RESEARCH ARTICLE

published:31 July 2023
doi: 10.21070/jas.v7i2.1725

The Impact Of Human Capital Readiness On Business Performance : The Mediating Role Of Innovation Capability

Linda Sutanto[1], Bambang Tjahjadi[2], Fiona Niska Dinda Nadia[3]*
[1] *Postgraduate School, Human Resource Development Program, Universitas Airlangga, Indonesia*
[2] *Postgraduate School and Faculty of Economics and Business, Universitas Airlangga, Indonesia*

This study makes a significant contribution by empirically investigating the role of innovation capabilities as a mediator between human capital readiness and business performance, employing a structural equation model within resource-based theory. The research adopts a quantitative cross-sectional study approach with 268 MSME's respondents out of a sample of 279, with a high response rate of 96 percent, offering advantages in data collection and analysis compared to longitudinal studies. The findings reveal the positive impact of human capital readiness on business performance and innovation capability's influence on business performance, with innovation capability serving as a vital intermediary between human capital readiness and business performance. The research provides compelling evidence of the interplay between these factors in Indonesian MSMEs, enhancing our understanding of their interactions. SME owners and managers in Indonesia are strongly advised to prioritize implementing an innovation strategy to foster capabilities, enabling them to navigate dynamic environmental changes and achieve sustained success.

Keywords: Human Capital Readiness, Innovation Capability, Business Performance, MSMEs

OPEN ACCESS
ISSN 2548-3501 (online)

*Correspondence:
Linda Sutanto
linda.tanto@gmail.com

received:09 May 2023
Accepted:24 July 2023
Published:31 July 2023
Citation: Linda and Bambang (2023) **The Impact of Human Capital Readiness On Business Performance : The Mediating Role of Innovation Capability**

INTRODUCTION

MSMEs play a crucial role in driving economic growth and job creation in developing countries (Agwu & Emeti, 2014; Javalgi & Todd, 2011; Shibia & Barako, 2017), but they face fierce competition in the global market (Cerrato & Piva, 2012; Onkelinx et al., 2016; Sadeghi & Biancone, 2018). To enhance their business performance, investing in human capital becomes imperative for MSMEs (Cerrato & Piva, 2012; Inmyxai & Takahashi, 2010; Khalique et al., 2018; Onkelinx et al., 2016) as it directly contributes to creating economic value (Marvel et al., 2016; Onkelinx et al., 2016; Jogaratnam, 2017). Human resource readiness plays a pivotal role in aligning with organizational strategy, supporting internal business operations (Kaplan & Norton, 2004), and fostering innovative behavior, which is essential for entrepreneurship and maintaining a competitive advantage (Kirzner, 1979; Miller, 1983; Schumpeter, 1934; Zahra & Covin, 1993).

Moreover, innovation capability significantly impacts corporate performance, allowing businesses to cultivate innovative capabilities that drive growth and ensure long-term success (Oura et al., 2016; Zhang & Hartley, 2018; O'Cass & Sok, 2014). However, previous studies have produced mixed findings on the relationship between human resources (HR) and business performance (Cabrilo & Dahms, 2018; Costa et al., 2014; Scafarto et al., 2016; Chahal et al., 2016; Hejazi et al., 2016; Jogaratnam, 2017; Tjahjadi et al., 2022). To address this complexity, further investigation is warranted to explore the intricate interplay between HR, innovation capability, and business performance, focusing on MSMEs in Indonesia. Managerial and theoretical implications of the study recommend MSME managers in Indonesia to invest in human capital development and foster innovation for enhanced productivity, adaptability, and competitiveness, while also enriching our understanding of the interplay between human capital readiness, innovation capabilities, and business performance through the lens of the Resource-Based View (RBV) theory.

LITERATURE REVIEW

Resource-Based View (RBV)

