The Factors Influencing the Degree of Digitalization: A Case Study of an International Accounting Firm in Malaysia

Paul Dung Gadi¹, Ng Wei Chien², Yong Qian Hui^{3*}, Yeap Zheng Hong⁴, Yin, Hang⁵,

Yong Hui Jia⁶, Zhang, Bai Hao⁷, A. J. Ali⁸, Daisy Mui Hung Kee⁹ Universiti Sains Malaysia^{1,2,3,4,5,6,7,8,9} 11800 Minden, Penang City, Malaysia Corresponding Email: yhui2003@gmail.com³ ORCID ID: https://orcid.org/0009-0000-4489-32243

ARTICLE INFORMATION

ABSTRACT

Publication information

Research article

HOW TO CITE

H. (2025). The factors influencing the factors that impact the degree International Journal of Tourism Hospitality in Asia Pasific, 8(1), 22-40.

DOI:

https://doi.org/10.32535/ijthap.v8i1.3837

Published by IJTHAP



This is an open-access article. License: BY-NC-SA)

Received: 18 December 2024 Accepted: 20 January 2025 Published: 20 February 2025

In this Industry 4.0 era, digitalization has become more common since it penetrates every industry and consequently brings drastic changes to firms, and there is no exception in the finance and accounting Gadi, P. D., Chien, N. W., Hui, Y. Q., Hong, industry for implementing digitalization. Y. Z., Hang, Y., Jia, Y. H., ..., & Kee, D. M. Therefore, this study aims to explore the of degree of digitalization: A case study of an digitalization in KPMG Malaysia. The international accounting firm in Malaysia. survey was carried out by questionnaire & distribution, which involved 408 respondents in order to collect the data. The SPSS software was used for data analysis. The regression analysis reveals that strategic corporate management, personal involvement, and employee circumstances Copyright @ 2025 owned by Author(s). significantly positively influence KPMG Malaysia's degree of digitalization, with personal involvement having the strongest Technology and regulation, impact. do not significantly however. affect digitalization. While this factor poses challenges, it does not substantially hinder digitalization. The model explains 47.5% of the variance in digitalization, highlighting Attribution-Noncommercial-Share Alike (CC the importance of leadership commitment, employee engagement, and personal involvement in driving digital transformation. These findings suggest that KPMG Malaysia should prioritize fostering personal involvement and strategic management while addressing employee needs to enhance digitalization efforts, even as regulatory and technological

> Keywords: Accounting Firm; Corporate Management; Corporate Employee; Digitalization Degree; Personal Involvement; Technology

challenges remain manageable.

INTRODUCTION

Digitalization may appear to be a recent development, but the presence of digital goods, services, and mediums was a hot topic in the late 1990s and the mid-2000s (Schallmo & Williams, 2018). People started computerizing procedures, and a lot of organizations have already adopted automated operations more than 30 years ago. Since technology is upending every sector, digitalization has become essential for almost all businesses in the modern era. Digitalization has become an essential approach for companies looking to reinvent their operations and business models for the contemporary business period. It entails integrating digital technologies into every facet of business operations to enhance goods and services, streamline processes, and create new forms of income.

According to data from PwC's 2024 Global CEO Survey, 97% of CEOs said their companies had "taken some steps to change how they create, deliver, and capture value over the past five years," demonstrating how widespread the need for change has become. Additionally, according to 76% of CEOs, they "took at least one action that had a large or huge impact on their company's business model" (Pratt, 2024). The new reality will keep changing, bringing with it both opportunities and new challenges. Organizations must adopt new technologies more quickly in order to stay competitive in this new reality and stay ahead of both established and new competitors. A digital organization will be ready for whatever comes next and be able to respond to these developments swiftly. The notion of digitalization for enterprises is typically linked to the widespread adoption of digital technologies (Balsmeier & Woerter, 2019), but this notion pertains primarily to digitalization as an outcome rather than a process (Schildt, 2022). Digitalization or digital transformation is a comprehensive process that is linked to modifications in organizational structure, business models, products, and business processes. As a result, some researchers consider digitalization to be the development of infrastructures, organizational practices, and managerial attitudes around digital technology, in addition to the utilization of digital technologies (Schildt, 2022).

Klynveld Peat Marwick Goerdeler (KPMG) ranks as one of the "Big 4" international accounting firms in terms of revenue (Kenton, 2024). KPMG offers professional auditing, advisory, and taxation services to a broad spectrum of government, nonprofit, and commercial clients. KPMG Malaysia was established in 1928 and has developed as a part of KPMG's worldwide network of independent professional services firms, with over 273,000 partners and staff working in member firms across 143 countries and territories. According to KPMG's official website, the company helps clients see how their industries will develop in the future and helps them take advantage of the new opportunities that the "new reality" creates through digital transformation by providing services such as evaluation of digital maturity, the business case for digital investments, using digital values to optimize the operating model and digital strategy combined with enterprise transformation (Gan, n.d.). "KPMG Connected Enterprise" is the customer-focused and industry-specific strategy for the digitalization of the company. From the perspective of KPMG, digitalization is not just about enabling automation or enhancing employee collaboration, but it also includes building a new connected enterprise centered around customers. KPMG believes that a successful enterprise of tomorrow requires a connected approach.

Therefore, we will explore the factors influencing the degree of digitalization in KPMG Malaysia in this study. Additionally, we will identify KPMG's degree of the utilization of digital technologies by comparing it with the other competitors in particular areas to disclose the current shortcomings of the company in digitalization. The importance of this study is it tends to offer valuable insights for leveraging digitalization achievements to recognize the strengths and weaknesses of KPMG Malaysia in digitalization, implement

the improvement approaches, and enhance the company's competitiveness in the finance and accounting sector.

LITERATURE REVIEW

Introduction to Digitalization

Digitalization as a new collaborative communication method in the workplace can identify digitized and native data using digital technologies to generate profit, improve business performance, and change business processes (Kraus et al., 2021). Rather than representing a sudden revolution, digitalization is the pervasive synergy of digital innovations in the business and community (Perez, 2015). Therefore, customer interactions, data accessibility, and business operations can be enhanced by merging the analog and digital worlds with advanced technologies (Eling & Lehmann, 2017). In addition, different economic sectors are at different phases of digitalization, and financial industries are at the forefront (Ohlert et al., 2022).

In professional service firms, the development of digital technologies has completely transformed client interactions (Moffett et al., 2020; Wirtz et al., 2018). Professional service firms have adopted and integrated information and communication technologies into their daily work by altering their methods of communicating with clients and sharing knowledge (Breunig, 2016), thereby advancing their digitalization (Breidbach et al., 2019). From an external perspective, the client demand and establishing relations with external partners drive digitalization. Undoubtedly, the external forces brought by customers, competitors, vendors, and regulators shape the framework of the operation in professional service firms and contribute to influencing the change of processes (Tomo et al., 2021).

