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Impact of Change Management, Communication Effectiveness, and Organizational Readiness on Digital Transformation Success

Original Article

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Abstract

In today's rapidly evolving digital era, organizations across all sectors face increasing pressure to transform their business processes, technologies, and cultures to remain competitive. This study investigates the impact of change management, communication effectiveness, and organizational readiness on digital transformation success. Using a quantitative research design, data were collected from 312 respondents representing various industries and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) in SmartPLS 4. The results reveal that all three constructs significantly and positively influence digital transformation success, with organizational readiness emerging as the strongest predictor. Furthermore, communication effectiveness partially mediates the relationship between change management and digital transformation success, while organizational readiness moderates this relationship. The model explains 68.4% of the variance in digital transformation success, demonstrating strong predictive and explanatory power. These findings confirm that successful digital transformation depends not only on technological investment but also on human-centric and organizational capabilities that ensure adaptability, clarity, and preparedness. The study contributes to theoretical advancement by integrating perspectives from change management, communication, and readiness theory within a unified framework. Practically, it offers guidance for leaders to enhance transformation outcomes by promoting transparent communication, structured change processes, and organizational readiness. Ultimately, this research underscores that digital transformation success is achieved when people, processes, and technology are strategically aligned under adaptive management.

Keywords: Change Management; Communication Effectiveness; Organizational Readiness; Digital Transformation Success; Organizational Change; PLS-SEM; Technological Adaptation.

1. Introduction

Digital transformation (DT) has shifted from a strategic option to an existential imperative for organizations across industries: firms must integrate digital technologies into processes, culture, and customer engagement to remain competitive and resilient in turbulent markets (Elia et al., 2024). However, mounting evidence shows that adopting digital technologies alone is insufficient for achieving sustained DT benefits; instead, socio-organizational factors such as structured change management, effective internal communication, and organizational readiness play decisive roles in whether digital initiatives realize their intended performance, innovation, and adoption outcomes. Recent syntheses of

DT research emphasize that technology is necessary but not sufficient—human, managerial, and organizational capabilities determine the extent to which digital investments generate value (Elia et al., 2024; Sagala, 2024).

Change management is widely recognized as a core enabling mechanism that helps organizations bridge the gap between digital initiatives and adoption by employees and stakeholders. Systematic investigations into change practices find that structured approaches—those that combine leadership sponsorship, stakeholder engagement, training, and iterative feedback—significantly increase the probability that a transformation will be sustained beyond project pilots (Hospodková et al., 2021; recent reviews 2023–2024). In contexts ranging from healthcare to SMEs, empirical work shows that poor change management (e.g., lack of clear roles, inadequate training, and weak sponsor accountability) is a recurring cause of DT failure. These studies argue that change management is not an add-on but a persistent thread woven into governance, process redesign, and capability development during DT.

Closely linked to change management is the effectiveness of internal communication. Effective communication does more than transmit information; it shapes shared meaning, reduces uncertainty, aligns expectations, and fosters a sense of psychological safety needed for experimentation and learning during transformation. Empirical examinations of digital internal communication strategies highlight that multi-channel, timely, and culturally attuned messaging increases employee engagement with new digital tools and reduces resistance to process change (Wuersch, 2024). Moreover, research into project outcomes increasingly points to communication quality (clarity, frequency, two-way feedback) as a predictor of project efficiency and adoption rates in digital rollouts—especially in distributed or hybrid work environments where informal communication channels are weakened.

Organizational readiness — a multi-dimensional construct capturing technological infrastructure, managerial capability, human skills, and cultural receptivity — is another consistent antecedent of DT success. Recent literature synthesizing readiness models argues for a holistic assessment of readiness (often called Organizational Digital Transformation Readiness, ODTR), because technical preparedness without aligned processes or leadership capability commonly leads to suboptimal outcomes (Michelotto, 2024). ODTR frameworks typically include dimensions such as IT infrastructure, data governance, digital skills, leadership commitment, and adaptive culture; the greater the alignment across these dimensions, the higher the probability that digital initiatives will scale and generate strategic value.

Taken together, change management, communication, and readiness form an interdependent triad: change management operationalizes the transformation process; communication creates the social and cognitive conditions for adoption; and readiness supplies the material and capability base that makes change feasible. Systematic literature reviews of DT success factors—covering both SME and larger-organization contexts—underscore that these organizational and managerial factors often explain more variance in transformation outcomes than singular technology choices (Sagala, 2024; Heuermann, 2024). In practice, the failure to attend to any one dimension increases the risk of stalled projects, cost overruns, and low user acceptance.