Resource-Based View (RBV) prioritizes using internal resources for business success, requiring valuable, scarce, difficult to replicate, and irreplaceable resources (Barney, 1991; Chabowski & Mena, 2017; Jogaratnam, 2017). These resources may be used to optimize product market activities, generate more cost-effective goods, and fulfil the expectations of consumers (Peteraf, 1993; Wernerfelt, 1984). Firms must employ advantage techniques that competitors cannot replicate to establish long-term competitive advantage (Barney, 1991; Newbert, 2008). RBV's influence on sustainable competitive advantage is described in (Barney, 1991). framework, which is the first formalized RBV framework (Newbert, 2008). To gain a competitive advantage, firms must manage intangible assets, which are strategic resources that match RBV criteria. (Fareed et al., 2016; Jogaratnam, 2017; Kristandl & Bontis, 2007; Onkelinx et al., 2016). Human capital readiness, comprising knowledge, skills, and values, aligns with the RBV theory's focus on firm-specific resources. Organizations with a well-prepared and skilled workforce are more likely to possess valuable and inimitable human capital that can contribute to their overall competitive advantage. The study investigating the relationship between human capital readiness and business performance aligns with RBV's core principles as it explores how a specific resource (human capital) can impact firm performance. Furthermore, the mediating role of innovation capability in the relationship between human capital readiness and business performance also resonates with the RBV theory. Innovation capability is considered a dynamic capability that allows firms to create and deploy new ideas, technologies, and processes to adapt to changing market conditions and gain a competitive edge. In the context of the RBV theory, innovation capability is viewed as an outcome of firms leveraging their valuable resources, including human capital, to generate new and unique innovations that can lead to improved business performance.

Knowledge Management

Knowledge is a strategic asset that impacts business performance (Darroch, 2005; Dayan et al., 2017; Michaelis et al., 2015; Muthuveloo et al., 2017; Nonaka & Takeuchi, 1995). Effective knowledge management integrates human capital and employee-owned information to generate economic value (Dayan et al., 2017; Kianto et al., 2016; Omotayo, 2015). Knowledge management assists corporate in creating various knowledge to produce superior goods by implementing an effective method to gather, use, and reuse information inside the company (Harlow, 2008; Muthuveloo et al., 2017). The systematic process of selecting internally held information that might help the firm is known as knowledge management (Muthuveloo et al., 2017; Roy, 2002; Harlow, 2008). It is the basis for developing and managing organizational competencies (Berio & Harzallah, 2005; Carlucci et al., 2004).

Human Capital Readiness

Human capital is an intangible resource that meets RBV requirements (Barney, 1991; Jogaratnam, 2017; Onkelinx et al., 2016; Fareed et al., 2016). It is unique, uncommon, and irreplaceable (Ngah & Ibrahim, 2011), and its value can be measured in monetary terms (Marvel et al., 2016; Onkelinx et al., 2016; Schultz, 1961). Human capital can boost productivity, labour demand, and economic growth (Bergheim, 2005). The greater the readiness of human capital, the sooner intangible assets contribute to cash creation, which may be achieved through more sales and lower expenditures (Kaplan & Norton, 2004). Human capital readiness is critical to internal operations that impact the business success (Kaplan & Norton, 2004).

Innovation Capability

According to (Dobni, 2010), innovation is an organizational capability for organizations that create value through new product/service development. Innovation capability has been identified as a business's crucial organizational capability for deploying resources in novel ways to create value. It has been shown to have a beneficial influence on firm performance (Yang et al., 2009). Developing innovation capabilities is crucial for an organization's growth and survival (Francis & Bessant, 2005). (Smith et al., 2008; Kallio et al., 2012; Saunila & Ukko, 2011) identified seven areas for innovation capability: participative leadership culture, ideation and organizing frameworks, work atmosphere and welfare, know-how development, rejuvenation, external knowledge, and individual action.

Business Performance

Business performance results from the organization's work in

a certain period. (Pintea & Achim, 2010) state that performance will always be a contested concept in continuous development. Some researchers define business performance as the organization's ultimate goal, which is further used as information to improve future performance (Masa'deh et al., 2018; Pintea & Achim, 2010; Lee et al., 2015). Other researchers prove that business performance is obtained through organizational resources (Jogaratnam, 2017; Lonial & Carter, 2015). In their research, (Chahal et al., 2016; Sung & Choi, 2014) prove that business performance is related to individuals' ability to contribute to the organization. On the other hand, (Muthuveloo et al., 2017; Wang et al., 2015) revealed that performance is the center of all organizational operations, as it determines the organization's survival.

Human Capital Readiness and Business Performance

Human capital readiness, encompassing knowledge, skills, and values, has been widely recognized as a key factor that can confer a competitive advantage upon firms (Jogaratnam, 2017; Fareed et al., 2016). The possession of employee knowledge has been linked to the creation of competitive advantages (Kaplan & Norton, 2004) and has been deemed indispensable for the success of Micro, Small, and Medium Enterprises (MSMEs) (Inmyxai & Takahashi, 2010; Onkelinx et al., 2016; Khalique et al., 2018). Numerous studies have evidenced that the development of human capital significantly enhances productivity and organizational performance (Inmyxai & Takahashi, 2010; Khalique et al., 2018; Onkelinx et al., 2016). Moreover, human capital readiness has been shown to facilitate the transformation of intangible assets into tangible cash, thereby underscoring its pivotal role in contributing to overall business success (Kaplan & Norton, 2004). Based on this description, the following hypotheses can be developed;

