

Tenggono, Erwin; Soetjipto, Budi W.; Sudhartio, Lily

Article

Managing digital transformations: the intermediary function of digital readiness in facilitating strategic renewal within the healthcare industry

Cogent Business & Management

Provided in Cooperation with:

Taylor & Francis Group

Suggested Citation: Tenggono, Erwin; Soetjipto, Budi W.; Sudhartio, Lily (2024) : Managing digital transformations: the intermediary function of digital readiness in facilitating strategic renewal within the healthcare industry, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 11, Iss. 1, pp. 1-13,
<https://doi.org/10.1080/23311975.2024.2423276>

This Version is available at:

<https://hdl.handle.net/10419/326672>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Managing digital transformations: the intermediary function of digital readiness in facilitating strategic renewal within the healthcare industry

Erwin Tenggono, Budi W. Soetjipto & Lily Sudhartio

To cite this article: Erwin Tenggono, Budi W. Soetjipto & Lily Sudhartio (2024) Managing digital transformations: the intermediary function of digital readiness in facilitating strategic renewal within the healthcare industry, Cogent Business & Management, 11:1, 2423276, DOI: [10.1080/23311975.2024.2423276](https://doi.org/10.1080/23311975.2024.2423276)

To link to this article: <https://doi.org/10.1080/23311975.2024.2423276>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



[View supplementary material](#)



Published online: 11 Nov 2024.



[Submit your article to this journal](#)



Article views: 1389



[View related articles](#)



[View Crossmark data](#)



Citing articles: 3 [View citing articles](#)

Managing digital transformations: the intermediary function of digital readiness in facilitating strategic renewal within the healthcare industry

Erwin Tenggono , Budi W. Soetjipto  and Lily Sudhartio 

Department of Management, University of Indonesia, Indonesia

ABSTRACT

The study investigates the direct influence of Institutional Pressures (IP) and Dynamic Managerial Capability (DMC) on digital readiness (DR), and the subsequent impact on strategic renewal (SR) within private hospitals in Indonesia. Utilizing a quantitative approach and a cross-sectional research design, 231 valid responses were analyzed using smart partial least squares (PLS) for structural equation modeling (SEM). The findings reveal that institutional pressure directly affects digital readiness, emphasizing the critical role of DMC in mediating the relationship between institutional pressure and digital readiness. Furthermore, the study highlights the strong connection between digital readiness and strategic renewal, underscoring the organization's capability for digital transformation. The originality of this study lies in its exploration of the interplay between institutional pressures, dynamic managerial capabilities (DMC), and digital readiness (DR) in shaping strategic renewal within private hospitals in Indonesia. By examining how institutional pressures influence DR and the mediating role of DMC, this research uniquely contributes to the understanding of digital transformation challenges in healthcare, offering valuable insights for organizations seeking to enhance their strategic responses in facing digital disruptions.

ARTICLE HISTORY

Received 15 July 2024
Revised 18 October 2024
Accepted 23 October 2024

KEYWORDS

Digital Readiness; Digital Transformation;
Healthcare Organization;
Institutional Pressures;
Strategic Agility; Strategic Renewal

SUBJECTS

Economics; Health and Safety; Strategic Management

Introduction

Digital transformation has become a government solution to accelerate economic growth and recovery in Indonesia as the release of the Digital Indonesia Roadmap for 2021–2024. These challenges influence the healthcare sector after facing the COVID-19 pandemic (Purbaya & Noviaristanti, 2024). Thus, this indicates that Indonesia's healthcare sector has the necessity for strategic renewal in facing digital disruptions of Industrial Revolution 4.0 (Ndou et al., 2022).

Institutional Pressures have a significant impact on organizational behavior (Hsia et al., 2019). This study explores their impact on strategic renewal, with a focus on Digital Readiness (DR) as the mediating factor (Gfrerer et al., 2021). Besides institutional pressures, this study also considered Dynamic Managerial Capabilities (DMC) as an underlying factor towards strategic renewal. DMC comprises essential managerial skills crucial for improving organizational performance and adapting to digitalization (Åberg & Torchia, 2020). The research seeks to address the following key questions: (1) How do institutional pressures influence a healthcare organization's digital readiness? (2) How do dynamic managerial capabilities mediate the relationship between institutional pressures and a healthcare organization's digital readiness? And (3) How does digital readiness affect a healthcare organization's strategic renewal?

The research delves into the interplay between institutional pressures and dynamic managerial capabilities in shaping strategy renewal, with particular attention to the mediating role of Digital Readiness (DR), which holds significant importance in navigating digital transformation challenges (Al Ketbi & Alshurideh, 2022).

CONTACT Erwin Tenggono  erwintenggonoriset@gmail.com  Department of Management, University of Indonesia, Jl. Prof. DR. Sumitro Djojohadikusumo, Depok, West Java, Indonesia

 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/23311975.2024.2423276>.

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Through these investigations, this study advances existing knowledge in strategic management by demonstrating how healthcare organizations can leverage dynamic managerial capabilities and assess digital readiness to navigate digital disruptions, align with the Digital Transformation Blueprint 2024, and enhance digital literacy among healthcare staff

This study enriches the strategic management field by exploring the connections among institutional pressures, DMC, and DR in Indonesia's healthcare sector. It underscores the significance of healthcare organizations acquiring DMC and evaluating DR to ensure successful strategic renewal, particularly amid digital challenges faced by hospitals. The advanced contribution of this research lies in its focus on a developing country context, offering practical frameworks for healthcare institutions to respond effectively to digital disruptions. By investigating these dynamics, the research enhances understanding of the roles of institutional pressures, DMC, and DR in strategic renewal within developing countries like Indonesia, where digital healthcare services are pivotal. Through its inquiry, the study seeks to emphasize these relationships in Indonesia's healthcare sector, contributing to the advancement of strategic management.

Literature review and hypothesis development

Theoretical background

Our literature review examines the intricate interactions among institutional pressures, dynamic managerial capabilities (DMC), digital readiness, and strategic renewal within the healthcare sector. Although digital readiness has been explored in various sectors, including small and medium-sized enterprises (SMEs) (Pirola et al., 2019), manufacturing (Machado et al., 2020), and broader enterprise contexts (Lin et al., 2020), its application in healthcare management remains limited. Despite a growing interest in digital transformation (DT) within the healthcare field, research and management applications are still in their early and somewhat ambiguous stages (Santarsiero et al., 2023). While previous studies have investigated these relationships, notable gaps persist. A central focus of our research is the mediating role of digital readiness (DR), which offers a more comprehensive perspective on these dynamics.