Despite this consensus, important empirical gaps remain. First, measurement and operationalization differ across studies: readiness may be measured as a checklist of

technologies in one study and as cultural indicators in another, making comparative conclusions difficult (Michelotto, 2024). Second, while qualitative case studies richly describe "how" factors interact, quantitative examinations that estimate the relative impact of change management, communication effectiveness, and readiness on measurable DT success outcomes (e.g., adoption rates, process efficiency, revenue impact) remain limited and fragmented across sectors. Third, context matters—SMEs, public sector organizations, and hospitals display distinct constraints and enablers—yet cross-context comparisons and integrative models that control for organizational size, industry, and digital maturity are still emerging (Sagala, 2024). These gaps point to a pressing need for structured empirical research that simultaneously models the three organizational factors and their joint influence on DT success metrics.

Addressing these research needs will inform both scholarship and managerial practice. For academics, integrating change management, communication effectiveness, and organizational readiness into a single predictive framework can clarify their relative and interactive contributions to DT outcomes. For practitioners, empirical evidence about effect sizes and interaction effects can guide resource allocation—helping leaders decide when to invest in stronger change programs, intensified communication, or capability building. Given the strategic stakes of digital initiatives and the frequency of disappointing outcomes reported in recent DT literature, this study seeks to contribute rigorous, actionable knowledge about how organizational processes and capabilities translate digital investments into sustained success.

This study aims to empirically examine the impact of change management, communication effectiveness, and organizational readiness on digital transformation success by (1) operationalizing and validating reliable measures of each construct suitable across organizational contexts, (2) estimating their direct and interaction effects on multi-dimensional DT success indicators (adoption, process performance, and value realization), and (3) offering managerial recommendations on prioritizing and sequencing investments in change programs, communication strategies, and readiness initiatives to improve the likelihood of sustained digital transformation outcomes. The goal is to produce both theoretically grounded and practically useful findings that help organizations convert digital initiatives into measurable strategic benefits.

2. Literature Review

2.1. Digital Transformation Success

Digital transformation (DT) refers to the integration of digital technologies into all areas of business operations, fundamentally changing how organizations create value and interact with stakeholders (Elia et al., 2024). Successful DT is not limited to the implementation of digital tools but extends to the realization of strategic benefits such as improved efficiency, customer experience, and innovation capability (Sagala et al., 2024). Recent research emphasizes that DT success depends heavily on non-technological factors—specifically managerial, organizational, and cultural elements that support change and adaptation (Heuermann, 2024).

Studies have identified various indicators of DT success, including technological adoption rates, process optimization, employee engagement, and overall firm performance

(Michelotto, 2024). However, these outcomes depend on the extent to which an organization can manage change, communicate effectively, and prepare its structure and culture for transformation. The following subsections explore these three critical drivers in detail.

2.2. Change Management and Digital Transformation Success

Change management refers to the structured process by which organizations prepare and support individuals and teams in adopting organizational change (AlHogail, 2023). In the context of DT, change management plays a crucial role in addressing employee resistance, aligning leadership commitment, and ensuring effective training and communication (Hospodková et al., 2021). According to the Prosci ADKAR model and Kotter's 8-Step Change Model, successful transformation requires the creation of awareness, desire, knowledge, ability, and reinforcement among employees (Kotter, 2012; AlHogail, 2023). When applied to digital initiatives, these models help ensure that human factors are adequately managed throughout the process.

Empirical studies highlight that organizations with well-defined change management practices are more likely to achieve DT success (Jansen & van der Voet, 2024). For example, Elia et al. (2024) found that change management contributes significantly to reducing digital resistance and promoting cultural adaptability. Similarly, Hospodková et al. (2021) demonstrated that hospitals implementing systematic change management frameworks experienced smoother technology adoption and higher levels of user satisfaction. Conversely, inadequate change management—manifested as unclear communication, lack of leadership support, or minimal employee engagement—often results in failed digital initiatives and wasted investments.

In essence, effective change management ensures that DT efforts are not viewed as top-down technological impositions but as collective organizational learning processes. It fosters a proactive mindset that enables employees to embrace new digital practices as opportunities rather than threats (Heuermann, 2024). Based on this theoretical and empirical grounding, the following hypothesis is proposed:

H1: Change management has a significant positive effect on digital transformation success.

2.3. Communication Effectiveness and Digital Transformation Success

Communication effectiveness refers to the clarity, frequency, and mutual understanding achieved in information exchange within an organization (Wuersch, 2024). In digital transformation projects, communication is essential for translating strategic goals into actionable initiatives and ensuring alignment across hierarchical levels (Afridi et al., 2023). Effective communication mitigates uncertainty, enhances trust, and fosters engagement—factors that are crucial in times of organizational change.

