

Organizational Structure Strategies: Implications for Employee Engagement and Adaptation (Systematic Literature Review)

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ABSTRACT

Keywords:

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This research aims to elucidate the context and theoretical frameworks influencing organizational structures that affect employee engagement and adaptation throughout digital transformation. This study employs the PRISMA systematic review methodology by examining 15 empirical publications concerning organizational structure, employee engagement, and flexibility in digital transformation from 2017 to 2024 across diverse nations. A concise summary and suggestions for future research agendas are provided for each applicable theory. This analysis indicates that, despite extensive prior research, the majority of studies examine the development of organizational structures through employee involvement. Moreover, the employed theories, including agile theory, transformational leadership theory, and resilience theory, underscore the significance of organizational agility, adaptive leadership, and organizational resilience. This research contributes to stakeholders and shareholders in developing an appropriate organizational structure for the Company's sustainability, while also providing references for future researchers conducting literature reviews on organizational structure, employee engagement, and adaptability in digital transformation.

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INTRODUCTION

Digital transformation has fundamentally altered the operational and competitive dynamics of enterprises. Due to swift technological progressions like artificial intelligence, automation, and big data, firms must evolve to maintain relevance in a progressively competitive marketplace (Andersen & Plesner, 2022; Xu et al., 2024). Digital transformation encompasses not only the integration of new technologies but also essential modifications in corporate strategy and organizational structure. An adaptable and flexible organizational structure is essential for organizations to react to alterations in the dynamic and intricate commercial environment (Nowotny et al., 2022; Uhl-Bien & Arena, 2018).

Hierarchical organizational structures have historically been the prevailing approach in numerous firms. This framework provides robust control and supervision, facilitating centralized decision-making (Almazrouei et al., 2024; Galván, 2019). In the realm of digital transformation, hierarchical architectures are frequently seen too inflexible and sluggish in adapting to innovation and changing technology dynamics. Hierarchical structures, characterized by sluggish decision-making

processes, can impede firms from seizing new business opportunities and decelerate the necessary pace of change to adapt in the digital era (Aini et al., 2022; Yajima & Arimura, 2022).

In response to these problems, numerous firms are increasingly adopting hybrid or agile structures that integrate components of traditional frameworks with a more adaptable methodology (Liu et al., 2024; Rialti & Filieri, 2024). Hybrid structures facilitate a more dynamic allocation of authority and expedited decision-making, while preserving the essential supervision framework (Pérez-Valls et al., 2019; Ran et al., 2023). This paradigm provides companies the adaptability to respond to technology advancements while ensuring operational stability (Bakken et al., 2023; Khayal et al., 2023). These structures frequently incorporate cross-functional teams, enabling them to operate more swiftly and adapt to market and technological developments (Westergren et al., 2024).

In the realm of digital transformation, hybrid architectures possess the capacity to enhance operational efficiency. Decentralized decision-making and enhanced communication among teams enable firms to respond more swiftly to market needs and technology advancements (Buonocore et al., 2024; Yu et al., 2024). This framework facilitates more adaptable resource allocation, enabling organizations to enhance operational procedures and boost overall production (Svorken et al., 2023; Wen et al., 2025). Nevertheless, empirical evidence concerning the precise influence of hybrid structures on operational efficiency remains few and requires additional investigation.

Conversely, employee engagement is a significant element affected by the organizational structure (Funmini, 2018; Mahmoudsalehi et al., 2012). Rigid hierarchical systems frequently correlate with diminished employee engagement, mostly attributable to insufficient autonomy and involvement in decision-making (Imran et al., 2020). A more adaptable and cooperative hybrid structure enables greater employee engagement in the work process, fostering innovation and creativity (Lidman et al., 2023). This framework can enhance employee satisfaction by offering increased autonomy and more defined duties in job execution (Bhardwaj & Kalia, 2021).

The capacity of a company to swiftly adjust to technological changes is a crucial determinant of successful digital transformation (Uhl-Bien & Arena, 2018). Hybrid structures offer a framework enabling firms to merge stability with adaptability, facilitating responses to technology developments while maintaining organizational control (Benzer et al., 2017). This structure enables cross-functional teams to swiftly integrate new technology advancements, while management upholds a comprehensive strategic goal (Saleh et al., 2021). Consequently, strong flexibility might serve as a competitive advantage for firms functioning in swiftly evolving marketplaces.

Nonetheless, although the advantages of hybrid structures are evident, several facets require more investigation. The degree to which these frameworks might enhance operational efficiency, employee engagement, and adaptability in digital transformation remains an inadequately addressed inquiry (Osorio-Gómez et al., 2024). Variations in industrial sectors, company size, and organizational digital readiness can influence the outcomes of deploying hybrid architectures (Saleh et al., 2021). Consequently, comprehensive and methodical study is required to comprehend the effects of hybrid architectures across diverse business contexts.

