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The role of talent development on business performance in Islamic rural banks

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The objective of this study is to investigate talent development as a driver for strategic flexibility, digital readiness, and innovativeness and how these affect the business performance. This study used a quantitative approach using surveys from 391 managers and directors of Islamic rural banks in Indonesia, then the data were analyzed using structural equation modelling - partial least square (SEM-PLS). The results show that talent development has positive effects on innovativeness, strategic flexibility, and digital readiness. Moreover, strategic flexibility has positive mediating variables between digital readiness and innovativeness which also lead to business performance. This study provides contribution to the literature by integrating the digital readiness, strategic flexibility and innovativeness toward financial and non-financial performance. It also offers managerial implication that talent development drives those correlations.

KEYWORDS

talent development, strategic flexibility, business performance, digital readiness, innovativeness, Islamic rural banks

Introduction

The COVID-19 crisis has created a serious multi-dimensional disruption throughout the world, leaving the Islamic financial institutions in a state of instability due to high credit risk and systemic risk (Rizwan et al., 2020). Interestingly, this crisis also has accelerated the rapid adoption of digital transformation (Nachit and Belhcen, 2020). It is widely seen by the intense competition between Islamic rural banks and bank digital or fintech that provide new digital channels and products to gain strategic positioning in the digital age. Cloud computing and blockchain technology are employed by the competitors to improve their efficiency (Muia, 2017). The use of advanced digital technology triggered much discussion into its impact on talent development (TD). It is also still a debate among scholars whether TD could improve the performance of Islamic rural banks due to limited studies.

Theoretically, there are two views related to talent development, namely micro and macro. From a micro perspective, talent development can be defined as small initiatives aimed at people and organizations development. It consists of activities to support the

employee's learning and growth. Employees would understand their roles and responsibilities. From a macro perspective, talent development can be considered as an integrated HR function that is designed to attract, develop, motivate and retain employees. It encompasses the company's activities in recruiting the best candidates, retaining top talent, and developing leaders. This study is intent to fill the gap in the literature where majority of previous studies focused on talent development in Aziz et al. (2016).

From the empirical side, many companies are transforming their business structures, rapidly spending in new digital technology, experimenting with new possibilities in order to survive and compete with others (Farrington and Alizadeh, 2017; Nambisan et al., 2017). Numerous advanced technologies, such as Big Data, Artificial Intelligence (AI), Internet of Things (IoT), advanced manufacturing, robotics, and blockchain have been introduced to replace the traditional works in a new efficient way. Some scholars have documented talent development as a driver for strategic flexibility in Greek firms (Kafetzopoulos, 2022; Kafetzopoulos et al., 2022) and relate the strategic flexibility and business performance in emerging economies (Direction, n.d.; Yang et al., 2015; Xiao et al., 2021). Other academics link the firm's level of innovation and its degree of flexibility (Khin and Ho, 2018; Nassani and Aldakhil, 2021). However, there is a limited study that discusses the role of talent development for Islamic rural banks. Therefore, the objective of this study is to analyze the talent development as a driver for digital readiness, strategic flexibility, and innovativeness and its effect on business performance in Islamic rural banks.

This study gives contribution in three ways. First, majority of previous studies only investigate the individual relationship between strategic flexibility and innovativeness (Hewapathirana and Almasri, 2021; Kafetzopoulos, 2022), while this study develops a framework that integrates the correlation between strategic flexibility, digital readiness, and innovativeness which has not been exposed by previous studies. Second, this study offers a managerial perspective for Islamic rural banks in relation to talent development, while previous studies in this sector focused on financing quality (Rizky and Mongid, 2022) and customer satisfaction (Wibisono and Harto, 2018). Third, Islamic rural banks play an important role for MSMEs and other marginalized sectors that have difficulty to get financing from commercial banks. However, recent advancements in technologies have raised industry and academic attention to analyze its implementation in business. Thus, this study is intended to fill the gap between theory and practice. The finding provides a critical analysis for their readiness toward digital transformation and its effect on business performance.

This paper scrutinized into the following sections: first section presents the introduction, second section reviews the literature on Talent Development and Digital Transformation, third section describes the methodology, fourth section presents and discusses the results, practical implications, and concludes with conclusions and recommendations.

Literature review

Talent development

Talent development (TD) has been identified as an integral part in the overall talent management (TM) process (Cappelli, 2008). Baron (2011) defines talent development as a set of practices that are implemented by the organization to reap the benefits in the long term. It can also refer to how the organizations attract, select, develop and manage talent's skill in a strategic way (Scullion and Collings, 2011). Talent in this regard appears to be seen as an exemplary skill that people possess (Pruis, 2011). As explained by Gist et al. (1989), talent is a key in organizational success. Hamel (2009) suggests that developing talent skills results in a significant benefit to any organization (Charness et al., 1991).

Talent development is defined as an integrated process of planning, selecting, and carrying out talent development programs for all aspects of human resources (Garavan et al., 2012). Coaching, feedback, training, and mentoring are examples of processes in which Ibeh and Debrah (2011) characterized it as talent development. These processes are designed to elevate the talent's capacity at maximum level so that they have skills to fulfill organizational strategic goals, such as financial or performance objectives, or both (Hedayati Mehdiabadi and Li, 2016).

Dalal and Akdere (2018) identifies talent development as an effort to ensure that the firm has qualified talent to satisfy future demand and job changes, especially in this dynamic era of globalized and technology-driven world, exposing to no "talent shortage" within the firm. In light of this, Gandz (2006) argues firms often use talent development aimed to ensure planned succession and to strengthen their position as a talent magnet.

There are key roles who are in charge of reinforcing succession in organizational talent development, as conceptualized by Kaye (2011). Key responsibilities for talent development lie in the role of employee, the manager, and overall organization. The organization offers assets, tools, values, and culture in accordance with talent development practices. Managers play a role in assessing the needs in talent, clarify goals, support the development, provide feedback and monitor development. While employees or individuals set career goals, seek development opportunities, maintain motivation and implement development of the action plans.

Strategic flexibility

Strategic flexibility refers to the capacity of a firm to respond quickly to a rapidly uncertain and high volatility business environment (Hitt et al., 1998). Kristal et al. (2010) posits strategic flexibility as a combinative capability which enables firms to synthesize and utilize both current and newly obtained external knowledge in their operations. Viewed from the nature of capability, Eisenhardt and Martin (2000) argues strategic flexibility as dynamic and firm-specific because problem-solving

abilities are firmly embedded in and developed within firms. Teece et al. (1997) sum up that strategic flexibility is a dynamic characteristic that helps businesses to gain an edge in competitive markets.

The significance of a firm's strategic flexibility is found in its adaptability and responsiveness in addressing problems arising from fast-paced settings. Moreover, with strategic flexibility, firms are more receptive towards reallocating and reconfiguring their organizational resource, process, and strategy to deal with the problems (Zhao et al., 2010). A firm may require strategic flexibility to handle shifts in customer's preferences, competitive behavior, and other market factors (Chen et al., 2017). Strategic flexibility is also the key fundamental of firm resilience in dealing with crises, especially in COVID-19 crisis (Widiana and Soetjipto, 2021).

Innovations are more likely to occurred in a firm that values strategic flexibility. Being flexible allows firms to possess innovative ideas that are new to firms. This may benefit them in acquiring a competitive advantage, as innovations are the most important drivers. In their study, Nadkarni and Herrmann (2010) provides evidence that, by offering more adaptable processes and structures, it improves the firm's innovation performance in a hostile environment.

Innovativeness

Innovativeness is a key for a company's success as it represents openness in pursuit of a firm's competitive advantage (Miller and Friesen, 1982). Garcia and Calantone (2002) reveals innovativeness as a degree on which the firm possessed newness or advancement in products and services. The level of innovativeness influences the firm's existing resources, including capabilities, skills, and technology resources. Hence, in order to be innovative, firms must have a willingness to place emphasis on technology advancements, new offerings, enhanced product lines, and/or new services (Lumpkin and Dess, 1996).

Innovation is crucial to a firm's emerging survival strategy in the dynamic character of most marketplaces, where there is an intense rivalry among firms. In times of turbulent and unpredictive conditions, like crises, Ali (2021) conveys that a firm's innovativeness could aid firms to reduce the detrimental financial effects due to COVID-19, increasing their likelihood of survival. Reflecting an important means by which firms promote innovativeness, firms are likely employing an appropriate strategy through analysis of the external information (Dibrell et al., 2014).

The awareness about a firm's external environment may help firms in seizing opportunity, and enhancing its ability to transform its resource base to realign with the current changes (Kyrgidou and Spyropoulou, 2013). This encourages creative thinking behavior that can result in the invention of new products, services, or procedures (Dibrell et al., 2014). Research on technological and customer behavior trends, fulfillment of customer's needs, and new inventions of technology are several important inputs into the innovation process (Zahra et al., 2002).

Digital readiness

Digitalization has received tremendous attention from many practitioners and researchers in business management. Its existence has triggered a massive wave of technology transforming the overall global economy, business, and lifestyle (Moeini Gharagozloo et al., 2021). Matt et al. (2015), refers to this as a "digital transformation," which changed the tone across many sectors and businesses (World Bank Group, 2016). As technology continues to transform professional environments and modern workflows, the need for adopting technology for business sustainability becomes increasingly important (Mujiono, 2021).

Digital transformation is not about technology, rather it is about people, and, in particular, based on their ability to use digital technologies (Tabrizi et al., 2019). Digital transformation undertakes a process of organizational change which embeds emerging digital technology into the overall business operations (Gong and Ribiere, 2021). It is about how the business is switching the old way into the new way to create value and deliver benefits to customers. This process requires a major effort for the realignment of people, culture, and strategies of a firm to match with desired end stage.