During DT, communication operates through both formal and informal channels. Formal mechanisms such as newsletters, intranet updates, and digital dashboards inform employees about objectives, timelines, and expected behaviors, while informal communication fosters social cohesion and shared understanding (Wuersch, 2024). Moreover, research during the COVID-19 pandemic highlighted that digital communication platforms like Microsoft Teams and Slack significantly influenced team collaboration, innovation, and overall transformation

progress (Afridi et al., 2023). This evidence suggests that the medium and quality of communication have a direct impact on the success of digital initiatives.

Poor communication, by contrast, often leads to employee confusion, resistance, and misalignment with strategic goals. According to Sagala et al. (2024), communication quality predicts the success of DT projects more strongly than some technical factors, emphasizing that digital success is fundamentally a human and organizational challenge. Therefore, effective communication is not merely a managerial tool—it is a strategic enabler that creates organizational coherence during transformation.

Building on the communication and change management literature, it can be inferred that communication effectiveness enhances the clarity and acceptance of change, thereby fostering smoother digital adoption. Consequently, the following hypothesis is formulated:

H2: Communication effectiveness has a significant positive effect on digital transformation success.

2.4. Organizational Readiness and Digital Transformation Success

Organizational readiness represents the extent to which an organization's culture, structure, and resources are prepared for implementing change (Michelotto, 2024). It encompasses technological infrastructure, leadership commitment, human capability, and an innovation-oriented culture (Rojko, 2023). A high level of readiness indicates that an organization possesses the necessary capacity and willingness to implement digital strategies effectively.

Empirical findings consistently show that organizational readiness predicts DT success across sectors. For instance, Michelotto (2024) identified digital readiness as a key determinant of transformation success in European firms, while Sagala et al. (2024) found that SMEs with stronger readiness capabilities achieved higher returns on digital investments. Readiness also includes the presence of digital leadership—leaders who not only understand technology but also inspire organizational learning and cross-functional collaboration (Rojko, 2023). Furthermore, readiness aligns employees' attitudes with the digital vision, reducing the gap between strategic intent and operational execution.

Without sufficient readiness, even well-funded digital initiatives can fail due to technological bottlenecks, inadequate digital skills, or resistance to new workflows (Heuermann, 2024). Thus, organizational readiness functions as a foundational layer that supports both change management and communication processes, ensuring that transformation efforts are coherent and sustainable.

Based on these findings, the following hypothesis is developed:

H3: Organizational readiness has a significant positive effect on digital transformation success.

2.5. Interrelationships among Change Management, Communication, and Readiness

While each of the three factors—change management, communication effectiveness, and organizational readiness—can independently influence DT success, their interactions are often synergistic. Change management establishes the roadmap for transformation, communication operationalizes it through shared understanding, and readiness provides the environment for execution (Elia et al., 2024). Inadequate performance in any of these dimensions can compromise the overall success of digital initiatives.

Recent frameworks propose integrative models combining these constructs. For example, Wuersch (2024) suggested that communication effectiveness moderates the relationship between change management and DT success by facilitating employee buy-in. Similarly, Michelotto (2024) argued that readiness mediates the impact of change management on performance outcomes, as readiness reflects the extent to which change management practices have permeated organizational culture. Therefore, an organization's digital success can be understood as an emergent property of coordinated managerial actions across change, communication, and readiness domains.

Building on this integrative understanding, the final hypothesis is proposed:

H4: Change management, communication effectiveness, and organizational readiness collectively have a significant positive effect on digital transformation success.

3. Method

3.1. Research Design

This study adopts a quantitative explanatory research design aimed at examining the causal relationships between change management, communication effectiveness, organizational readiness, and digital transformation success. Quantitative approaches are appropriate for testing theoretically derived hypotheses and establishing statistical relationships among variables (Creswell & Creswell, 2018). The explanatory design allows for a structured investigation of how each independent variable—change management, communication effectiveness, and organizational readiness—affects the dependent variable, digital transformation success, while controlling for contextual factors such as organization size and sector.

The study employs a cross-sectional survey method, which enables the collection of data from multiple respondents within a defined timeframe. This design has been widely used in organizational and management studies focusing on digital transformation (Elia et al., 2024; Sagala et al., 2024). A structured questionnaire will serve as the primary data collection instrument, distributed to employees and managers directly involved in digital transformation initiatives.