Consequently, several factors, including strategic corporate management, technology and regulation, personal involvement, and employee circumstances, influence the degree of digitalization in professional service firms like KPMG.

Strategic Corporate Management

According to Hitt et al. (2019), the commitments, decisions, and actions are all included in strategic management, and all are required to achieve strategic competitiveness and superior returns. The two most important elements of corporate development and transformation are strategic management and leadership (Belias & Koustelios, 2014). An organization's structure, including its relationships, activities, culture, traits, and skills, enables it to remain adaptable to new developments (Mollah et al., 2024). Every facet of corporate operations is being impacted more and more by technologies like artificial intelligence (AI), big data, cloud computing, the Internet of Things (IoT), and machine learning (El-Moumane & Elhamma, 2024). In today's crisis economy, management activities must adapt to changing business conditions, including how decisions are made and how they are carried out. A company's new organizational environments that unlock the potential of employees in their pursuit of producing value for clients and realizing their prospects to develop into proactive entrepreneurs are the precondition of applying digital innovations effectively (Akmaeva et al., 2020). Furthermore, corporate strategy significantly influences the degree of digitalization, emphasizing its critical role in driving technological advancements and aligning them with business goals (El-Moumane & Elhamma, 2024).

Technology and Regulation

Environmental regulation and digital technology act as an "accelerator," providing a foundation for the "digital economy" to develop in a high-quality, coordinated manner (Zhang et al., 2024). Digital technology increases the "mobility" and "accessibility" of

resources and production factors, promotes innovation and the multiplier effect, and supports the transformation, maximizing efficiency and rearrangement of traditional elements (Chang et al., 2023). Customer experience is a strategic approach to delivering comprehensive customer value, establishing a persistent strength, and differentiating from the competitors (Jain et al., 2017). A customer may associate an experience with technology offered by the company (Edeh et al., 2021). Technology was identified as one of the main elements that impact digitalization (Wang et al., 2025).

On the other side, regulatory authorities are advised to improve antitrust laws and shift from conventional "antitrust enforcement" to adopting "new rules for the digital economy" to prevent disrupting competition, harming consumers, and impeding innovation (Zheng & Guo, 2024). The digital era poses challenges for cloud data applications and fair business access, leading to regulatory interventions and solutions to ensure fair competition. According to Shao et al. (2020), governmental regulations may have a considerable influence on business innovation, environmental protection, and market stability by establishing institutional frameworks. For example, organizations now recruit qualified risk management and compliance specialists to guarantee that business activities comply with established professional standards such as cybersecurity and data protection (Martínez-Ferrero & García-Sanchez, 2016). Government regulation of digital technology has an important influence on innovation (He & Tian, 2020).

Personal Involvement

Personal involvement means including employees in the decision-making process within the company (Marchington & Wilkinson, 2005). The involvement of employees is crucial for the success of transformation initiatives, as it speeds up the implementation process (Hussain et al., 2018). The approach taken toward transformation projects can differ based on individual perspectives, influencing employee reactions to these initiatives and impacting the results of their implementation. One of the main goals of involving employees is to have those impacted by the change actively participate, incorporating them into the planning and decision-making stages of the process (Vroom & Yetton, 1973). This can enhance the readiness to accept the change (Oreg et al., 2011), as well as help foster and sustain customer trust, as customer engagement plays a key role in the level of digitalization. In this new environment, establishing and preserving trust became crucial, as customer satisfaction relied largely on a company's capacity to adjust to the evolving circumstances (Yew et al., 2024). Consequently, employees' personal involvement will enhance customer engagement and satisfaction for firms like KPMG in this era of digitalization. Research has shown that customer assessments of the technology's effectiveness are crucial (Lai et al., 2022). As a result, there is increasing attention on the impact on labor and employees, including changes in employee involvement practices (Bosch & Schmitz, 2020) and the success of the transformation.

Employee

As one of modern society's most significant ongoing transformations, it profoundly alters business and daily life (Hagberg et al., 2016). Managers have prioritized digital transformation (Legner et al., 2017). Digitalization is a process that improves an organization by introducing significant changes through the adoption of communication, computing, information, and connection technology. So, it is related to the adoption and implementation of technology across a wide spectrum of organizations (Legner et al., 2017). Organizations rely on their employees' ability to embrace change to successfully implement their strategies in this rapid development environment. As a result, in digital labor, the success of organizational change, especially during digital transformation, is significantly determined by employees' proactive digital preparedness (Oreg et al., 2011). In short, employees are the backbone and foundation of organizational operations because their performance can impact productivity and profitability (Teoh et al., 2021).

Therefore, they are crucial in enhancing the degree of digitalization in organizations like KPMG, as their digital readiness can help generate competitive advantages.

Degree of Digitalization

Digital technologies increasingly affect innovations, customer-organization relationships, and IT systems (Kraus et al., 2019a, 2019b). This trend is specifically evident in financial service firms, where a transformation to e-services occurs (Setia et al., 2013). Implementing business processes through information technologies, establishing control systems, monitoring, and improving the visibility of data and information are all aimed at examining organization operations more proficiently and detecting potential risks (Rahim et al., 2023). At the same time, digitalization can be defined simply as using digital tools to create business value for a company (Sommarberg & Makinen, 2017).

In the accounting field, the digitalization process enhances the work efficiency and the precision of the processed data in reporting (lonescu-Feleagă et al., 2022a). As a result, effective communication of results and information within departments is created, enabling access to documents and data processing to become faster with the assistance of information systems (lonescu-Feleagă et al., 2022b). As digitalization accelerates, Employees use technology to complete repetitive and mundane tasks and process processes such as data entry or bookkeeping automatically as a reaction to the rhythm of digitalization (Kokina & Blanchette, 2019). In short, these changes require professionals to react to the change in the landscape of the business environment with the adaption to new technologies and identify key factors such as strategic corporate management, technology and regulation, personal involvement, and employee circumstances in this digital era. For firms like KPMG, successfully adapting to this transformation can help them improve their business performance and create competitive advantages in the market.

Gaps in the Existing Literature Review

The current research on the factors influencing the degree of digitalization in KPMG has several gaps that require more in-depth investigation. Earlier literature reviews have not broadly examined this topic, and most research on digitalization focused on generalized models in all sectors, which are not firm-specific and industry-specific. Additionally, there was a lack of consistent and clear methodologies for measuring the degree of digitalization in accounting and consulting firms. Therefore, further research into this area is required. The authors have established a research model in Figure 1 and developed several hypotheses, as listed below, by considering these gaps:

- H1: Strategic corporate management positively affects KPMG's degree of digitalization.
- H2: Technology and regulation negatively affect KPMG's degree of digitalization.
- H3: Personal involvement in digitalization positively affects KPMG's degree of digitalization.
- H4: Employee conditions negatively affect KPMG's degree of digitalization.