Readiness is one of the steps necessary for a digital transformation to be successfully implemented (Welter, 2011). Readiness, as described theoretically by Weiner (2009) is a state of an individual being psychologically and behaviorally prepared to do something. Digital readiness refers to the level to which individuals in a firm perceive benefits of use and actual uses of digital transformation (Trischler and Li-ying, 2022). Fostering this digital readiness, in which individuals in a firm are willing to and capable of using such technologies, is key to successful digital transformation. Based on Nguyen (2022), a firm may foster a digital readiness through leveraging its human capital or development process.

Business performance

Business performance measures the success of a firm in achieving its goals. The success of a company in pursuing its goals can be viewed in two ways: financial and non-financial performance (Simon et al., 2015). Van Rompuy (2012) implies these two metrics are constructed based on the requirements and expectations of key parties involved in the company's strategy implementation. The overall performance of a firm is later compared to those of its top competitors (Tsai and Yang, 2013).

Two approaches measuring business performance were proposed by Kafetzopoulos et al. (2019). The first focuses on the outcomes, such as financial and market performance. The extent to which a firm achieves monetary results is considered as

financial performance (Hogan and Coote, 2014). It attempts to measure how well a business uses its assets and resources to generate revenue and how well it can pay off debts, showing the stability and health of a company. Market performance assesses the success of a firm's products and programs in existing businesses and in those related to its future positioning (Kandemir et al., 2006). Three separate dimensions of market performance are captured: sales growth, market share, and market development.

The second method for assessing business performance, based on Kafetzopoulos et al. (2019), relates to the variables that have indirect-effects on the outcomes, such as quality management, the firm's flexibility, resource use, and innovation level. These factors contend to have effects on how well the firm performs in terms of increasing firm value.

Development of Islamic rural banks in Indonesia

Over the past decades, Indonesia's Microfinance Institutions (MIs) industry has experienced significant growth. The number of MIs that received permits from the Financial Services Authority (OJK) increased by 149.42% annually on average between 2015 and 2019. There were about 223 MIs with a total asset value of IDR 1.13 trillion as of October 2020 (Otoritas Jasa Keuangan, 2020).

In their continued development, MIs are growing into Islamic Microfinance Institutions, emphasizing Shariah principles in their product or services offerings, where the concepts of riba (interest), maisir (gambling), and gharar (speculative trading) are prohibited. Four distinct discoveries in the Qur'an mention the ban of riba: Surah al-Rum (Chapter 30), verse 39; Surah al-Nisa (Chapter 39), verse 161; Surah al-Imran (Chapter 3), verses 130–2; and Surah al-Baqarah (Chapter 2), verses 275–81 (Aburime, 2008). Gross Financing of Shariah MI is recorded in the form of Mudharabah Financing, Musharaka Financing, and Murabahah Fincancing. Increased number of Muslims is one of the factors affecting the growth of Islamic MIs in Indonesia, which also raises awareness of Islamic finance (Aburime, 2008).

Islamic rural banks or Bank Pembiayaan Rakyat Syariah (BPRS) are included as Islamic Microfinance Institutions. According to successor Act No. 10 of 1998 concerning "Banking" which expressly positions BPRSs as a part of the national banking system adopting the Islamic philosophy (Khan et al., 2019). The business operations of BPRSs are governed by OJK regulation No. 3/POJK.03/2016 concerning "BPRS." Seen from their role, BPRSs strive to improve economic empowerment and society productivity by providing access to funds to low-income groups and Micro Small Medium Enterprises [MSMEs; Sakai, 2014; Law No. 1 (2013)]. BPRSs have a substantial effect on the country's economy, because 99% of Indonesian businesses are classified as MSMEs (Disli et al., 2022).

BPRS has grown robustly since its first establishment in 2009. This is reflected in the growth of 7% Year-on-Year (YoY), with total assets of IDR 12.36 trillion by the end of 2018 and estimated to reach IDR 20.69 trillion by the end of 2024. In 2022, assets grew 9.15% (YoY) from IDR 14.91 trillion to IDR 17.29 trillion (Otoritas Jasa Keuangan, 2022). In 2018, there were 160 Islamic rural banks in Indonesia; by 2021, there were approximately 163 Islamic rural banks, with BPRSs playing a larger role in their expansion (Otoritas Jasa Keuangan, 2021).

In the context of the financing disbursed by BPRSs, an upward trend was also evident. Murabahah Financing is the largest portion with a value of IDR 7.45 trillion in 2019, dramatically grew by 11% (YoY) on average per year from IDR 4.49 trillion in 2015. Musharaka Financing and Mudharabah Financing, respectively, took the second and third positions with a financing value of IDR 1.12 trillion and IDR 0.24 trillion in 2019. When compared to IDR 10.22 trillion in 2019, the total financing provided by BPRSs to MSMEs increased by 3.61% (YoY) or IDR 10.60 trillion in 2020 despite the COVID-19 pandemic. Overall, this sums up that the development of BPRS in Indonesia has great potential to grow.

Previous study

Based on the academic literature discussed above, several existing studies addressing the same issue can be seen from Table 1.

Hypothesis development

Digitalization helps companies in customizing products as per customer needs, changing business values and increasing focus to meet customer expectations for product quality and service standards (Xiu et al., 2017; Tsou and Chen, 2021). However, digitalization is also pushing people in organizations to change faster, which promotes the urgency for digital readiness (Tabrizi et al., 2019; Jun et al., 2021; Susanty et al., 2022). The help of talent development leads to the development of a lot of positive attitudes within the employee, such as an increase in motivation (Panda and Sahoo, 2015; Sheel and Nath, 2019). On the other hand, the acceleration of digital readiness is associated with attitudes of the employees (Nguyen, 2022; Trischler and Li-ying, 2022). Based on these arguments, the suggested hypothesis is:

> *H1:* Talent Development has a positive and significant impact toward Digital Readiness.

Strategic flexibility can be a source of competitive advantages as they possess their willingness to revise strategic plans based on their assessment of changing environmental conditions (Zhao et al., 2010; Vyas and Jain, 2021; Ruan and Mezei, 2022). The succession of talent development can be a source of such competitive advantage. In a hostile environment, learning and skills development are significant factors for talent-focused organisations to grasp the advantage of environmental opportunities (Dalal and Akdere, 2018; Bouranta et al., 2022). Armed with analysis and insights gained from the effective talent

TABLE 1 Previous study.

No.	Authors (Year)	Objective	Method	Result
1	Bouranta et al. (2022)	The aim of the paper is to determine whether leadership affects strategic flexibility and business performance taking into consideration the mediating role of talent management in these relationships.	- Exploratory interviews with managers from 462 Greek firms. - Partial Least Squared - Structural Equation Modeling (PLS-SEM).	- The results show that leadership drives firms to strategic flexibility and business performance, talent management fully mediates these relationships - Strategic flexibility also affects business performance positively.
2	Xiu et al. (2017)	The purpose of the paper is to examine the role of innovative HR practices as an important mechanism through which strategic flexibility affects firm performance as well as the role of gender-based leadership in this relationship.	- Questionnaires data from 598 small and medium-sized firms. - PLS - SEM	- There is a positive relationship between strategic flexibility and firm performance measured as employee productivity and the role of innovative HR practices as a mediator in these relationships. - Female leadership enhances strategic flexibility-performance relationship.
3	Khin and Ho (2018)	This study aims to examine the effect of digital orientation and digital capability on digital innovation, and also the mediating effect of digital innovation on the link between organizational performance and digital orientation as well as digital capability.	- Questionnaires data from 105 small to medium-sized IT firms in Malaysia. - PLS - SEM	- Digital orientation and digital capability have positive effects on digital innovation and also that digital innovation mediates the effect of technology orientation and digital capability on financial and non-financial performance.
4	Gouda and Tiwari (2021)	This aim of the paper is to investigate the impact of e-commerce capabilities on agricultural firms' performance gains through organizational agility.	- Questionnaires data from 280 managers of agricultural firms. - PLS - SEM	- Organizational agility plays a mediating role in conveying the positive influences of e-commerce capabilities on agricultural firms' performance gains.
5	Jun et al. (2021)	The purpose of the study is to investigate how digital platforms capability, improvisational capability and organizational readiness directly affect innovation performance.	- Questionnaires data from 647 managers of small and medium enterprises (SMEs) working in Pakistan. - PLS - SEM	- There is a significant and positive relationship of digital platforms capability, improvisational capability and organizational readiness with innovation performance. - Organizational readiness fully mediates the relationships between digital platforms capability and innovation performance.
6	Susanty et al. (2022)	The purpose of the study is to examine the effect of leadership style directly and indirectly through the mediation of employee readiness, innovation culture, technology capability and organizational structure.	- Questionnaires data from a telecommunications company in Indonesia with a total of 1,073 employees - PLS - SEM	- Adaptive leadership style has a direct and significant positive effect on the organizational agility level. - Employee readiness, innovation culture, technological capability and organizational structure function as mediators between adaptive leadership style and agility.
7	Adhiatma et al. (2022)	The purpose of the study is to develop a model of the relationship between SMEs' readiness to change, agile leadership and dynamic capability to implement a digital ecosystem for SMEs	- Questionnaires data from 250 creative SMEs in Semarang, Central Java, Indonesia. - PLS - SEM	- Three critical conditions for dealing with Industry 4.0: organizational readiness to change, agile leadership and dynamic capability.

