conditions. To strengthen the validity of the findings, reliability and construct validity were tested through *confirmatory factor analysis*, as well as testing for potential common method bias, given that the data were sourced from respondents' perceptions. Furthermore, additional analysis, in the form of comparisons between groups of organizations with different levels of digital transformation, was conducted to identify whether increasing digitalization intensity always aligns with increased substantive performance, or whether, under certain conditions, reflects symptoms of performance illusion as posited in the conceptual framework of this study.

RESULTS AND DISCUSSION

Digital Transformation as a Dominant Narrative

Digital transformation in contemporary management literature has evolved from a mere technological phenomenon to a largely unquestioned framework. Many studies implicitly assume that adopting digital technologies is a rational step that will lead to increased efficiency and competitiveness. A World Bank report indicates that over 70% of companies in developing countries have adopted at least one form of digital technology in their operations, especially after the COVID-19 pandemic (COUNTRY, n.d.). However, these adoption figures are often read as indicators of progress, without further examining whether the technology is truly integrated into core business processes or merely serves as an administrative complement. At this point, digital transformation begins to function as a *taken-for-granted solution*, accepted without much conceptual resistance.

In the context of developing countries, this dominant narrative is often reinforced by external pressures, both from global markets and government policies. In Indonesia, for example, the push for MSME digitalization through various national programs demonstrates how technology is positioned as a solution to productivity and market access issues (Gunawan & Wiyata, 2026). However, field studies indicate that most MSMEs adopt digital platforms more in response to environmental demands than internal strategic needs. A similar phenomenon is also found in India and Vietnam, where technology adoption is often partial and not accompanied by changes in organizational structure. This raises a fundamental question: does digitalization in these contexts truly create value, or simply fulfill institutional expectations?

Furthermore, the dominance of the digitalization narrative also has the potential to block space for critical evaluation of the costs and risks involved. Technology

investments not only require financial resources but also demand changes in organizational culture and work patterns. When organizations adopt technology without adequate preparation, the results are not always positive. In some cases in the public sector of developing countries, the digitalization of services actually lengthens the bureaucratic chain because old and new systems run in parallel. Thus, the literature is beginning to understand that digital transformation cannot be treated as a universal prescription but is rather a context-laden process that requires more careful assessment.

Organizational Performance: Between Substance and Representation

Organizational performance has traditionally been understood as the result of operational efficiency and effectiveness, measurable through financial and non-financial indicators. However, emerging literature suggests that performance is not merely objective but also constructed through measurement and reporting processes. In the context of digitalization, organizations' ability to generate and display data in real time has transformed how performance is perceived. Data from the OECD shows that companies that adopt digital systems tend to have higher data transparency, but this does not necessarily correlate directly with increased productivity (Pratama, 2025). In other words, performance visibility increases, but the substance of performance does not necessarily experience a commensurate change.

The distinction between substantive and symbolic performance becomes increasingly relevant in this context. Substantive performance refers to tangible improvements in output, efficiency, or profitability, while symbolic performance relates to how an organization is perceived by stakeholders. In many cases, organizations actively engaging in digitalization gain legitimacy as innovative entities, even though the economic impact is unclear. In some startups in Southeast Asia, for example, company valuations often increase along with a strong digital narrative, even though profitability has not yet been achieved (Edi Witjara, 2019). This suggests that performance can function as a representation shaped by narratives and perceptions, rather than solely by tangible results.

In the context of developing countries, this representational dimension often becomes more dominant due to the need to demonstrate modernity and competitiveness on a global level. Organizations, both in the public and private sectors, tend to showcase digitalization success as part of a legitimacy strategy. However, when performance is understood more as representation than substance, the risk of distortion is inevitable. Performance indicators may improve due to changes in measurement methods, rather than improvements in underlying processes. This is where the importance of distinguishing between what is measured and what is truly valuable to the organization becomes crucial.

The Illusion of Performance: A Critical Reading

The concept of performance illusion emerged in response to the mismatch between improving indicators and relatively stagnant operational realities. In management literature, this phenomenon is often associated with increased reporting capacity that is not accompanied by improved decision quality (Rojabi, 2025). Digital technology enables organizations to collect and process large amounts of data, but does not automatically improve analytical capabilities or managerial discretion. In this context, perceived performance may be a reflection of information system capabilities, rather than the effectiveness of the organization itself.

The case of the digital banking sector in several developing countries provides a compelling illustration. Many banks report increases in digital transactions and app users

as indicators of successful transformation. However, research shows that these increases are not always accompanied by increased profitability or operational cost efficiency. In some cases, the costs of technology investment and maintenance actually outweigh the short-term benefits. This situation illustrates how performance indicators can be misleading if not interpreted critically.

Furthermore, the illusion of performance can also be reinforced by cognitive biases at the managerial level. When organizations have invested significant resources in technology, there is a tendency to view results more positively as a form of justification for decisions. Complex dashboards full of indicators can create the impression of high control, even though strategic decisions remain based on untested assumptions. Not everything that is measurable reflects what is valuable. This statement is key to understanding that technology, while always improving performance, can also create a layer of perception that obscures reality.