Figure 1. Research Framework



RESEARCH METHOD

This study uses a mixed approach mixing quantitative and qualitative research design to explore the key factors affecting the level of digitalization in KPMG Malaysia. The qualitative part of the study was performed using a thorough analysis of KPMG's operating reports and relevant publicly available data to find the factors that affect the level of digitalization. The sources of this data include company yearly reports, industry analysis papers, and market research reports from consulting firms. The goal of the literature review was to find gaps in the available research and to formulate hypotheses that could form the basis for the following quantitative study. In addition, thematic analysis was used to summarize the textual data gathered to derive key themes important to the study goals.

Quantitative data was collected via an online questionnaire that was spread on platforms such as Telegram, WhatsApp, and internal emails to reach as many people as possible. Stratified random sampling was used to ensure a varied and representative group in terms of department (e.g., technical department, finance department) and grade (e.g., employee level, management level). A total of 408 valid questionnaires were collected for the study, covering workers from different areas and roles in KPMG Malaysia. The surveys were organized around the following four independent variables and a dependent variable, each of which was measured using a Likert scale (1-5): The questionnaire was pre-tested before formal distribution to measure the clarity and reliability of the questions, and the questionnaire design was changed based on feedback.

All data was analyzed using SPSS 27 software with specific steps to determine the importance of each variable in relation to the degree of digitization. Limitations of the current study include self-report bias that may arise from subjectivity because respondents must rate themselves; limitations in sample coverage, where some employees in marginalized sectors may have been underrepresented despite the use of stratified random sampling; and limitations in guestionnaire design, where the online

survey may not have captured the in-depth complexity of the questions, particularly in terms of a full understanding of technology and regulations. To address these limits, the study team minimized possible bias by carefully designing the questionnaire, increasing the sample source, and carefully controlling the impact of variables in the data analysis.

Using the methods mentioned above, this study aims to find the main factors affecting the degree of digitalization of KPMG Malaysia and provide reliable theoretical and empirical support for further research in related areas.

RESULTS

Table 1. Respondents Demographic Summary (N=400)							
Response	Frequency	Percentage (%)					
Gender							
Female	272	66.7					
Male	136	33.3					
Age							
18-20	69	16.9					
21-30	153	37.5					
31-40	127	31.1					
41-50	44	10.8					
51 and above	15	3.7					
Educational Level							
Bachelor's Degree	211	51.7					
Master/PhD	32	7.8					
Pre-University / STPM	65	15.9					
SPM	100	24.5					
What is the primary industry of your organization?							
Consulting/Professional Services	28	6.9					
Energy and Utilities	26	6.4					
Financial Services	98	24.0					
Government / Public Sector	28	6.9					
Healthcare and Life Sciences	54	13.2					
Manufacturing and Industrial	68	16.7					
Retail and Consumer Goods	53	13.0					
Technology and Media	53	13.0					
What is the size of your organization in terms of employee count?							
1-50 employees	122	29.9					
51-200 employees	149	36.5					
201-500 employees	80	19.6					
501-1000 employees	29	7.1					
1001-5000 employees	15	3.7					
Above 5000	13	3.2					
What is your organization's approximate annual revenue?							
Less than RM10 million	127	31.1					
RM10 million - RM50 million	132	32.4					
RM51 million - RM200 million	81	19.9					
RM201 million - RM1 billion	21	5.1					
Over RM1 billion	19	4.7					
Prefer not to say	28	6.9					

Table 1. Respondents' Demographic Summary (N=408)

Table 1 shows that 272 respondents are female (66.7%) and 136 respondents are male (33.3%) out of the total of 408 respondents. The majority of them are aged 21-30 (N=153,

37.5%), while the respondents aged 51 and above are the least (N=15, 3.7%). In terms of educational level, more than half of the respondents hold a Bachelor's Degree (N=211, 51.7%), and only 32 respondents have a Master/PHD (7.8%). There is no specific field for the target respondents for this survey. Therefore, respondents from various industries were involved in this survey. The primary industry of the majority of respondents' organizations are focused on the energy and utilities industry (N=26, 6.4%). For the size of the organization in terms of employee count, most of the respondents work at a company with 51-200 employees (N=149, 36.5), while only 13 respondents work in an organization with several employees above 5000, which is the least (3.2%). Lastly, the approximate annual revenue for 132 respondents' organizations is RM10 million - RM50 million (32.4%), while only 19 respondents' organizations hit an approximate annual revenue of over RM1 billion (4.7%), including 28 respondents (6.9%) prefer not to say.

Table 2. Descriptive Statistics, Cronbach's Coefficients Alpha, and Zero-Order

 Correlations for All Study Variables

	Variables	1	2	3	4	5
1	Strategic Corporate Management	0.860				
2	Technology and Regulation	0.526**	0.601			
3	Personal Involvement	0.467**	0.470**	0.762		
4	Employee	-0.165**	0.153**	-0.017	0.814	
5	Degree of Digitalization	0.495**	0.457**	0.638**	0.670	0.601
Νι	umber of Items	5	5	2	6	6
M	ean	3.7740	3.5069	3.7316	2.9833	3.9432
St	andard Deviation	0.85546	0.55742	0.81201	0.72638	0.76647

Note: N = 408; *p < 0.05, **p < 0.01, ***p < 0.001. The diagonal entries represent Cronbach's Coefficient Alpha.

Table 2 demonstrates descriptive statistics, measures of reliability, and zero-order correlations among the study variables. The reliability of every examined variable is high, as seen by the range of 0.60 to 0.86 Cronbach's coefficient alpha value.

	Variables	Degree of Digitalization
1	Strategic Corporate Management	0.237***
2	Technology and Regulation	0.087
3	Personal Involvement	0.487***
4	Employee	0.101**
R ²		0.475
F value		91.093
Durbin-Watson Statistic		1.667

 Table 3. Regression Analysis

Note: N = 408; *p < 0.05, **p < 0.01, ***p < 0.001.

Table 3 exhibits the results of the regression analysis that examines the relationship between KPMG Malaysia's degree of digitalization (dependent variable) and four independent variables, which are strategic corporate management, technology and regulation, personal involvement, and employees. The results proved H1 and H3, demonstrating the positive relationship between strategic corporate management and personal involvement with the degree of digitalization. The results also support H4, which states that employee circumstances positively impact the degree of digitalization. The R² value of 0.475 indicates that 47.50% of the variance in the degree of digitalization can be explained by the three significant variables: strategic corporate management, personal involvement, and employee.