H1: Human capital readiness positively affects business performance

Human Capital Readiness and Innovation Capability

The impact of human capital on firm innovation has been extensively examined, with the consensus that robust human capital would boost firm innovativeness (Manzaneque et al., 2017; Wu. et al., 2008). However, empirical investigations have yielded inconclusive results. (Subramaniam & Youndt, 2005) showed a negative relationship between human capital and radical innovation, and (Chen et al., 2014; Duodu & Rowlinson, 2020) found no evidence of a link between human capital and corporate innovation. However, (Protogerou et al., 2017; Kato et al., 2015; Agostini et al., 2017) discovered positive links between human capital and innovation in new and small enterprises. (McKelvie & Davidsson, 2009) found no significant relationship between founder human capital and competence development. More evidence on the impact of human capital on innovation potential is required, especially in the context of startup businesses (Foo et al., 2005). Companies that spend on enhancing the quality of their human capital are more inclined to boost the efficiency and effectiveness of their innovative initiatives (Ardito et al., 2015). As a result, the following hypothesis will be evaluated using new information from Indonesian MSMEs:

H2. Human capital readiness positively affects innovation capability.

Innovation Capability and Business Performance

Most studies in small enterprises found a positive relationship between innovation capabilities and company success (O'Cass & Sok, 2014; Oura et al., 2016; Zhang & Hartley, 2018). According to the review, new product performance (Zhang & Hartley, 2018), brand performance (Odoom & Mensah, 2019), and overall form performance (Dadfar et al., 2013; Keskin, 2006; Odoom & Mensah, 2019) are all connected to innovation capabilities. (Dadfar et al., 2013) it is stated that successful organizational structure, learning, procedures, and partnerships with vendors, consumers, and different networks are all prerequisites for this interaction. Past research has demonstrated that enhanced corporate success is encouraged by innovation capability (Rajapathirana & Hui, 2018). According to the findings of (Widjajanti et al., 2017), innovation capabilities have a beneficial effect on the marketing performance of MSMEs. Based on the preceding description, the hypothesis:

H3. Innovation capability positively affect business performance

Mediating Role of Innovation Capability in Human Capital Readiness and Business Performance

Empirical studies suggest that human capital is strongly linked to innovation. Skilled and knowledgeable workers who are specialists in their fields and have innovative and creative abilities can generate more original ideas, leading to improved innovation capabilities (Romijn & Albaladejo, 2002; Donate et al., 2016). A larger pool of human capital can lead to improved inventive performance (Donate et al., 2016; Subramaniam & Youndt, 2005). Innovation capability is critical to performance, with innovative behavior generating new and valuable things that improve organizational performance (Savitz et al., 2000; Collins & Clark, 2003). Therefore, the following hypothesis is proposed:

H4: Innovation capability mediates the relationship between human capital readiness and business performance.

METHODS

This research uses quantitative methods with a cross-sectional study approach and conduct on MSMEs. This cross-sectional study approach in MSME research has significant advantages in collecting data and analyzing the relationship between the variables studied. By collecting data at one particular point in time, researchers can obtain an accurate picture of the characteristics of MSMEs at that time. In addition, this approach is more efficient because it does not require involvement over a long period like the longitudinal study approach.. Based on data from the Department of Cooperatives and SMEs East Java Province, there are 1,004 standardized MSMEs. Using the formula (Slovin, 1960) determined the number of samples taken in this study with a confidence level of 95% and a margin of error of 5%; a sample of 279 respondents was obtained. Two hundred sixty-eight respondents got involved in the research study, with 96 percent response rate. Figure 1 illustrates the conceptual framework for this research.

[Figure 1 about here.]

Research Variable and Operational Definitions

In this study, human capital readiness is defined operationally as respondents' perceptions of employees' readiness to carry out business operations to accomplish the company's plan. Knowledge, skills, and values are the three elements of human capital readiness, as defined by (Kaplan & Norton, 2004) and (Tjahjadi et al., 2022). A total of 7 statements were measured

on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Innovation capability refers to an organization's critical ability to produce resources in new ways to create value. This study, like (Saunila & Ukko, 2011), employs seven components of innovation capability: participative leadership culture, ideation and organizational structures, work climate and welfare, know-how development, regeneration, external knowledge, and individual activity. The perceived innovation capability is measured using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Business performance is defined operationally as respondents' opinions about the results of managing company resources, both financial and non-financial performance, in a certain period. According to (Kaplan & Norton, 2004) and (Tjahjadi et al., 2022), business performance includes four elements: financial performance, consumer performance, internal performance, growth performance, and learning. A total of 12 statements were measured on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). Table 1 below shows the measurement items used in this study.