(Continued)

TABLE 1 (Continued)

No.	Authors (Year)	Objective	Method	Result
8	Hameed et al. (2021)	The purpose of the study is to investigate the impact of business process reengineering on organizational performance in the Malaysian electronics manufacturing industry	- Questionnaires data from 103 samples electronics manufacturing companies listed in the Federation of Malaysia Manufacturers' directory. - PLS - SEM	- Business process reengineering dimensions (top management commitment, organizational readiness for change, information technology capabilities and people management) have significant positive impacts on organizational performance.
9	Chen et al. (2017)	The purpose of the study is to investigate the direct relationship between IT support for core competencies and strategic flexibility, and how strategic flexibility mediates the relationship between IT support for core competencies and firm performance	- Questionnaires data from IT and business executives in 148 Chinese manufacturing firms. - PLS – SEM	- IT support for core competencies has a positive influence on a firm's strategic flexibility, leading to superior firm performance.
10	Nassani and Aldakhil (2021)	The study's objective is to explore the impact of strategic orientation on the organizational innovativeness of SMEs. In addition, the study examines the intervening role of strategic alignment as well as the moderating role of strategic flexibility.	- Questionnaires data from 209 SMEs - PLS-SEM	- Strategic orientation is positively related to the innovativeness of SMEs. Strategic alignment links the gap between strategic orientation and innovativeness.

development process, firms can make more effective decisions about the types of resources to develop or acquire (Hedayati Mehdiabadi and Li, 2016; Prentice et al., 2020). Based on these arguments, the suggested hypothesis is:

> *H2:* Talent Development has a positive and significant impact toward Strategic Flexibility.

Innovativeness is a key towards sustainable growth of a firm (Jun et al., 2021). Barney (1991) has strongly argued that the competitive benefits which accrue to innovative firms are generated through unique capabilities which are difficult for competitors to imitate, are rare, and provide value. Innovativeness is conceptualized here mainly as cultural and behavioral aspects of the firm (Ferraresi et al., 2012; Nwankpa and Roumani., 2016; Papagiannidis et al., 2020). The roots of a firm's innovative capability may be derived from talent development processes. As employees' knowledge, skills and competencies are maximized and developed, they add value to the firm by possessing the capacity to yield innovative ideas, which may lead to new and improved products and services (Dibrell et al., 2014; Susanty et al., 2022). Based on these arguments, the suggested hypothesis is:

> *H3:* Talent Development has a positive and significant impact toward Innovativeness.

A large body of empirical research, summarized in Chen et al. (2017), Xiu et al. (2017), and Bouranta et al. (2022) strongly suggests that strategic flexibility improves a firm's performance. The presence of a strong, strategic flexibility enables firms to conduct frequent internal and external analyses, scan for emerging trends, and evaluate a number of strategy alternatives (Dibrell et al., 2014). Firms' ability to "act" or "react" as a result of their analyses have been shown to significantly influence their performance (Mithas et al., 2011; Noparumpa et al., 2021). Given this point, firms capable of concurrently acting and reacting are in a better competitive position than those that are unable, which makes them more superior (Xiu et al., 2017). Similarly, Bouranta et al. (2022) have exerted strategic flexibility as a valuable firm-specific resource that benefitted firms in terms of improved innovation performance, thereby potentially boosting customer' satisfaction. Based on these arguments, the suggested hypothesis is:

> *H4:* Strategic Flexibility has a positive and significant impact toward Business Performance.

Firms with the higher level of employee' digital readiness will enjoy more options among digital tools and are thus likely to attain a higher level of productivity (Jun et al., 2021). Digital readiness refers to a perception of the positive consequences that are caused by digitalization (Laurenza et al., 2018; Susanty et al., 2022). A greater digital readiness in a firm, increasing the likelihood of a firm to devote resources, such as financial resources, human resources, and R&D resources, to adopt digital technology (Moldabekova et al., 2021). Correspondingly, the adoption of digital technology in a firm plays an important role in creating competitive value if it is deployed in a way that leverages a firm's core competencies (Khin and Ho, 2018; Martínez-Caro et al., 2020). Further, in their study Chen et al. (2017), it is evident that embedding digital technology in core competencies can create competitive advantage for a firm and improve its

performance. Based on these arguments, the suggested hypothesis is:

> *H5:* Digital Readiness has a positive and significant impact toward Business Performance.

Success is increasingly a function of a firm's ability to develop and to deploy resources in an innovative way (Dibrell et al., 2014; Flannelly et al., 2014). Firms rely on innovativeness as a key value-enhancing activity, which transforms the benefits of innovation processes into increased financial performance (Susanty et al., 2022). Innovativeness allows firms to enhance their competitive posture through the development and delivery of innovative products and services (Hult et al., 2004; Dibrell et al., 2014). Firm's acceptance towards new ideas will result in economies of scale (continuously increasing efficiency and effectiveness of their operations) that have direct-effects towards both growth and financial performance (Yeniyurt et al., 2019; Gotteland et al., 2020). Accordingly, by emphasizing innovation, a firm can easily link their market, learning, and entrepreneurial orientations to business performance (Hult et al., 2004; Farrington and Alizadeh, 2017). Based on these arguments, the suggested hypothesis is:

> *H6:* Innovativeness has a positive and significant impact toward Business Performance.

Kafetzopoulos (2022) has confirmed that strategic flexibility is in association with innovativeness. The more innovative the firm is, the more it is associated with the complementary strategic plans capacity to respond and the flexibility of those plans. In other words, innovativeness is an action resulting from a strategic flexibility process. Further, there is a congruence between strategic flexibility and innovativeness (Alabbadi and Al-Masaeed, 2020). In Lokuge et al. (2019), strategic flexibility represented by the extent to which a firm may possess strong motivation to adapt to the external environment, is an important precursor to innovation. Digital readiness refers to attitudes and behaviors that underpin people's preparedness and comfort in using digital tools (Horrigan, 2016; Asokan et al., 2022). Firms possessing the capacity to implement adaptive strategies in response to an emergence of new technologies are likely to transform their workforce–combining features of knowledge, skill, and attitude of workforce–towards digitalisation, which causes the rate of readiness to increase (Alabbadi and Al-Masaeed, 2020; Fachrunnisa et al., 2020). Hence, digital readiness is fully correlated with the rate of flexibility of a firm. Thus, strategic flexibility processes and readiness are nearly equally positively associated with innovativeness. Based on these arguments, the suggested hypothesis is:

> *H7:* Digital Readiness has a positive and significant impact Strategic Flexibility.

> *H8:* Strategic Flexibility has a positive and significant impact Innovativeness.

Research methodology

Research design

In this study, the objective is to examine the impact of talent development toward digital readiness, strategic flexibility, innovativeness, and how these impact the business performance. Simultaneously, it investigates the mediating effect of strategic flexibility between digital readiness and innovativeness in Islamic rural banks. The present study used a quantitative research approach by utilizing primary data. Kowalczyk and Pounders (2016) defines quantitative research as a methodology which entails the use of numerical data measures to test the established hypothesis and interpret the results. Sugiyono (2013) applies this approach to survey or questionnaire data that are distributed to respondents.

Population and sampling

According to Sekaran and Bougie (2010), sampling begins with defining the research population. Sugiyono (2013) defines population as a generalization of territory that consists of items or subjects with certain characteristics chosen by the researcher to be examined and used to draw conclusions. The selected population is the internal stakeholders in Indonesian Islamic rural bank (Bank Pembiayaan Rakyat Syariah), while the sampling technique is convenience with the respondents hold position at least at the top management level, e.g., Chief Executive Officers (CEOs), Chief Financial Officers (CFOs), managers, etc.

The 10-times rule is widely used by the researchers in gauging sample size adequacy in SEM-PLS analyses (Wasko and Faraj, 2005; Van Raaij and Schepers, 2008). Incorporating the ten thumbs rule (10-times rule) proposed by Barclay and Smith (1995), the minimum required sample size is 250 respondents. The 10-times rule in SEM-PLS is made up of 10 times the number of predictors of: (1) the largest number of formative indicators used to measure one construct, (2) the largest number of structural paths directed at a particular latent construct in the structural model (Hair et al., 2021). This study received 420 data and removed 29 invalid data. Thus, the total sample in this study is 391 respondents.

Data collection

Partial Least Squares-structural equation modeling (PLS-SEM) was considered a key approach in this study (Hair et al., 2021). As can be seen from Table 2, a questionnaire survey instrument is distributed to the selected respondents *via* online form in order to collect the data in an acceptable amount of time. A questionnaire refers to a set of written formula questions (Sekaran and Bougie, 2010). Interval scales based on the Likert scale are frequently used to gauge a person's intention, attitudes, opinions, or perceptions regarding social phenomena (Joshi et al.,

TABLE 2 Measurement items.