Additionally, we introduce dynamic managerial capabilities as a pivotal element in the realms of strategic management. Our unique contributions are around the exploration of how institutional pressures and dynamic managerial capabilities influence digital readiness, with a specific focus on their function as antecedents rather than mediating factors. Recent literature, particularly by Santarsiero et al. (2023), highlights a significant gap in empirical evidence regarding the impact of management qualifications in healthcare service management on the development of dynamic managerial capabilities and their influence on digital readiness. This gap is critical, as dynamic managerial capabilities are essential for driving digital initiatives in healthcare organizations.

Further examining the domain of strategic renewal, which entails altering or replacing organizational attributes for long-term prospects, we note that while several contemporary studies have linked strategic renewal to variables like firm performance, entrepreneurial orientation, and cooperative resilience, there remains limited research on how insufficient management training and the inadequate performance of hospital staff affect strategic renewal processes, particularly within the context of digital transformation. Our research addresses this gap by framing strategic renewal as a generator of new outcomes, thus enhancing our understanding of its role in organizational strategy. By identifying this shortfall, we emphasize the necessity for dynamic managerial capabilities to foster strategic renewal in healthcare settings.

Grounded in institutional theory as posited by DiMaggio and Powell (2012) and dynamic managerial capabilities as defined by Helfat and Martin (2015), our study integrates these factors within the strategic management discipline. Additionally, we seek to elucidate the influence of institutional pressures and dynamic managerial capabilities on strategic renewal processes. To investigate these relationships and understand how organizations navigate external and internal dynamics, we employ institutional theory to highlight the impact of external environmental pressures, while emphasizing the role of managerial competencies within our research.

Moreover, the literature by Brommeyer and Liang (2022) does not adequately address how specific policy and system-level factors, such as aligning digital health policies with strategic goals and implementing training for digital technology governance (Brommeyer & Liang, 2022), influence dynamic managerial capabilities and strategic renewal in healthcare organizations. Our theoretical framework distinguishes itself by spotlighting the significance of external environmental factors and internal managerial capabilities in shaping organizations' strategic responses and their relevance to the variables under examination. This distinction is vital for understanding the relevance of these variables in facilitating successful digital transformation within the healthcare sector.

Hypothesis development

The effect of institutional pressures on digital readiness

Institutional theory posits that organizations seek economic prosperity and social legitimacy by conforming to societal norms and values (Cardinale, 2018; Jones et al., 2020). In the digital technology sector, companies adapt policies under coercive, normative, and mimetic pressures, offering insights into digital transformation processes (Everly & Schwarz, 2015; Fikru, 2014). In healthcare, institutional pressures drive innovation tactics to reduce costs and improve service quality (DiMaggio & Powell, 2012). Mimetic pressure significantly impacts healthcare digitalization (Hsia et al., 2019). Digital readiness, particularly in banking, is crucial for successful transformation, emphasizing human resource readiness within the institutional theory framework (Gfrerer et al., 2021). Fostering a culture of digital readiness is essential, as deficient digital skills can impede transformation (Westerman et al., 2014). Recent studies highlight the positive correlation between institutional pressures and digital adoption, suggesting a role for coercive and normative pressures in technology adoption (Liu et al., 2010). Understanding these pressures aids organizations in navigating external forces and shaping their decisions and behavior. Therefore, we form the hypothesis as follows:

H1: Institutional pressures positively affect a healthcare organization's digital readiness.

The mediating role of dynamic managerial capabilities

Rooted in dynamic capabilities theory, Dynamic Managerial Capabilities (DMC) encompass the adaptive processes and resources necessary for organizations to navigate environmental changes (Castiaux, 2012). Comprising managerial human capital, social capital, and cognition, DMC underscores managers' strategic change-making abilities (Martin & Bachrach, 2018). Despite the inconclusive understanding of how institutional pressures influence DMC, research suggests that internal and external factors, such as governmental, customer, and competitor pressures, could serve as triggers or moderators (Kor & Mesko, 2013; Sirmon & Hitt, 2009). Institutional pressures, as integral components of managers' mental frameworks, promote critical thinking regarding changes and are deeply intertwined with environmental contexts (Barrales-Molina et al., 2013). Proficient development of DMC is crucial for successful digital transformation initiatives, allowing managers to capitalize on networks and previous experiences to navigate transformational challenges (Li et al., 2018; Milicevic et al., 2018). Previous studies suggest that DMC may mediate the positive influence of stakeholder pressures on organizational proactiveness and foster digital readiness (Pusparini et al., 2018; Zhen et al., 2021). These findings highlight the importance of DMC in building an organization's digital readiness and adapting to evolving digital landscapes, ultimately influencing organizational performance (Mattila et al., 2021; Wirtz et al., 2021). Therefore, we hypothesize as follows:

H2: Dynamic managerial capabilities mediate the relationship between institutional pressures and a healthcare organization's digital readiness.

The effect of digital readiness and strategic renewal

Strategic renewal encompasses a comprehensive approach to rejuvenating an organization's long-term prospects by refreshing or replacing key attributes, extending beyond mere strategic alterations to

include business model overhauls, innovations in collaborative practices, and transformations in organizational culture (Agarwal & Helfat, 2009; Schmitt et al., 2018). Digital technology adoption plays a crucial role in facilitating strategic renewal, as it enhances an organization's capacity to innovate and develop new business models (Bughin et al., 2021; Matt et al., 2015). While research has explored the impact of digital readiness on organizational innovation and adaptation (Wang et al., 2022), there remains a scarcity of studies directly examining the relationship between digital readiness and strategic renewal, possibly due to the complexity of measuring and analyzing strategic renewal (Bughin et al., 2021). Therefore, based on the existing literature, this study hypothesizes as follows:

H3: Digital readiness has a positive effect on healthcare organization's strategic renewal.