The literature study reveals a research gap: whereas extensive studies exist on traditional and agile organizational structures, empirical research focusing on hybrid structures within the framework

of digital transformation remains scarce (Xu et al., 2024). Moreover, the majority of studies on organizational structure emphasize generic advantages like innovation or adaptability, however there is limited discourse on the specific impact of hybrid structures on a company's long-term operational effectiveness (Ohlsson et al., 2020). Furthermore, studies indicate that although more flexible structures can enhance employee engagement, there remains a lack of clarity regarding the degree to which an organizational structure incorporating certain hierarchical elements can boost employee engagement and satisfaction in a digital work setting. Prior research has frequently focused on digital transformation broadly, although never investigated the operational dynamics of hybrid structures across various industries with differing degrees of technological adaption (Konopik et al., 2022). Prior study has concentrated on the merits and demerits of different organizational structures (such as hierarchical or agile); however, direct comparisons between hybrid structures and traditional models regarding digital transformation have been insufficiently explored (Wen et al., 2025). The majority of the research emphasizes the immediate advantages of hybrid structures in enhancing flexibility. Despite the expanding literature on organizational structure, there is a paucity of studies addressing the impact of organizational cultural diversity on the effective adoption of hybrid systems. The impact of conventional vs modern organizational cultures on the efficacy of hybrid structures in digital transformation remains largely unexamined.

This study seeks to elucidate the context and theoretical underpinnings of hybrid organizational structures and their influence on efficiency, engagement, and adaptability during digital transformation, addressing existing research gaps in these areas. This research aims to offer enhanced insights into the efficacy of organizational structures by examining existing studies on their influence on employee engagement and flexibility during digital transformation. This review's findings are anticipated to offer guidance for business practitioners in creating appropriate organizational structures to address challenges and opportunities in the digital transformation era.

METHODOLOGY

This study employs the Systematic Literature Review (SLR) methodology, adhering to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, to examine pertinent literature concerning the effects of hybrid organizational structures on employee engagement and adaptability during digital transformation. The SLR procedure comprises the subsequent stages:

1. Identification

The initial stage in this procedure is to identify pertinent articles from the Scopus database. The inquiry utilized pertinent keywords including "hybrid organizational structure," "digital transformation," "organizational efficiency," "employee engagement," and "organizational adaptability." Supplementary keywords are employed to guarantee comprehensive coverage of all publications pertinent to this topic; specifically, the journal in question is recognized for its Q1-Q4 ranking and spans the years 2017-2024, resulting in the identification of a total of 158 articles.

2. Screening

During the screening phase, articles identified in the initial search are filtered by journal category to confirm their relevance to the specified subject of research. The chosen categories comprise journals in Business, Management, and Accounting (n=57), Social Sciences (n=32), and Economics, Econometrics, and Finance (n=23). Following the concentration on the journal domain, there were 46 non-compliant articles, while the remaining totaled 112 articles.

3. Eligibility

Additionally, publications are chosen based on their open access availability to provide full accessibility for readers and scholars. This screening process reduced the number of qualifying articles to 71, whilst 41 articles were inaccessible.

4. Included

The concluding phase of the selection process involves identifying papers that are genuinely pertinent to the research emphasis, specifically hybrid organizational structures and their effects on efficiency, employee engagement, and adaptability in digital transformation. Forty-five studies, both theoretical and empirical, that addressed these characteristics were omitted from the study due to their diminished relevance. Following the final modification, 26 papers were chosen for further analysis, encompassing the following information: (1) author, (2) year of publication, (3) nation, (4) analysis approach, (5) product kind, and (6) theoretical framework. An extensive analysis is required to address the research issue effectively.

The article's selection process is depicted in the subsequent PRISMA diagram:

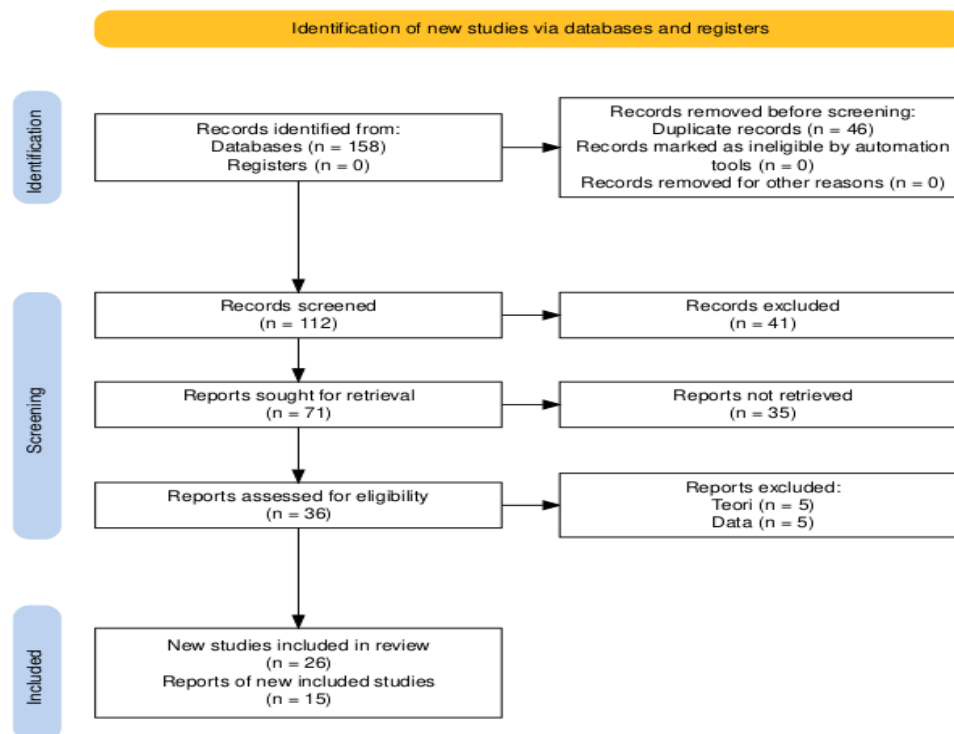


Figure 1. Prism Diagram

RESULT

Descriptive analysis derived from research concerning organizational structure, digital transformation (n=4), employee engagement (n=6), flexibility (n=3), and leadership (n=2). The study encompassed many sectors, including construction, retail, healthcare, and public services. Among the 15 articles selected and published between 2017 and 2024, the distribution of publications is as follows: Europe (n=5), America (n=3), China (n=2), India (n=1), Nigeria (n=1), Pakistan (n=1), Indonesia (n=1), and UAE (n=1). This analysis encompasses essential discoveries, trends, distinctions, and discussions regarding theories and methodologies, as well as methodological approaches and theoretical frameworks and models employed.

1. Key Findings and Trends

Digital Transformation and Organizational Structure

Studies on digital transformation indicate that modifying organizational structures is essential to optimize the advantages of digital technology. The article on conceptual models for implementing digital transformation in the construction sector emphasizes the significance of organizational structures that facilitate the utilization of digital technologies. Organizational agility has emerged as a critical feature enabling organizations to swiftly adapt to technology advances, as evidenced by research on innovation success in the corporate sector (Almazrouei et al., 2024). In the UAE's public sector, innovations centered on public value are propelled by organizational frameworks that facilitate flexibility and public participation. It emphasizes the strong correlation between organizational agility and the capacity to generate innovations that address societal requirements.

Employee Engagement and Organizational Structure

Numerous studies indicate that organizational frameworks promoting autonomy, interdisciplinary collaboration, and transparent communication enhance employee engagement. The research from Nigeria and Samarinda highlights that employee engagement is influenced not just by physical working conditions but also by organizational frameworks that foster adaptability to change and effective governance (Aini et al., 2022; Funminiyi, 2018). Employee involvement is crucial for employee-driven innovation within the public sector. The research indicated that elevated employee engagement can enhance creativity by fostering a robust motivation to learn and adapt to change.

Leadership and Organizational Adaptability

A study on leadership narcissism in the retail sector revealed that robust, but narcissistic, leadership can enhance shop performance when complemented by suitable organizational frameworks (Sánchez-Gómez & Vázquez-Suárez, 2024a). Adaptive leadership is emphasized in several sectors, where leaders' capacity to manage change with structural flexibility is essential for sustaining organizational resilience during crises (Ohlsson et al., 2020). A prevailing trend is the necessity to cultivate organizational resilience and adaptation by balancing formal and informal structures (Koohborfardhaghighi & Altmann, 2017). Studies indicate that businesses capable of sustaining this equilibrium are more adept at managing external upheavals.

2. Differences, Contradictions, and Debates in Theory and Methods

Although the majority of studies concur on the significance of adaptive organizational structures, notable discrepancies and contradictions exist, particularly regarding Organizational Agility and Formal Structure: A controversy exists regarding whether conventional organizational structures, exemplified by the construction sector, impede agility compared to the more flexible structures required for digital transformation (Almazrouei et al., 2024; Xu et al., 2024). In conventional industries like construction, there exists a dependence on formal hierarchies, which some scholars argue may impede innovation and transformation.

Leadership Styles: Investigations into narcissism in retail leadership indicate that narcissistic leadership might yield unforeseen consequences, both advantageous and detrimental (Sánchez-Gómez & Vázquez-Suárez, 2024b). This contradicts the conventional perspective of transformative leadership, which posits that leaders should prioritize group interests over individual concerns. **Employee Engagement and Organizational Change:** Research indicates that structural changes frequently diminish employee engagement due to associated uncertainty and discomfort (Funminiyi, 2018; Lidman et al., 2023). Nonetheless, other research indicates that frameworks facilitating change can enhance involvement, particularly when bolstered by supportive leadership and efficient communication.

3. Methodological Approach Used by Researchers

This study employs multiple methodological approaches, including quantitative, qualitative, and mixed methodologies, to address distinct research problems. Quantitative: The majority of research assessing organizational performance and employee engagement use a quantitative methodology, utilizing data gathered via surveys and processed through statistical methods such as regression and mediation analysis. Research on employee engagement in Nigeria employed questionnaires to assess the correlation between organizational structure and work engagement (Funminiyi, 2018).

Case Studies: Research concentrating on digital transformation and public service reform in the UAE use numerous case studies to examine how organizations in various sectors are adopting more adaptable and agile frameworks to address external and internal demands (Almazrouei et al., 2024).