Variables	Code	Items	Sources
Talent Development	TD1	The company's training and development programs designed to develop skills that benefit in completing my works effectively in the long-term	Hicks (2016), Fachrunnisa et al. (2020)
	TD2	The company's training and development programs has sharpened my characters to be more ethical, honest, and motivated	
	TD3	Information and Technology (IT) training program has helped me in leveraging the use of digital technology	
Strategic Flexibility	SF1	Within a specific timeframe, my company can create the products that customers demand	Dibrell et al. (2014)
	SF2	My company has an ability to adapt to technological advancements	
	SF3	My company has an ability to adapt to the needs of customers for its products and/or services	
Digital Readiness	DR1	Digital technology enables rapid responses and confirmation	Whitelaw et al. (2020)
	DR2	I believe digital technology offers flexibility and effectiveness	
	DR3	The adoption of digital technology in the workplace makes me feel at ease and helpful	
	DR4	I have the adequate digital technology facilities to support my works	
Innovativeness	IN1	My company is rapidly innovating new products and upgrading existing ones	Dibrell et al. (2014), Yıldız et al. (2014)
	IN2	My company impose policies for Research-and-Development (R&D) based on new technologies	
	IN3	My company has a capacity to identify innovative strategies to stay competitive	
	IN4	My company is investing in features & new banking product development to gain a competitive advantage	
Business Performance	BF1	My company can boost its profitability	Dibrell et al. (2014), Cabrilo and Dahms (2018)
	BF3	My company can improve the customer loyalty and satisfaction	
	BF3	My company can improve its brand image	
	BF4	My company can increase its capacity to penetrate new markets	

2015). In a Likert scale, the response takes the shape of a five-point scale. All variable measurements representing their own constructs were assessed by applying Likert scales. In this study, the researcher uses a scale range of 1–5 with each meaningful scale as follows: "1" Strongly Disagree, "2" Disagree, "3" Neutral, "4" Agree, and "5" Strongly Agree. SmartPLS 3 software was utilized for data analysis (Ringle et al., 2015).

Data analysis

In the current study, five variables have been used among which talent development, strategic flexibility, digital readiness, and innovativeness are considered as exogenous variables, while firm performance is a representative for endogenous variables. Descriptive statistics are used to measure the extent of agreement of the respondents for each of the items.

Five latent variables are examined to test the relationships between them using the PLS-SEM technique. PLS-SEM, which originated from Wold (1980), is a method to assess the causal relationships between endogenous and exogenous variables. PLS-SEM helps to assess the direct and indirect effects of coefficients of variables (Choo and Mokhtarian, 2007). There are two stages that must be completed to run PLS-SEM, (1) evaluation of the measurement model, and (2) evaluation of the structural model (Mehmetoglu and Venturini, 2021).

In the first stage, the measurement model must demonstrate construct reliability, construct validity, and absence of multicollinearity. Rho is used to measure the construct's reliability. Mehmetoglu and Venturini (2021) suggested that rho should be larger than 0.7 and less than 0.93. Meanwhile, the construct of validity can be seen in terms of convergent and discriminant reliability. Convergent and discriminant reliability can be used to describe the validity construct. While the discriminant validity is linked to the Fornell-Larcker criterion, the convergent validity is linked to indicator reliability (factor loadings) and Average Variance Extracted (AVE). The factor loadings are typically greater than 0.7, the AVE is usually at least 0.5, and the Fornell-Larcker criterion is expected to indicate that the AVE of the construct should be greater than its squared correlation (Mehmetoglu and Venturini, 2021).

In the second stage, the structural model must possess the coefficients of determination (R2), path coefficients, and multicollinearity. The fundamental suggestions for R2: small, moderate, and significant effects, respectively, are represented by values of 0.19, 0.33, and 0.67 (Mehmetoglu and Venturini,

2021). A statistically significant path coefficient (t-stat.) is one with a value greater than 1.96 or a value of p lower than 0.05 (Benitez et al., 2020). Multicollinearity was a problem that needed to be taken into account when assessing a structural model. In order to investigate this problem, the Variance Inflation Factors (VIF) values should be lower than 5 (Hair et al., 2014).

Results and discussion

Demographic respondents

Table 3 shows the demographic characteristics of the respondents. A total of 391 samples were received from the selected population. Based on the result, Male (71.4%) portion made up the majority of the samples out of the total respondents, compared to female (28.6%). More than 88% (88.46%) of the respondents reside in Java Island, the remaining samples are domiciled outside Java for about (11.54%). In terms of Work Experience, most of the respondents are having more than eleven years (>11 years) working experience (51.4%), followed by respondents with 9 to 11 years (20%), and 3–5 together with 6–8 years (11.4%), while the other respondents are having less than 2 years (5.7%). The obtained samples came from a range of educational backgrounds; the highest number of students earned Bachelor (62.9%), followed by Master (20%), while other remaining respondents earned Highshool Degree (8.6%), Vocational (5.7%), and Doctoral (2.9%). In terms of income level, majority of the respondents have a salary less than 10 million (48.5%), followed by between 10 million to 20 million (40%), while the lowest percentage was from a salary more than 20 million (11.5%).

Assessment of measurement model

The construct reliability and convergent validity for the measurement model assessment are presented in Table 4. The model shown in Figure 2 served as the foundation for the three measurements model. The figure shows the eighteen indicators (TD1, TD2, TD3, DR1, DR2, DR3, DR4, SF1, SF2, SF3, I1, I2, I3, I4, BF1, BF2, BF3, and BF4) are represented by five latent variables (Business performance; Digital readiness; Innovativeness; Strategic flexibility; Talent development).

Construct reliability

The correlation between latent and indicators is measured using Dillon-Goldstein's rho (DG rho). Table 4 shows all Dillon-Goldstein's rho values of the latent variables match the acceptance values (exceed the value 0.7 but lower than 0.93) (Business performance = 0.855; Digital readiness = 0.871; Innovativeness = 0.875; Strategic flexibility = 0.875; Talent development = 0.876), implying the construct's reliability was deemed satisfactory. Thus, demonstrating high internal consistencies as well as composite reliability.

Convergent validity

Average Variance Extracted (AVE) of each latent variable, which has a recommended threshold value of 0.5 and loading factors at least 0.7 served as a confirmation of the constructed model's validity.

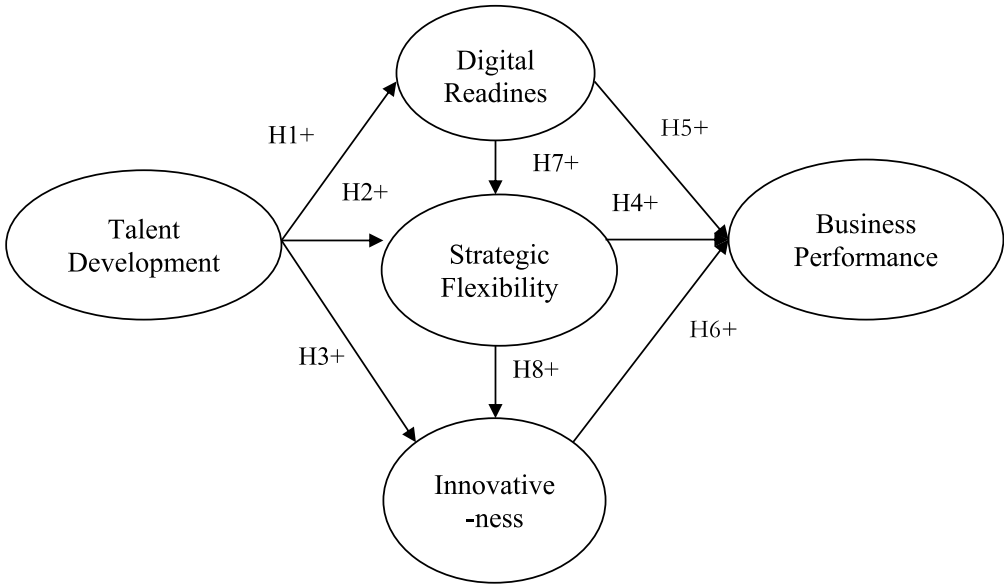

FIGURE 1
Conceptual framework.

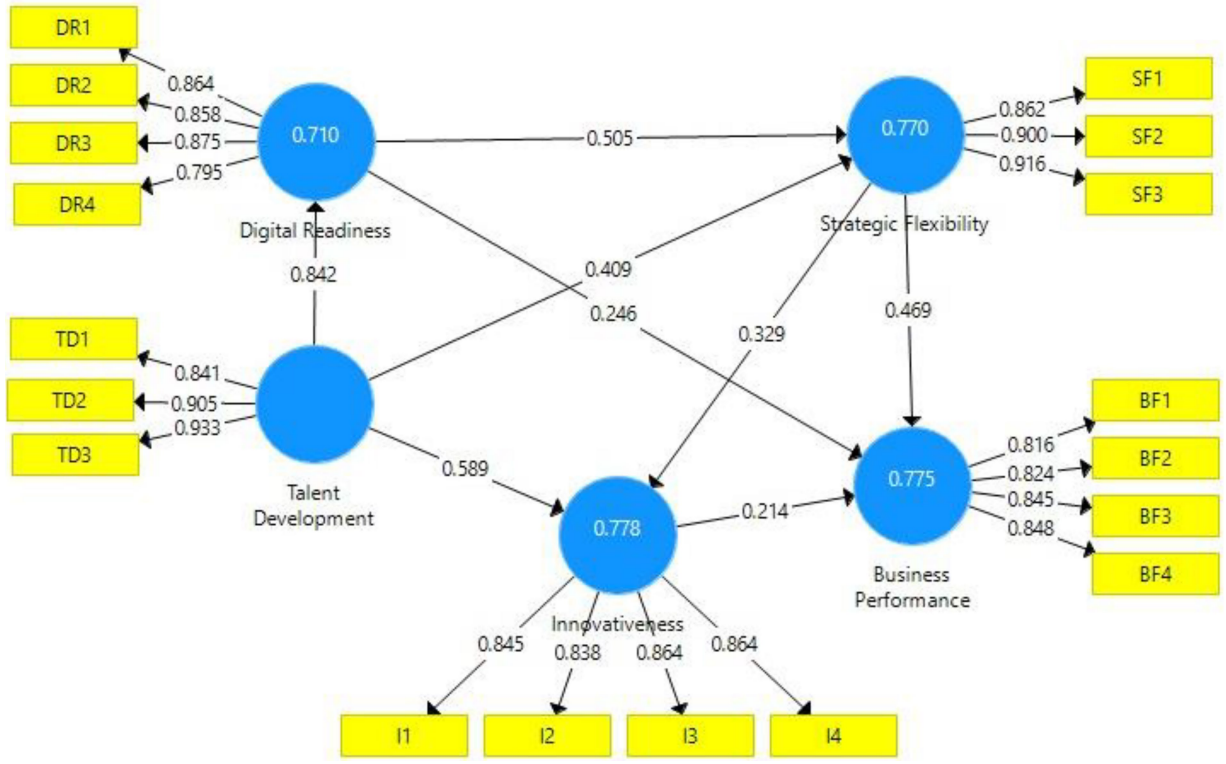

FIGURE 2
Outer loading.