Among these variables, personal involvement in digital development presents the highest beta value of 0.487, demonstrating the most significant effect on the degree of digitalization in KPMG Malaysia. The remaining variables, strategic corporate management, show a beta value of 0.237, as well as employee circumstances exhibit a beta value of 0.101. However, technology and regulation do not demonstrate a significant influence on the company's degree of digitalization. Thus, H2 is rejected.

The hypothesized model and the results can be seen in Figure 2.



Figure 2. Hypothesized Model

DISCUSSION

The purpose of this study is to examine the factors influencing the degree of digitalization in KPMG. So, this study has focused on four factors: strategic corporate management, technology and regulation, personal involvement, and employees. The results provide a distinct understanding of these relationships.

Strategic Corporate Management

In this factor, we explore a few variables, which are strategy, management restructuring, management reactions, and association structure (Ulrich-Diener et al., 2023). The findings show that this factor positively affects the degree of digitalization, as evidenced by the significant path coefficient ((β = 0.237, p < 0.001) and the strong zero-order correlation (r = 0.495, p < 0.01), which supports H1. This result suggests that having a clean and distinct outline of strategy, visionary leaders, and an effective management structure led to a higher degree of digitalization in KPMG. In short, positive leadership management can help employees achieve excellent performance from individual aspects and organizations, create sustainable growth, and generate competitive advantage by setting explicit guidance for organizational growth (Abbas et al., 2020).

Digital transformation planning provides continuous observation, refinement, adjustment, and time for adaptation to organizations as it is not a one-time movement (Maciule,

2023). It results in handling and analyzing data at a high rate when the management decision-making is transformed to real-time after using predictive analytics, which allows businesses to react better to shifting market situations and new opportunities (lansiti & Lakhani, 2020). As a result, enters the phase of digitalization with a shift in business procedures, business models, and products based on digital technologies (Tagscherer & Carbon, 2023). Thus, organizations that merge their corporate strategy with digital objectives have the capability to face digital disruption and technological innovation.

However, during this process, KPMG faces some challenges. Organizational complexity increases the complexity of digitalization as the association structures restrict the dependence on service and technology freedom (Ulrich-Diener et al., 2023). KPMG needs to increasingly restructure and rethink approaches to balance centralization with flexibility. In this context, KPMG always reacts to market and competitive situations to keep up with others for more effective resource allocation and optimization of processes in management.

Technology and Regulation

We examine several variables in the technology and regulation factor, including implementation difficulties, barriers, public infrastructure, technology regulatory effort, and data protection (Ulrich-Diener et al., 2023). In contrast to H2, the findings show that this factor does not slow the digitalization in KPMG, as evidenced by the non-significant path coefficient ($\beta = 0.087$). At the same time, the strong zero-order correlation (r = 0.457, p < 0.01) indicates a moderate positive effect on the degree of digitalization. This result states that this factor may cause challenges but is not substantial enough to slow down the digitalization of KPMG. This is because digital technology is the tool for creating a competitive advantage for a digital enterprise in its internal and external operations (Magesa & Jonathan, 2020).

Technology or interface standardization is crucial for expanding the digital economy as it can lead to modularization and new business models, such as platforms within complex industries (Narayanan & Chen, 2012). Thus, technology and regulation can cause a positive outcome in digitalization as there is a growing emphasis on technology resiliency and rules in organizations. Regulators constantly monitor the ongoing regulation to ensure that substantial continuity and resiliency implementations can support the legacy and newly adopted technologies. For instance, they focused on proactive and continuing detection, mitigating, and remediating threats and susceptibilities concerning information and technology systems, both on-premises and cloud environments, including policies to demonstrate accountability, threat intake processing, including internal threats, projects, escalations, remediations, and remediation testing (KPMG, 2022). In addition, data processing infrastructures connect to all machines and continuously analyze the measured data, which is necessary to monitor the manufacturing process and intervene to optimize it (Singh et al., 2021).

Moreover, technology and regulation also improve governance, which improves the digitalization process, enhances transparency and accountability, and reduces bureaucracy, corruption, and tax avoidance (Maciule, 2023). In addition, regulation protects employees and the environment by limiting some organizations' discretionary space (Grote & Weichbrodt, 2017). Therefore, KPMG will run smoothly in maintaining security and structured and compliant data systems. The transparency of systems reduces the risk of disruption that will slow down the digitalization in KPMG and improve innovation.

However, there is a potential risk of compliance costs (Poshakwale et al., 2019). This is because organizations strongly tend to include all regulatory expectations in the safety

management systems (Størkersen et al., 2020). The mandated changes to the firms' operations increase the costs of producing goods or providing services (Fullenbaum & Richards, 2020), limiting the digitalization process's flexibility. Thus, KPMG must be more flexible and utilize its resources effectively to avoid potential risks. This can enable them to respond to changes in the market in real-time.

Personal Involvement

In this factor, we will examine the participation of employees and customers in the digitalization of KPMG (Ulrich-Diener et al., 2023). The significance path coefficient (β = 0.487, p < 0.001) and the zero-order correlation (r = 0.638, p < 0.01) strongly support H3. This result shows that personal involvement positively affects the degree of digitalization, with both employees and customers acting as the critical drivers in the digitalization process.

The digital initiatives at KPMG will succeed when the employees and customers are involved in digital transformation to shape digital development actively. In short, employees are the key to digitalization as they are the people who implement digital initiatives. At the same time, customers who support the digital initiatives shape the implementation as they will give feedback. In practice, successful firms involve customers in innovation (Behl et al., 2023)

Employee involvement can be measured in the decision-making process. The employees have the right to take ownership of the digital processes and contribute their ideas about innovative solutions. They will have a sense of responsibility when involved in this process. Employees will always be ready to support the organization when they receive a good amount of effective commitment (Kumar & Saha, 2017). They are the most critical asset, leading to success in creating a competitive advantage when they are involved in the workforce and generate new ideas and innovations. For customer involvement, their participation enables KPMG to adjust the process of digitalization and then create a service that fulfills customers' needs. This is because customer involvement as a reference of information implies that knowledge diversity increases as digital technology allows firms to collect customer information from different backgrounds and viewpoints by crossing geographical boundaries (Verganti et al., 2021).

However, there is some potential risk if the ideas are applied. Employees might feel overwhelmed if they are given ownership in the decision-making process without providing specific training and resources. This situation will make ineffective contributions. Moreover, employees may have a fear of loss of competence and meaning then, causing a sense of alienation from work (Schneider & Sting, 2020). For customer involvement, quantifying service quality and customer expectation uncertainty is not easy to achieve (Awadhi et al., 2021). According to this situation, KPMG must consider the possibility of customers providing impractical feedback that might slow down digitalization. Customers will feel unsatisfied when they anticipate something from a business but do not get it (Awadhi et al., 2021). Therefore, KPMG must give a clear direction to the employees and customers, such as training for employees and precise question surveys for customers when implementing the ideas to balance the coordination between employees and customers, then not interrupt the digitalization process.