The mixed-methods technique is frequently employed to investigate the intricate link between organizational structure and innovation. This study integrates comprehensive interviews with quantitative analysis to enhance understanding of organizational adaptability to new technology and internal creativity (Beccalli et al., 2023; Hayashida & Funashima, 2023).

4. Theoretical Framework and Models

Diverse theoretical frameworks and conceptual models are employed in this research to elucidate the correlation between organizational structure, digital transformation, and organizational performance.

Contingency Theory

Numerous research employ Contingency Theory to elucidate that no singular organizational structure is universally applicable to all enterprises. An effective structure is contingent upon particular situations, including industry, environment, and leadership. Organizations operating in dynamic environments, such as the technology sector or public services, are more inclined to implement flexible and agile structures (Rialti & Filieri, 2024; Xu et al., 2024).

Dynamic Capabilities Framework

This framework is extensively utilized in study concerning digital transformation, indicating that organizations capable of enhancing their dynamic skills, such as big data competencies, are more adept at adapting and augmenting their innovation performance (Konopik et al., 2022; Wen et al., 2025). This is pertinent to the digital revolution within the construction industry, as firms must cultivate the capacity to adapt to emerging technology and internal reorganization.

Agile Theory

Research on agility within the UAE public sector and technology firms employs Agile Theory to underscore the significance of organizational agility in adapting to swift and dynamic changes (Almazrouei et al., 2024). The theory stresses speedy decision-making, cross-functional collaboration, and enhanced employee involvement.

Transformational Leadership Theory

This theory analyzes leadership styles' impact on organizational performance. Within the framework of adaptive leadership, this idea illustrates how leaders can facilitate change and innovation by establishing organizational structures that promote transformation (Buonocore et al., 2024; Schiuma et al., 2024).

Conceptual Model for Digital Transformation

Research in the construction sector establishes a conceptual model indicating that the adoption of digitalization necessitates modifications in organizational structures to facilitate the utilization of new technology. This model underscores the significance of big data competencies and agility in enhancing innovation efficiency and performance (Almazrouei et al., 2024; Xu et al., 2024).

Resilience Theory

Research indicates that in the realm of organizational resilience, a balance between formal and flexible structures enhances an organization's ability to withstand crises. This resilience model illustrates how businesses can adjust to external disruptions via adaptive restructuring and management.

5. Theoretical and Practical Implications

Theoretical

This study enhances the comprehension of the relationship between organizational structure and digital transformation, as well as its effects on organizational performance. This research contributes to the body of literature on employee engagement, adaptive leadership, and organizational resilience during rapid change and external disturbances.

Practical

These findings offer managers direction in creating organizational structures that are more adaptable and conducive to change, particularly for the problems posed by digital transformation. Adaptive leadership and the enhancement of big data capabilities are crucial elements in optimizing innovation and efficiency across diverse industry sectors.

GAPS IN LITERATURE

The examination of literature deficiencies pertaining to theoretical, methodological, and contextual gaps, particularly concerning organizational structure, digital transformation, employee engagement, organizational efficiency, and flexibility, is as follows:

Theoretical Gaps

Theoretical gaps denote the absence or inadequacy of comprehensive theoretical elucidations within the current literature. Notable theoretical gaps include the insufficient theoretical integration of organizational structure and adaptability in the digital era. Numerous studies independently examine the effects of digital transformation on organizational performance or innovation, alongside theories concerning organizational structure. However, the literature has yet to cohesively amalgamate these two components within a unified theoretical framework. For instance, a research article by Xu et al (2024), titled "How Digital Transformation Enhances Corporate Innovation Performance," employs big data and agility as mediators but fails to consolidate theories regarding the influence of organizational structure changes on enhancing innovation performance in this context.

Moreover, emerging adaptive leadership theories, as evidenced by research from (Ohlsson et al., 2020; Uhl-Bien & Arena, 2018) on "Smooth Power: Identifying High-Level Leadership Skills Promoting Organizational Adaptability" and "Leadership for Organizational Adaptability," reveal a deficiency in the advancement of adaptive leadership theories suitable for widespread application. The literature has yet to integrate advanced leadership competencies with a definitive framework for their effective application across various organizational structures.

The theory of employee engagement in organizational change, particularly regarding employee and innovation engagement in the public sector, is frequently inadequately articulated within a robust theoretical framework, as examined in the research by (Lidman et al., 2023) titled "Learning and

Employee-Driven Innovation in the Public Sector." A comprehensive perspective regarding the interplay among employee engagement, organizational change, and innovation is necessary, particularly within the public and non-profit sectors. A framework illustrating the relationship between formal and informal systems in fostering organizational resilience: A study by Andersson et al (2019) titled "Building Traits for Organizational Resilience Through Balancing Organizational Structures" highlighted the significance of equilibrating formal and informal structures to enhance organizational resilience. Nevertheless, the research is deficient in a comprehensive theoretical model elucidating the interaction and mutual support of these two structural kinds across many contexts.

