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UNLOCKING INNOVATION FROM WITHIN: THE POWER OF TACIT KNOWLEDGE AND CHANGE ADAPTABILITY IN INDONESIAN INTERNAL ORGANISATIONAL INNOVATION PROCESSES

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Abstract

Research purpose. The study examines how tacit knowledge sharing affects internal organisational innovation by exploring change adaptability as a mediator. Hence, it tries to fill this gap and further explain the role played by tacit knowledge sharing in the entire knowledge management process. Given the mediating effect of change adaptability, this study aims to provide new insight into effective management and sharing tacit knowledge among organisations to improve their innovation processes.

Design / Methodology / Approach. This study adopted a quantitative cross-sectional survey design, with Partial Least Squares Structural Equation Modeling (PLS-SEM) as the main statistical technique. Such a method is best applied in this research, where one confirms hypotheses and the relationship between observed and latent variables. The samples were selected based on judgmental non-probability and purposive sampling approaches. The SEM was used in data analysis. It contributed to understanding the relationship of the variables, such as sharing tacit knowledge, change adaptability, and internal organisational innovation.

Findings. The study proved that tacit knowledge sharing is highly significant in internal organisational innovation, mediated by change adaptability. Direct effect: Tacit knowledge sharing directly affects the organisational ability to adapt to change and internal innovativeness, thus underpinning its basis. Change adaptability mediates the effect of tacit knowledge sharing on internal organisational innovation, which influences innovation outcomes. Path coefficient analysis confirms the positive influence of tacit knowledge sharing on adaptability to change and innovation. Indirect Effects: Empirical examination has proved the significant mediating effect of change adaptability in leveraging tacit knowledge for innovation. These results suggest that the strategic value of tacit knowledge and adaptability, which will drive sustainable innovation within organisations and support their integration within strategic frameworks, is fully justified.

Originality / Value / Practical implications. This is a new model used for the first time to suggest novel contributions and usefulness in understanding the relationship among sharing of tacit knowledge, change adaptability, and innovation at the internal level of the organisation. Tacit knowledge sharing, combined with change adaptability, is a model for internal organisational innovation. Therefore, it fills an important gap in the existing literature: the quantification of adaptability in mediating the effect of tacit knowledge on innovation. The results of this study will provide empirical validation of these relationships and further contribute to the knowledge in practice, particularly by emphasising the mediating role of change adaptability, which has been relatively underexplored. Practically, tacit knowledge sharing within adaptive organisational environments is thus an important call towards effective adaptation to change. The level of enhancement of these dimensions as core competencies through strategies could make a difference in the success of businesses. The importance of adaptability has to be emphasised by training programs and management practices that would provide the same skills. Other important avenues include those that work towards cultivating supportive organisational cultures that

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would facilitate tacit knowledge exchange, support employee interaction and informal knowledge exchange, and measures to reward innovation efforts. Investment in human resources practices that encourage learning and adaptability will continue to encourage knowledge sharing and innovation, including improving training programs, offering mentorship opportunities, and developing performance management systems that support and reward behaviours around innovation. This study contributes to the literature with a developed framework and empirical examination of the interrelations between tacit knowledge sharing, change adaptability, and innovation. It provides practical strategies that can be of value to the organisation in enhancing innovation capabilities through knowledge management.

Keywords: tacit knowledge sharing; internal organisation innovation, change adaptability, white-collar employee, mediating variable.

JEL codes: M53, M59.

Introduction

The Fourth Industrial Revolution is propelled by various key technologies such as augmented reality, automation, robotics, additive manufacturing, renewable energy, cloud computing, blockchain, sensors, analytics, machine learning, artificial intelligence, and virtual reality. These technologies drive connectivity, analytics, automation, and advanced manufacturing, reshaping global business (McKinsey Explainers, 2022).

In 2024, successful implementation relies heavily on reskilling and upskilling the workforce to meet changing job demands. This includes retraining for new roles (reskilling) and acquiring additional skills for current positions (upskilling). The process involves identifying necessary skills, designing talent development programs, and implementing relevant content (McKinsey Explainers, 2022). Upskilling improves existing skills, while reskilling prepares individuals for new roles. Both approaches are guided by agility, personalisation, and forward-thinking. Agility ensures adaptability to changing circumstances, personalisation tailors learning to individual needs, and forward-thinking anticipates future trends.

Organisational Learning Theory, widely discussed in academic literature, encompasses various facets: the socio-organizational context of acquiring new knowledge, individual-level learning factors, macro-environmental influences on knowledge application, and the effects of innovation on subsequent learning processes (Berta et al., 2015). This theory emphasises how organisations adjust behaviours based on goals and experiences (Greve, 2020), involving a dynamic process of acquiring, sharing, applying, and remembering knowledge to enhance organisational behaviour and maintain competitive advantage (Chen & Zheng, 2022). It also addresses the balance between explorative and exploitative innovations within organisations (Ferreira, 2020) and outlines processes such as intuiting, interpreting, integrating, and institutionalising knowledge at individual, group, and organisational levels (Easterby-Smith et al., 2000). Organisational Learning Theory is instrumental in understanding how organisations attain competitive advantage by integrating learning with high-performance work systems and entrepreneurial orientation (Liu et al., 2019). Furthermore, it explains the development of competitive advantage through the convergence of knowledge-based theory and dynamic capabilities theory (Kreiser, 2011).

Organisational innovation processes are vital for companies to drive internal change and foster a culture of creativity and continuous improvement. These processes involve adopting new technologies, developing products/services, enhancing existing processes, and nurturing employee creativity. (McKinsey Explainers, 2022). An innovation-oriented approach benefits companies by enhancing flexibility in responding to potential changes, seizing opportunities as they arise, and ultimately gaining a competitive edge by developing superior products and services (Cabello, 2022; Kucharska & Rebelo, 2022). Innovation holds significant importance globally as it enables the creation of competitive goods and services, enhances public services' efficiency, and improves social activities (Khan & Khan, 2019; Phung et al., 2021). A significant body of knowledge underscores the importance of studying process innovation, especially in resource-constrained and institutionally weak contexts (Cabello, 2022; Kucharska & Rebelo, 2022). Despite its significance, organisations often overlook the innovative internal organisational process (Dedahanov et al., 2017).