Methods

This research focuses on type B and C private hospitals, which are affected by the Ministry of Health's blueprint, 'A Blueprint for Digital Health Transformation Strategy 2024' (Ministry of Health of the Republic of Indonesia, 2021). Type A hospitals are excluded due to their limited numbers and centralized policies (Kemkes, 2022), while type D hospitals are too small, with only 50 beds and limited medical equipment. To minimize bias, two respondent levels—head divisions and top management—are included, as single sources can threaten data validity (Peker et al., 2022), and managers must consider multiple stakeholder concerns (Shah et al., 2019). This approach allows the investigation of institutional pressures on digital readiness, the mediating role of dynamic managerial capabilities (DMC), and the impact of digital readiness on strategic renewal. To ensure the questionnaire was relevant and accurate, a detailed validation process was conducted. Initially, 102 questions were adapted for key variables: Institutional Pressures (Liu et al., 2010), Dynamic Managerial Capability (Heubeck & Meckl, 2022), Strategic Agility (Reed, 2021), Digital Readiness (Gfrerer et al., 2021), and Strategic Renewal (Bhatti et al., 2021; Caro et al., 2020; Wang et al., 2017). Experts reviewed the questions, separating those with multiple topics into single questions, bringing the total to 107. Certified translators helped clarify the language, and a pretest with 32 hospitals confirmed validity and reliability using Factor Analysis in SPSS (Margolis, 2022; Menold, 2020). We employed non-probability purposive sampling, this approach was chosen for its cost-effectiveness, the challenging accessibility of target respondents, and its common usage in healthcare research (Andrade, 2021; Campbell et al., 2020; Klar & Leeper, 2019; Lavrakas, 2008)

To determine sample size, we used a 90% confidence level, considering practical constraints and precision needs (Daniel & Cross, 2018), applying the formula from Krejcie and Morgan (1970). With an estimated population of 1300, we distributed approximately 240 questionnaires to account for potential incompleteness or inconsistency. The questionnaire, comprising 107 indicators from twelve dimensions, utilized a six-point Likert scale and underwent validation by academic experts and a pilot study for reliability. Convenience sampling continued until the target sample size. Participants received information sheets and consent forms, ensuring voluntary participation and ethical compliance. We collected 240 responses from December 2022 to April 2023, with 231 remaining after data cleaning (Tenggono et al., 2024a).

To mitigate potential sampling biases, this study employed two methods to address selection bias (Sulaiman-Hill & Thompson, 2011) and the potential for common method bias using Harman's single-factor test as recommended by previous literature (Podsakoff et al., 2003). Multiple entry points into the respondent group were utilized to enhance contact opportunities and minimize selection bias (Atkinson & Flint, 2001). Harman's single-factor test revealed that a single factor explained 23.2% of the variance, indicating no significant common method variance issues. For the validity and reliability of the questionnaire, Cronbach's Alpha values for variables—including Institutional Pressure, DMC, Digital Readiness, and Strategic Renewal—ranged from 0.563 to 0.924. Despite the lowest Cronbach's Alpha value being close to the 0.60 threshold commonly accepted in exploratory research (Hinton et al., 2014; Taber, 2018), it was deemed acceptable.

For data analysis, this research employed partial least squares structural equation modeling (PLS-SEM) with hierarchical component models (HCMs). This approach facilitates the prediction of broad behaviors, simplifies complex relationships, and addresses issues with highly correlated variables without assuming

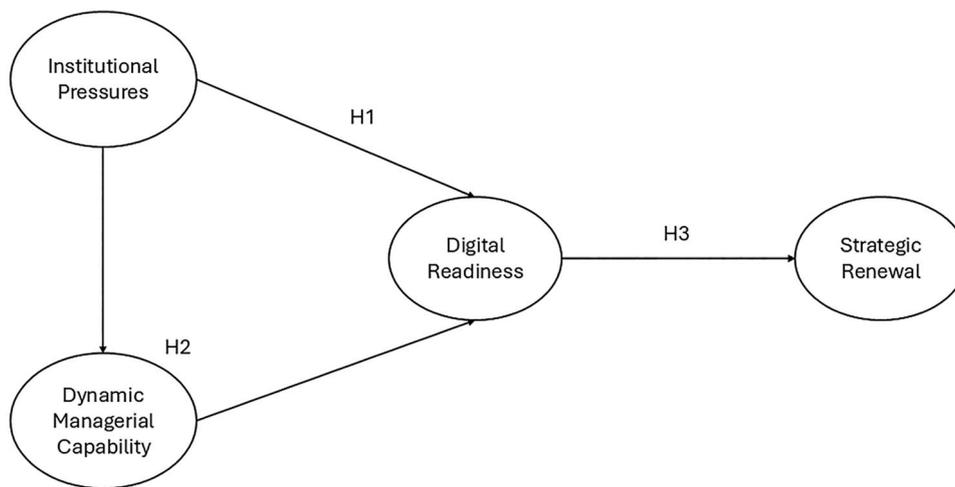


Figure 1. Research model.

data distribution (Hair et al., 2021; Taber, 2018). All analyses were conducted using SmartPLS 3.0, with a significance level set at $\alpha = 0.05$. The research model is illustrated in Figure 1 below.

Based on this model, there are several potential limitations that arise with the PLS-SEM approach. Some of the main limitations are related to model complexity (relatively large number of indicators), multicollinearity, and bias in the path coefficient. To mitigate this, the research uses the Higher Order Model (HCM) approach with first and second order construct evaluation so that the structural model can be simpler. VIF will be used as a tool to mitigate multicollinearity problems. The bias-correction techniques approach or bootstrap methods with a larger number of resamples ($n=1000$) is used to anticipate bias in the value of the path coefficient (Guenther et al., 2023).

Ethical issues/statement

This study was reviewed and approved by the Research Ethics Review Committee of the Post-Graduate Management Studies unit at Universitas Indonesia (Ethics Application No. S-0600A/UN2.F6.D.PIM/PDP.00.01/2022), in compliance with the Universitas Indonesia Policy on Research Ethics. Informed consent was obtained verbally from all participants during in-person meetings to fill out the questionnaire. This method facilitated direct interaction, allowing participants to ask questions and receive clarification, ensuring they fully understood the study's purpose and implications. This approach confirmed their agreement to participate in accordance with ethical guidelines while assuring confidentiality and anonymity of their responses. The research adheres to standards that uphold participant confidentiality. Any amendments to the research methodology will be promptly communicated to the ethics committee for further review, ensuring ongoing compliance with ethical standards throughout the research process.

Results

Most hospitals surveyed were private facilities with around 100 beds each. Geographically, while a significant portion of hospitals are situated in Java, the sample encompasses all major islands across Indonesia. The respondents primarily consisted of the Board of Directors for the first questionnaire and Managers for the second questionnaire. Table 1 illustrates the distribution of demographic variables in terms of frequency and percentage.

Measurement model evaluation of first-order constructs

The assessment of the measurement model encompasses indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. We assessed the reflective measurement models for the

Table 1. Demographic characteristics of unit analysis.