[Table 1 about here.]

Table 2 displays the responses of the respondents. The mean value of 4.157 suggested that MSME owners or managers agreed on the necessity of human capital readiness. The mean value of 4.075 suggested agreement on the significance of innovation capability. Furthermore, the mean value of 4.068 demonstrated managers' comprehension of improving business performance.

[Table 2 about here.]

RESULTS

Variance-based structural equation modelling was used to evaluate the hypotheses. PLS (partial least squares) WARP 5.0 software was used to analyze the data. The use of PLS in this investigation was supported for the following reasons. For starters, no normal distribution assumption is required. (Chin & Newsted, 1999). Second, it can handle multicollinearity among independent variables. Finally, it addresses the issue of sample size limitation.

PLS investigates both measurement and the structural model. The measuring model defines the connection between indicators and constructs. The measuring model evaluates the dependability and validity of construct-related indicators. In the meanwhile, the structural model describes the link between constructions. As a result, PLS is utilized to evaluate the validity of components within the overall model (Chenhall, 2005).

In order to investigate the relationship between indicators and constructs, this study used a measuring technique to analyze the reliability and validity of certain constructs. Table 3 displays the findings of data analysis following the second repetition.

Measurement Model Analysis

In order to assess the relationship between indicators and constructs, this study used a measuring technique to analyze the reliability and validity of certain constructs. Table 3 shows the results of data analysis after the second iteration. In the first iteration, BP5 (Customer complaints have tended to decline) resulted in loading factor values of 0.365. Measurement items whose values are invalid are removed for further data analysis. In the second iteration, each indicator's loading value satisfies convergent conditions (above 0.60) and significant validity (less than 0.0001). The value indicates that the indicator contributes at least 60% of the variance in the underlying concept (Chin, 1998). The composite reliability coefficient for all constructions is more than the standard level of 0.70, as proposed by (Nunnaly, 1967).

Concept validity is evaluated using convergent validity and discriminant validity. According to (Hulland, 1999), an average variance extracted (AVE) of 0.50 or above is used to determine convergent validity. As shown in Table 3, the AVEs of all constructs in this investigation are greater than 0.50, indicating sufficient convergent validity.

[Table 3 about here.]

The discriminant's validity is determined by comparing the square root of the AVE to the correlation between constructs. When the square root of the AVE is larger than the correlation between the construct and other constructs, it is valid. The off-diagonal correlation and the square root of the AVE on the diagonal are shown in Table 4. Because all diagonal elements are greater than the corresponding off-diagonal elements, AVE indicates the discriminant's validity. Overall, it concludes that the measurement model is valid.

[Table 4 about here.]

Structural Model Analysis

A structural model analysis is used to test hypotheses that have been formulated. This model determines the effect of human capital readiness on business performance directly or mediated by innovation capability. This study employs structural model analysis in the steps of (Baron & Kenny, 1986): (1) examine the effect of human capital readiness on business performance directly; (2) examine innovation capability as a mediating variable on the impact of human capital readiness on business performance. Table 5 presents the results of the structural model analysis.

Table 5 (Panel A) indicates that human capital readiness has a positive effect on business performance (Coefficient β: 0.219; p-value <0.01; R^2 = 0.451). Thus, the first hypothesis that states human capital readiness positively affects business performance is supported. Further analysis was performed by adding innovation capability as a mediating variable (Panel B). The results show that human capital readiness positively affects innovation capability (Coefficient β: 0.429; p-value <0.01; R^2 = 0.184), so the second hypothesis is that human capital readiness has a positive effect on innovation capability is supported. Innovation capability positively affects business performance (Coefficient β: 0.548; p-value <0.01; R^2 = 0.451), so the third hypothesis that states innovation capability positively affects business performance is supported.

The effect of human capital readiness on business performance after mediated innovation capability remains significant (Coefficient β: 0.454; p-value <0.01), so the fourth hypothesis stating that innovation capability mediates the influence of human capital readiness on business performance is supported. It can be concluded that human capital readiness has a direct

and positive impact on business performance, and innovation capability mediates the influence of human capital readiness on business performance.

[Table 5 about here.]