Tacit knowledge sharing plays a crucial role in driving internal innovation within organisations. Ganguly et al. (2019) emphasizes its significance, noting how social capital precedes tacit knowledge sharing and influences an organisation's innovation capability. This importance is reinforced by Kmieciak (2020) and Maurseth & Svensson (2020), who suggest that tacit knowledge sharing has a greater impact on firms' innovation performance than explicit knowledge sharing. Complementing explicit sharing, tacit knowledge sharing is crucial for introducing external innovations and improving internal processes (Kucharska & Erickson, 2023). Its role in enhancing psychological capital and breakthrough innovation is highlighted by R. Hu et al. (2023). Additionally, L. Hu & Randel (2014) note its mediation between cognitive, social capital and team innovation, while Andriani & Nasution (2020), Harjanti & Halim, (2022), Kucharska (2021) stress its significant contribution to the innovation process within companies. Together, these findings underscore the critical role of tacit knowledge sharing in facilitating knowledge transfer, improving team dynamics, and fostering a culture of innovation within organisations.

Tacit knowledge sharing significantly enhances organisational adaptability to change. Holste & Fields (2010) show that affect-based trust drives the willingness to share tacit knowledge, which is crucial for adaptation. Wang et al. (2021) note that individual attitudes like enjoyment and self-efficacy positively influence tacit knowledge sharing. Al-Zoubi et al. (2019) find that sharing tacit knowledge improves employees' adaptability and innovation in changing work environments. Furthermore, L. Hu & Randel (2014) suggest that tacit knowledge sharing mediates the relationship between social capital and team innovation, enhancing teams' adaptability. Enwereuzor (2021) highlights the positive correlation between diversity climate, workplace belongingness, and tacit knowledge sharing, emphasising organisational culture's role in promoting adaptation.

Scholarly works underscore the importance of tacit knowledge sharing in fostering organisational adaptability. Trust, individual attitudes, organisational culture, and social capital are key factors promoting tacit knowledge sharing, which is crucial for adapting to dynamic environments. Kucharska & Erickson (2023) conducted a study in Poland examining the relationship between tacit knowledge and innovation. They focused on understanding how individuals acquire tacit knowledge, particularly through "learning by doing" and "learning by interaction," and how these forms of learning foster knowledge sharing, ultimately supporting innovation in processes and products/services. Additionally, Kucharska & Rebelo (2022) identified knowledge gaps regarding the impact of transformational leadership on internal and external innovation within scientific institutions. They also investigated key factors contributing to innovation, including organisational learning culture, tacit knowledge sharing, and change adaptability, which is essential for successful innovation implementation. Understanding how these factors interact and influence scientific development is crucial.

Adaptability is crucial for fostering internal process innovation within organisations. Firican (2022) emphasises the need to balance standardisation and adaptability effectively to drive internal changes. Internal change agents, as highlighted by Volberda et al. (2014), play a significant role in promoting the adoption of management innovation. However, organisations may face tensions as they navigate competitive and complex environments (Smith et al., 2017). Absorbing external knowledge and leveraging internal resources are essential for driving innovation (Alexander et al., 2020). This dual-channelling perspective enhances overall innovation performance at the process level (Alexander et al., 2020). Cultivating a culture of continual improvement, as emphasised by Cela et al. (2019), is vital for adapting to internal and external changes.

Innovation capacity enables organisations to adapt and promote flexible thinking (Zhang et al., 2022). Organisations drive management innovation by internalising external knowledge and leveraging relationships with external change actors, especially in microenterprises (Chapelon et al., 2018). This internalisation significantly impacts management innovation generation (Chapelon et al., 2018). Organisations that balance internal and external knowledge, empower internal change agents, and foster continual improvement are better positioned to drive innovation and adapt to dynamic environments.

Adaptability is a crucial mediator across diverse contexts, influencing decision-making and processes. In organisational climate change adaptation, perceived risk mediates between environmental attitudes, climate change knowledge, and adaptation importance (Bremer & Linnenluecke, 2016). Among civil

servants, adaptability mediates the link between managerial climate factors and change readiness (Yean et al., 2022). In psychology, it fully or partially mediates connections between personality traits, social support, and psychological well-being (Holliman et al., 2022; Vincent et al., 2024), reflecting its significance in individual reactions to internal and external factors. Prior scholarly works show adaptability is a pivotal mediator in decision-making, organisational change, individual well-being, and healthcare outcomes. Its mediation of various relationships underscores its importance in facilitating adjustments, enhancing resilience, and responding to changing environments.

This study aims to examine the critical but under-researched nexus—the interplay between tacit knowledge and organisational adaptability to change. It clearly sets the framework for its relevance within the wider ambit of organisational learning and innovation, highlighting how these components can leverage competitive advantage and improve organizational processes, specifically in dynamic environments. This gives way to a framework of relevance within the wider ambit of organisational learning and innovation, which underlines how these components can be used for competitive advantage and improvement in organisational processes, specifically in dynamic environments. This context framing shall underline the importance of exploring the dynamics that exist amid tacit knowledge and adaptability in the organisational setting.

This study fills an important gap in the existing literature regarding tacit knowledge sharing and internal organisational innovation while focusing on the mediating role of change adaptability. It extends the debate on how tacit knowledge, once managed, and shared well, fosters innovation within organisations. In a sense, the consideration of adaptability as mediating between tacit knowledge and internal organisational innovativeness is quite novel concerning the mechanisms of innovation within organisational contexts.

The rationale of the study is to empirically examine the complexity of the relationship between tacit knowledge sharing and internal organisational innovation in which change adaptability acts as a pivotal mediator. This objective represents efforts to shed light on how tacit knowledge affects innovation processes and offers unique insights to help organisational strategists and practitioners. Such an in-depth empirical analysis would thus bring out a much more nuanced understanding of the factors associated with organisational innovation.

The current research used a quantitative cross-sectional survey method. This quantitative approach permits the hypothesised relationships in this study to be tested rigorously and affords greater exactness in results regarding tacit knowledge sharing, adaptability to change, and organisational innovation. Therefore, the current research study is capable of having better rigour and validity in the findings.