Employee

We examine several variables in the employee factor, including flexibility, acceptance, qualification, transparency, availability, and age structure (Ulrich-Diener et al., 2023). In contrast to H4, the findings show that this factor does not slow the digitalization in KPMG, as evidenced by the significant path coefficient ($\beta = 0.101$, p < 0.01). At the same time, the strong zero-order correlation (r = 0.670) shows that this factor positively affects the

degree of digitalization. This result indicates that this factor contributes to the success of digitalization in KPMG.

The variables in this factor enhance the process of digitalization. First, flexibility enables employees to adjust when using new digital tools and systems. The flexibility prevents employees from reaching the limit digitally as work flexibility is digitally moderated. meaning that it is backed up by a wide variety of digital tools, infrastructure, and systems (Sutherland et al., 2019). For acceptance the acceptance of employees nowadays is high because they would not be left behind in the era of digitalization. The improvement of data accuracy, enhancement of data protection, and streamlined operation procedures contribute to the enhancement of work efficiency and reduce clerical errors (Mutambik & Almugrin, 2024), thus enabling employees to accept the process of digitalization. In addition to the process transparency, clear guidelines and framework give confidence to employees to adapt themselves in the digital era. Then, they can produce high-value and high-quality work by using digital technologies to automate repeated tasks (Widodo et al., 2024). Moreover, the qualifications of employees ensure that they have specific skills and knowledge that are suitable for the new technologies. This situation enables them to utilize digital applications in the workforce and master various digital tools and platforms to increase productivity and efficiency (Widodo et al., 2024). Next, a different age structure means a group with heterogeneous ages that contribute knowledge differences to manifest and enable favorable synergies that increase labor-productive (Mothe & Nguyen-Thi, 2021). Furthermore, a balanced age structure creates a diverse workforce, enabling KPMG to customize training that is ideal for each age level to speed up adapting to technology.

However, implementing the information systems causes various technical and social changes, which may cause resistance to change among employees (Zhang & Chin, 2024). This is because employees in the digital era are required to adapt work and skills that are not in their job scope, and such requirements can overstrain the employees and then may reduce their acceptance of digitalization (Digmayer & Jakobs, 2018). The fear of job replacement, lack of understanding, or discomfort with new technologies will cause this resistance within employees and slow down the digitalization in KPMG. It is natural for employees to feel job insecurity in this revolutionary technological change (Nam, 2018). Therefore, adequate training must be provided to ensure transparent communication, which can actively engage employees in creating a confident and supportive environment for digital transformation. The perceived empathy and active support from the management enable employees to be more willing to accept a change in working processes and methods (Mutambik & Almugrin, 2024).

CONCLUSION

Overall, this mixed-methods study highlights that strategic corporate management, personal involvement, and employee circumstances significantly drive KPMG Malaysia's digitalization, with personal involvement having the strongest impact. While technology and regulation pose challenges, they do not substantially hinder progress. These findings underscore the importance of leadership commitment, employee engagement, and personal involvement in enhancing innovation and competitiveness in a rapidly evolving digital landscape. The research provides actionable insights for KPMG Malaysia to strategically plan and implement digitalization efforts, ensuring it meets customer demands and maintains industry leadership.

In order to increase KPMG's degree of digitalization, the company can enhance its customer-centric approach. For instance, training consultants on using digital tools such as Tableau or AI platforms to provide deeper insights into the customer's business. This

can help to deliver better customer solutions. Besides that, the company can integrate the ESG topic with the digitalization skills and tools that they utilize to stay ahead of the trend and fulfill clients' demands. For example, KPMG Malaysia can invent an ESGrelated new function such as ESG audit, ESG data collection, and analysis, or other ideas into the Clara platform, which is an intelligence audit and assurance technology platform that utilizes data science, audit automation, and data visualization. So, it will not only satisfy customers' wants and needs but will also increase the efficiency and productivity of the company. KPMG Malaysia can associate with technology companies like Microsoft or Google and build long-term collaborations to jointly develop digital tools and platforms. Furthermore, investing more in employee development or hiring more employees who are already experts in digitalization tools is one of the actions that can be taken by the company. Therefore, the corporation may adopt advanced technologies such as artificial intelligence (AI) and robotic process automation (RPA) into daily operations. Consequently, KPMG can apply automation in repetitive tasks, increase efficiency, reduce costs, as well as offer various services that can fulfill customers' demands. In addition, KPMG Malaysia should maximize the utilization of advanced data analytics tools to provide a lot of valuable insights for clients, including risks and opportunities detection, predictive modeling, and real-time business intelligence.

This study highlighted the importance of adopting digitalization in organizations. In the digitalization process, employees who inspire innovation by using digital tools are the key factors that influence the degree of digitalization. Their involvement in digitalization can enhance customer experiences by providing better services that align with digital and also increase productivity and efficiency in organizational operations. KPMG can become the leader in the accounting and finance field by prioritizing the establishment of a digitally advanced workplace to develop digital strategies that can fulfill customer needs. Moreover, these efforts also contribute to the development of accountable and ethical digital practices in the business environment, as well as gaining competitive advantages.

In conclusion, KPMG is at the forefront of the field as continuous improvement in digitalization provides outstanding value to customers and standardized innovation in professional services.

LIMITATION

There are several limitations in this research. First, this study's respondents mainly consisted of young respondents between the ages of 21 and 31 years old, which can cause a limited sample size. In addition, a similar respondent's background, which mainly consists of a Bachelor's degree education level, also contributes to this limitation and limits the potential to generalize the findings. Therefore, a diverse range of respondents from different demographic backgrounds should be involved in future research to gather viewpoints on geographic and sectoral differences. This is because different regions and industries will influence the level of digitalization. For instance, urban areas and larger business companies will achieve higher digitalization levels compared to rural areas and smaller business companies. Besides, the adoption of technologies in Malaysia is also affected by several cultural and social factors. The differences in income and education levels will influence respondents' attitudes toward digitalization. Thus, bias and misrepresentative findings will arise. In short, in order to generate comprehensive research, surveys can integrate with gualitative data such as interview contents and observations because only relying on self-reported data from surveys online will provide biased findings. Moreover, there is also a limitation in the availability of accurate and upto-date information related to digitalization. This is because some government reports and industry surveys are incomplete and not accessible to the public. There is also a limitation when inconsistencies between a variety of sources and data gaps occur. This

problem will restrict a complete analysis as the data availability and quality are different. Overall, a variety of data collection methods must be used, and global trends in digitalization must be considered to generate a solid and comprehensive context for research.