Methodological Gaps

Methodological gaps imply deficiencies or flaws in the research methodology employed to investigate a certain topic. Identifiable methodological deficiencies include:

Constraints of employing qualitative and quantitative methodologies in a balanced approach: Numerous scholars, like Häkkinen & Sund (2021) and Ohlsson et al. (2020), employ quantitative approaches, exemplified by "What Works? The Association of Organizational Structure, Reforms and Interventions," or qualitative methods, as seen in "Smooth Power." Nevertheless, limited research has employed mixed methods to examine the intricate relationships among organizational structure, leadership, and consequences of organizational adaptation. Employing combined techniques will yield a more comprehensive knowledge of the interplay among these components.

Absence of longitudinal analysis: The majority of studies employ cross-sectional research designs that gather data at a single point in time, exemplified by Aini et al. (2022) and Funminiya (2018), titled "Impact of Organizational Structure on Employee Engagement" and "The Effect of Organizational Structure and Readiness for Change," respectively. The methodological deficiency is in the absence of longitudinal studies that can effectively document the dynamics and alterations in organizational structure and adaptability over time, particularly in the setting of swift changes induced by digital transformation.

Constraints on the generalizability of study findings: Numerous studies derive data from particular regional or sectoral contexts, exemplified by (Funminiya, 2018; Sánchez-Gómez & Vázquez-Suárez, 2024b) with titles such as "Organizational Structure and Store Performance in the Grocery Retail Industry" and "Impact of Organizational Structure on Employee Engagement in North Central Nigeria". The methodological deficiencies encompass an absence of research utilizing global or cross-cultural samples that could yield more generalized findings about the influence of organizational structures across diverse social and cultural contexts.

Insufficient investigation of mediation and moderation mechanisms: Numerous studies employing structural equation modeling (SEM), including "How Digital Transformation Enhances Corporate Innovation Performance," have recognized mediators such as big data capability and organizational agility (Xu et al., 2024). Nonetheless, methodological deficiencies remain in elucidating additional moderators that could affect these connections, including the influence of company culture, group dynamics, and external variables.

Contextual Gaps

Contextual gaps denote insufficient context or inadequate research within a specific geographical, sectoral, or industrial framework. The following contextual gaps can be identified:

Insufficient research in the non-profit sector and small to medium enterprises: Studies on organizational structure and innovation predominantly concentrate on major corporations or the public sector. Research on "Organizational Structure and Store Performance in the Grocery Retail Industry" and "Public Value-Driven Innovation in UAE Public Services" indicates that studies

concerning the small and medium-sized commercial sector and non-profit organizations remain notably scarce.

Insufficient research in developing nations: The majority of studies on digital transformation and organizational structure concentrate on developed countries, with notable exceptions including "Impact of Organizational Structure on Employee Engagement: Evidence from North Central Nigeria" and "The Effect of Organizational Structure and Readiness for Change in Samarinda" (Aini et al., 2022; Funmini, 2018). Nonetheless, a considerable gap persists in comprehending the functioning of organizational structures in developing nations characterized by diverse political, social, and economic circumstances.

Underexplored situations within various industries: While certain studies by Osorio-Gómez et al. (2024) have concentrated on the construction sector ("Conceptual Model for Implementation of Digital Transformation in the Construction Sector") and the retail sector ("Organizational Structure and Store Performance in the Grocery Retail Industry"), numerous other industries, including technology, education, and healthcare, remain inadequately represented in research regarding the impact of digital transformation on organizational structures.

Insufficient study into the COVID-19 pandemic: Numerous organizations encountered significant alterations in their structures and operations during the pandemic. Nevertheless, the current literature has not thoroughly examined how firms are adjusting to these changes concerning organizational structure, employee engagement, and leadership.

FUTURE RESEARCH AGENDA

The literature review results indicate several prospective research agendas that can be formulated based on the identified literature gaps (theoretical, methodological, and contextual) concerning organizational structure, digital transformation, employee engagement, and organizational adaptability.

Developing a Comprehensive Theoretical Framework on Organizational Structure and Digital Transformation

Investigations that amalgamate hypotheses concerning organizational structure, digital transformation, and innovation efficacy: Future study must establish a theoretical framework that integrates diverse views regarding organizational structure, flexibility, and digital transformation. This paradigm examines the impact of alterations in organizational structure, within the realm of digital transformation, on agility, big data capabilities, and organizational innovation performance. This research may encompass cross-industry analyses, including the technology, healthcare, and education sectors.

The correlation between adaptive leadership theory and organizational structure: Further advancement is required for adaptive leadership theory within the framework of digital transformation. Investigating the leadership competencies required to oversee organizational structural changes and promote sustained adaptability will be a significant focus in forthcoming research. Research can delineate the interactions between various organizational structures and distinct leadership styles in fostering innovation and resilience.

Longitudinal Study on Organizational Structure and Adaptability

Longitudinal studies on the effects of organizational structure modifications: Future research agendas may investigate the enduring effects of digital transformation on organizational structures using a longitudinal methodology. This study will elucidate the impact of incremental modifications in organizational structure on performance, employee engagement, and innovation over an extended

duration. This is particularly pertinent in the post-pandemic period as firms encounter significant transformations in their operational methods.