These research results would, in effect, help provide important knowledge on the dynamics of sharing tacit knowledge and organisational adaptability. First, it confirms that the substantial impact of sharing tacit knowledge contributes to organisational innovation either directly or indirectly through its influence on changes in adaptability. It underlines the strategic importance of effectively managing and sharing tacit knowledge in underpinning organisational capabilities. This, in turn, underscores yet another important role of change adaptability as a critical mediator in amplifying innovative outcomes originating from tacit knowledge sharing. The mediation logic is that while organisational adaptability supports the realisation of innovation through tacit knowledge sharing, it further amplifies the innovative potential which underlies tacit knowledge.

The significance is that the study would have practical implications for organisations interested in creating environments that would naturally foster the sharing of tacit knowledge and being adaptive in their operations. Major recommendations include investments in training that are tailor-made for individuals and the creation of mentorship opportunities, as well as investments in performance management systems that reward and recognise innovative behaviours inspired by tacit knowledge all of which bring the findings together into a single tapestry: theoretical advances and practical understandings of the internal innovation processes of organisations.

Literature Review

Organisational Learning Theory

Organisational learning is crucial in management theory, focusing on how organisations improve over time through absorbing, cultivating, and sharing knowledge. It's essential for maintaining competitiveness, fostering innovation, and navigating change. Practically, organisations facilitate learning through practices like using learning management systems, fostering a culture of growth, and employing strategic methodologies like scenario analysis. However, hurdles such as inertia and balancing exploration with exploitation exist (Crossan et al., 1995; Crossan et al., 1999; Robinson, 2001). The 4I Framework (Crossan et al., 1995; Easterby-Smith et al., 2000; Crossan et al., 1999), offers insight into organisational learning at individual, group, organisational, and inter-organizational levels. At the individual level, Intuiting involves recognising patterns and possibilities not immediately obvious to others. Interpreting occurs as individuals communicate insights, facilitating discussion and reflection. Integrating at the group level synthesises individual interpretations into shared understanding and coordinated action. Institutionalising at the organisational level embeds learned knowledge into systems and culture (Crossan et al., 1995; Easterby-Smith et al., 2000; Crossan et al., 1999).

Internal Organisational Innovation

Internal organisational innovation encompasses fostering creativity, developing ideas, and implementing changes to boost efficiency, effectiveness, and competitiveness. This involves internal R&D, knowledge acquisition, and process innovations, as highlighted by Cassiman & Veugelers (2006) and Damanpour et al. (2009). Factors like communication, leadership, and integrating internal and external knowledge influence organisational creativity and innovation, as noted by Fu (2020) and Gumusluŏlu & Ilsev (2009). External collaborations and networks also significantly contribute to organisational innovation, complementing internal efforts (Haned et al., 2014) and driving radical innovations (Perin et al., 2016). By nurturing creativity, encouraging knowledge sharing, and leveraging resources, organisations enhance their innovative capabilities for sustainable competitive advantage (Kising'U et al., 2016).

Innovation is vital for organisational goals, involving introducing new ideas or methods to improve competitiveness. As defined by Phung et al. (2021), process innovation entails novel or significantly improved production or delivery methods. Kucharska & Rebelo (2022) distinguish between internal and external innovation types, with internal innovation focusing on enhancing organisational performance through elements like management structure and employee involvement. It relies on organisational routines and tacit knowledge, reducing costs and increasing market competitiveness, as suggested by Goel & Nelson (2018). Fazil (2018) identifies five factors influencing the speed of process innovation, including continuous improvement and adaptability to regulations. External innovation aims to renew research for broader societal benefits, demonstrating innovation's diverse scope and impact within and beyond organisational boundaries.

Change Adaptability

Employee adaptability, crucial in dynamic work environments, involves adjusting to changing conditions, whether gradual or rapid. It combines knowledge, skills, and attitudes to anticipate and respond to work-related changes. Adaptability enhances employees' confidence in overcoming challenges and improves their performance and workplace flexibility (Kucharska & Rebelo, 2022; Park & Park, 2019, 2021). Key dimensions include stress management, handling uncertainty, flexibility, resilience, problem-solving abilities, with indicators like ease of adjustment and familiarity with change.

Adaptability yields positive outcomes for individuals, improving skills and career success while benefiting organisations by aiding change management, fostering learning, and meeting customer expectations. Organisational factors promoting adaptability include a clear vision, innovative culture, support, and a learning environment (Kucharska & Rebelo, 2022; Park & Park, 2019, 2021). In the workplace, adaptability involves behaviours for handling unexpected situations and job demands, such as learning new tasks, dealing with uncertainty, and creative problem-solving. This research extends adaptability beyond customer interactions, focusing on how employees adapt to general work demands like learning new technology or tasks and interpersonal aspects of the job. It also underscores factors like schedule flexibility and career development opportunities (Kim et al., 2022).

Tacit Knowledge Sharing

Tacit knowledge, comprised of insights and experiences not easily articulated or documented, is typically acquired through learning processes like observation, imitation, and modelling (Jones, 2013; Maurseth & Svensson, 2020). This knowledge often requires personal, face-to-face interactions for effective transfer. Sharing tacit knowledge through physical interactions positively impacts team performance, with peer interactions facilitating more effective access to tacit knowledge than formal knowledge management systems (Hatjidis et al., 2019; Olaisen & Revang, 2018). This informal sharing is crucial for organisational tasks like creating new knowledge, developing products, and fostering innovation.

Tacit knowledge serves as a valuable organisational asset, difficult for competitors to replicate. It plays a vital role in change management, enhancing adaptability and innovation. Kucharska & Rebelo (2022) identify its dimensions as fostering innovation, relating to new knowledge, influencing perceptions, and changing the environment. Indicators of tacit knowledge include sharing personal experiences, learning from others, receiving new ideas from colleagues, and participating in discussions about best practices, reflecting its integral role in organisational success and innovation.

The Relationship between Tacit Knowledge Sharing and Change Adaptability

Tacit knowledge, which involves sharing unspoken knowledge, influences change adaptability, defined as employees' ability to adjust to evolving work conditions, whether rapidly or gradually changing. Research reveals that tacit knowledge positively impacts adaptability (Kucharska & Rebelo, 2022). Tacit knowledge is similar to new knowledge and can influence perceptions, leading to changes in thinking and actions, ultimately enhancing the capacity to adapt to organisational changes through altered perceptions (Kucharska & Rebelo, 2022).