ACKNOWLEDGMENT

The authors gratefully acknowledge the contributions of informants, colleagues, and all individuals who supported this research through their insights and engagement. Their involvement greatly enriched the quality and depth of this study.

DECLARATION OF CONFLICTING INTERESTS

The authors declare there are no potential conflicts of interest with respect to the research, authorship, and publication of this article.

REFERENCES

- Abbas, A., Saud, M., Suhariadi, F., Usman, I., & Ekowati, D. (2020). Positive leadership psychology: Authentic and servant leadership in higher education in Pakistan. *Current Psychology, 41*(9), 5859–5871. https://doi.org/10.1007/s12144-020-01051-1
- Akmaeva, R., Arykbaev, R., Epifanova, N., & Glinchevskiy, E. (2020). Influence of digitalization upon formation of corporate strategy and new business models of modern organizations. SHS Web of Conferences, 89, 03003. https://doi.org/10.1051/shsconf/20208903003
- Awadhi, J., Obeidat, B & Alshurideh, M. (2021). The impact of customer service digitalization on customer satisfaction: Evidence from telecommunication industry. *International Journal of Data and Network Science*, 5(4), 815-830. http://dx.doi.org/10.5267/j.ijdns.2021.x.002
- Balsmeier, B., & Woerter, M. (2019). Is this time different? How digitalization influences job creation and destruction. *Research Policy*, *48*(8), 103765. https://doi.org/10.1016/j.respol.2019.03.010
- Behl, A., Kamboj, S., Sarmah, B., Pereira, V., Sharma, K., Rammal, H. G., & Arrigo, E. (2023). Customer involvement and servitization in hybrid offerings: moderating role of digitalization and co-creation. *International Marketing Review*, 40(4), 739– 773. https://doi.org/10.1108/imr-11-2021-0325
- Belias, D., & Koustelios, A. (2014). The impact of leadership and change management strategy on organizational culture. *European Scientific Journal*, *10*(7), 451-470.
- Bosch, G., & Schmitz-Kießler, J. (2020). Shaping Industry 4.0 an experimental approach developed by German trade unions. *Transfer: European Review of Labour and Research, 26*(2), 189–206. https://doi.org/10.1177/1024258920918480
- Breidbach, C. F., Keating, B. W., & Lim, C. (2019). Fintech: research directions to explore the digital transformation of financial service systems. *Journal of Service Theory and Practice*, *30*(1), 79–102. https://doi.org/10.1108/jstp-08-2018-0185
- Breunig, K. J. (2016). Limitless learning: assessing social media use for global workplace learning. *The Learning Organization*, *23*(4), 249–270. https://doi.org/10.1108/tlo-07-2014-0041
- Chang, K., Zhang, H., & Li, B. (2023). The impact of digital economy and industrial agglomeration on the changes of industrial structure in the Yangtze River Delta. *Journal of the Knowledge Economy,* 15(2), 9207–9227. https://doi.org/10.1007/s13132-023-01448-w

- Digmayer, C., & Jakobs, E. M. (2018, July). Employee Empowerment in the Context of domain-specific Risks in Industry 4.0. In 2018 IEEE International Professional Communication Conference (ProComm) (pp. 125-133). IEEE. https://doi.org/10.1109/procomm.2018.00034
- Edeh, F. O., Teoh, K. B., Murugan, Y., Kee, D. M. H., Wong, J., Wong, X. S., ..., & Jacinta, O. B. (2021). Contributing factors to Apple's sustainability in Malaysia's information and communication technology industry. *Asia Pacific Journal of Management and Education, 4*(2), 74–84. https://doi.org/10.32535/apjme.v4i2.1145
- Eling, M., & Lehmann, M. (2017). The impact of digitalization on the insurance value chain and the insurability of risks. *The Geneva Papers on Risk and Insurance Issues and Practice*, *43*(3), 359–396. https://doi.org/10.1057/s41288-017-0073-0
- El-Moumane, R., & Elhamma, A. (2024). Impact of corporate strategy on the digitalization of management control: Evidence from Moroccan companies. *European Scientific Journal ESJ, 20*(31), 81. https://doi.org/10.19044/esj.2024.v20n31p81
- Fullenbaum, R., & Richards, T. (2020). The impact of regulatory growth on operating costs. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3697453
- Gan, A. (n.d.). *Digital Transformation*. KPMG. https://kpmg.com/my/en/home/services/advisory/technologyconsulting/technology-enabled-transformation/digital-transformation.html
- Grote, G., & Weichbrodt, J. (2017). Why regulators should stay away from safety culture and stick to rules instead. In *Trapping Safety into Rules* (pp. 225-240). CRC Press. https://doi.org/10.1201/9781315549774-14
- Hagberg, J., Sundstrom, M., & Egels-Zandén, N. (2016). The digitalization of retailing: An exploratory framework. *International Journal of Retail & Distribution Management*, *44*(7), 694–712.
- He, J., & Tian, X. (2020). Institutions and Innovation. *Annual Review of Financial Economics*, *12*(1), 377–398. https://doi.org/10.1146/annurev-financial-032820-083433
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2019). *Strategic Management: Concepts and Cases: Competitiveness and Globalization* (13th ed.). Cengage Learning.
- Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of innovation & knowledge*, *3*(3), 123-127. https://doi.org/10.1016/j.jik.2016.07.002
- Iansiti, M., & Lakhani, K. R. (2020). Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World. Harvard Business Press.
- Ionescu-Feleagă, L., Dragomir, V. D., Bunea, Ș., Stoica, O. C., & Barna, L. (2022a). Empirical evidence on the development and digitalization of the accounting and finance profession in Europe. *Electronics*, *11*(23), 3970. https://doi.org/10.3390/electronics11233970
- Ionescu-Feleagă, L., Ionescu, B., & Stoica, O. C. (2022b). The impact of digitalization on happiness: a European perspective. *Mathematics, 10*(15), 2766. https://doi.org/10.3390/math10152766
- Jain, R., Aagja, J., & Bagdare, S. (2017). Customer experience a review and research agenda. *Journal of Service Theory and Practice, 27*(3), 642–662. https://doi.org/10.1108/jstp-03-2015-0064
- Kenton, W. (2024, May 30). *The Big 4 Accounting Firms: An Overview*. Investopedia. https://www.investopedia.com/terms/b/bigfour.asp
- Klynveld Peat Marwick Goerdeler (KPMG). (2022). *Ten key regulatory challenges of 2023*. KPMG. https://kpmg.com/us/en/articles/2022/ten-key-financial-services-regulatory-challenges-2023.html