Prolonged investigation into employee engagement and creativity within the public sector: Longitudinal studies are crucial for examining the correlation between employee engagement and creativity in the public sector, as evidenced by multiple research. Subsequent research could examine whether elevated engagement levels consistently facilitate sustainable innovation within a public sector characterized by a rigid hierarchical structure.

Increase in the Use of Mixed Methods

Investigate mixed methods to comprehend the correlation between organizational structure and innovation performance: Employing mixed methods that integrate qualitative and quantitative approaches is crucial for gaining a comprehensive understanding of the intricate relationships among organizational structure, employee engagement, and performance outcomes. A quantitative approach can assess innovation success and employee engagement, but a qualitative approach can investigate the experiences of individuals and stakeholders in navigating changes in organizational structures.

Investigation of the interplay between formal and informal structures: Future study may employ mixed methodologies to investigate the interplay between formal and informal structures within organizations and their collaborative role in fostering organizational resilience and flexibility.

Cross-Cultural and International Research

Cross-cultural investigations into organizational structure and adaptability during digital transformation: A significant future research priority is to undertake cross-cultural studies examining the application of organizational structure and digital transformation across various nations and cultural contexts. This study examines the disparities in the adaption of organizational structures between industrialized and developing nations, focusing on the impact of cultural elements and social values on the efficacy of transformation.

Investigation in emerging nations and small to medium-sized economic sectors: An further significant objective is to broaden research initiatives in developing nations and small to medium enterprises. The majority of current study concentrates on large corporations or developed nations, leaving significant opportunities to investigate the application of organizational structure and flexibility in resource-constrained organizations and countries facing distinct economic challenges.

Mediation and Moderation Mechanisms in Organizational Structure

Investigation of novel mediators and moderators within organizational frameworks: Future research initiatives may concentrate on discovering and evaluating new mediation and moderation mechanisms in the correlation between organizational structures and performance results. Moderators, including organizational culture, group dynamics, and external forces, can affect the relationship between changes in organizational structure and their impact on innovation and adaptive performance.

Investigation of the function of technological capacities as intermediaries: With the rise of digitalization, additional research may investigate the function of technological capabilities, such as big data capabilities, as mediators in the connection between organizational structure and innovation performance. This encompasses how firms with a decentralized structure may more rapidly adapt to emerging technology and digital advancements.

Research on Adaptability and Resilience of Post-Pandemic Organizations

Research on organizational adaptation during and subsequent to the COVID-19 pandemic: Future inquiries may investigate how organizations have modified their structures to enhance adaptability and resilience throughout the epidemic. The study can investigate the persistence of pandemic-induced changes, such as the transition to remote work and digitization, and their effects on employee engagement and performance across diverse industry sectors.

The impact of organizational structure on change preparedness in the post-pandemic period: Subsequent research may investigate the impact of organizational structure on readiness for change during emergencies, such as pandemics, which include substantial alterations in work patterns and expedited integration of new technologies.

An Empirical Study on the Interrelationship of Organizational Structure and Adaptive Leadership

Empirical investigations into the interplay between adaptive leadership and flexible organizational frameworks: Future research agendas may delve further into the functioning of adaptive leadership within decentralized and flexible organizational structures. The research may employ empirical analysis to evaluate the efficacy of various leadership styles in fostering innovation and change within a dynamic context.

The impact of leadership styles in formal and rigidly structured companies: Future research may investigate the effects of adaptable leadership styles in organizations characterized by formal or hierarchical structures, such as those in the public sector or manufacturing. This will elucidate how leadership can enable transformation within a more intricate framework.

CONCLUSION

Flexible and decentralized organizational structures are demonstrably more adept at managing dynamic changes induced by digital transformation. Organizations that implement adaptive structures are generally more nimble and conducive to innovation, particularly for emerging technologies like big data and digital capabilities. Employee engagement as the primary catalyst is a crucial element in fostering organizational innovation and productivity. Organizations that enhance employee engagement via structural modifications and a digital work environment foster conditions conducive to performance enhancement and creativity.

Research indicates that adaptive leadership is crucial for handling organizational structural changes induced by digitalization. Leaders capable of swiftly and suitably responding to change are essential for sustaining organizational resilience and fostering innovation during periods of uncertainty. Changes in organizational structures exert varying effects across sectors such as construction, retail, public services, and healthcare. Research indicates that the sector backdrop and organizational culture significantly affect the implementation of changes in organizational structure and their efficacy in enhancing performance. The study identifies a theoretical deficiency indicating an absence of a cohesive theoretical framework linking organizational structure, digital transformation, and innovation performance. Increased effort is required to create a complete model that can thoroughly elucidate this link.

Comprehensive and cross-cultural study is essential to comprehend the impact of evolving organizational structures in the digital age on enterprises across different nations, particularly in developing countries. Longitudinal studies are necessary to examine the long-term impacts of these changes on organizational performance, adaptability, and employee engagement. Future research should increasingly apply mixed methods approaches to yield more profound and varied insights into the interplay between organizational structures, employee engagement, adaptive leadership, and innovation across multiple contexts. An adaptable and responsive organizational framework to technology advancements is essential for attaining competitive advantage in the age of digital

transformation. Organizations prioritizing employee engagement, bolstered by adaptable leadership, and consistently enhancing digital competencies will be more equipped to confront future difficulties.