In another study, the relationship between tacit knowledge and change adaptability is discussed by Suhana et al. (2020). Organisational learning, which includes tacit knowledge, is found to have a positive link with employee adaptability, a component of change adaptability. Organisational learning helps identify disruptive technologies, fostering employee innovation and improving innovation processes. Employees who adapt to new work requirements show more effective adaptability, demonstrating confidence in handling evolving tasks and conditions (Suhana et al., 2020). Based on these findings, the following hypothesis is proposed:

H1: Tacit knowledge sharing significantly influences change adaptability.

The Relationship between Tacit Knowledge Sharing and Internal Organizational Innovation

Tacit knowledge, which is personal knowledge gained through experience, can drive innovation in companies (Berraies et al., 2020). Knowledge workers with tacit knowledge have a deeper understanding and confidence in their knowledge, evolving from situational solutions to intuitive insights (Kucharska & Erickson, 2023). This confidence and recognition of its relevance lead to better knowledge application and sharing. Self-confidence, influence, and social capital also play roles in knowledge-sharing (Kucharska & Erickson, 2023). When individuals are confident in their knowledge and see its value for the organisation, they are more likely to share it.

Tacit knowledge significantly impacts the innovation process, improving daily work operations from an employee's perspective (Kucharska & Rebelo, 2022). It differentiates between process innovation (methods) and product innovation (results) (Kucharska & Erickson, 2023). Internal organisation innovation in companies refers to innovative work methods that can lead to product or service innovation (Kucharska & Rebelo, 2022). To foster innovation, companies in Indonesia need to develop internally. Therefore, the hypothesis can be drawn that tacit knowledge positively influences internal organisational innovation. Based on previous research findings, the proposed research hypothesis is:

H2: Tacit knowledge sharing significantly influences internal organisational innovation.

The Relationship between Change Adaptability and Internal Organizational Innovation

Smith and Webster (2018) highlight adaptation as a crucial driver of innovation, asserting that innovation requires individuals to actively monitor and modify their thinking and behaviour to enhance

existing processes or introduce new concepts. This conscious and deliberate adaptation is a necessary precursor to innovation, making both concepts interdependent. They emphasise that higher self-perceived adaptability motivates individuals to take risks, confidently present their ideas, and act innovatively and convincingly to justify their innovations to others.

Exploring this relationship further, Nguyen et al. (2019) discuss how change adaptability within organisational culture positively affects employee innovation, particularly in Vietnam's technology industry. Similarly, research in the Vietnamese IT industry investigates the relationship between various aspects of organisational culture (including adaptability) and employee innovation (Smith & Webster, 2018). Their study establishes a significant link between adaptability and innovation. These findings lead to the proposal of a hypothesis emphasising the integral role of adaptability in fostering innovation within organisational settings (Smith & Webster, 2018).

H3: Change adaptability significantly influences internal organisational innovation.

The Impact of Tacit Knowledge Sharing on Internal Organizational Innovation with Change Adaptability Serving as a Mediating Variable

Change adaptability can mediate the relationship between tacit knowledge and internal organisational innovations. It means that employees' tacit knowledge can enhance their adaptability, which, in turn, can stimulate internal organisational innovation (Kucharska & Rebelo, 2022).

Previous research has explored the concept of change adaptability as a mediating factor in the relationship between the absorptive capacity of knowledge (similar to tacit knowledge) and innovation in organisations (Martínez-Sánchez et al., 2020). In this study, flexibility in human resources was considered a mediating variable (Martínez-Sánchez et al., 2020). Given these findings, this study proposes the following hypothesis and research framework (see Figure 1):

H4: Tacit knowledge sharing significantly influences internal organisational innovation when mediated by change adaptability.

Research Methodology

Research Design and Approaches

This research involved a cross-sectional survey with a quantitative approach with partial least square structural equation modelling (PLS-SEM) in justifying the novel conceptual framework and proposed hypothesis. In particular, this study confirms that tacit knowledge sharing significantly influences internal organisational innovation when mediated by change adaptability. This study was conducted in Greater Jakarta, Indonesia, the capital city of Indonesia. In addition, the research model in this paper is provided in Figure 1. From the figure, it can be explained that the research model is formed from preliminary papers and relevant underpinning theories.

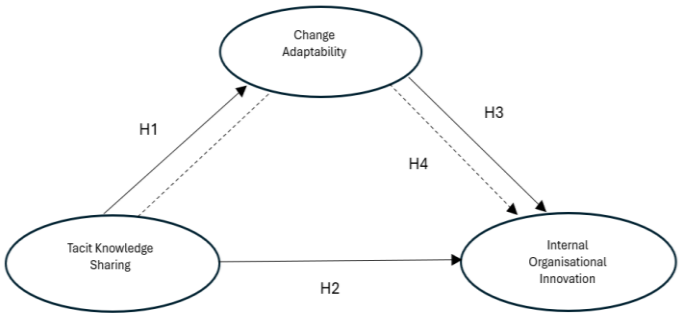


Fig. 1. Research framework (Source: Authors' research)

Data Collection

For this research, a convenience sample of 302 employees in Greater was employed to represent the relationship of tacit knowledge sharing, change adaptability and internal organisational innovation. This

sampling method was chosen because the sampling frame is unavailable and due to its relative speed and ease. However, care was taken to avoid bias in acquaintance with the sampling approach. The data collection process was initiated by distributing online questionnaires in Google Forms to respondents using email addresses, LinkedIn, and WhatsApp Groups, with the colleagues being asked to complete the questionnaires voluntarily. At the initial stage, we distributed 350 online questionnaires to the respondents, and we collected back these questionnaires for further analysis. During this process, we removed approximately 48 incomplete questionnaires and outliers, which were determined using the Rasch Model, specifically Person Measure Analysis, with the assistance of WINSTEPS software version 5.2.1.0 (Boone et al., 2014; Sumintono, 2014). At this stage, we had a 94.2 per cent response rate, which is a good response. The study was performed from January until August 2023, and it was followed up two weeks later. The criteria of respondents in this research were employees with at least one year of work experience.

Research Instrument

The research instrument in this study (Table 1) was created by thoroughly reviewing relevant literature and prior research. The questionnaire items, shown in Table 1, are specifically designed to assess tacit knowledge sharing, innovative work behaviour, and transformational leadership, and it is structured into three sections. Tacit knowledge sharing was adapted from Kucharska (2021), while change adaptability was taken from Kucharska & Bedford (2019; 2020). Lastly, internal organisation innovation was adopted from the works of Kucharska (2021). The study will use a questionnaire to gather data and a five-point Likert scale for measurement.