Figure 2 and Table 4 show the values of loading factors all exceeded 0.7 and AVE with value at least demonstrating 5% significance level (Business performance = 0.694; Digital readiness = 0.720; Innovativeness = 0.727; Strategic flexibility = 0.797; Talent development = 0.799), suggesting all values correspond to the acceptable range. This exhibits the least errors captured in the construct.

Assessment of structural model

The structural model is evaluated after the performance of the measurement model has been assessed by looking at three quality systems of measurement: path coefficient, coefficient of determination, and multicollinearity. Tables 5, 6 present the measurement's results.

Path coefficient

Path coefficients evaluate the structural model's hypothesized relationships. It investigates the direct and indirect effects of predictor variables as well as the outcome. A good fit of path coefficient one with a value greater than 1.96 or a value of p lower than 0.05. Based on Table 5, it can be seen that all the coefficients range from 0.214 to 0.842 and are statistically significant with value of p lower than 5% of significance level. They also have a positive sign, which denotes a positive relationship, meaning that as a predictor rises, so does the outcome.

Coefficient of determination (R^2)

R-squared (R^2) is the measurement of "goodness of fit." It quantifies the variation in the outcome explained by a group of predictor variables. Based on Table 6, the result of R^2 values of all variables are showing large effects, as it appears to exceed 0.67 in the rule of thumb (Business performance = 0.775; Digital readiness = 0.710; Innovativeness = 0.778; Strategic flexibility = 0.770).

Multicollinearity

The absence of multicollinearity among variables is one of the fundamental tenets in structural measurements. Multicollinearity refers to any confounding effects as a result of highly correlated variables, and is assessed using the Variance Inflation Factor (VIF). Hair et al. (2014) suggests limiting the VIF values to less than 5. Based on Appendix Table A1, the findings demonstrate that there is no discernible multicollinearity among the variables used because all VIF values are below 2.5.

Hypothesis testing

Based on Appendix Table A2, talent development is found to have a positive impact on digital readiness where value of p is less than alpha value ($0.000 < 0.05$). Thus, we accept the first hypothesis. Talent development is found to have a positive impact on strategic flexibility where value of p is less than alpha value

TABLE 3 Demographic respondent.

Demographic Variables		Frequency	Percentage
Gender	Male	279	71.4%
	Female	112	28.6%
Domicile	Java Island	346	88.46%
	Outside Java Island	45	11.54%
Work experience	0–2 Years	24	5.7%
	3–5 Years	44	11.4%
	6–8 Years	44	11.4%
	9–11 Years	78	20%
	>11 Years	201	51.4%
Educational background	High School Certificate	37	8.6%
	Vocational Certificate	22	5.7%
	Bachelor Certificate	246	62.9%
	Master Certificate	78	20%
	Doctoral Certificate	8	2.9%
Income level	Rp 0 - Rp 10,000,000	190	48.5%
	Rp 10,000,001 - Rp 20,000,000	156	40%
	> Rp 20,000,001	45	11.5%

TABLE 4 Assessment of construct reliability and convergent validity.

Variable	Cronbach's alpha	rho_A	Composite reliability	AVE
Business performance	0.853	0.855	0.901	0.694
Digital readiness	0.87	0.871	0.911	0.72
Innovativeness	0.875	0.875	0.914	0.727
Strategic flexibility	0.873	0.875	0.922	0.797
Talent development	0.873	0.876	0.922	0.799

(0.000 < 0.05). Thus, we accept the second hypothesis. It also found that talent development has a positive impact on innovativeness where value of p is less than alpha value (0.000 < 0.05). Thus, we accept the third hypothesis.

In mediating variables, strategic flexibility is found to have significant and positive impact toward business performance where value of p is less than alpha value (0.000 < 0.05). Digital readiness is found to have significant and positive impact toward business performance where value of p is less than alpha value (0.001 < 0.05). Moreover, Innovativeness is also found to have significant and positive impact toward business performance where value of p is less than alpha value (0.003 < 0.05).

In addition, digital readiness is found to have significant and positive impact toward strategic flexibility where value of p is less than alpha value (0.000 < 0.05) and strategic flexibility is found to have significant and positive impact toward innovativeness where value of p is less than alpha value (0.000 < 0.05).

Discussion

Previous studies have discussed the relationship between talent development and business performance. Gathungu and Mwangi (2012) viewed talent development as an important role for performance. Talent development is a new contribution to existing talent management practices, not a replacement. An addition that makes the link between talent management and strategy (even) more explicit and can assist organizations in taking the next step toward realizing their ambitions through targeted deployment and development of top talent in key positions (Schreuder and Noorman, 2019).

The study shows that talent development positively and significantly affects digital readiness. Talent development programs provide benefits for the individual, for example it assists them to create more strategic solutions, provide a platform to improve their skills and increase work motivation. In the digital era, numerous advanced technologies, such as Big Data, Artificial Intelligence (AI), Internet of Things (IoT), advanced and blockchain have been introduced to replace the traditional works in a new efficient way. Many companies are transforming their business structures, rapidly spending in new digital technology, experimenting with new possibilities in order to survive and compete with others (Farrington and Alizadeh, 2017; Nambisan et al., 2017). The company's training and development programs, in particular digital literacy, are designed to develop the employee's skills in using new technologies and provide them with a good ability to accept new challenges.

Talent development also shows a positive and significant impact on strategic flexibility where the individual and organization have an ability to adapt with new changes, in particular during technological advancement. Training and development programs developed by islamic rural banks together with the support from government programs, improve the ability of companies to respond to the customer demand. This finding is in-line with the previous study conducted by Kafetzopoulos (2022) that talent development positively and significantly affects the managers in Greek firms to be more flexible in its strategy. In addition to that, talent development also plays an important role in the Islamic rural banks which trigger them to be more innovative in producing more competitive products. Training and development programs also encourage them to identify better innovative strategies to stay competitive.

Digital readiness is found to have significant and positive impact on business performance of Islamic rural banks. Wade and Shan (2020) defined digital transformation as the integration and deployment of digital technology which fundamentally alters their

TABLE 5 Path coefficients.

Variable	Business performance	Digital readiness	Innovativeness	Strategic flexibility	Talent development
Business performance					
Digital readiness	0.246			0.505	
Innovativeness	0.214				
Strategic flexibility	0.469		0.329		
Talent development		0.842	0.589	0.409	

TABLE 6 Hypothesis testing.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	*P* Values	Result
TD→DR	0.842	0.840	0.027	31.354	0.000	H1 Accepted
TD→SF	0.409	0.406	0.071	5.744	0.000	H2 Accepted
TD→I	0.589	0.592	0.084	6.976	0.000	H3 Accepted
SF→BP	0.469	0.465	0.085	5.549	0.000	H4 Accepted
DR→BP	0.246	0.253	0.076	3.246	0.001	H5 Accepted
I→BP	0.214	0.211	0.071	3.029	0.003	H6 Accepted
DR→SF	0.505	0.507	0.064	7.841	0.000	H7 Accepted
SF→I	0.329	0.326	0.081	4.082	0.000	H8 Accepted

business model. Many industries have benefited from integrated, shared, and updated real-time mobility systems both personally and professionally (Dwivedi et al., 2021). The inclusion of smart-based technologies leads to shifting in people's behavior, for example, the adoption of remote working, distance learning, and cashless society (Piccinini et al., 2015). The adoption of new advanced digital technologies must be followed by preparedness of the people. Firms with higher degree of employee' digital readiness will result in greater productivity, thus likely to attain improved firm performance (Jun et al., 2021; Moldabekova et al., 2021).

In addition, strategic flexibility is also found to have significant and positive impact on Islamic rural bank's performance. This finding is in-line with previous studies that analysed the relationship between strategic flexibility on business performance (Cingöz and Akdoğan, 2013). In this study, digital readiness drives the strategic flexibility and innovativeness. Digital technologies have paved the way for developing innovative Shari'ah compliant products, which strengthen the competitive advantage of Islamic financial sector (Hasan et al., 2020).

Conclusion, limitation and recommendation

Conclusion

This study is aimed to investigate the impact of talent development toward digital readiness, strategic flexibility, innovativeness, and how these impact the business performance. Simultaneously, it investigates the mediating effect of strategic flexibility between digital readiness and innovativeness. According to the result, talent development significantly affects digital readiness, strategic flexibility, and innovativeness. Those variables also significantly affect the business performance. Furthermore, digital readiness significantly affects the company to be more flexible in developing their strategy, which also leads to more innovativeness. Overall, the proposed model explained 77.5% of the variance that can predict and explain the drivers of business performance in Islamic rural banks.