Characteristics	Number	%
Type of hospital		
Type B	33	14.29
Type C	198	85.71
Location		
Java & Bali	157	67.97
Sumatera	45	19.48
Kalimantan	15	6.49
Sulawesi	13	5.63
Papua	1	0.43
Hospital representative at high-level executive for first questionnaire		
Board of Directors/Management	186	80.52
Division Head/Manager	26	11.26
Owner	13	5.63
Commissioner/Board	2	0.87
Others	4	1.73
Hospital representative at managerial staff for the second questionnaire		
Manager	142	61.47
Pharmacist	62	26.84
Staff	23	9.96
Others	4	1.73

first-order constructs, aiming for indicator loadings above 0.70, as recommended by Hair et al. (2011). Indicators with loadings between 0.40 and 0.70 were considered for removal if doing so improved composite reliability. Several indicators did not meet the factor-loading criteria, with loadings ranging from 0.378 to 0.889 (refer to [Supplementary Materials](#)). We also examined cross-loadings to ensure validity, removing indicators with substantial cross-loadings to avoid measuring multiple constructs simultaneously (Hair et al., 2011).

Second, we assessed consistency reliability and validity using Composite Reliability (CR) and Average Variance Extracted (AVE). A CR above 0.60 and AVE above 0.50 were required (Hair et al., 2011). After removing unsuitable indicators, CR values ranged from 0.836 to 0.945, indicating strong internal consistency. All constructs explained 50% or more of the variance in their indicators, with AVE values between 0.577 and 0.799, surpassing the threshold.

Discriminant validity was assessed using the Fornell-Larcker criterion (Fornell & Larcker, 1981), as each construct's diagonal correlation exceeded its correlations with other constructs, affirming their distinctiveness.

Second-order construction and reliability

After confirming the reliability and validity of the first-order constructs, the latent variable scores derived from these constructs were utilized as indicators for the higher-order, second-order constructs. [Table 2](#) presents the outer loadings, composite reliability, and convergent validity of the second-order constructs.

The discriminant validity of the second-order constructs was verified using the Fornell-Larcker matrix depicted in [Table 3](#). Together with the validation and reliability confirmation of both first- and second-order constructs, this assessment of measurement models was deemed satisfactory.

Evaluation of the structural model

Before assessing the structural model, multicollinearity among predictor constructs was checked, with all VIF values ranging from 1.506 to 3.059, indicating no collinearity issues. Path coefficients were then validated to ensure statistical significance and magnitude [(56)]. The path relationships of the model are illustrated in [Table 4](#) and [Figure 2](#).

[Table 4](#) confirms all hypotheses. First, the path between Institutional Pressure and Digital Readiness was positive and significant ($\beta=0.175$, $t=1.745$), supporting H1, which posits that institutional pressures positively impact digital readiness. Second, Institutional Pressures also had a positive, significant effect on DMC ($\beta=0.294$, $t=5.292$), and DMC had a strong, significant effect on Digital Readiness ($\beta=0.688$, $t=9.891$). Indirect effects further supported H2, indicating that DMC mediates the relationship between Institutional Pressure and Digital Readiness ($\beta=0.202$, $t=4.547$).

Table 2. Outer loadings, construct reliability, and validity of second-order constructs.

Construct	Item	Outer loading	Composite reliability	Average variance extracted (AVE)
Institutional pressure	Coercive pressure	0.868	0.891	0.732
	Mimetic pressure	0.797		
	Normative pressure	0.899		
Dynamic managerial capabilities	Human capital	0.872	0.919	0.792
	Managerial cognition	0.891		
	Social capital	0.906		
Digital readiness	Capabilities	0.891	0.923	0.749
	Competencies	0.844		
	Individual belief	0.832		
	Shared belief	0.893		
Strategic renewal	Renewal of business model	0.918	0.907	0.764
	Renewal of collaborative approach	0.832		
	Renewal of organization culture	0.871		

Table 3. Discriminant validity of second-order constructs.

	Digital Readiness	Dynamic managerial capabilities	Institutional pressure	Strategic renewal
Digital readiness	0.865			
Dynamic managerial capabilities	0.740	0.890		
Institutional pressure	0.377	0.294	0.856	
Strategic renewal	0.405	0.355	0.692	0.874

Table 4. Path relationship.

Path	Coefficient (β)	S.E	t-values	p-value
<i>Direct effect</i>				
Institutional pressure → Digital readiness	0.175	0.100	1.745	0.041
Institutional Pressure → Dynamic managerial capabilities	0.294	0.056	5.292	0.000
Dynamic managerial capabilities → digital readiness	0.688	0.070	9.891	0.000
Digital readiness → Strategic Renewal	0.405	0.086	4.723	0.000
<i>Indirect effect</i>				
Institutional Pressure → Dynamic managerial capabilities → Digital Readiness	0.202	0.045	4.547	0.000

Lastly, H3 was supported, showing that Digital Readiness positively influences Strategic Renewal ($\beta=0.405$, $t=4.723$). The R^2 values for the endogenous variables ranged from 0.087 (DMC), 0.164 (Strategic Renewal), and 0.575 (Digital Readiness), indicating weak to moderate explanatory power. The f^2 effect sizes ranged from 0.095 to 1.019, with generally weak to strong effects. Finally, using the Stone-Geisser's Q^2 value, the model's predictive relevance was confirmed, with Q^2 values of 0.065 (DMC), 0.121 (Strategic Renewal), and 0.415 (Digital Readiness). All Q^2 values exceeded zero. These results provided generally sound measurement support for hypothesis testing.

Discussion

All three hypotheses are strongly supported, offering valuable theoretical and practical insights. First, in line with Hypothesis 1, the study shows that institutional pressures significantly influence digital readiness in private hospitals. The complexity of digital challenges introduces uncertainties, hindering hospitals from meeting digital requirements for implementing digital health services. This underscores the crucial role of institutional pressures in shaping digital readiness, consistent with prior research (Cardinale, 2018; Hinings et al., 2018; Jones et al., 2020). Healthcare leaders must engage with institutional stakeholders and understand national regulations to enhance their organization's digital readiness (DR) and facilitate the smooth implementation of digital health initiatives. The rising demand for digital technology among customers compels hospitals to adopt these services. Establishing regular communication with stakeholders provides valuable insights into upcoming regulations and best practices for implementation. Furthermore, it is essential for hospital employees to be proficient in both administrative and