- Kokina, J., & Blanchette, S. (2019). Early evidence of digital labor in accounting: Innovation with Robotic Process Automation. *International Journal of Accounting Information Systems*, 35, 100431. https://doi.org/10.1016/j.accinf.2019.100431
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2021). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management, 63*, 102466. https://doi.org/10.1016/j.ijinfomgt.2021.102466
- Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2019a). Digital entrepreneurship: A research agenda on new business models for the twentyfirst century. *International Journal of Entrepreneurial Behavior & Research, 25*, 353-375. https://doi.org/10.1108/ijebr-06-2018-0425
- Kraus, S., Roig-Tierno, N., & Bouncken, R. B. (2019b). Digital innovation and venturing: an introduction into the digitalization of entrepreneurship. *Review of Managerial Science*, *13*(3), 519–528. https://doi.org/10.1007/s11846-019-00333-8
- Kumar, S. P., & Saha, S. (2017). Influence of trust and participation in decision making on employee attitudes in Indian public sector undertakings. SAGE Open, 7(3). https://doi.org/10.1177/2158244017733030
- Lai, K. H., Lee, J. C., Lee, K. J., Lee, J. L., Yosanti, I. (2022). Do you have a digital wallet? A study of e-wallet during the COVID-19 pandemic. *International Journal of Accounting & Finance in Asia Pasific, 5*(1), 24-38. https://doi.org/10.32535/ijafap.v5i1.1413
- Legner, C., Eymann, T., Hess, T., Matt, C., Böhmann, T., Drews, P., Mädche, A., Urbach, N., & Ahlemann, F. (2017). Digitalization: Opportunity and challenge for the business and information systems engineering community. *Business* & *Information Systems Engineering*, 59(4), 301–308. https://doi.org/10.1007/s12599-017-0484-2
- Maciule, V. (2023, July 6). *National digital transformation strategy mapping the digital journey.* Digital Regulation Platform. https://digitalregulation.org/national-digital-transformation-strategy-mapping-the-digital-journey/
- Magesa, M., & Jonathan, J. (2020, 16-19 June). *Digital leadership for digital transformation*. DSA2020: New Leadership for Global Challenges. https://nomadit.co.uk/conference/dsa2020/paper/54547
- Marchington, M., & Wilkinson, A. (2005). Direct participation and involvement. InS. Bach (Ed.), *Managing Human Resources: Personnel Management in Transition* (pp. 398-423). John Wiley & Sons.
- Martínez-Ferrero, J., & García-Sánchez, I. (2016). Coercive, normative and mimetic isomorphism as determinants of the voluntary assurance of sustainability reports. International Business Review, 26(1), 102–118. https://doi.org/10.1016/j.ibusrev.2016.05.009
- Moffett, J. W., Folse, J. a. G., & Palmatier, R. W. (2020). A theory of multiformat communication: mechanisms, dynamics, and strategies. *Journal of the Academy of Marketing Science*, *49*(3), 441–461. https://doi.org/10.1007/s11747-020-00750-2
- Mollah, M. A., Ibrahim, N., Masud, A. A., & Chowdhury, M. S. (2024). How digital leadership boosts competitive performance? The role of digital culture, affective commitment, and strategic agility. *Heliyon*, e40839. https://doi.org/10.1016/j.heliyon.2024.e40839
- Mothe, C., & Nguyen-Thi, T. U. (2021). Does age diversity boost technological innovation? Exploring the moderating role of HR practices. *European Management Journal*, 39(6), 829–843. https://doi.org/10.1016/j.emj.2021.01.013
- Mutambik, I., & Almuqrin, A. (2024). Employee Acceptance of Digital Transformation: A study in a smart City context. *Sustainability*, *16*(4), 1398. https://doi.org/10.3390/su16041398

- Nam, T. (2018). Technology usage, expected job sustainability, and perceived job insecurity. *Technological Forecasting and Social Change*, 138, 155–165. https://doi.org/10.1016/j.techfore.2018.08.017
- Narayanan, V., & Chen, T. (2012). Research on technology standards: Accomplishment and challenges. *Research Policy, 41*(8), 1375–1406. https://doi.org/10.1016/j.respol.2012.02.006
- Ohlert, C., Giering, O., & Kirchner, S. (2022). Who is leading the digital transformation? Understanding the adoption of digital technologies in Germany. *New Technology Work and Employment, 37*(3), 445–468. https://doi.org/10.1111/ntwe.12244
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change. *The Journal of Applied Behavioral Science*, *47*(4), 461–524. https://doi.org/10.1177/0021886310396550
- Perez, C. (2015). From long waves to great surges. *European Journal of Economic and Social Systems, 27*(1–2), 69–80.
- Poshakwale, S., Aghanya, D., & Agarwal, V. (2019). The impact of regulations on compliance costs, risk-taking, and reporting quality of the EU banks. *International Review of Financial Analysis, 68*, 101431. https://doi.org/10.1016/j.irfa.2019.101431
- Pratt, M. K. (2024, October 11). What is digital transformation? Ongoing reinvention. CIO. https://www.cio.com/article/230425/what-is-digital-transformation-anecessary-disruption.html
- Rahim, N. F. A., Sabeh, H. N., Zaky, I. D. B. A., Naidu, H. N. a. R., Heng, B. Y., Laili, A. F., ..., & Kee, D. M. H. (2023). Exploring customer views on digitalized vs. traditional restaurants: A study in the restaurant industry. *International Journal of Tourism and Hospitality in Asia Pasific, 6*(3), 57–75. https://doi.org/10.32535/ijthap.v6i3.2592
- Schallmo, D. R. A., & Williams, C. A. (2018). History of digital transformation. In SpringerBriefs in business (pp. 3–8). https://doi.org/10.1007/978-3-319-72844-5_2
- Schildt, H. (2022). The institutional logic of digitalization. In *Digital transformation and institutional theory* (pp. 235-251). Emerald Publishing Limited. https://doi.org/10.1108/s0733-558x2022000083010
- Schneider, P., & Sting, F. J. (2020). Employees' perspectives on digitalization-induced change: Exploring frames of industry 4.0. Academy of Management Discoveries, 6(3), 406-435. https://doi.org/10.5465/amd.2019.0012
- Setia, P., Venkatesh, V., & Joglekar, S. (2013). Leveraging Digital Technologies: How information quality leads to localized capabilities and customer service performance. *MIS Quarterly, 37*(2), 565–590. https://doi.org/10.25300/misq/2013/37.2.11
- Shao, S., Hu, Z., Cao, J., Yang, L., & Guan, D. (2020). Environmental Regulation and Enterprise Innovation: a review. *Business Strategy and the Environment, 29*(3), 1465–1478. https://doi.org/10.1002/bse.2446
- Singh, M., Fuenmayor, E., Hinchy, E., Qiao, Y., Murray, N., & Devine, D. (2021). Digital Twin: origin to future. *Applied System Innovation*, *4*(2), 36. https://doi.org/10.3390/asi4020036
- Sommarberg, M., & Mäkinen, S. J. (2017). Mechanisms of Disruptive Technological Change: Case Studies in Transformation of Traditional Industries. In Management of Engineering and Technology (PICMET), 2017 Portland International Conference on (pp. 1–10). IEEE. https://doi.org/10.23919/PICMET.2017.8125297
- Størkersen, K., Thorvaldsen, T., Kongsvik, T., & Dekker, S. (2020). How deregulation can become overregulation: An empirical study into the growth of internal bureaucracy when governments take a step back. *Safety Science*, *128*, 104772. https://doi.org/10.1016/j.ssci.2020.104772