From the theoretical perspective, this study expands the literature of talent development where it provides a new framework that digital readiness, strategic flexibility, and innovativeness could lead to the business performance. By looking into the digital transformation in business processes, it has a significant impact on the structure of organizations, including their goals and identities (Holmström, 2022). On the other side, it also creates opportunities for information technology security threats such as cyber-attacks in the form of intrusion into organization's existing information technology through the distribution of malware, viruses, ransomware, and spam on users' emails, resulting in the attempted theft of sensitive data. Upgrading employees' skills in digital training courses strengthen organizations' defenses to protect company assets and information, increases employee discipline to comply with security regulations, reduces the risk of cyber-attacks, and increase customer satisfaction and trust. Thus, this study also assists future researchers in better understanding the relationship between cyber security readiness, technology readiness, and performance.

From the managerial perspective, this study can be used as a reference for Islamic rural banks to fully integrate its talent development strategy with digital transformation. Digital technology will create powerful banking and financial institutions

to completely reimagine how they operate, launch groundbreaking products and services, and, most importantly, reduce customer experience disruptions. One of the digital technology, Artificial intelligence (AI), has been used by this industry for customer identification and authentication. It helps the organization to enhance customer experiences and improve middle office function. In addition to AI, the existence of robotic process automation (RPA) and augmented reality also provide numerous benefits to businesses, such as improve customer experience and employee productivity, save money, time, and reduces the manual process.

However, many companies are facing increasing pressure to make digital investment as a strategic priority and to transform these investments into innovative business processes, new products, and business models. Digital investment, which refers to a firm's strategic technology investment in order to investigate how cutting-edge digital technologies may potentially differentiate the firm's business, transactions, and operations, is viewed as a critical imperative for firms seeking to remain competitive and maintain market positions. The success implementation of digital technology is not solely based on the investment, but also skills and competencies. It proved that the training and development program could improve the ability of an individual and organization to adapt with new changes in digital disruption and market conditions. Therefore, the manager and directors of Islamic rural banks develop organizational structure and boost the innovative culture.

Limitation and recommendation

For future research, there are several possible considerations: (1) the number of respondents is small compared to the total numbers of employees at Islamic rural banks in Indonesia. Thus, this study encouraged further research to expand the sample size that covers at least 80% of the population; (2) this research does not differentiate staff based on their unit/departments. Perhaps it is beneficial to include the adoption level of the digital readiness between different units to enrich the discussion; (3) the study only focused on strategic flexibility, digital readiness, and innovativeness as mediators. Further studies could expand the model by examining the perceptions of employee through several digital talent programs and compare these with employee performance; (4) the research model can be extended to the antecedents to predict digital readiness, such as organizational culture of using technologies.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

References

Aburime, T. (2008). Islamic banking theories, practices and insights for Nigeria. *Int. Rev. Bus. Res. Pap.* 5, 321–339.

Adhiatma, A., Fachrunnisa, O., and Rahayu, T. (2022). Creating digital ecosystem for small and medium enterprises: the role of dynamic capability, agile leadership and change readiness. *J. Sci. Technol. Pol. Manag.* doi: 10.1108/JSTPM-12-2020-0171 [Epub ahead of print].

Alabbadi, H., and Al-Masaeed, S. (2020). The impact of e-readiness on strategic flexibility. *Int. J. Manag. Enterp. Develop.* 19, 257–272. doi: 10.1504/IJMED.2020.108710

Ali, H. S. (2021). The role of firm innovativeness in the time of Covid-19 crisis: evidence from Chinese manufacturing firms. *Asian J. Technol. Innov.* 30, 689–714. doi: 10.1080/19761597.2021.1976063

Asokan, D. R., Huq, F. A., Smith, C. M., and Stevenson, M. (2022). Socially responsible operations in the industry 4.0 era: post-COVID-19 technology adoption and perspectives on future research. *Int. J. Operat. Product. Manag.* ahead-of-print. doi: 10.1108/IJOPM-01-2022-0069

Aziz, M. I., Afthanorhan, A., and Awang, Z. (2016). Talent development model for a career in Islamic banking institutions: a SEM approach. *Cogent Bus. Manag.* 3:1186259. doi: 10.1080/23311975.2016.1186259

Barclay, M. J., and Smith, C. W. Jr. (1995). The maturity structure of corporate debt. *J. Finance* 50, 609–631.

Barney, J. (1991). Firm resources and sustained competitive advantage. *J. Manag.* 17, 99–120. doi: 10.1177/014920639101700108

Baron, A. (2011). Measuring human capital. *Strategic HR Review* 10, 30–35. doi: 10.1108/14754391111108338

Benitez, J., Henseler, J., Castillo, A., and Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: guidelines for confirmatory and explanatory IS research. *Inf. Manag.* 57:103168. doi: 10.1016/j.im.2019.05.003

Bouranta, N., Psomas, E., and Antony, J. (2022). Human factors involved in lean management: a systematic literature review. *Total Qual. Manag. Bus. Excell.* 33, 1113–1145. doi: 10.1080/14783363.2021.1936481

Cabrilo, S., and Dahms, S. (2018). How strategic knowledge management drives intellectual capital to superior innovation and market performance. *J. Knowl. Manag.* doi: 10.1108/JKM-07-2017-0309

Cappelli, P. (2008). *Talent on Demand: Managing Talent in an Uncertain Age*. Boston, MA: Harvard Business School Press.

Charness, N., Ericsson, K. A., and Smith, J. (1991). *Toward a General Theory of Expertise: Prospects and Limits*. Cambridge: Cambridge University Press, 39–63.

Chen, Y., Wang, Y., Nevo, S., Benitez, J., and Kou, G. (2017). Improving strategic flexibility with information technologies: insights for firm performance in an emerging economy. *J. Inf. Technol.* 32, 10–25. doi: 10.1057/jit.2015.26

Choo, S., and Mokhtarian, P. L. (2007). Telecommunications and travel demand and supply: aggregate structural equation models for the US. *Transp. Res. A Policy Pract.* 41, 4–18. doi: 10.1016/j.tra.2006.01.001

Cingöz, A., and Akdoğan, A. A. (2013). Strategic flexibility, environmental dynamism, and innovation performance: an empirical study. *Procedia Soc. Behav. Sci.* 99, 582–589. doi: 10.1016/j.sbspro.2013.10.528

Dalal, R., and Akdere, M. (2018). Talent development: Status quo and future directions. *Ind. Commer. Train.* 50, 1–12.

Dibrell, C., Craig, J. B., and Neubaum, D. O. (2014). Linking the formal strategic planning process, planning flexibility, and innovativeness to firm performance. *J. Bus. Res.* 67, 2000–2007. doi: 10.1016/j.jbusres.2013.10.011

Direction S. (n.d.). Strategic flexibility and business performance: the need for cross-dimension alignment.

Disli, M., Aysan, A. F., and Abdelsalam, O. (2022). Favoring the small and the plenty: Islamic banking for MSMEs. *Economic Systems* 101051

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., et al. (2021). Setting the future of digital and social media marketing research: perspectives and research propositions. *Int. J. Inf. Manag.* 59:102168. doi: 10.1016/j.ijinfomgt.2020.102168

Eisenhardt, K. M., and Martin, J. A. (2000). Dynamic capabilities: what are they? *Strateg. Manag. J.* 21, 1105–1121. doi: 10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E

Fachrunnisa, O., Adhiatma, A., Lukman, N., and Ab Majid, M. N. (2020). Towards SMEs' digital transformation: the role of agile leadership and strategic flexibility. *J. Small Bus. Strateg.* 30, 65–85.

Farrington, T., and Alizadeh, A. (2017). On the impact of digitalization on R &D: R&D practitioners reflect on the range and type of digitalization's likely effects on R&D management. *Res. Technol. Manag.* 60, 24–30. doi: 10.1080/08956308.2017.1348130

Ferraresi, A. A., Quandt, C. O., dos Santos, S. A., and Frega, J. R. (2012). Knowledge management and strategic orientation: leveraging innovativeness and performance. *J. Knowl. Manag.* 16, 688–701. doi: 10.1108/13673271211262754

Flannelly, L. T., Flannelly, K. J., and Jankowski, K. R. (2014). Independent, dependent, and other variables in healthcare and chaplaincy research. *J. Health Care Chaplain.* 20, 161–170. doi: 10.1080/08854726.2014.959374

Gandz, J. (2006). Talent development: the architecture of a talent pipeline that works. *Ivey Bus. J.* 70, 1–4.

Garavan, T. N., Carbery, R., and Rock, A. (2012). Mapping talent development: definition, scope and architecture. *Eur. J. Train. Develop.* 36, 5–24. doi: 10.1108/03090591211192601

Garcia, R., and Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *J. Product Innovat. Manag.* 19, 110–132. doi: 10.1111/1540-5885.1920110

Gathungu, J. M., and Mwangi, J. K. (2012). Dynamic capabilities, talent development and firm performance.

Gist, M. E., Schwoerer, C., and Rosen, B. (1989). Effects of alternative training methods on self-efficacy and performance in computer software training. *J. Appl. Psychol.* 74:884. doi: 10.1037/0021-9010.74.6.884

Gong, C., and Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation* 102:102217. doi: 10.1016/j.technovation.2020.102217

Gotteland, D., Shock, J., and Sarin, S. (2020). Strategic orientations, marketing proactivity and firm market performance. *Ind. Mark. Manag.* 91, 610–620. doi: 10.1016/j.indmarman.2020.03.012

Gouda, G. K., and Tiwari, B. (2021). Talent agility, innovation adoption and sustainable business performance: empirical evidences from Indian automobile industry. *Int. J. Product. Perform. Manag.* 71, 2582–2604. doi: 10.1108/IJPPM-02-2021-0071

Hair, J. F. Jr., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2021). A primer on partial least squares structural equation modeling (PLS-SEM). *Sage Publicat.* 38, 220–221.