Table 1. Research instrument items (Source: Authors' research)

Construct		Item
Tacit Knowledge Sharing (Kucharska, 2021)	TKS1	I share knowledge from my own experience.
	TKS2	I learn from others' experiences.
	TKS3	Colleagues share new ideas with me.
	TKS4	Colleagues involve me in discussions about best practices.
Change Adaptability (Bedford & Kucharska, 2019, 2020)	C1	I am flexible when faced with change.
	C2	I can adapt to changes.
	C3	I easily embrace changes.
	C4	I am accustomed to changes.
Internal Organisational Innovation (Kucharska, 2021)	II1	We consistently enhance our work processes.
	II2	We excel at handling changes.
	II3	We are enthusiastic about implementing new methods, procedures.
	II4	We are highly receptive to new regulations.

Data Analysis

The data analysis method used is structural equation modelling (SEM). This approach allows researchers to test models that capture the hierarchical nature of constructs, providing a more detailed understanding of the relationships among both observed and latent variables (Ghozali, 2021; Hair et al., 2019; Sarstedt et al., 2014)The analysis will be conducted using SMARTPLS 3.2.9 software. It aims to enhance our understanding of observed and latent variable relationships and contribute to a comprehensive view of the research model.

Common Biased Method

To address common method bias in self-report questionnaires, researchers can utilise the Rasch Model (Boone et al., 2014; Sumintono, 2014). Person Measure Analysis, a specific technique within this framework, helps identify biases in respondents' answers. Acceptable MNSQ (Mean Square) values, typically ranging from 0.5 to 1.5, indicate unbiased responses. By scrutinising MNSQ values within this range, researchers can assess questionnaire reliability and validity, thereby mitigating the impact of common method bias and enhancing the credibility of the research (Boone et al., 2014; Sumintono, 2014). The study employed the Rasch Model, specifically Person Measure Analysis, with the assistance of WINSTEPS software version 5.2.1.0.

Results

Respondents' Profile

The study examined 302 respondents with several demographic factors, including gender, age range, education level, job level, and length of work. Regarding gender, the respondents were divided into men and women, with 59.9% female and 49.1% male. The age range of respondents was categorised as follows: 19 - 20 years (11.2%), 21 - 30 years (50.6%), 31 - 40 years (33%), 41 - 50 years (4.2%), and more than 50 years (0.9%). Regarding education level, 62.7% held a Bachelor's degree, 17.6% had education levels at high school and equivalent, 14.8% had a Diploma 1-4, and 4.8% had a Master's education and above. Job levels varied among respondents, with 14.8% at the Associate Manager - Manager level, 1.8% at the Director level, 1.5% at the Senior Manager - General Manager level, 36.1% at the Staff - Officer level, 23% as Supervisors, and 22.7% in non-permanent/contract/internship positions. Regarding length of work, 40.3% had worked for less than 5 years, 43.9% for less than 10 years, 13.9% for less than 20 years, and 1.8% for more than 20 years. Most respondents had worked for less than 10 years (43.9%).

Measurement Model Analysis

The data analysis method used is structural equation modelling (SEM). According to the existing literature, an indicator is considered significant if its loading factor surpasses 0.70 (Ghozali, 2021; Sarstedt et al., 2014). Additionally, it is essential to assess the internal consistency reliability of the model using two metrics: composite reliability and Cronbach's alpha. Both metrics should have a value of at least 0.50 to establish reliability, as indicated by the same sources. Moreover, to establish convergent validity, the average variance extracted (AVE) must be considered, with a threshold of 0.50 or higher (Ghozali, 2021; Sarstedt et al., 2014).

Table 2 shows discriminant validity, which involves comparing factors with cross-loading to assess the distinctiveness of the research construct. The test requires a cross-loading value of > 0.70 for each variable (Musyaffi et al., 2022; Ghozali, 2021). The table results indicate that all indicators for each variable in this study have cross-loading values exceeding 0.70 (> 0.70), meeting the criteria for discriminant validity testing (Ghozali, 2021; Sarstedt et al., 2014).

Table 2. Measurement model analysis (Source: Authors' research)

Latent Variable	Item	Loading Factor	Cronbach's Alpha	Composite Reliability	AVE	Remark
		(>0.7)	(>0.6)	(≥0.6)	(≥0.5)	
Tacit Knowledge Sharing	TKS1	0.787	0.781	0.859	0.604	Valid and Reliable
	TKS2	0.729				
	TKS3	0.769				
	TKS4	0.821				
Change Adaptability	CA1	0.805	0.817	0.879	0.645	Valid and Reliable
	CA2	0.791				
	CA3	0.785				
	CA4	0.832				
Internal Organisational Innovation	II1	0.799	0.805	0.873	0.632	Valid and Reliable
	II2	0.756				
	II3	0.811				
	II4	0.812				

Table 2 also shows Composite Reliability measures the reliability of indicators, with a minimum acceptable value for exploratory research being 0.60 - 0.70. The table reveals that all variables' Composite Reliability test results exceed 0.60 (> 0.60), indicating that all variables meet the Composite Reliability criteria. Cronbach's Alpha assesses the reliability of a construct by measuring internal consistency among indicators. A minimum Cronbach's Alpha value greater than 0.60 (> 0.60) is acceptable for exploratory research. The table shows that the Cronbach's Alpha value for all variables is greater than 0.60 (> 0.60), confirming that all variables meet the requirements for further testing. The

construct validity of the study is supported by the results of the Average Variance Extracted (AVE) values, as shown in Table 2. The Average Variance Extracted (AVE) test requires a value greater than 0.50 (> 0.50) to ensure that items adequately cover all aspects of the construct. The table results show that each variable in this study has an AVE value exceeding 0.50 (> 0.50), indicating that all variables meet the AVE criteria (Ghozali, 2021; Musyaffi et al., 2022).