The results of testing the effect of human capital readiness on innovation capability showed a value of β = 0.429 and significance with a p-value of <0.01. The results of testing the effect of innovation capability on business performance showed a value of β = 0.548 and significance with a p-value of <0.01. The results of the mediation model testing led to an increase in the β value from 0.219 to 0.454 and were significant with a p-value of <0.01.

The computation of Variance Accounted For (VAF) was used to determine the extent of mediation of global market orientation on the influence of human capital readiness on business performance. The variance accounting for (VAF) method, as shown in Table 6, was then used to further analyze a mediating impact, as indicated by (Hair et al., 2013). A VAF value of less than 20% denotes no mediation impact, a VAF value of 20% to 80% denotes partial mediation, and a VAF value of more than 80% denotes full mediation. A VAF calculation results show a value of 0.341 or 34.1%. These findings indicate that innovation capability partially mediates the effect of human capital readiness on business performance.

[Table 6 about here.]

Common Method Bias

Common method bias in this study was tested using the full collinearity value of VIF. The full collinearity value of the VIF must be less than or equal to 3.3 to be free from bias (Kock, 2015). The test results using PLS-SEM with WarpPLS 5.0 software resulted in a full collinearity VIF value of 1.226. Thus, the measurement items in the study are free from bias caused by the measurement methods used in the study.

DISCUSSION

The Effect of Human Capital Readiness on Business Performance

The results of this study support the research of (Khalique et al., 2018; Sung & Choi, 2014) in terms of the importance of human capital in enhancing business performance through employee competency. Resouce-Based View (RBV) declares internal resources that are valuable, scarce, difficult to replicate, and cannot be replaced give companies a long-term competitive advantage (Jogaratnam, 2017; Barney, 1991; Kristandl & Bontis, 2007; Onkelinx et al., 2016). Human capital must be developed because it is vital to achieving sustainable competitive advantage (Fareed et al., 2016). Managers must pay special attention to human capital and invest in developing employee knowledge, skills, and abilities (Hejazi et al., 2016).

Human capital readiness is essential in business performance in globalization and the knowledge economy. (Kaplan & Norton, 2004) state that knowledge can generate distinct advantages, and human capital readiness, as an intangible resource, can be exchanged for cash. MSMEs in East Java must manage human capital readiness to ensure the readiness of employee competencies that impact business performance.

According to this study, the greater the human capital readiness, the more MSMEs will boost their innovation capability. Department of Cooperatives and SMEs East Java Province has a new program, namely the MSME innovation development program as contained in the 2022 Work Plan. The program includes Acceleration of Digitalization in the form of Big Data for East Java MSMEs.

The Effect of Innovation Capability on Business Performance

The results of this study support previous research showing that innovation capability has a positive effect on a company's business performance (Dadfar et al., 2013; Keskin, 2006; Odoom & Mensah, 2019; Zhang & Hartley, 2018). In today's digital era, innovation capability can support business success, especially for MSMEs (Oura et al., 2016; O'Cass & Sok, 2014; Zhang & Hartley, 2018). MSMEs in East Java must be engaged in developing digital acceleration.

In this study, the more MSMEs increase their innovation capability, the more they improve their business performance. Department of Cooperatives and SMEs East Java Province stated that MSMEs are following the flow of digitalization and struggling to seize existing opportunities. This will help MSME players in terms of marketing and understanding what product trends the market needs today through the East Java MSME Big Data program.

Mediating Role of Innovation Capability in Human Capital Readiness and Business Performance

The research conducted by (Urgal et al., 2013; Yusr, 2016) has shown that innovation capability has a positive role as a mediator in enhancing innovation performance. Similarly, (AlTalwell & Al-Hawary, 2021) study confirms that innovation capability also positively impacts organizational performance.

However, previous research has needed to be more consistent concerning the relationship between human capital and business performance. While some studies (Jogaratnam, 2017; Chahal et al., 2016; Sung & Choi, 2014) found that human capital has a positive effect on business performance, others (Cabrilo & Dahms, 2018; Costa et al., 2014; Scafarto et al., 2016) found no such effect. This research suggests that higher human capital may lead to better business performance. Nonetheless, human capital can impact business performance through innovation capability and mediation. Our study aims to narrow the gap between previous studies by examining this relationship. Our findings suggest that innovation capability can mediate the relationship between human capital readiness and business performance for MSMEs in East Java. By enhancing their human capital readiness, MSMEs can improve their innovation capability, leading to better business performance. As a result, the greater the level of human capital readiness, the more significant when increasing innovation capability and, ultimately, business performance.