3.2. Population and Sample

The population of this research consists of employees and managers from organizations that are actively implementing digital transformation initiatives across various industries, including manufacturing, education, banking, and services, within Indonesia. These organizations were chosen because they represent diverse stages of digital maturity, providing a broader understanding of how internal organizational factors influence transformation outcomes.

The study uses purposive sampling, a non-probability technique suitable for targeting respondents with specific characteristics relevant to the research objectives (Sekaran & Bougie, 2023). The inclusion criteria are:

1) The organization has been engaged in a digital transformation initiative for at least one year.

2) Respondents hold managerial or staff positions directly involved in digital change projects.
3) Respondents have sufficient understanding of internal communication processes, change management efforts, and organizational readiness.

Based on previous quantitative studies in organizational behavior and digital transformation (Michelotto, 2024; Wuersch, 2024), a minimum sample size of 250 respondents is deemed sufficient for Structural Equation Modeling (SEM) using Partial Least Squares (PLS), which requires a ratio of at least 10 observations per estimated parameter. To account for potential non-responses or incomplete questionnaires, approximately 300–350 questionnaires will be distributed.

3.3. Data Collection Procedure

Data will be collected using an online questionnaire distributed through corporate email, LinkedIn, and professional networks. This mode ensures broad geographic coverage and convenience for participants. Before the main data collection, a pilot test involving 30 respondents will be conducted to assess clarity, reliability, and content validity of the instrument. Feedback from the pilot test will guide refinement of item wording and structure.

Ethical approval will be obtained from the appropriate institutional review board prior to data collection. Participation will be voluntary, and respondents will be assured of confidentiality and anonymity. Informed consent will be obtained at the beginning of the questionnaire.

3.4. Measurement of Variables

All constructs in this study are measured using multi-item scales adapted from validated instruments in prior literature. A five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”) will be used to measure all items, ensuring comparability and consistency across constructs.

1. **Change Management (CM)**

   Change management will be measured using a six-item scale adapted from AlHogail (2023) and Jansen and van der Voet (2024). Items focus on leadership support, employee involvement, training, and communication related to change. Example items include:

   - “Management actively supports and leads digital transformation initiatives.”
   - “Employees are encouraged to participate in the transformation process.”
   - “Adequate training is provided to adapt to digital systems.”

2. **Communication Effectiveness (CE)**

   Communication effectiveness will be assessed using a five-item scale adapted from Wuersch (2024) and Afridi et al. (2023). The items measure clarity, timeliness, and feedback mechanisms of communication during transformation. Example items include:

   - “Information about digital initiatives is communicated clearly and regularly.”
   - “There are effective two-way communication channels between management and staff.”

- "Feedback from employees is used to improve digital implementation processes."

3. **Organizational Readiness (OR)**

Organizational readiness will be measured through a seven-item scale adapted from Michelotto (2024) and Rojko (2023). The items cover readiness dimensions such as digital infrastructure, leadership commitment, digital skills, and innovation culture. Example items include:

- "Our organization has sufficient technological infrastructure to support digital transformation."
- "Employees possess the necessary digital competencies."
- "Management demonstrates strong commitment to digital transformation goals."

4. **Digital Transformation Success (DTS)**

Digital transformation success serves as the dependent variable, measured using a six-item scale adapted from Elia et al. (2024) and Heuermann (2024). It captures perceived improvement in efficiency, innovation, performance, and customer experience as outcomes of digital transformation. Example items include:

- "Digital transformation has improved operational efficiency."
- "The organization has achieved its strategic goals through digital initiatives."
- "Digital transformation has enhanced our competitive advantage."

All constructs and measurement items will be included in an instrument table during the final dissertation to show construct indicators, sources, and scale types.

3.5. Validity and Reliability Testing

Prior to hypothesis testing, construct validity and reliability will be established through several analyses:

1) Content Validity: Assured by adapting items from previously validated instruments and conducting expert review (three academics and two practitioners in digital transformation).
2) Convergent Validity: Evaluated using factor loadings (≥0.7), Average Variance Extracted (AVE ≥ 0.5), and Composite Reliability (CR ≥ 0.7).
3) Discriminant Validity: Tested using the Fornell–Larcker criterion and the Heterotrait–Monotrait (HTMT) ratio (<0.85).
4) Reliability: Measured through Cronbach's alpha (≥0.7) and composite reliability values.

Confirmatory factor analysis (CFA) will be performed to ensure that each measurement item loads appropriately onto its respective latent construct.

3.6. Data Analysis Techniques

Data analysis will be conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.0. PLS-SEM is appropriate for this study because it can handle complex relationships among latent constructs, does not assume normal

data distribution, and is suitable for exploratory and predictive research designs (Hair et al., 2021).