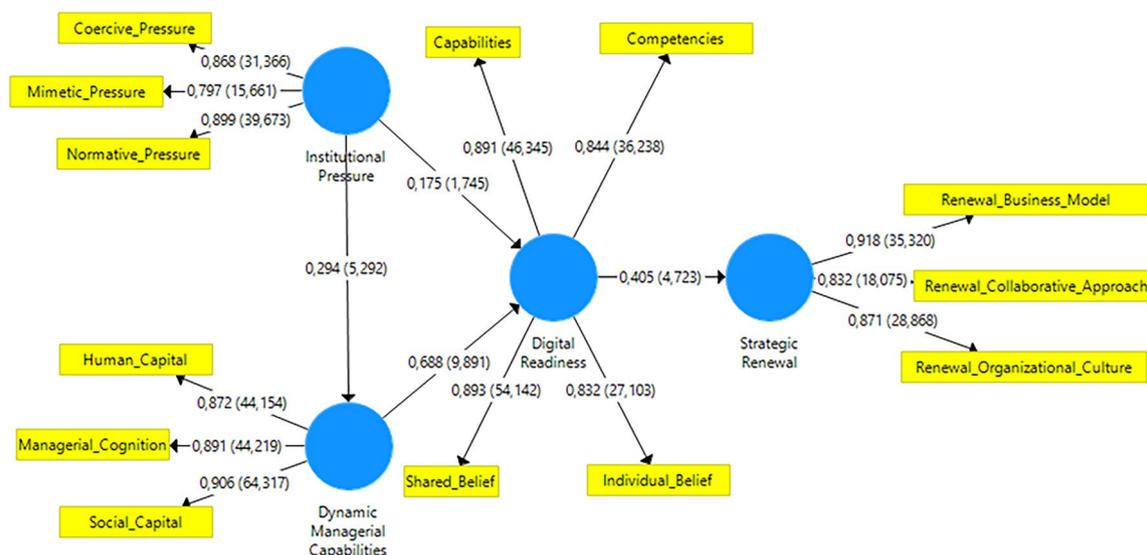


Figure 2. Results of PLS-SEM analysis. Path coefficients are reported (t-values in parentheses).

clinical digital operations to effectively execute these initiatives, ensuring the organization can navigate today's digital disruption successfully.

Hypothesis 2 is also confirmed, revealing that Dynamic Managerial Capabilities (DMC) mediate the relationship between institutional pressures and digital readiness. Hospital management's understanding of digital health services is key to evaluating digital capabilities and responding to uncertainties. This highlights the importance of managerial cognition in preparing for digital transformation, echoing Adner & Helfat (2003) and Heubeck and Meckl (2022). Healthcare leaders should prioritize digital health training to help teams navigate digital transformation. Workshops on emerging technologies equip managers to assess and leverage digital capabilities, improving decision-making. The findings show that Dynamic Managerial Capabilities (DMC) significantly mediate the relationship between institutional pressures (IP) and digital readiness (DR), (t-value = 4.457). Normative pressures, such as customer demand for digital health services, drive hospitals to adopt these technologies, but successful implementation requires managerial adaptability (t-value DMC to DR = 9981). Employees' strong competencies in securing digital devices and understanding risks are key, with adaptable leadership being the driving force behind successful digital transformations.

The study also supports Hypothesis 3, demonstrating that hospitals committed to digital health services are more capable of renewing strategies. Digital transformation provides strategic flexibility, allowing organizations to innovate and adapt quickly, as noted in previous studies (Pätzmann et al., 2022; Wang et al., 2022). Healthcare managers should foster a culture of innovation and flexibility, encouraging teams to explore digital solutions and adapt strategies to meet evolving healthcare demands. As digital readiness (DR) improves, employees develop stronger competencies in securing digital devices and managing associated risks. This readiness also enhances the hospital's ability to renew collaborative approaches (SR) with key partners, enabling the proposal of innovative digital solutions to address shared challenges. Ultimately, this approach improves both patient care and operational efficiency.

The present study significantly enhances the literature on strategic management by examining the impact of institutional pressures on digital readiness and the role of dynamic managerial capabilities (DMC) in strategic renewal, building on the findings of Jiang et al. (2020). While Tenggono et al. (2024b) explored the mediating role of strategic agility in Indonesia's private healthcare sector, this research further investigates change management by integrating DMC and institutional pressures (Tenggono et al., 2024b). It clarifies how these factors mediate unique sector challenges, such as limited resources and resistance to change, as noted by Koning (2022). Ultimately, these findings underscore the importance of effective strategic management in fostering resilience and innovation within healthcare organizations.

The theoretical implications are further reinforced by Marques and Ferreira (2020) and Kraus et al. (2021), who emphasize the multifaceted nature of digital transformation (DT) in healthcare. Marques

and Ferreira (2020) argue that successful DT transcends mere digitization, incorporating e-health solutions and telemedicine to enhance patient engagement and operational efficiency (Marques and Ferreira (2020)). Moreover, Kraus et al. (2021) advocate for a strategic focus on patient empowerment and data-driven care, aligning with this study's emphasis on the interplay between institutional pressures and DMC (Kraus et al. (2021)). By integrating these insights, this research contributes to the broader fields of strategic management and digital transformation, highlighting the necessity for organizations to adapt their business models and stakeholder management practices in response to the evolving technological landscape

Implications of the study

Theoretical Implications

Firstly, the study contributes to organizational theory, especially regarding institutional pressures. As previous research explored institutional pressures in contexts of performance and green innovation, this study highlights the relationship between institutional pressures and digital readiness in the healthcare sector. This enlightens the understanding of their impact, beyond the usual focus on regulations and social ties between organizations.

Secondly, in the field of strategic change, this study emphasizes digital readiness because this factor is a new concept with limited attention to the healthcare context. Previous research focused on international enterprises and the banking industry.

Thirdly, regarding strategic renewal, this study examined dynamic managerial capability as a mediating factor in the relationship between institutional pressure and digital readiness within healthcare. This approach is significant, as the existing literature has not explored digital readiness in this context.

Practical Implications

The research findings provide valuable insights into the dynamics of strategic renewal in healthcare organizations, emphasizing the significance of institutional pressures, DMC, and digital readiness. The study highlights the influence of both direct and indirect institutional pressures on digital readiness, which in turn drives strategic renewal. These findings align with the importance of integrating digital transformation with overall organizational strategy. A key contribution of the study is the role of DMC in mediating the relationship between institutional pressures and digital readiness, highlighting the need for managers to develop effective capabilities in managing these pressures for digital success.