Table 3. The Fornell-Larcker Criterion (Source: Authors' research)

Construct	Change Adaptability	Internal Organisational Innovation	Tacit Knowledge Sharing
Change Adaptability	0.803		
Internal Organisational Innovation	0.692	0.795	
Tacit Knowledge Sharing	0.718	0.749	0.777

The Fornell-Larcker Criterion (Table 3) is a method that compares the square root value of the Average Variance Extracted (AVE) for each construct with the correlations between other constructs in the model. To pass the test, the value should exceed 0.50 (> 0.50) (Ghozali, 2021; Sarstedt et al., 2014). Based on the table above (Table 3), it can be concluded that all variables in this study have Fornell-Larcker Criterion values exceeding 0.50 (> 0.50), indicating that they are all valid according to the Fornell-Larcker Criterion test.

Table 4. The Heterotrait-Monotrait Ratio Values (HTMT) (Source: Authors' research)

Construct	Heterotrait-Monotrait Ratio (HTMT)
Tacit knowledge sharing → Change Adaptability	0.850
Change Adaptability → Internal Organisational Innovation	0.944
Tacit knowledge sharing → Internal Organisational Innovation	0.897

To establish excellent discriminant validity, the Heterotrait-monotrait Ratio (HTMT) value should be less than 0.90 (<0.90) as mentioned in Table 4. Based on the table above, it can be concluded that the results of the Heterotrait-monotrait Ratio (HTMT) test between variables are very good, as they are all less than 0.90 (<0.90). This confirms that they meet the requirements for the Heterotrait-monotrait Ratio (HTMT) test (Ghozali, 2021; Sarstedt et al., 2014).

Structural Model Analysis

The R-square value often represented as R^2, is a statistical measure that indicates the proportion of variance in a dependent variable that is predictable from the independent variables. According to Artanto et al. (2021), The R-square value can be categorised as high if it reaches 0.75, moderate if it reaches 0.5, and low if it reaches 0.25.

Table 5. R-Square (Source: Authors' research)

Construct	R-Square
Change Adaptability	0.516
Internal Organisational Innovation	0.610

Table 5 and Figure 2 show that The R-square value is 0.516. This suggests that the independent variables included in the model can explain approximately 51.6% of the variance in Change Adaptability. This R-square value means that 51.6% of the variation in the construct Change Adaptability can be explained by the variables that were included in the model (Ghozali, 2021; Sarstedt et al., 2014).

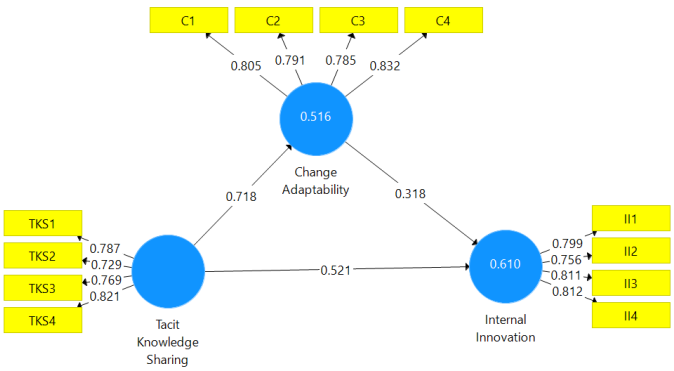


Fig. 2. Path coefficients (Source: Authors' research)

The R-square value is 0.610, indicating that the independent variables in the model explain about 61.0% of the variance in Internal Organisational Innovation. Statistically, these values indicate a moderate to substantial level of explanation of the dependent variables by the predictors, signifying a good fit for the models used to analyse these constructs. For this construct, an R-square value of 0.610 means that 61% of the variation in Internal Organisational Innovation can be explained by the predictors in the model. This implies that the model does a reasonably good job of capturing the influences on this aspect of the organization (Ghozali, 2021; Sarstedt et al., 2014).

Hypothesis Testing

The analysis of the outer loadings, as presented in Table 6, validates all construct indicators within the model. This validation is supported by the T-statistics values, which exceed the critical value of 1.96 and demonstrate statistical significance at the 0.05 level.

Table 6 shows that the results of the path coefficient analysis reveal The Path Test results that show that tacit knowledge sharing significantly influences change adaptability, with a T-statistic of 16.786 (> 1.96) and a P-value of 0.000 (< 0.05). This influence is moderate to strong, accounting for 71.8% of the variance, while 28.2% is attributed to other variables. Hence, H1 is statistically supported. It means that *tacit knowledge sharing significantly influences change adaptability*. It implies that tacit knowledge sharing, which is often informal and not codified, plays a significant role in enabling organisations to adapt and innovate. This aligns with Organizational Learning Theory, which posits that tacit knowledge is crucial to an organization's learning capability. The findings support previous studies by Kucharska & Rebelo (2022) and Suhana et al. (2020) which found a significant impact of tacit knowledge sharing on change adaptability.

Table 6. Path coefficients (Source: Authors' research)

Hypothesis	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Results
TKS → CA	0.718	16.786	0.000	H1 Accepted
TKS → II	0.521	6.544	0.000	H2 Accepted
CA→ II	0.318	3.625	0.000	H3 Accepted
TKS → CA → II	0.228	3.522	0.000	H4Accepted

Notes: CA: Change Adaptability; II: Internal organisational innovation; TKS: Tacit Knowledge Sharing

Tacit Knowledge Sharing similarly has a significant impact on the internal organisational innovation process, with a T-statistic of 6.544 (> 1.96) and a P-value of 0.000 (< 0.05). This influence is moderate to strong, accounting for 52.1% of the variance, while 64.5% is attributed to other variables. The data analysis can also support H2 statistically, meaning *tacit knowledge sharing significantly influences internal organisational innovation.* The results can support previous studies by Berraies et al. (2020) and Kucharska & Erickson (2023) that highlight the positive impact of tacit knowledge sharing on internal organisational innovation in various industries.

The robust positive connections outlined in the hypotheses, particularly H1 (Tacit Knowledge Sharing → Adaptability) and H2 (Tacit Knowledge Sharing → Innovative Capabilities), affirm the notion that tacit knowledge exchange within an organization is pivotal for fostering both adaptability and innovation. This underscores the importance of environments that foster tacit knowledge exchange, bolstering organizational capacity to adapt and innovate. These findings align with and enrich existing theories on organizational learning and knowledge management.