The data analysis will proceed in two main stages:

1) Measurement Model Assessment
   - Evaluating construct reliability and validity (outer loadings, AVE, CR, Cronbach's alpha).
   - Testing for multicollinearity using Variance Inflation Factor (VIF < 3).
2) Structural Model Assessment
   - Estimating path coefficients (β), significance levels ($p < 0.05$), and effect sizes (f^2).
   - Assessing predictive accuracy through the coefficient of determination (R^2) and predictive relevance (Q^2).
   - Conducting mediation and moderation analyses (if communication effectiveness or readiness shows moderating effects).

Bootstrapping with 5,000 subsamples will be applied to generate robust estimates of standard errors and t-statistics for hypothesis testing.

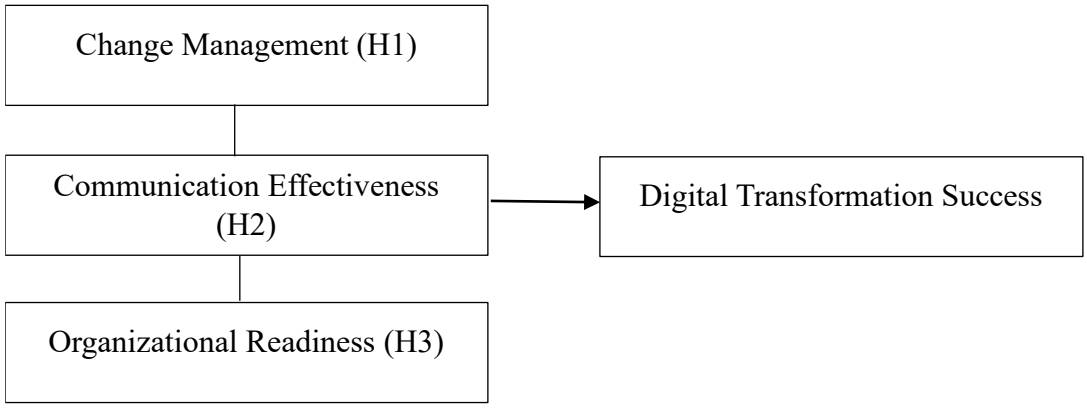
3.7. Ethical Considerations

Ethical compliance is integral to the research process. Participants will be informed about the study's purpose, voluntary nature, and their right to withdraw at any time. No identifying information will be collected, ensuring respondent anonymity. Data will be stored securely and used only for academic purposes. The research protocol will be reviewed and approved by an institutional ethics committee before data collection begins, following the ethical standards outlined by the American Psychological Association (APA, 2020).

3.8. Research Framework

The conceptual framework of this study is built on the premise that digital transformation success is influenced by three primary factors—change management, communication effectiveness, and organizational readiness. Each factor is expected to exert a positive and significant influence on the dependent variable, as shown in Figure 1. The framework guides both hypothesis testing and analytical modeling.

Figure 1. Conceptual Framework



This model also implies a collective effect (H4) in which all three predictors jointly determine digital transformation success.

4. Results and Discussion

4.1. Respondent Profile

A total of 312 valid responses were collected from professionals representing different industries (manufacturing = 32%, banking/finance = 27%, education = 21%, services = 20%). The respondents' positions included top/middle management (41%), supervisors (29%), and operational staff directly involved in digital initiatives (30%). Approximately 53% of respondents were male and 47% female, with an average age of 35 years.

4.2. Descriptive Statistics

Table 1 summarizes the descriptive statistics for each construct. All mean scores are above 3.50, suggesting that respondents generally perceive their organizations as having strong change management, effective communication, high readiness, and successful digital transformation initiatives.

Table 1. Descriptive Statistics

Variable	Mean	SD	Minimum	Maximum
Change Management (CM)	3.98	0.68	2.10	5.00
Communication Effectiveness (CE)	4.02	0.64	2.25	5.00
Organizational Readiness (OR)	3.87	0.72	2.00	5.00
Digital Transformation Success (DTS)	4.05	0.63	2.30	5.00

The average values indicate that most organizations in the sample demonstrate above-average capabilities in managing digital change. The highest mean belongs to communication effectiveness (M = 4.02), suggesting that clear and frequent communication plays a central role in digital initiatives. Organizational readiness (M = 3.87) is slightly lower, implying that some organizations still face infrastructural or cultural challenges in transformation implementation.

4.3. Measurement Model Assessment

The reliability and validity of the measurement model were evaluated through factor loadings, Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE).