Hair, J. F. Jr., Sarstedt, M., Hopkins, L., and Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): an emerging tool in business research. *Eur. Bus. Rev.* 26, 106–121. doi: 10.1108/EBR-10-2013-0128

Hameed, N. S. S., Salamzadeh, Y., Rahim, N. F. A., and Salamzadeh, A. (2021). The impact of business process reengineering on organizational performance during the coronavirus pandemic: moderating role of strategic thinking. *Foresight* doi: 10.1108/fs-02-2021-0036 [Epub ahead of print].

Hamel, G. (2009). Moon shots for management. *Harv. Bus. Rev.* 87, 91–98.

Hasan, R., Hassan, M. K., and Aliyu, S. (2020). Fintech and Islamic finance: literature review and research agenda. *Int. J. Islamic Econ. Fin.* 3, 75–94. doi: 10.18196/ijief.2122

Hedayati Mehdiabadi, A., and Li, J. (2016). Understanding talent development and implications for human resource development: an integrative literature review. *Hum. Resour. Dev. Rev.* 15, 263–294. doi: 10.1177/1534484316655667

Hewapathirana, G. I., and Almasri, F. (2021). Talent development challenges and opportunities in the 4th Industrial revolution: A boundaryless career theory perspectives. Fourth Industrial Revolution and Business Dynamics, 287–320.

Hicks, K. (2016). Construct validation of strategic alignment in learning and talent development. *Perform. Improv. Q.* 28, 71–89. doi: 10.1002/piq.21210

Hitt, M. A., Keats, B. W., and DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *AMP* 12, 22–42.

Hogan, S. J., and Coote, L. V. (2014). Organizational culture, innovation, and performance: a test of Schein's model. *J. Bus. Res.* 67, 1609–1621. doi: 10.1016/j.jbusres.2013.09.007

Holmström, J. (2022). From AI to digital transformation: The AI readiness framework. *Bus. Horiz.* 65, 329–339. doi: 10.1016/j.bushor.2021.03.006

Horrigan, J. B. (2016). *Digital Readiness Gaps*. Washington: Pew Research Center.

Hult, G. T. M., Hurley, R. F., and Knight, G. A. (2004). Innovativeness: its antecedents and impact on business performance. *Ind. Mark. Manag.* 33, 429–438. doi: 10.1016/j.indmarman.2003.08.015

Ibeh, K., and Debrah, Y. A. (2011). Female talent development and African business schools. *J. World Bus.* 46, 42–49. doi: 10.1016/j.jwb.2010.05.016

Joshi, A., Kale, S., Chandel, S., and Pal, D. K. (2015). Likert scale: explored and explained. *Br. J. Appl. Sci. Technol.* 7:396. doi: 10.9734/BJAST/2015/14975

Jun, W., Nasir, M. H., Yousaf, Z., Khattak, A., Yasir, M., Javed, A., et al. (2021). Innovation performance in digital economy: does digital platform capability, improvisation capability and organizational readiness really matter? *Eur. J. Innovat. Manag.* doi: 10.1108/EJIM-10-2020-0422 [Epub ahead of print].

Kafetzopoulos, D. (2022). Talent development: a driver for strategic flexibility, innovativeness and financial performance. *EuroMed J. Bus.*, ahead-of-print. doi: 10.1108/EMJB-02-2022-0042

Kafetzopoulos, D., Psomas, E., and Bouranta, N. (2022). The influence of leadership on strategic flexibility and business performance: the mediating role of talent management. *Manag. Dec.* doi: 10.1108/MD-10-2021-1310 [Epub ahead of print].

Kafetzopoulos, D., Psomas, E., and Skalkos, D. (2019). Innovation dimensions and business performance under environmental uncertainty. *Eur. J. Innov. Manag.* 23, 856–876. doi: 10.1108/EJIM-07-2019-0197

Kandemir, D., Yaprak, A., and Cavusgil, S. T. (2006). Alliance orientation: conceptualization, measurement, and impact on market performance. *J. Acad. Mark. Sci.* 34, 324–340. doi: 10.1177/0092070305285953

Kaye, B. (2011). *Up is Not the Only Way: A Guide to Developing Workforce Talent*. UK: Hachette.

Keuangan, O. J. (2020). Statistik perbankan Indonesia. Available at: https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Desember-2020.aspx

Keuangan, O. J. (2021). Statistik perbankan Indonesia. Available at: https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Desember-2021.aspx

Keuangan, O. J. (2022). Statistik perbankan Indonesia. Available at: https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Agustus-2022.aspx

Khan, M. A., Azizah, M., and Ullah, S. (2019). A fractional model for the dynamics of competition between commercial and rural banks in Indonesia. *Chaos, Solitons Fractals* 122, 32–46. doi: 10.1016/j.chaos.2019.02.009

Khin, S., and Ho, T. C. (2018). Digital technology, digital capability and organizational performance: a mediating role of digital innovation. *Int. J. Innovat. Sci.* 11, 177–195. doi: 10.1108/IJIS-08-2018-0083

Kowalczyk, C. M., and Pounders, K. R. (2016). Transforming celebrities through social media: the role of authenticity and emotional attachment. *JPBM* doi: 10.1108/JPBM-09-2015-0969

Kristal, M. M., Huang, X., and Roth, A. V. (2010). The effect of an ambidextrous supply chain strategy on combinative competitive capabilities and business performance. *J. Oper. Manag.* 28, 415–429. doi: 10.1016/j.jom.2009.12.002

Kyrgidou, L. P., and Spyropoulou, S. (2013). Drivers and performance outcomes of innovativeness: an empirical study. *Br. J. Manag.* 24, 281–298. doi: 10.1111/j.1467-8551.2011.00803.x

Laurenza, E., Quintano, M., Schiavone, F., and Vrontis, D. (2018). The effect of digital technologies adoption in the healthcare industry: a case based analysis. *Bus. Process. Manag. J.* 24, 1124–1144. doi: 10.1108/BPMJ-04-2017-0084

Lokuge, S., Sedera, D., Grover, V., and Dongming, X. (2019). Organizational readiness for digital innovation: development and empirical calibration of a construct. *Inf. Manag.* 56, 445–461. doi: 10.1016/j.im.2018.09.001

Lumpkin, G. T., and Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad. Manag. Rev.* 21, 135–172. doi: 10.2307/258632

Martínez-Caro, E., Cegarra-Navarro, J. G., and Alfonso-Ruiz, F. J. (2020). Digital technologies and firm performance: the role of digital organisational culture. *Technol. Forecast. Soc. Chang.* 154:119962. doi: 10.1016/j.techfore.2020.119962

Matt, C., Hess, T., and Benlian, A. (2015). Digital transformation strategies. *Bus. Inf. Syst. Eng.* 57, 339–343. doi: 10.1007/s12599-015-0401-5

Mehmetoglu, M., and Venturini, S. (2021). *Structural Equation Modelling with Partial Least Squares Using Stata and R*. New York: Chapman and Hall/CRC.

Miller, D., and Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: two models of strategic momentum. *Strateg. Manag. J.* 3, 1–25. doi: 10.1002/smj.4250030102

Mithas, S., Ramasubbu, N., and Sambamurthy, V. (2011). How information management capability influences firm performance. *MIS Q.* 35, 237–256. doi: 10.2307/23043496

Moeini Gharagozloo, M. M., Askarzadeh, F., and Moeini Gharagozloo, A. (2021). More power for international entrepreneurs: the effect of digital readiness of economies on channeling national R&D resources to entrepreneurship. *J. Int. Entrep.* 20, 1–29. doi: 10.1007/s10843-021-00296-6

Moldabekova, A., Philipp, R., Satybaldin, A. A., and Prause, G. (2021). Technological readiness and innovation as drivers for logistics 4.0. *J. Asian Finan. Econ. Bus.* 8, 145–156.

Muia, S. W. (2017).The effect of financial innovations on financial performance of commercial banks in Kenya (Doctoral dissertation) Kca University, Nairobi.

Mujiono, M. N. (2021). The shifting role of accountants in the era of digital disruption. *Int. J. Multidiscipl.* 2, 1259–1274. doi: 10.11594/10.11594/ijmaber.02.11.18

Nachit, H., and Belhcen, L. (2020). Digital transformation in times of COVID-19 pandemic: the case of Morocco. *SSRN Electr. J.* 395, 931–934.

Nadkarni, S., and Herrmann, P. O. L. (2010). CEO personality, strategic flexibility, and firm performance: the case of the Indian business process outsourcing industry. *Acad. Manag. J.* 53, 1050–1073. doi: 10.5465/amj.2010.54533196

Nambisan, S., Lyytinen, K., Majchrzak, A., and Song, M. (2017). Digital innovation management: reinventing innovation management research in a digital world. *MIS Q.* 41, 223–238. doi: 10.25300/MISQ/2017/41:1.03

Nassani, A. A., and Aldakhil, A. M. (2021). Tackling organizational innovativeness through strategic orientation: strategic alignment and moderating role of strategic flexibility. *Eur. J. Innov. Manag.* doi: 10.1108/EJIM-04-2021-0198

Nguyen, K. (2022). Employee and Team Digital Readiness.