- Sutherland, W., Jarrahi, M. H., Dunn, M., & Nelson, S. B. (2019). Work precarity and gig literacies in online freelancing. *Work Employment and Society, 34*(3), 457–475. https://doi.org/10.1177/0950017019886511
- Tagscherer, F., & Carbon, C. (2023). Leadership for successful digitalization: A literature
review on companies' internal and external aspects of digitalization. Sustainable
Technology and Entrepreneurship, 2(2), 100039.
https://doi.org/10.1016/j.stae.2023.100039
- Teoh, K. B., Cordova, M., Hor, S. N., Lim, C. H., Yeoh, L. K., Madhu, A., ..., & Chuah, Y. J. (2021). The factors of Employee Performance: A study of SearchNEasy. Asia Pacific Journal of Management and Education, 4(1), 82–96. https://doi.org/10.32535/apjme.v4i1.1053
- Tomo, A., Mangia, G., & Canonico, P. (2021). Innovating processes and processing innovation: strategic approach to innovation in accounting firms. *Journal of Economic and Administrative Sciences.*, 39(4), 1195–1209. https://doi.org/10.1108/jeas-03-2020-0029
- Ulrich-Diener, F., Dvouletý, O., & Špaček, M. (2023). The future of banking: What are the actual barriers to bank digitalization?. *BRQ Business Research Quarterly*, 23409444231211597. https://doi.org/10.1177/23409444231211597
- Verganti, R., Dell'Era, C., & Swan, K. S. (2021). Design thinking: Critical analysis and future evolution. *Journal of Product Innovation Management*, 38(6), 603-622. https://doi.org/10.1111/jpim.12610
- Vroom, V. H., & Yetton, P. W. (1973). Leadership and decision-making. *Administrative Science Quarterly, 18*(4), 556. https://doi.org/10.2307/2392210
- Wang, H., Gu, L., & Hong, M. (2025). Research on the correlation between the degree of digitization of manufacturing process links and economic benefits. *Business Process Management Journal*, *31*(1), 298-339. https://doi.org/10.1108/bpmj-04-2023-0313
- Widodo, S. D., Rubiyanti, N., Widodo, A., & Silvianita, A. (2024). The role of digital transformation in improving employee performance. *Journal of International Conference Proceedings*, 7(1), 109–118. https://doi.org/10.32535/jicp.v7i1.3181
- Wirtz, J., Patterson, P. G., Kunz, W. H., Gruber, T., Lu, V. N., Paluch, S., & Martins, A. (2018). Brave new world: service robots in the frontline. *Journal of Service Management*, 29(5), 907–931. https://doi.org/10.1108/josm-04-2018-0119
- Yew, L. T., Ling, L. H., Fuad, A. a. R. B. M., Khan, A. B. A., Ismail, A. a. B., Hazaini, A. a. B. M., & Kee, D. M. H. (2024). The impact of COVID-19 pandemic on customer satisfaction and business performance. *Journal of the Community Development in Asia*, 7(3), 482–498. https://doi.org/10.32535/jcda.v7i3.3502
- Zhang, B., Zhang, J., & Chen, C. (2024). Digital technology innovation and corporate resilience. *Global Finance Journal*, 101042. https://doi.org/10.1016/j.gfj.2024.101042
- Zhang, W., & Chin, T. (2024). How employee career sustainability affects innovative work behavior under digitalization. *Sustainability, 16*(9), 3541. https://doi.org/10.3390/su16093541
- Zheng, J., & Guo, F. (2024). Digital financial supervision and inefficient investment of enterprises: Evidence from China's internet financial industry. *Pacific-Basin Finance Journal*, 83, 102255. https://doi.org/10.1016/j.pacfin.2024.102255

ABOUT THE AUTHOR(S)

1st Author

Paul Dung Gadi obtained his Doctor of Philoshophy at Universiti Sains Malaysia on 2020 for Human Resources Management and Services. He is currently lecturer at Department of Business Administration and Management, Plateau State Polytechnic, Barkin Ladi Email: jsstature@gmail.com

ORCID ID: 0000-0001-5221-8587

2nd Author

Ng Wei Chien is a lecturer in the field of science at Universiti Sains Malaysia (USM). He holds a Doctor of Philosophy (Ph.D.) degree and contributes to research and education in the field of science

3rd Author

Ng Wei Chien is a lecturer in the field of science at Universiti Sains Malaysia (USM). He holds a Doctor of Philosophy (Ph.D.) degree and contributes to research and education in the field of science

4th Author

Yeap Zheng Hong currently undergraduate student at Universiti Sains Malaysia.

5th Author

Yin, Hang currently undergraduate student at Universiti Sains Malaysia.

6th Author

Yong Hui Jia currently undergraduate student at Universiti Sains Malaysia.

7th Author

Zhang, Bai Hao currently undergraduate student at Universiti Sains Malaysia.

8th Author

A. J. Ali currently undergraduate student at Universiti Sains Malaysia.

9th Author

Daisy Mui Hung Kee is an Associate Professor at the School of Management, Universiti Sains Malaysia. Her areas of interests are in Human Resource Management, Organizational Behavior, Work Values, Leadership, Entrepreneurship, and Psychosocial safety climate. Her current program of research focuses on Leadership and Psychosocial safety climate. She holds a PhD in Business and Management from International Graduate School of Business, University of South Australia. She was the secretary of Management Case Study Journal, Australia (2004-2006). She was award recipient of Merdeka Award 2006 from the Australia Malaysia Business Council of South Australia (AMBCSA) by former South Australia Governor Sir Eric Neal (2006). The award recognizes the Most Outstanding Malaysian University students in South Australia.She earned her MBA from School of Management, Universiti Sains Malaysia. She was awarded Dean's List for being one of the top MBA students (2003). Presently, she is an active academician and researcher supervising a numbers of MBA, MA and PhD candidates with working experience across diverse industries. She has published a good numbers of journal papers during the course of her career. She has conducted series of training related to motivation and research in USM under Professional and Personal Development (PPD) workshop.

Email: daisy@usm.my

ORCID ID: 0000-0002-7748-8230