REFERENCES

- Aini, N., Setyadi, D., & Fitriadi, F. (2022). The Effect of Organizational Structure and Readiness for Change to Employee Engagement and Good Governance in Cooperative, SMEs and Industry Service Samarinda. *Saudi Journal of Business and Management Studies*, 7(9), 238-249. <https://doi.org/10.36348/sjbms.2022.v07i09.001>
- Almazrouei, F., Elias Sarker, A., Zervopoulos, P., & Yousaf, S. (2024). Organizational structure, agility, and public value-driven innovation performance in the UAE public services. *Heliyon*, 10(13). <https://doi.org/10.1016/j.heliyon.2024.e33261>
- Andersen, A. R., & Plesner, A. L. (2022). Optimization of the organizational structure in hospitals to account for patients with multiple diseases. *Artificial Intelligence in Medicine*, 130. <https://doi.org/10.1016/j.artmed.2022.102327>
- Andersson, T., Cäker, M., Tengblad, S., & Wickelgren, M. (2019). Building traits for organizational resilience through balancing organizational structures. *Scandinavian Journal of Management*, 35(1), 36-45. <https://doi.org/10.1016/j.scaman.2019.01.001>
- Bakken, J., Wallgren, G. C., Furnes, B., Kørner, H., & Ueland, V. (2023). Organizational structures influencing timely recognition and acknowledgment of end-of-life in hospitals – A qualitative study of nurses' and doctors' experiences. *European Journal of Oncology Nursing*, 67. <https://doi.org/10.1016/j.ejon.2023.102420>
- Beccalli, E., Rossi, L., & Viola, A. (2023). Network vs integrated organizational structure of cooperative banks: Evidence on the Italian reform. *International Review of Financial Analysis*, 89. <https://doi.org/10.1016/j.irfa.2023.102812>
- Benzer, J. K., Charns, M. P., Hamdan, S., & Afable, M. (2017). The role of organizational structure in readiness for change: A conceptual integration. In *Health Services Management Research* (Vol. 30, Issue 1, pp. 34-46). SAGE Publications Ltd. <https://doi.org/10.1177/0951484816682396>
- Bhardwaj, B., & Kalia, N. (2021). Contextual and task performance: role of employee engagement and organizational culture in hospitality industry. *Vilakshan - XIMB Journal of Management*, 18(2), 187-201. <https://doi.org/10.1108/xjm-08-2020-0089>
- Buonocore, F., Annosi, M. C., de Gennaro, D., & Riemma, F. (2024). Digital transformation and social change: Leadership strategies for responsible innovation. *Journal of Engineering and Technology Management - JET-M*, 74. <https://doi.org/10.1016/j.jengtecman.2024.101843>
- Funmini, A. K. (2018). Impact of Organisational Structure on Employee Engagement: Evidence from North Central Nigeria. *International Journal of Advanced Engineering, Management and Science*, 4(8), 579-589. <https://doi.org/10.22161/ijaems.4.8.1>
- Galván, I. P. (2019). Designing Local e-Government: The Pillars of Organizational Structure. In *Designing Local e-Government: The Pillars of Organizational Structure* (pp. 5-52). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-227-620191002>
- Häkkinen, U., & Sund, R. (2021). What works? The association of organisational structure, reforms and interventions on efficiency in treating hip fractures. *Social Science and Medicine*, 274. <https://doi.org/10.1016/j.socscimed.2020.113611>