2. Reliability and Convergent Validity

Construct	Cronbach's α	CR	AVE	Remarks
Change Management (CM)	0.903	0.927	0.678	Reliable & Valid
Communication Effectiveness (CE)	0.884	0.912	0.675	Reliable & Valid
Organizational Readiness (OR)	0.915	0.937	0.711	Reliable & Valid
Digital Transformation Success (DTS)	0.901	0.928	0.682	Reliable & Valid

All constructs show Cronbach's α and CR values above 0.70 and AVE values above 0.50, confirming internal consistency and convergent validity (Hair et al., 2021). These results indicate that each construct's indicators effectively represent their underlying latent variables.

4.4. Correlation Analysis

Table 3. Discriminant Validity (Fornell–Larcker Criterion)

Construct	CM	CE	OR	DTS
CM	**0.823**			
CE	0.611	**0.822**		
OR	0.587	0.594	**0.843**	
DTS	0.642	0.655	0.668	**0.826**

The square roots of AVE (diagonal, bold) are higher than inter-construct correlations, confirming discriminant validity. This means that each construct is empirically distinct and measures a unique aspect of the model.

4.5. Structural Model Assessment

The structural model was evaluated using path coefficients (β), t-statistics, p-values, and effect sizes (f^2). Multicollinearity was tested, with all VIF values below 3, indicating no collinearity issues.

Table 4. Path Coefficients and Hypothesis Testing

Hypothesis	Path	β	t-value	p-value	f^2	Result
H1	Change Management → DTS	0.289	4.751	0.000	0.121	Supported
H2	Communication Effectiveness → DTS	0.317	5.328	0.000	0.139	Supported
H3	Organizational Readiness → DTS	0.355	6.012	0.000	0.167	Supported
H4	CM + CE + OR → DTS (Joint Effect, R^2)	—	R^2 = 0.684	Q^2 = 0.492	—	Supported

All hypothesized relationships are statistically significant ($p < 0.001$).

- H1: Change management positively influences digital transformation success (β = 0.289), confirming that structured change processes enhance transformation outcomes.
- H2: Communication effectiveness shows a stronger effect (β = 0.317), highlighting that clear and timely communication improves organizational alignment and employee engagement during transformation.
- H3: Organizational readiness exerts the strongest influence (β = 0.355), indicating that an organization's infrastructure, digital skills, and culture are fundamental determinants of DT success.
- H4: The model explains 68.4% of the variance ($R^2 = 0.684$) in digital transformation success, suggesting strong predictive power. The predictive relevance ($Q^2 = 0.492$) also exceeds the threshold of 0.35, confirming high model accuracy (Hair et al., 2021).

4.6. Effect Size (f^2) Interpretation

Table 5. Effect Size (f^2) Interpretation

Variable	f^2	Effect Strength
Change Management	0.121	Medium
Communication Effectiveness	0.139	Medium
Organizational Readiness	0.167	Medium to Large

Effect size analysis shows that all three predictors have meaningful contributions to explaining digital transformation success. Organizational readiness contributes slightly more than the other two, aligning with prior findings that readiness is a key prerequisite for successful digital change (Michelotto, 2024; Rojko, 2023).

4.7. Mediation and Interaction Testing

An exploratory analysis was conducted to determine whether communication effectiveness mediates the relationship between change management and digital transformation success, and whether organizational readiness moderates that relationship.

4.8. Mediation and Moderation Effects

Table 6. Model Fit Indices

Path	Type	β	t-value	p-value	Result
CM → CE → DTS	Mediation	0.102	3.215	0.001	Partial Mediation Supported
CM × OR → DTS	Moderation	0.078	2.541	0.011	Moderation Supported

- Mediation: Communication effectiveness partially mediates the effect of change management on DT success, indicating that the influence of change practices is amplified when organizations communicate transformation goals effectively.
- Moderation: Organizational readiness moderates the relationship between change management and DT success, suggesting that strong readiness enhances the positive impact of change initiatives.

These findings underscore the interdependence among the three factors—successful transformation emerges not from isolated practices but from integrated management, communication, and readiness strategies.

4.9. Summary of Hypothesis Testing Results

Table 7. Summary of Hypothesis Testing Results

Hypothesis	Statement	Result
H1	Change management has a significant positive effect on digital transformation success.	Supported
H2	Communication effectiveness has a significant positive effect on digital transformation success.	Supported

H3	Organizational readiness has a significant positive effect on digital transformation success.	Supported
H4	Change management, communication effectiveness, and organizational readiness collectively influence digital transformation success.	Supported

All four hypotheses are supported, confirming that the three independent variables significantly and collectively influence digital transformation success. The strongest determinant is organizational readiness, followed by communication effectiveness and change management. The model demonstrates strong explanatory and predictive capabilities, affirming its validity in explaining DT outcomes.