Noparumpa, T., Ruangkanjanases, A., and Hariguna, T. (2021). Organization benefit as an outcome of organizational security adoption: the role of cyber security readiness and technology readiness. *Sustainability* 13:13761. doi: 10.3390/su132413761

Nwankpa, J. K., and Roumani, Y. (2016). IT capability and digital transformation: A firm performance perspective.

Panda, S., and Sahoo, C. K. (2015). Strategic talent development interventions: an analysis. *Industrial and Commercial Training.* doi: 10.1108/ICT-05-2014-0031

Papagiannidis, S., Harris, J., and Morton, D. (2020). WHO led the digital transformation of your company? A reflection of IT related challenges during the pandemic. *Int. J. Inf. Manag.* 55:102166. doi: 10.1016/j.ijinfomgt.2020.102166

Piccinini, E., Gregory, R. W., and Kolbe, L. M. (2015). Changes in the producer-consumer relationship-towards digital transformation.

Prentice, C., Dominique Lopes, S., and Wang, X. (2020). The impact of artificial intelligence and employee service quality on customer satisfaction and loyalty. *J. Hosp. Market. Manag.* 29, 739–756. doi: 10.1080/19368623.2020.1722304

Pruis, E. (2011). The five key principles for talent development. *Ind. Commer. Train.* doi: 10.1108/00197851111137825

Ringle, C. M., Wende, S., and Becker, J. M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH.

Rizky, U. D., and Mongid, A. (2022). Stress Test of Financing Quality at Islamic Rural Bank in Indonesia Using Montecarlo Simulation. 147–154.

Rizwan, M. S., Ahmad, G., and Ashraf, D. (2020). Systemic risk: The impact of COVID-19. *Finance Res. Lett.* 36:101682. doi: 10.1016/j.frl.2020.101682

Ruan, Y., and Mezei, J. (2022). When do AI chatbots lead to higher customer satisfaction than human frontline employees in online shopping assistance? Considering product attribute type. *J. Retail. Consum. Serv.* 68:103059. doi: 10.1016/j.jretconser.2022.103059

Sakai, M. (2014). Establishing social justice through financial inclusivity: Islamic propagation by Islamic savings and credit cooperatives in Indonesia. *TRaNS* 2, 201–222. doi: 10.1017/trn.2014.4

Schreuder, R., and Noorman, S. (2019). Strategic talent development–making the best people in crucial positions better. *Strateg. HR Rev.* doi: 10.1108/SHR-04-2019-0034

Scullion, H., and Collings, D. G. (2011). "Global talent management: Introduction" in *Global Talent Management* (London: Routledge), 19–32.

Sekaran, U., and Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*. Chichester: John Willey & Sons.

Sheel, A., and Nath, V. (2019). Effect of blockchain technology adoption on supply chain adaptability, agility, alignment and performance. *Manag. Res. Rev.* 42, 1353–1374. doi: 10.1108/MRR-12-2018-0490

Simon, A., Bartle, C., Stockport, G., Smith, B., Klobas, J. E., and Sohal, A. (2015). Business leaders' views on the importance of strategic and dynamic capabilities for successful financial and non-financial business performance. *Int. J. Product. Perform. Manag.* 64, 908–931. doi: 10.1108/IJPPM-05-2014-0078

Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D. Available at https://digilib.unigres.ac.id/index.php?p=show_detail&id=43 (Accessed November 21, 2022).

Susanty, A. I., Budiharjo, E., and Winarto, W. (2022). Achieving an agile organisation in an Indonesian telecommunications company: investigation on leadership impact and mediation variables. *J. Sci. Technol. Policy Manag.* doi: 10.1108/jstpm-07-2021-0095 [Epub ahead of print].

Tabrizi, B., Lam, E., Girard, K., and Irvin, V. (2019). Digital transformation is not about technology. *Harv. Bus. Rev.* 13, 1–6.

Teece, D. J., Pisano, G., and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strateg. Manag. J.* 18, 509–533. doi: 10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

Trischler, M. F. G., and Li-Ying, J. (2022). Digital business model innovation: toward construct clarity and future research directions. *RMS* 1–30. doi: 10.1007/s11846-021-00508-2

Tsai, K. H., and Yang, S. Y. (2013). Firm innovativeness and business performance: The joint moderating effects of market turbulence and competition. *Ind. Mark. Manag.* 42, 1279–1294. doi: 10.1016/j.indmarman.2013.06.001

Tsou, H. T., and Chen, J. S. (2021). How does digital technology usage benefit firm performance? Digital transformation strategy and organisational innovation as mediators. *Tech. Anal. Strat. Manag.* 33, 1–14. doi: 10.1080/09537325.2021.1991575

Van Raaij, E. M., and Schepers, J. J. (2008). The acceptance and use of a virtual learning environment in China. *Comput. Educ.* 50, 838–852. doi: 10.1016/j.compedu.2006.09.001

Van Rompuy, H. (2012). *An Overview of the EFQM Excellence Model*. Belgium: European Foundation for Quality Management.

Vyas, V., and Jain, P. (2021). Role of digital economy and technology adoption for financial inclusion in India. *Indian Growth Develop. Rev.* 14, 302–324. doi: 10.1108/IGDR-01-2020-0009

Wade, M., and Shan, J. (2020). Covid-19 has accelerated digital transformation, but may have made it harder not easier. *MIS Q. Exec.* 19, 213–220.

Wasko, M. M., and Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Q.* 35–57. doi: 10.2307/25148667

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implement. Sci.* 4, 1–9. doi: 10.1186/1748-5908-4-67

Welter, F. (2011). Contextualizing entrepreneurship—conceptual challenges and ways forward. *Entrep. Theory Pract.* 35, 165–184. doi: 10.1111/j.1540-6520.2010.00427.x

Whitelaw, S., Mamas, M. A., Topol, E., and Van Spall, H. G. (2020). Applications of digital technology in COVID-19 pandemic planning and response. *Lancet Digit. Health* 2, e435–e440. doi: 10.1016/S2589-7500(20)30142-4

Wibisono, C., and Harto, R. B. (2018). Effects Rahn, Ijaroh, customer satisfaction through qual-ity of service in. PT. sharia rural Bank Syarikat Madani. *Int. J. Engin. Technol.* 7, 1026–1032. doi: 10.14419/ijet.v7i2.29

Widiana, D., and Soetjipto, B. W. (2021). "The role of psychological capital, trust, ambidexterity and strategic flexibility on organizational resilience and survival in dealing with covid-19 pandemic." in *3rd International Conference on Business and Management of Technology (ICONBMT 2021)*. Atlantis Press, 107–115.

Wold, H. (1980). "Model construction and evaluation when theoretical knowledge is scarce: theory and application of partial least squares," in *Evaluation of Econometric Models* (Cambridge: Academic Press), 47–74.

World Bank Group (2016). *World Development Report 2016: Digital Dividends*. Washington: World Bank Publications.

Xiao, H., Yang, Z., and Hu, Y. (2021). Influencing mechanism of strategic flexibility on corporate performance: the mediating role of business model innovation. *Asia Pac. Bus. Rev.* 27, 470–492. doi: 10.1080/13602381.2021.1896256

Xiu, L., Liang, X., Chen, Z., and Xu, W. (2017). Strategic flexibility, innovative HR practices, and firm performance: a moderated mediation model. *Pers. Rev.* 46, 1335–1357. doi: 10.1108/PR-09-2016-0252

Yang, J., Zhang, F., Jiang, X., and Sun, W. (2015). Strategic flexibility, green management, and firm competitiveness in an emerging economy. *Technol. Forecast. Soc. Chang.* 101, 347–356. doi: 10.1016/j.techfore.2015.09.016

Yeniyurt, S., Wu, F., Kim, D., and Cavusgil, S. T. (2019). Information technology resources, innovativeness, and supply chain capabilities as drivers of business performance: a retrospective and future research directions. *Ind. Mark. Manag.* 79, 46–52. doi: 10.1016/j.indmarman.2019.03.008

Yıldız, S., Baştürk, F., and Boz, İ. T. (2014). The effect of leadership and innovativeness on business performance. *Procedia Soc. Behav. Sci.* 150, 785–793. doi: 10.1016/j.sbspro.2014.09.064

Zahra, S. A., Neubaum, D. O., and El-Hagrassey, G. M. (2002). Competitive analysis and new venture performance: understanding the impact of strategic uncertainty and venture origin. *Entrep. Theory Pract.* 27, 1–28. doi: 10.1111/1540-8520.t01-2-00001

Zhao, X., Lynch, J. G. Jr., and Chen, Q. (2010). Reconsidering baron and Kenny: myths and truths about mediation analysis. *J. Consum. Res.* 37, 197–206. doi: 10.1086/651257

10.3389/feduc.2022.1045729

Appendix

TABLE A1 Coefficient of determination.

Variable	*R* square	*R* square adjusted
Business Performance	0.775	0.773
Digital Readiness	0.71	0.709
Innovativeness	0.778	0.777
Strategic Flexibility	0.77	0.769

TABLE A2 Multicollinearity.

	BF1	BF2	BF3	BF4	DR1	DR2	DR3	DR4	I1	I2	I3	I4	SF1	SF2	SF3	TD1	TD2	TD3
VIF	2.4	2	2.5	2.2	2.2	2.3	2.6	1.7	2.1	2	2.3	2.3	2	2.5	2.8	1.8	3.2	3.7
	21	98	89	26	49	84	74	40	95	47	21	48	1	61	1	2	57	20