- Hayashida, H., & Funashima, H. (2023). Organization Structure Analysis by Network Analysis of Innovative Japanese Firms. *Procedia Computer Science*, 225, 1826-1833. <https://doi.org/10.1016/j.procs.2023.10.172>
- Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., & Ilyas, S. (2020). Impact of perceived organizational support on work engagement: Mediating mechanism of thriving and flourishing. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3). <https://doi.org/10.3390/JOITMC6030082>
- Khayal, I. S., Butcher, R. L., McLeish, C. H., Shentu, Y., & Barnato, A. E. (2023). Organizational Intent, Organizational Structures, and Reviewer Mental Models Influence Mortality Review Processes. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, 7(6), 515-523. <https://doi.org/10.1016/j.mayocpiqo.2023.09.004>
- Konopik, J., Jahn, C., Schuster, T., Hofsbach, N., & Pflaum, A. (2022). Mastering the digital transformation through organizational capabilities: A conceptual framework. *Digital Business*, 2(2). <https://doi.org/10.1016/j.digbus.2021.100019>
- Koohborfardhaghighi, S., & Altmann, J. (2017). How Organizational Structure Affects Organizational Learning. *Journal of Integrated Design and Process Science*, 21(1), 43-60. <https://doi.org/10.3233/jid-2017-0006>
- Lidman, L., Gustavsson, M., & Fogelberg Eriksson, A. (2023). Learning and employee-driven innovation in the public sector – the interplay between employee engagement and organisational conditions. *Journal of Workplace Learning*, 35(9), 86-100. <https://doi.org/10.1108/JWL-05-2022-0055>
- Liu, Y., Garnevska, E., & Shadbolt, N. (2024). Organizational structures of agriculture cooperatives in China: Evidence from the green vegetable sector. *Journal of Co-Operative Organization and Management*, 12(2). <https://doi.org/10.1016/j.jcom.2024.100246>
- Mahmoudsalehi, M., Moradkhannejad, R., & Safari, K. (2012). How knowledge management is affected by organizational structure. *Learning Organization*, 19(6), 518-528. <https://doi.org/10.1108/09696471211266974>
- Nowotny, S., Hirsch, B., & Nitzl, C. (2022). The influence of organizational structure on value-based management sophistication. *Management Accounting Research*, 56. <https://doi.org/10.1016/j.mar.2022.100797>
- Ohlsson, A., Alvinus, A., & Larsson, G. (2020). Smooth power: identifying high-level leadership skills promoting organizational adaptability. *International Journal of Organization Theory and Behavior*, 23(4), 297-313. <https://doi.org/10.1108/IJOTB-02-2019-0009>
- Osorio-Gómez, C. C., Herrera, R. F., Prieto-Osorio, J. M., & Pellicer, E. (2024). Conceptual model for implementation of digital transformation and organizational structure in the construction sector. *Ain Shams Engineering Journal*, 15(7). <https://doi.org/10.1016/j.asej.2024.102749>
- Pérez-Valls, M., Céspedes-Lorente, J., Martínez-del-Río, J., & Antolín-López, R. (2019). How Organizational Structure Affects Ecological Responsiveness. *Business and Society*, 58(8), 1634-1670. <https://doi.org/10.1177/0007650317696313>
- Ran, R., Wang, X., Wang, T., & Hua, L. (2023). The impact of the digital economy on the servitization of industrial structures: the moderating effect of human capital. *Data Science and Management*, 6(3), 174-182. <https://doi.org/10.1016/j.dsm.2023.06.003>

- Rialti, R., & Filieri, R. (2024). Leaders, let's get agile! Observing agile leadership in successful digital transformation projects. *Business Horizons*, 67(4), 439-452. <https://doi.org/10.1016/j.bushor.2024.04.003>
- Saleh, S., Nakshabandi, O. A., Zeebaree, M., Ismael, G. Y., & Aqel, M. (2021). Organizational barriers which are facing electronic government implementation: The electronic government implementation framework. *Estudios de Economia Aplicada*, 39(7). <https://doi.org/10.25115/eea.v39i7.5231>
- Sánchez-Gómez, R., & Vázquez-Suárez, L. (2024a). Organizational structure and store performance in the grocery retail industry: The moderating role of narcissistic leadership. *Journal of Retailing and Consumer Services*, 79. <https://doi.org/10.1016/j.jretconser.2024.103796>
- Sánchez-Gómez, R., & Vázquez-Suárez, L. (2024b). Organizational structure and store performance in the grocery retail industry: The moderating role of narcissistic leadership. *Journal of Retailing and Consumer Services*, 79. <https://doi.org/10.1016/j.jretconser.2024.103796>
- Schiuma, G., Santarsiero, F., Carlucci, D., & Jarrar, Y. (2024). Transformative leadership competencies for organizational digital transformation. *Business Horizons*, 67(4), 425-437. <https://doi.org/10.1016/j.bushor.2024.04.004>
- Svorken, M., Kvalvik, I., & Lord, N. (2023). Understanding the organisational structure of fisheries crime in well-regulated fisheries. *Marine Policy*, 157. <https://doi.org/10.1016/j.marpol.2023.105860>
- Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *Leadership Quarterly*, 29(1), 89-104. <https://doi.org/10.1016/j.leaqua.2017.12.009>
- Wen, T., Chen, Y., wang, Syed, T. A., & Ghataoura, D. (2025). Examining communication network behaviors, structure and dynamics in an organizational hierarchy: A social network analysis approach. *Information Processing and Management*, 62(1). <https://doi.org/10.1016/j.ipm.2024.103927>
- Westergren, U. H., Mähler, V., & Jadaan, T. (2024). Enabling digital transformation: Organizational implementation of the internet of things. *Information and Management*, 61(6). <https://doi.org/10.1016/j.im.2024.103996>
- Xu, M., Zhang, Y., Sun, H., Tang, Y., & Li, J. (2024). How digital transformation enhances corporate innovation performance: The mediating roles of big data capabilities and organizational agility. *Heliyon*, 10(14). <https://doi.org/10.1016/j.heliyon.2024.e34905>
- Yajima, N., & Arimura, T. H. (2022). Promoting energy efficiency in Japanese manufacturing industry through energy audits: Role of information provision, disclosure, target setting, inspection, reward, and organizational structure. *Energy Economics*, 114. <https://doi.org/10.1016/j.eneco.2022.106253>
- Yu, X., Sun, S., Cheng, X., Wang, M., & Fu, X. (2024). Does a government's organizational structure affect the governance structure of local family firms? A perspective on the number of cities' subordinate counties. *Finance Research Letters*, 65. <https://doi.org/10.1016/j.frl.2024.105577>