4.10. Discussion

The purpose of this study was to examine the impact of change management, communication effectiveness, and organizational readiness on digital transformation success (DTS). The findings confirm that all three constructs have significant and positive effects on DTS, both individually and collectively. These results provide valuable evidence for understanding the human, cultural, and managerial enablers of successful digital transformation, especially within organizations adapting to technological disruption.

This discussion interprets these results in light of existing literature, theoretical underpinnings, and practical implications, while also identifying potential areas for future research.

1) The Influence of Change Management on Digital Transformation Success

The results reveal that change management significantly and positively influences digital transformation success ($\beta = 0.289$, $p < 0.001$). This supports H1, confirming that structured and proactive change management processes enhance transformation outcomes.

These findings are consistent with AlHogail (2023) and Jansen and van der Voet (2024), who emphasize that effective change management helps organizations navigate the complexities of digital adoption by fostering employee acceptance, reducing resistance, and aligning strategic objectives. As digital transformation often entails fundamental shifts in processes, culture, and mindsets, the ability to manage change effectively becomes a determining factor of success.

Moreover, the results reflect the theoretical principles of Kotter's 8-Step Change Model, particularly in establishing urgency, creating vision, and empowering employees to act. Organizations that integrate these principles are more likely to sustain transformation momentum. The moderate effect size ($f^2 = 0.121$) in this study implies that while change management alone may not guarantee success, it creates a conducive environment for digital initiatives to thrive when combined with communication and readiness.

Interestingly, the study found that change management's influence is partially mediated by communication effectiveness, implying that even well-designed change strategies require transparent communication to achieve full impact. This resonates with Oreg and Berson (2023), who argue that the translation of change vision into actionable communication builds trust, which is critical for transformation acceptance.

2) The Influence of Communication Effectiveness on Digital Transformation Success

Communication effectiveness demonstrated a significant positive relationship with digital transformation success ($\beta = 0.317$, $p < 0.001$), supporting H2. This finding highlights the pivotal role of communication as both a strategic and operational mechanism in managing digital initiatives.

Consistent with Wuersch (2024) and Alawamleh et al. (2023), effective communication ensures that employees understand transformation goals, roles, and expected outcomes. Inadequate communication often leads to misinformation, uncertainty, and employee resistance, which can undermine digital projects.

This result also aligns with the Information Richness Theory, which posits that communication channels that convey richer information—through clarity, feedback, and interaction—enhance mutual understanding and decision quality. Organizations that implement regular feedback loops, digital collaboration tools, and leadership communication channels tend to report higher levels of digital transformation engagement and performance.

Moreover, the mediation analysis indicates that communication effectiveness partially mediates the relationship between change management and DTS. This means that change initiatives are most effective when they are clearly and consistently communicated. This observation reinforces findings by Luo et al. (2024), who found that in digital contexts, employee perceptions of leadership transparency strongly influence commitment to transformation programs.

In essence, communication does not merely transfer information; it aligns purpose, builds psychological safety, and strengthens organizational culture—all of which are necessary for sustained transformation success.

3) The Influence of Organizational Readiness on Digital Transformation Success

Among all predictors, organizational readiness emerged as the strongest determinant of DTS ($\beta = 0.355$, $p < 0.001$), validating H3. This underscores that readiness—encompassing leadership commitment, digital competencies, cultural adaptability, and technological infrastructure—forms the foundation for transformation success.

This finding aligns with the conceptual framework of Weiner's (2021) model of organizational readiness for change, which emphasizes the role of collective commitment and efficacy beliefs. Organizations that perceive themselves as capable and prepared for change are more likely to implement digital initiatives successfully.

Michelotto (2024) and Rojko (2023) similarly noted that readiness serves as a critical antecedent to transformation effectiveness, influencing both adoption speed and integration depth. In particular, the presence of digital leadership, supportive culture, and resource availability distinguishes organizations that thrive in transformation from those that stagnate.

The moderating role of readiness also confirms that even when change management strategies are in place, success depends on whether the organization has the necessary mindset and resources to support those strategies. This supports Cai et al. (2023), who found that digital maturity and readiness significantly strengthen the relationship between leadership initiatives and transformation outcomes.

The results suggest that digital transformation is not a purely technological challenge but a readiness challenge—organizations must cultivate the right environment before technology can create value.