The study strongly supports all three hypotheses, offering important practical insights. First, it confirms that institutional pressures significantly influence digital readiness (DR) in private hospitals. The complexity of digital challenges and the rising demand for digital health services drive hospitals to adopt these technologies. Leaders must engage with stakeholders and ensure employees are proficient in both administrative and clinical digital operations to meet digital demands. Second, DMC mediates the relationship between institutional pressures and digital readiness, with managerial cognition playing a crucial role in evaluating digital capabilities and responding to uncertainties. Training in digital health competencies is essential to navigating digital transformation effectively. Lastly, hospitals committed to digital health services exhibit greater strategic flexibility, enabling them to innovate and renew collaborative approaches (SR) with key partners. This fosters a culture of innovation that enhances both patient care and operational efficiency.

Limitations and recommendations

This study has several limitations. First, it focused only on healthcare organizations, which may limit how well the findings apply to other sectors. Future research should examine a wider range of industries to see if the relationships between institutional pressures, DMC, digital readiness, and strategic renewal are consistent across different settings. Future research could investigate additional variables that may theoretically influence the study's variables. This could contribute to enhancing

the R^2 of the endogenous variables identified as low in this study (i.e. case DMC). Second, since the study is cross-sectional, it limits our ability to determine causality between the variables. To address this, future studies could use a longitudinal approach to better understand how these relationships develop over time and offer stronger evidence of cause and effect. Additionally, using other research methods, like experiments or mixed-method approaches, could provide deeper insights into how digital transformation works. Lastly, exploring other factors, like organizational culture or leadership styles, could give a more detailed understanding of what influences strategic renewal during digital transformation

Conclusions

This study provides robust support for all three hypotheses. It affirms the favorable impact of institutional pressures on digital readiness (H1), illustrates the intermediary function of DMC between institutional pressures and digital readiness (H2), and underscores the pivotal role of digital readiness in propelling strategic renewal within the healthcare sector (H3). This study extends the organizational theory by shedding light on the relationship between institutional pressures and digital readiness in the healthcare sector, highlighting the significance of digital readiness amidst changing landscapes. This study underscores the importance of considering dynamic managerial capabilities as a mediating factor in this relationship, contributing novel insights to the field of strategic renewal within healthcare contexts, and emphasizing the imperative for managers to cultivate adept capabilities in navigating institutional pressures to foster digital success and overall organizational resilience.

Authors' contributions

Erwin Tenggono contributed to the conceptualization, methodology, formal analysis, writing of the original draft, and review and editing of the manuscript. Budi W. Soetjipto was involved in validation, review and editing of the manuscript, and served as a supervisor. Lily Sudhartio also participated in validation, review and editing of the manuscript, and served as a supervisor. All authors have approved the final manuscript.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Disclosure of interest

In accordance with Taylor & Francis policy and my ethical obligation as a researcher, I am reporting that I have no financial or business interests, nor do I receive funding from or act as a consultant to any company that may be affected by the research reported in the enclosed paper. I have disclosed this to Taylor & Francis, and no conflicts of interest exist regarding this study.

Funding

The authors have not acknowledged any research funding.

About the authors

Dr. Erwin Tenggono, holds an MBA from Prasetya Mulya Business School and a doctorate from University of Indonesia. He serves as a co-partner at Halodoc and is on the Board of Directors at Mensa Group. His research focuses on digital transformation and strategic agility in business and corporate leadership, drawing on over 25 years of experience in healthcare to inform his academic works.

Budi W. Soetjipto, Ph.D., former vice rector at Pertamina University, is currently a lecturer at the University of Indonesia, specializing in research, development, and academic affairs. With over 25 years of consulting experience in strategic, organizational, and human capital management, he has collaborated with companies such as PT Semen Indonesia and PT Freeport Indonesia. He co-owns two consulting firms and is a master trainer in personality assessments.

Dr. Lily Sudhartio, M.Sc., QRGP, is a lecturer at the Faculty of Economics and Business, University of Indonesia. Her research interests are centered on innovation and entrepreneurship. She holds a master's in industrial engineering and management from Bandung Institute of Technology and a Doctorate in Management Science from the University of Indonesia.

ORCID

Erwin Tenggono  <http://orcid.org/0000-0001-6607-9442>

Budi W. Soetjipto  <http://orcid.org/0000-0001-5670-0864>

Lily Sudhartio  <http://orcid.org/0000-0002-8414-2369>

Data availability statement

The data that support the findings of this study are available from the corresponding author, Erwin Tenggono, upon reasonable request.