Change adaptability significantly affects internal organisational innovation, with a T-statistic of 3.625 (> 1.96) and a P-value of 0.000 (< 0.05). This influence is moderate, explaining 31.8% of the variance, leaving 68.2% explained by other factors. The data analysis can support H3 statistically. It implies that *change adaptability significantly affects internal organisational innovation*. The results align with prior research by Smith & Webster (2018) and Nguyen et al. (2019), emphasizing the significant influence of transformational leadership on innovative work. The significant paths from tacit knowledge sharing to change adaptability and then from change adaptability to internal organizational innovation imply a continuous and iterative learning process within organizations. This reflects the Organizational Learning Theory's emphasis on continuous improvement and adaptation through learning loops, where knowledge is constantly being created, transferred, and utilized. The strong statistical support for these paths underscores the strategic importance of organizational learning capabilities. It highlights how deliberate enhancements in knowledge sharing and adaptability can lead to substantial improvements in innovation, thus providing a competitive edge.

Based on the indirect effect test results in the table above, the result shows that the T statistics exceed 1.96 (3.522 > 1.96), indicating their significance. Additionally, the P values are less than 0.05 (0.000 < 0.05), also indicating significance. Therefore, the results can conclude that the mediator variable in this hypothesis is acceptable and exerts a significant influence. The original sample test result shows a 22.8% influence by the mediator variable, which is moderate, with the remaining 77.2% influenced by other variables not examined in this research. The data analysis can also support H4 statistically. This implies that *there is a significant relationship between tacit knowledge sharing and internal organisational innovation through change adaptability as a mediator*. The fact that change adaptability acts as a mediator in the relationship between tacit knowledge sharing and internal organisational innovation suggests that learning processes (in this case, adaptability) are essential for transforming knowledge into actionable innovative practices. This supports the theory's claim that organisational learning mechanisms are vital for effectively responding to environmental changes. The results align with several studies Kucharska & Rebelo (2022); Martínez-Sánchez et al. (2020). These studies generally find that tacit knowledge sharing positively influences the internal organizational innovation process, with change adaptability mediating this relationship.

The validation of Hypothesis 3 (Change Adaptability → Internal Organisational Innovation) and Hypothesis 4 (Tacit Knowledge Sharing → Change Adaptability → Internal Organisational Innovation) underscores the pivotal role of change adaptability as a mediator between tacit knowledge sharing and internal organizational innovation. This suggests that not only does adaptability directly influence innovation, but it also amplifies the impact of tacit knowledge on innovation outcomes. By illustrating this mediation model, the study enriches existing theoretical frameworks, showing how adaptability is a crucial relationship between knowledge management processes and innovation outcomes.

Discussion

Theoretical Implications

The findings emphasise the importance of organisations considering the direct impact of knowledge sharing on performance outcomes and the pathways through which this influence unfolds. The highlighted pathway via change adaptability calls for a nuanced approach to strategic planning and organisational behaviour models, where nurturing adaptability becomes crucial for maximising the benefits of tacit knowledge. Furthermore, the results extend current knowledge management theory by quantifying the influence of tacit knowledge sharing on subsequent organisational functions and outcomes. By empirically validating these relationships, the study supports theoretical models advocating integrating knowledge management practices with strategies for organisational adaptability

to drive innovation.

The study demonstrates the significant role of tacit knowledge, often informal and uncodified, in enabling organisations to adapt and innovate. This aligns with Organizational Learning Theory, which underscores tacit knowledge as vital to an organisation's learning capability. Moreover, the mediation role of Change Adaptability between Tacit Knowledge Sharing and Internal organisation innovation implies that learning processes, such as adaptability, are pivotal for translating knowledge into actionable innovative practices. This underscores the theory's assertion that organisational learning mechanisms are crucial for effectively responding to environmental changes.

The identified paths, from Tacit Knowledge Sharing to Change Adaptability and subsequently to Internal organisation innovation, suggest a continuous and iterative learning process within organisations. This mirrors Organizational Learning Theory's emphasis on continuous improvement and adaptation through learning loops, where knowledge is perpetually created, transferred, and utilised. The robust statistical support for these pathways underscores the strategic significance of organisational learning capabilities. It underscores how deliberate enhancements in knowledge sharing and adaptability can lead to substantial improvements in innovation, thereby providing a competitive advantage.

These insights reaffirm the foundational tenets of Organizational Learning Theory and extend its application by empirically illustrating how specific types of knowledge-sharing influence organisational dynamics and outcomes. This underscores the importance of fostering an environment where tacit knowledge is freely shared, and adaptability is recognised as a key learning process, directly contributing to innovation and strategic flexibility.

Practical Implications

The research underscores the critical role of tacit knowledge sharing in fostering change adaptability and internal organisational innovation, accounting for 71.8% and 52.1% of the variance, respectively. To prioritise tacit knowledge sharing, organisations should cultivate an environment conducive to informal knowledge exchange, supported by formal and informal learning opportunities, mentorship programs, and collaborative workspaces. Investment in communication tools is essential to facilitate seamless knowledge sharing, and integrating knowledge sharing into performance management systems reinforces its importance.

Change adaptability, mediating the relationship between tacit knowledge sharing and internal organisation innovation, necessitates organisational actions to enhance employees' adaptability skills. Training and development programs should focus on flexibility, resilience, and creative problem-solving, complemented by fostering a culture that values adaptability. Agile organisational structures and processes facilitate adaptability while embedding adaptability into innovation encourages experimentation and continual improvement. Fostering a culture of knowledge sharing is paramount to bolster internal organisational innovation. This entails leadership support, recognition, rewards for knowledge-sharing behaviours, and investment in collaborative tools and spaces. Training programs should equip employees with communication skills and knowledge management techniques, while leadership training should emphasise the facilitation of knowledge sharing. Cross-functional interaction enhances tacit knowledge sharing, fostering creativity and innovation.

Organisations should invest in mechanisms such as mentoring programs, cross-functional teams, and collaborative platforms to facilitate tacit knowledge sharing. Training programs should focus on communication, adaptability, and innovative thinking, while organisational structures should be flexible and less hierarchical. Leveraging technology can aid knowledge sharing while fostering a culture of innovation and adaptability requires proactive management support. Strategic decision-making processes should integrate knowledge sharing, adaptability, and innovation considerations, while performance measurement systems should reflect these priorities.