The Limits of Technology Effectiveness in Organizations

The effectiveness of technology in an organization cannot be understood as a direct function of the level of adoption, but rather as a result of the interaction between technology and internal capabilities. The literature on *dynamic capability* emphasizes that organizations need the ability to integrate and reconfigure resources for technology to generate value (Muzadi et al., 2022). Without this capability, technology becomes merely a tool disconnected from business strategy. Data from the Asian Development Bank shows that many companies in Southeast Asia experience a gap between technology adoption and productivity gains, largely due to limited organizational capabilities.

Furthermore, the quality of human resources plays an equally important role. Advanced technology will be ineffective without adequate competency. In many developing countries, the digital skills gap is a major barrier to optimal technology utilization. Organizations often adopt new systems without adequate investment in employee training and development. As a result, technology is underutilized or even misused, thus under-recognizing its potential benefits.

Another factor limiting technology's effectiveness is its alignment with business strategy and institutional context. Technology that isn't integrated with an organization's strategic objectives tends to be a separate and unsustainable initiative. In the public sector, for example, service digitization is often not accompanied by process reform, resulting in a shift from manual to digital bureaucracy without improving efficiency. This suggests that the primary problem lies not with the technology itself, but with how it is orchestrated within a specific organizational context.

The Mechanism of Illusion Formation

The illusion of performance does not emerge spontaneously, but rather through a series of interconnected mechanisms. Institutional pressure is one of the main factors driving organizations to adopt technology as a symbol of modernity. In many cases, organizations feel the need to "look digital" to remain relevant in the eyes of stakeholders. This phenomenon is evident in the public sector in various developing countries, where digitalization programs often focus more on image than process improvement.

On the other hand, managerial cognitive biases also play a role in reinforcing this illusion. Technology is often viewed as a universal solution that can solve a wide range of organizational problems. This belief, while not entirely incorrect, can overlook the complexity of implementation and the need for structural change. When expected results are not achieved, organizations tend to adjust indicators or narratives to maintain the

perception of success.

The misalignment between digital strategy and implementation is also a key mechanism in creating illusions. Many organizations adopt technologies without clarity about how they will create value. Coupled with an overreliance on digital metrics, organizations risk becoming trapped in a shallow measurement logic. Indicators improve, reports appear positive, but substantive change doesn't occur. This is where the illusion of performance gains momentum.

Theoretical and Practical Implications

The findings from this literature review suggest the need to redefine the relationship between digital transformation and organizational performance. Rather than viewing technology as the primary determinant of performance, a more appropriate approach is to understand technology as part of a more complex system, where organizational capabilities and institutional context play a crucial role. This challenges the linear assumptions that have dominated the literature and opens up space for a more contingent approach.

From a practical perspective, organizations need to be more careful in assessing the success of digital transformation. Improved performance indicators do not always reflect increased value. Therefore, it is important to distinguish between symbolic and substantive adoption. Organizations that integrate technology with business strategy and develop internal capabilities are more likely to achieve sustainable performance than those that focus solely on technology adoption.

Ultimately, this study confirms that digital transformation is not an end in itself, but a means. Value is not created by technology itself, but by how it is used in a specific organizational context. Therefore, research on digitalization needs to move toward a more reflective and contextual approach, explaining not only what happens but also why and under what conditions.

CONCLUSION

The conclusion of this study does not lead to a rejection of digital transformation, but rather to its more proportional placement within the framework of organizational management. The reviewed literature shows that digital transformation has indeed become a dominant narrative that is difficult to reject, especially in the context of global competition and institutional pressures in developing countries. However, this dominance often simplifies a more complex reality: technology adoption is not always synonymous with value creation. In many cases, digitalization operates at a symbolic level—building legitimacy and perceptions of modernity—without being accompanied by substantive changes in organizational processes.

From a performance perspective, this study emphasizes the need to distinguish between substantive and representational performance. Digital technology expands organizations' ability to measure, display, and communicate performance, but it also opens up room for distortion. The illusion of performance arises when indicators show improvement, while operational reality has not undergone a commensurate transformation. In this situation, technology no longer functions as a driver of performance, but rather as a medium that reinforces the perception of performance. This is not a failure of technology per se, but rather a consequence of how organizations understand and use it.

Furthermore, the effectiveness of digital transformation has been shown to be

highly dependent on an organization's internal capabilities and underlying strategic alignment. Dynamic capabilities, the quality of human resources, and the integration between technology and business objectives are determining factors in whether digitalization will generate value or create illusions. Without these foundations, technology investments risk becoming fragmented, undirected, and unlikely to generate long-term impact. Thus, the limits of technology's effectiveness are determined not by its sophistication, but by the organization's ability to orchestrate it.

Ultimately, this study leads to a relatively firm yet open-ended position: digital transformation cannot be understood deterministically as a driver of performance, but must be viewed as a contingent phenomenon. It can enhance performance, but it also has the potential to mislead it. Therefore, both in theory development and managerial practice, a more reflective approach is needed—one that not only measures the success of digitalization by its appearance, but also questions what has actually changed. It is at this point that the study of performance illusions becomes relevant, not merely as a critique, but as an attempt to clarify the boundaries between real and perceived progress in modern organizations.

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