References

- Åberg, C., & Torchia, M. (2020). Do boards of directors foster strategic change? A dynamic managerial capabilities perspective. *Journal of Management and Governance*, 24(3), 655–684. <https://doi.org/10.1007/s10997-019-09462-4>
- Agarwal, R., & Helfat, C. E. (2009). Strategic renewal of organizations. *Organization Science*, 20(2), 281–293. <https://doi.org/10.1287/orsc.1090.0423>
- Al Ketbi, S. J., & Alshurideh, M. (2022). *The Impact of Corporate Entrepreneurship on Corporate Performance: The Moderating Role of Digital Readiness in the Banking Sector*. Springer. p. 499–509.
- Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian Journal of Psychological Medicine*, 43(1), 86–88. <https://doi.org/10.1177/0253717620977000>
- Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social Research Update*, 33, 1–4.
- Barrales-Molina, V., Bustinza, Ó. F., & Gutiérrez-Gutiérrez, L. J. (2013). Explaining the causes and effects of dynamic capabilities generation: A multiple-indicator multiple-cause modelling approach: Causes and effects of dynamic capabilities generation. *British Journal of Management*, 24(4), 571–591. <https://doi.org/10.1111/j.1467-8551.2012.00829.x>
- Bhatti, S. H., Santoro, G., Khan, J., & Rizzato, F. (2021). Antecedents and consequences of business model innovation in the IT industry. *Journal of Business Research*, 123, 389–400. <https://doi.org/10.1016/j.jbusres.2020.10.003>
- Brommeyer, M., & Liang, Z. (2022). A systematic approach in developing management workforce readiness for digital health transformation in healthcare. *International Journal of Environmental Research and Public Health*, 19(21), 13843. <https://doi.org/10.3390/ijerph192113843>
- Bughin, J., Kretschmer, T., & van Zeebroeck, N. (2021). Digital technology adoption drives strategic renewal for successful digital transformation. *IEEE Engineering Management Review*, 49(3), 103–108. <https://doi.org/10.1109/EMR.2021.3098663>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Cardinale, I. (2018). Beyond constraining and enabling: Toward new microfoundations for institutional theory. *Academy of Management Review*, 43(1), 132–155. <https://doi.org/10.5465/amr.2015.0020>
- Caro, E., Cegarra-Navarro, J. G., & Alfonso-Ruiz, F. J. (2020). Digital technologies and firm performance: The role of digital organisational culture. *Technological Forecasting and Social Change*, 154, 119962. <https://doi.org/10.1016/j.techfore.2020.119962>
- Castiaux, A. (2012). Developing dynamic capabilities to meet sustainable development challenges. *International Journal of Innovation Management*, 16(06), 1240013. <https://doi.org/10.1142/S1363919612400130>
- Daniel, W. W., & Cross, C. L. (2018). *Biostatistics: a foundation for analysis in the health sciences* [Internet]. Wiley; [cited 2023 Oct 13]. Available from: https://books.google.com/books?hl=en&lr=&id=PON1DwAAQBAJ&oi=fnd&pg=PA3&dq=Daniel,+Wayne+W.,+1929--+and+Chad+Lee+Cross.+2013.+Biostatistics:+A+Foundation+for+Analysis+in+the+Health+Sciences.+Hoboken,+NJ,+Wiley&ots=a73yaWrrPt&sig=mNqJCyWuShPu03eGI0tLddGk_04
- DiMaggio, P., & Powell, W. W. (2012). *The new institutionalism in organizational analysis* [Internet]. University of Chicago press; [cited 2023 Oct 2]. Available from: <https://books.google.com/books?hl=en&lr=&id=jbTbAgAAQBAJ&oi=fnd&pg=PR5&dq=dimaggio+and+powell+&ots=pEmjA4Ml6G&sig=UqreeRGRStJ5EwDmjplVDem6WkQ>
- Everly, B. A., & Schwarz, J. L. (2015). Predictors of the adoption of LGBT-friendly HR policies. *Human Resource Management*, 54(2), 367–384. <https://doi.org/10.1002/hrm.21622>
- Fikru, M. G. (2014). International certification in developing countries: The role of internal and external institutional pressure. *Journal of Environmental Management*, 144, 286–296. <https://doi.org/10.1016/j.jenvman.2014.05.030>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>

- Gfrerer, A., Hutter, K., Füller, J., & Ströhle, T. (2021). Ready or not: Managers' and employees' different perceptions of digital readiness. *California Management Review*, 63(2), 23–48. <https://doi.org/10.1177/0008125620977487>
- Guenther, P., Guenther, M., Ringle, C. M., Zaefarian, G., & Cartwright, S. (2023). Improving PLS-SEM use for business marketing research. *Industrial Marketing Management*, 111, 127–142. <https://doi.org/10.1016/j.indmarman.2023.03.010>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J., Jr Hair, Jr. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Heubeck, T., & Meckl, R. (2022). Antecedents to cognitive business model evaluation: a dynamic managerial capabilities perspective. *Review of Managerial Science*, 16(8), 2441–2466. <https://doi.org/10.1007/s11846-021-00503-7>
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization*, 28(1), 52–61. <https://doi.org/10.1016/j.infoandorg.2018.02.004>
- Hinton, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS explained*. Second edition. Routledge, Taylor & Francis Group.
- Hsia, T.-L., Chiang, A.-J., Wu, J.-H., Teng, N. N. H., & Rubin, A. D. (2019). What drives E-Health usage? Integrated institutional forces and top management perspectives. *Computers in Human Behavior*, 97, 260–270. <https://doi.org/10.1016/j.chb.2019.01.010>
- Jiang, W., Mavondo, F., & Zhao, W. (2020). The impact of business networks on dynamic capabilities and product innovation: The moderating role of strategic orientation. *Asia Pacific Journal of Management*, 37(4), 1239–1266. <https://doi.org/10.1007/s10490-018-9628-2>
- Jones, A., Akhlaghpour, S., Ayre, S., Barde, P., Staib, A., & Sullivan, C. (2020). Changing the conversation on evaluating digital transformation in healthcare: Insights from an institutional analysis. *Information and Organization*, 30(1), 100255. <https://doi.org/10.1016/j.infoandorg.2019.100255>
- Kemkes. (2022). RS Online [Internet]. [cited 2022 Nov 29]. Available from https://sirs.kemkes.go.id/fo/home/dashboard_rs?id=0
- Klar, S., & Leeper, T. J. (2019). Identities and intersectionality: A case for purposive sampling in survey-experimental research. In Lavrakas P, Traugott M, Kennedy C, Holbrook A, De Leeuw E, West B, editors. *Experimental Methods in Survey Research*. [Internet]. 1st ed Wiley. [cited 2023 Dec 15]. p. 419–433. Available from: <https://onlinelibrary.wiley.com/doi/10.1002/9781119083771.ch21>
- Koning, C. (2022). Strategic management for healthcare organizations: Navigating the challenges of complexity.
- Kor, Y. Y., & Mesko, A. (2013). Dynamic managerial capabilities: Configuration and orchestration of top executives' capabilities and the firm's dominant logic. *Strategic Management Journal*, 34(2), 233–244. <https://doi.org/10.1002/smj.2000>
- Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital transformation: An overview of the current state of the art of research. *Sage Open*, 11(3), 215824402110475. <https://doi.org/10.1177/21582440211047576>
- Lavrakas PJ, editor. *Encyclopedia of survey research methods*. SAGE. (2008).
- Li, L., Su, F., Zhang, W., & Mao, J.-Y. (2018). *Digital Transformation by SME Entrepreneurs: A Capability Perspective*, 1129–1157.
- Lin, J., Luo, Z., & Luo, X. (2020). Understanding the roles of institutional pressures and organizational innovativeness in contextualized transformation toward e-business: Evidence from agricultural firms. *International Journal of Information Management*, 51, 102025. <https://doi.org/10.1016/j.ijinfomgt.2019.10.010>
- Liu, H., Ke, W., Wei, K. K., Gu, J., & Chen, H. (2010). The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems. *Journal of Operations Management*, 28(5), 372–384. <https://doi.org/10.1016/j.jom.2009.11.010>
- Machado, C. G., Almström, P., Öberg, A. E., Kurdve, M., & Almashalah, S. Y. (2020). Maturity framework enabling organizational digital readiness. In: Säfsten K, Elgh F, editors. *Advances in Transdisciplinary Engineering [Internet]*. IOS Press. [cited 2022 Apr 2]. Available from <http://ebooks.iospress.nl/doi/10.3233/ATDE200204>.
- Margolis, M. F. (2022). Born again but not evangelical? How the (double-barreled) questions you ask affect the answers you get. *Public Opinion Quarterly*, 86(3), 621–642. <https://doi.org/10.1093/poq/nfac035>
- Marques, I. C. P., & Ferreira, J. J. M. (2020). Digital transformation in the area of health: Systematic review of 45 years of evolution. *Health and Technology*, 10(3), 575–586. <https://doi.org/10.1007/s12553-019-00402-8>
- Martin, J. A., & Bachrach, D. G. (2018). A relational perspective of the microfoundations of dynamic managerial capabilities and transactive memory systems. *Industrial Marketing Management*, 74, 27–38. <https://doi.org/10.1016/j.indmarman.2018.07.008>
- Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. *Business & Information Systems Engineering*, 57(5), 339–343. <https://doi.org/10.1007/s12599-015-0401-5>
- Mattila, M., Yrjölä, M., & Hautamäki, P. (2021). Digital transformation of business-to-business sales: what needs to be unlearned? *Journal of Personal Selling & Sales Management*, 41(2), 113–129. <https://doi.org/10.1080/08853134.2021.1916396>
- Menold, N. (2020). Double barreled questions: An analysis of the similarity of elements and effects on measurement quality. *Journal of Official Statistics*, 36(4), 855–886. <https://doi.org/10.2478/jos-2020-0041>