Conclusion

The study aims to address a research gap by introducing an innovative framework that investigates the

influence of tacit knowledge sharing on the Internal Organisational Innovation process, with change adaptability as a mediating factor. Notably, there is a lack of scholarly research examining the role of change adaptability as a mediator between tacit knowledge sharing and the Internal Organisational Innovation process. The research contributes significantly to advancing the field of knowledge management, particularly in the context of tacit knowledge sharing.

The path coefficient analysis reveals significant insights into the influence of tacit knowledge sharing and change adaptability on the Internal Organisational Innovation process. Tacit knowledge sharing significantly influences change adaptability. Furthermore, change adaptability considerably affects the Internal Organisational Innovation process. Similarly, tacit knowledge sharing significantly impacts the Internal Organisational Innovation process. The indirect effect test results further confirm the significant role of the mediator variable. It suggests a significant relationship between tacit knowledge sharing and the Internal Organisational Innovation process, with change adaptability acting as a mediator. The study identifies a significant impact of tacit knowledge sharing on both change adaptability and internal organisational innovation directly. Moreover, change adaptability significantly mediates the relationship between tacit knowledge sharing and organisational innovation. This finding underscores the importance of adaptability in enabling organisations to harness tacit knowledge for innovative outcomes.

Key contributions of the paper include the introduction of a novel framework that integrates tacit knowledge sharing with change adaptability to enhance innovation. The study emphasises the practical implications for organisations, suggesting that fostering an environment that supports tacit knowledge exchange and adaptability is crucial for sustaining innovation. This research fills a notable gap in the literature on knowledge management and change management by providing empirical evidence on the critical roles of tacit knowledge and adaptability in driving internal innovation in organisations.

The study demonstrates the pivotal role of tacit knowledge sharing in enhancing internal organisational innovation, with change adaptability acting as a significant mediator. The research findings reveal that tacit knowledge directly influences change adaptability and innovation within organisations, emphasising the critical function of change adaptability in mediating this relationship. The study fills a gap in tj literature by establishing a clear link between these elements. It provides practical implications for organisations aiming to foster a culture of continuous improvement and adaptability. The implications suggest organisations should prioritise nurturing an environment conducive to tacit knowledge exchange and adaptability to thrive in dynamic conditions. This study offers valuable insights for academic researchers and practitioners, highlighting the importance of integrating tacit knowledge and adaptability into the strategic frameworks of organisations to drive sustainable innovation.

The previous studies show the relationship between the sharing of tacit knowledge, change adaptability, and the development of organizational innovation that this builds upon. Studies by Kmieciak (2020) have shown that the sharing of such tacit knowledge plays an important role in fostering internal organizational innovation over and above explicit knowledge-sharing. Moreover, Berraies et al. (2020) maintained that the innovative capabilities of an organization are very critical to tacit knowledge and, therefore, in the innovation process, it has increased importance.

On the other hand, studies by Smith & Webster (2018) and Nguyen et al. (2019) confirmed the role of adaptability in promoting organizational innovation. Their findings indicated that adaptable individuals and organizational cultures tend to practice innovative behaviour. Thus, this justified the research‘s finding on the mediating role of change adaptability in organizational innovation concerning tacit knowledge sharing.

Additional evidence for this line of mediation hypothesis is from Martínez-Sánchez et al. (2020), who examine the moderating role of human resource flexibility (analogous to change adaptability) on mediators of knowledge absorption and innovation. This has only added more weight to the studies and increased the theoretical base for this paper. As such, by comparing these findings with the previous research, it could be found that Organizational Learning Theory bounds the study as was in the study of Crossan et al. (1995) and Easterby-Smith et al. (2000). Similar to the past studies, current study found the seminal nature of tacit knowledge in promoting organizational learning and innovation; its informal,

non-codified nature enhances flexibility and innovation. Whereas earlier scholars have merely stopped at noting the favourable effects of adaptability on innovation and performance, the study‘s approach gives this subject a much-needed deeper analysis and richness. The more refined view opens more sensitivity to the appreciation of adaptability not as a facilitator but as a very important amplifier within the knowledge-to-innovation process.

The findings also have practical applications and organizational strategies that can be implemented to enable tacit knowledge sharing and adaptability. Recommendations such as mentorship programs, collaboration spaces, and integrated performance management systems, among others, detail for an organization a roadmap for the creation of an innovative environment. Such practical insights go on to build and extend earlier studies to offer action steps for the enhancement of organizational innovation processes. Therefore, this study confirmed previous study findings and further extended these with the mediating role of change adaptability overall. The research of interactionist processes within a qualitative framework offers insight into organizational innovation.

Limitations and Future Research

Research on the impact of tacit knowledge sharing on change adaptability and internal organisational innovation highlights the importance of considering multiple influencing factors. While tacit knowledge sharing is significant, other factors contribute to change adaptability and innovation, accounting for 28.2% and 47.9% variances, respectively. Future research should explore factors like organisational structure, technology, employee engagement, and external environmental influences to stay competitive and innovative. With 68.2% and 77.2% of the variance in internal organisational innovation attributed to factors beyond change adaptability and tacit knowledge sharing, it's crucial to identify and address these additional factors. These may include organisational culture, leadership style, resource allocation, technology infrastructure, and employee engagement. A comprehensive approach considering external factors and market dynamics is essential for understanding and addressing various factors influencing change adaptability and innovation.

Future research could examine whether the relationships among tacit knowledge sharing, change adaptability, and internal organisational innovation hold across different industries or are more pronounced in specific sectors like technology, healthcare, or manufacturing. Exploring the impact of digital transformation initiatives on the relationship between tacit knowledge sharing and innovation, particularly the role of digital tools in facilitating or hindering tacit knowledge flow, would be valuable. Understanding how organisational culture and national culture influence tacit knowledge sharing and its impact on innovation and adaptability would provide insights into the cultural dimensions of knowledge management. Comparative studies across different industrial settings or within multicultural organisations could be fruitful. Investigating the direct and indirect impacts of tacit knowledge sharing on overall organisational performance metrics such as financial outcomes, employee satisfaction, and customer loyalty would offer practical insights for business leaders. Additionally, exploring the impact of emerging technologies like artificial intelligence and machine learning on capturing, disseminating, and utilising tacit knowledge within organisations could provide forward-looking insights into the future of work.

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