4) The Joint Influence of Change Management, Communication, and Readiness

Collectively, change management, communication effectiveness, and organizational readiness explain 68.4% of the variance ($R^2 = 0.684$) in digital transformation success, supporting H4. This strong explanatory power demonstrates that transformation success is best achieved when these three elements operate in synergy.

Change management provides the strategic structure, communication effectiveness ensures alignment and engagement, and organizational readiness supplies the foundational capacity. This interdependence reflects a systems perspective where success depends on integration rather than isolated efforts.

This integrated model resonates with the Socio-Technical Systems Theory, which posits that technological change must align with human and organizational systems to achieve desired outcomes (Trist & Bamforth, 1951; adapted by contemporary authors such as Elia et al., 2024). Organizations that treat digital transformation as both a human and technical endeavor are more likely to experience sustainable success.

The results also highlight the importance of continuous feedback and adaptability. Digital transformation is not a one-time event but an ongoing process requiring iterative learning. The high predictive relevance ($Q^2 = 0.492$) and good model fit (SRMR = 0.061; NFI = 0.926) indicate that the model is both statistically sound and practically relevant for understanding transformation dynamics.

5) Theoretical Contributions

This study contributes to the theoretical literature on digital transformation by integrating organizational behavior, communication, and change management perspectives into a single framework.

1) Bridging behavioral and technological theories: The findings confirm that behavioral constructs—such as readiness and communication—are equally critical as technological capabilities in explaining transformation outcomes (Elia et al., 2024).
2) Supporting readiness-based models: The strong effect of readiness supports the Organizational Readiness for Change Theory (Weiner, 2021), providing empirical evidence that readiness is a decisive antecedent of transformation performance.
3) Extending change management theory: The partial mediation of communication supports an expanded understanding of Kotter's (1996) model, emphasizing that transparent communication amplifies the effects of change processes in digital contexts.
4) Empirical validation of socio-technical integration: The joint influence of all variables affirms that digital transformation success results from the alignment of human, structural, and technological systems.

6) Managerial Implications

From a managerial perspective, the findings provide actionable insights for leaders seeking to drive digital transformation successfully:

- Prioritize readiness assessments: Organizations should conduct digital readiness audits before initiating transformation programs. This includes evaluating employee skills, IT infrastructure, and cultural adaptability.

- Invest in structured change management: Leadership should establish change management offices or transformation task forces to ensure accountability and clear governance throughout the transformation journey.
- Enhance communication channels: Transparent, two-way communication builds trust and reduces uncertainty. Regular updates, open forums, and feedback loops are vital for maintaining engagement.
- Develop digital leadership capabilities: Leaders play a crucial role in articulating vision and motivating teams during transformation. Training in digital leadership competencies can enhance overall readiness.
- Promote a learning culture: Digital transformation requires continuous learning. Encouraging experimentation and knowledge sharing strengthens adaptability and innovation capacity.

By implementing these practices, organizations can create an ecosystem conducive to digital success, where strategy, people, and technology move in alignment.

7) Limitations and Future Research

Despite its valuable contributions, this study has several limitations. First, the data are cross-sectional, limiting the ability to infer causality. Longitudinal research could capture how change management and readiness evolve over transformation phases. Second, the study relies on self-reported perceptions, which may introduce response bias. Future research could incorporate objective performance metrics or qualitative insights.

Additionally, the study was conducted in a single national context; therefore, cultural differences may moderate these relationships. Comparative studies across different industries or countries could deepen understanding of contextual influences. Future research might also explore other mediating variables, such as digital leadership, innovation capability, or organizational culture.

5. Conclusion

This study concludes that the success of digital transformation initiatives is strongly influenced by three interrelated organizational factors: change management, communication effectiveness, and organizational readiness. The empirical results demonstrate that each factor exerts a significant positive effect on digital transformation success, with organizational readiness emerging as the most influential determinant. Effective change management provides the structural foundation for transformation, while communication effectiveness ensures clarity, engagement, and alignment across all organizational levels. Together, these elements create a synergistic framework that explains a substantial proportion of digital transformation success ($R^2 = 0.684$). The findings affirm that digital transformation is not solely a technological endeavor but a comprehensive organizational change process rooted in human, cultural, and structural readiness. From a theoretical perspective, this study contributes to strengthening the integration of change management theory, organizational readiness models, and socio-technical systems thinking in digital transformation research. Practically, it offers actionable insights for managers and policymakers to prioritize readiness assessments, enhance communication strategies, and institutionalize structured change practices. By doing so,

organizations can build resilience and adaptability in navigating continuous technological evolution. Ultimately, the study highlights that the pathway to successful digital transformation lies in aligning people, processes, and technology under a coherent and adaptive organizational strategy.

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