- Milicevic, A., Aimar, M., & Nazir, I. (2018). *Strategic Renewal in the Banking Industry: A middle managerial perspective with the focus on dynamic managerial capabilities in the Swedish Banking industry*.
- Ministry of Health of the Republic of Indonesia. (2021). *Blueprint for Digital Health Transformation Strategy 2024*.
- Ndou, V., Mele, G., Hysa, E., & Manta, O. (2022). Exploiting technology to deal with the COVID-19 challenges in travel & tourism: A bibliometric analysis. *Sustainability*, 14(10), 5917. <https://doi.org/10.3390/su14105917>
- Pätzmann, L.-M., Bitzer, M., & Back, A. (2022). *Organizational Readiness for Digital Intrapreneurship: Towards the Design of an Assessment Tool*.
- Peker, M., Dođru, O. C., & Meşe, G. (2022). Role of supervisor behavioral integrity for safety in the relationship between top-management safety climate, safety motivation, and safety performance. *Safety and Health at Work*, 13(2), 192–200. <https://doi.org/10.1016/j.shaw.2022.03.006>
- Pirola, F., Cimini, C., & Pinto, R. (2019). Digital readiness assessment of Italian SMEs: A case-study research. *Journal of Manufacturing Technology Management*, 31(5), 1045–1083. <https://doi.org/10.1108/JMTM-09-2018-0305>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Purbaya, N. C., & Noviaristanti, S. (2024). Digital transformation formulation AT PT. Rohto laboratories Indonesia. *International Journal of Engineering Business and Social Science*, 2, 1152–1163.
- Pusparini, E. S., Soetjipto, B. W., Rachmawati, R., & Sudhartio, L. (2018). Stakeholder pressure and its effect on environmental proactiveness and firm performance: The mediating role of dynamic managerial capabilities. *Pertanika Journal of Social Sciences and Humanities*, 26, 197–212.
- Reed, J. H. (2021). Strategic agility and the effects of firm age and environmental turbulence. *Journal of Strategy and Management*, 14(2), 129–149. <https://doi.org/10.1108/JMSA-07-2020-0178>
- Santarsiero, F., Schiuma, G., Carlucci, D., & Helander, N. (2023). Digital transformation in healthcare organisations: The role of innovation labs. *Technovation*, 122, 102640. <https://doi.org/10.1016/j.technovation.2022.102640>
- Schmitt, A., Raisch, S., & Volberda, H. W. (2018). Strategic renewal: Past research, theoretical tensions and future challenges: Strategic renewal. *International Journal of Management Reviews*, 20(1), 81–98. <https://doi.org/10.1111/ijmr.12117>
- Shah, H. A., Yasir, M., Majid, A., Yasir, M., & Javed, A. (2019). Promoting strategic performance through strategic orientation and strategic renewal: A moderated mediation model. *Management Decision*, 58(2), 376–392. <https://doi.org/10.1108/MD-04-2019-0536>
- Sirmon, D. G., & Hitt, M. A. (2009). Contingencies within dynamic managerial capabilities: interdependent effects of resource investment and deployment on firm performance. *Strategic Management Journal*, 30(13), 1375–1394. <https://doi.org/10.1002/smj.791>
- Sulaiman-Hill, C. M., & Thompson, S. C. (2011). Sampling challenges in a study examining refugee resettlement. *BMC International Health and Human Rights*, 11(1), 2. <https://doi.org/10.1186/1472-698X-11-2>
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Tenggono, E., Soetjipto, B. W., & Sudhartio, L. (2024a). Navigating institutional pressure: Role of dynamic managerial capabilities and strategic agility in healthcare organizations' renewal. *International Journal of Healthcare Management*, 1–10. <https://doi.org/10.1080/20479700.2024.2323846>
- Tenggono, E., Soedjipto, B. W., & Sudhartio, L. (2024b). The effect of institutional pressures and dynamic managerial capability on strategic renewal: The case of strategic agility and digital readiness as mediators in healthcare industry. *Asian Journal of Business Research*, 14(1), 120–141. <https://doi.org/10.14707/ajbr.230168>
- Wang, F., Zhao, J., Chi, M., & Li, Y. (2017). Collaborative innovation capability in IT-enabled inter-firm collaboration. *Industrial Management & Data Systems*, 117(10), 2364–2380. <https://doi.org/10.1108/IMDS-09-2016-0392>
- Wang, X., Qin, Y., Xu, Z., & Škare, M. (2022). A look at the focus shift in innovation literature due to Covid-19 pandemic. *Journal of Business Research*, 145, 1–20. <https://doi.org/10.1016/j.jbusres.2022.02.067>
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.
- Wirtz, B. W., Langer, P. F., & Schmidt, F. W. (2021). Digital government: Business model development for public value creation-A dynamic capabilities based framework. *Public Administration Quarterly*, 45(3), 232–255. <https://doi.org/10.37808/paq.45.3.2>
- Zhen, Z., Yousaf, Z., Radulescu, M., & Yasir, M. (2021). Nexus of digital organizational culture, capabilities, organizational readiness, and innovation: Investigation of SMEs operating in the digital economy. *Sustainability*, 13(2), 720. <https://doi.org/10.3390/su13020720>