CONCLUSION

This research concludes that (1) human capital readiness has an impact on business performance; (2) human capital readiness has an impact on innovation capability; (2) innovation

capability has an impact on business performance; (3) innovation capability mediate the relationship between human capital readiness and business performance. According to the findings of this research, owners or manager SMEs in Indonesia must execute an innovation strategy concerning to create innovation capabilities. This step is a necessary strategic step where drastic environmental changes are very demanding for organizational dynamics. Increased innovation capability will result in increased organizational success in the future.

Based on the research findings, SME owners or managers in Indonesia should prioritize the execution of an innovation strategy to develop innovation capabilities, as it emerges as a crucial strategic step to navigate dynamic environmental changes and ultimately drive organizational success in the future.

The following restrictions apply to this study. This study uses variance-based structural equation models as a research strategy. This technique is still debated in terms of causality. As a result, future research will have to deal with this problem by executing comparable studies utilizing various techniques, for instance experimental strategies. This study's sample is limited to MSMEs. This sample raises the possibility of generalization. As a result, future research should include new sample contexts, such as the public or private sector. The Likert scale is used to assess these investigations. This scale might lead to the actuality of data that relies on managers' perceptions rather than direct measurements. This issue should also be addressed in future research by establishing direct measurements of such factors. This issue should also be addressed in future research by establishing direct measurements of such factors. Despite the limitations mentioned above, this study contributes to resource-based view (RBV) theory by better understanding the association between human capital readiness, innovation capabilities, and business performance in Indonesian MSMEs.

REFERENCES

Agostini, L., Nosella, A., & Filippini, R. (2017). Does intellectual capital allow improving innovation performance? A quantitative analysis in the SME context. *Journal of Intellectual Capital*.

Agwu, M. O., & Emeti, C. I. (2014). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt city. *European Journal of Sustainable Development*, *3*(1), 101–114.

AlTaweel, I.R., and S.I. Al-Hawary. "The Mediating Role of Innovation Capability on the Relationship between Strategic Agility and Organizational Performance." *Sustainability* 13 (2021): 7564.

Ardito, L., Messeni Petruzzelli, A., & Albino, V. (2015). From technological inventions to new products: A systematic review and research agenda of the main enabling factors. *European Management Review*, *12*(3), 113–147.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, *17*(1), 99–120.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.

Bergheim, S. (2005). Human Capital is the Key to Growth—Success Stories and Policies for 2020. *SSRN Electronic Journal*, *10*(2139/ssrn.774825).

Berio, G., & Harzallah, M. (2005). Knowledge management for competence management. *Journal of Universal Knowledge Management*, *1*, 21–28.

Cabrilo, S., & Dahms, S. (2018). How strategic knowledge management drives intellectual capital to superior innovation and market performance. *Journal of Knowledge Management*, *22*(3), 621–648.

Carlucci, D., Marr, B., & Schiuma, G. (2004). The knowledge value chain: How intellectual capital impacts on business performance. *International Journal of Technology Management*, *27*(6–7), 575–590.

Cerrato, D., & Piva, M. (2012). The internationalization of small and medium-sized enterprises: The effect of family management, human capital and foreign ownership. *Journal of Management & Governance*, *16*(4), 617–644.

Chabowski, B. R., & Mena, J. A. (2017). A Review of Global Competitiveness Research: Past Advances and Future Directions. *Journal of International Marketing*, *25*(4), 1–24.

Chahal, H., Jyoti, J., & Rani, A. (2016). The Effect of Perceived High-performance Human Resource Practices on Business Performance: Role of Organizational Learning. *Global Business Review*, *17*(3_suppl), 107–132.

Chen, C. J., Liu, T. C., Chu, M. A., & Hsiao, Y. C. (2014). Intellectual capital and new product development. *Journal of Engineering and Technology Management*, *33*, 154–173.

Chenhall, R. H. (2005). Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organizations and Society*, *30*(5), 395–422.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, *295*(2), 295–336.

Chin, W. W., & Newsted, P. R. (1999). *Structural modelling analysis with small*.

Collins, C. J., & Clark, K. D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal*, *46*(6), 740–751.

Costa, R. V., Fernández-Jardon Fernández, C., & Figueroa Dorrego, P. (2014). Critical elements for product innovation at Portuguese innovative SMEs: An intellectual capital perspective. *Knowledge Management Research & Practice*, *12*(3), 322–338.

Dadfar, H., Dahlgaard, J. J., Brege, S., & Alamirhoor, A. (2013). Linkage between organisational innovation capability, product platform development and performance: The case of pharmaceutical small and medium enterprises in Iran. *Total Quality Management & Business Excellence*, *24*(7–8), 819–834.

Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, *9*(3), 101–115. https://doi.org/10.1108/13673270510602809

Dayan, R., Heisig, P., & Matos, F. (2017). Knowledge management as a factor for the formulation and

implementation of organization strategy. *Journal of Knowledge Management*, *21*(2), 308–329.

Dobni, C. B. (2010). *The relationship between an innovation orientation and*.

Donate, M. J., Peña, I., & Pablo, J. D. (2016). HRM practices for human and social capital development: Effects on innovation capabilities". *The International Journal of Human Resource Management*, *27*(9), 928–953.

Duodu, B., & Rowlinson, S. (2020). The effect of social capital on exploratory and exploitative innovation: Modelling the mediating role of absorptive capability. *European Journal of Innovation Management*, *23*(4), 649–674.

Fareed, M., Noor, W. S. W. M., Isa, M. F. M., & Salleh, S. S. M. M. (2016). Developing Human Capital for Sustainable Competitive Advantage: The Roles of Organizational Culture and High Performance Work System. *International Journal of Economic Perspectives*, *10*(4), 655–673.

Foo, P., Warren, W. H., Duchon, A., & Tarr, M. J. (2005). Do humans integrate routes into a cognitive map? Map- versus landmark-based navigation of novel shortcuts. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *31*(2), 195.

Francis, D., & Bessant, J. (2005). *Targeting innovation and implications for*.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate Data Analysis*. Pearson Education Limited.

Harlow, H. (2008). The effect of tacit knowledge on firm performance. *Journal of Knowledge Management*, *12*(1), 148–163.

Hejazi, R., Ghanbari, M., & Alipour, M. (2016). Intellectual, Human and Structural Capital Effects on Firm Performance as Measured by Tobin's Q. *Knowledge and Process Management*, *23*(4), 259–273.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, *20*(2), 195–204.

Inmyxai, S., & Takahashi, Y. (2010). The effect of firm resources on business performance of male-and female-headed firms in the case of Lao micro-, small-, and medium-sized enterprises (MSMEs. *International Journal of Business and Information*, *5*(1), 63–90.

Javalgi, R. G., & Todd, P. R. (2011). Entrepreneurial orientation, management commitment, and human capital: The internationalization of SMEs in India. *Journal of Business Research*, *64*(9), 1004–1010.

Jogaratnam, G. (2017). The effect of market orientation, entrepreneurial orientation and human capital on positional advantage: Evidence from the restaurant industry. *International Journal of Hospitality Management*, *60*, 104–113.

Kallio, A., Kujansivu, P., & Parjanen, S. (2012). *Locating the loopholes of*.

Kaplan, R. S., & Norton, D. P. (2004). *Strategy Maps: Converting Intangible Assets Into Tangible Outcomes*. Hadvard Business Press.

Kato, M., Okamuro, H., & Honjo, Y. (2015). Does Founders' Human Capital Matter for Innovation? Evidence from J apanese Start-ups. *Journal of Small Business Management*, *53*(1), 114–128.

Keskin, H. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of Innovation Management*, *9*(4), 396–417.

Khalique, M., Bontis, N., Shaari, J. A. N. B., Yaacob, M. R., & Ngah, R. (2018). Intellectual capital and organisational performance in Malaysian knowledge-intensive SMEs. *International Journal of Learning and Intellectual Capital*, *15*(1), 20–36.

Kianto, A., Vanhala, M., & Heilmann, P. (2016). The impact of knowledge management on job satisfaction. *Journal of Knowledge Management*, *20*(4), 621–636.

Kirzner, I. M. (1979). *Opportunity and Profit: Studies in the Theory of Entrepreneurship*. University of Chicago Press.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, *11*(4), 1–10.

Kristandl, G., & Bontis, N. (2007). Constructing a definition for intangibles using the resource based view of the firm. *Management Decision*, *45*(9), 1510–1524.

Lee, Y.-K., Kim, S.-H., Seo, M.-K., & Hight, S. K. (2015). Market orientation and business performance: Evidence from franchising industry. *International Journal of Hospitality Management*, *44*, 28–37.

Lonial, S. C., & Carter, R. E. (2015). The Impact of Organizational Orientations on Medium and Small Firm Performance: A Resource-Based Perspective. *Journal of Small Business Management*, *53*(1), 94–113.

Manzaneque, M., Ramírez, Y., & Diéguez-Soto, J. (2017). Intellectual capital efficiency, technological innovation and family management. *Innovation*, *19*(2), 167–188.

Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human Capital and Entrepreneurship Research: A Critical Review and Future Directions. *Entrepreneurship Theory and Practice*, *40*(3), 599–626.

Masa'deh, R. E., Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. *Benchmarking: An International Journal*, *25*(8), 3117–3142.

McKelvie, A., & Davidsson, P. (2009). From resource base to dynamic capabilities: An investigation of new firms. *British Journal of Management*, *20*, 63–80.

Michaelis, B., Wagner, J. D., & Schweizer, L. (2015). Knowledge as a key in the relationship between high-performance work systems and workforce productivity. *Journal of Business Research*, *68*(5), 1035–1044.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, *29*(7), 770–791.

Muthuveloo, R., Shanmugam, N., & Teoh, A. P. (2017). The impact of tacit knowledge management on organizational performance: Evidence from Malaysia. *Asia Pacific Management Review*, *22*(4), 192–201.

Newbert, S. L. (2008). Value, rareness, competitive advantage, and performance: A conceptual-level empirical investigation of the resource-based view of the firm. *Strategic Management Journal*, *29*(7), 745–768.

Ngah, R., & Ibrahim, A. R. (2011). The Influence of Intellectual Capital on Knowledge Sharing: Small and Medium Enterprises' Perspective. *Communications of the IBIMA*, 1–13.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation.* Oxford University Press.

Nunnaly, J. C. (1967). *Psychometric Theory*. McGraw-Hill.

O'Cass, A., & Sok, P. (2014). The role of intellectual resources, product innovation capability, reputational resources and marketing capability combinations in firm growth. *International Small Business Journal*, *32*(8), 996–1018.

Odoom, R., & Mensah, P. (2019). Brand orientation and brand performance in SMEs: The moderating effects of social media and innovation capabilities. *Management Research Review*, *42*(1), 155–171.

Omotayo, F. O. (2015). Knowledge Management as an important tool in Organisational Management: A Review of Literature. *Library Philosophy and Practice*, *1*(2015), 1–23.

Onkelinx, J., Manolova, T. S., & Edelman, L. F. (2016). The human factor: Investments in employee human capital, productivity, and SME internationalization. *Journal of International Management*, *22*(4), 351–364.

Oura, M. M., Zilber, S. N., & Lopes, E. L. (2016). Innovation capacity, international experience and export performance of SMEs in Brazil. *International Business Review*, *25*(4), 921–932.

Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. Wiley.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, *14*(3), 179–191.

Pintea, M.-O., & Achim, M.-V. (2010). *Performance-An Evolving Concept. Annals of the University of Craiova* (p. 2).

Protogerou, A., Caloghirou, Y., & Vonortas, N. S. (2017). Determinants of young firms' innovative performance: Empirical evidence from Europe. *Research Policy*, *46*(7), 1312–1326.

Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, *3*(1), 44–55.

Romijn, H., & Albaladejo, M. (2002). Determinants of innovation capability in small electronics and software firms in southeast England. *Research Policy*, *31*(7), 1053–1067.

Roy, P. (2002). Tacit knowledge management in organizations: A move towards strategic internal communications systems. *Journal of American Academy of Business*, *2*(1), 28–32.

Sadeghi, V. J., & Biancone, P. P. (2018). How micro, small and medium-sized enterprises are driven outward the superior international trade performance? A multidimensional study on Italian food sector. *Research in International Business and Finance*, *45*, 597–606.

Saunila, M., & Ukko, J. (2011). *Intangible aspects of organizational innovation.*

Savitz, L. A., Kaluzny, A. D., & Kelly, D. L. (2000). A life cycle model of continuous clinical process innovation. *Journal of Healthcare Management*, *45*(5), 307–315.

Scafarto, V., Ricci, F., & Scafarto, F. (2016). Intellectual capital and firm performance in the global agribusiness industry: The moderating role of human capital. *Journal of Intellectual Capital*, *17*(3), 530–552.

Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, *51*(1), 1–17.

Schumpeter, J. A. (1934). *The theory of Economic Development*. Harvard University Press.

Shibia, A. G., & Barako, D. G. (2017). Determinants of micro and small enterprises growth in Kenya. *Journal of Small Business and Enterprise Development*, *24*(1), 105–118.

Slovin, M. J. (1960). *Slovin's formula for sampling technique*. Simon and Schuster Inc.

Smith, M., Busi, M., & Ball, P. (2008). *Factors influencing an organization's*.

Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, *48*(3), 450–463.

Sung, S. Y., & Choi, J. N. (2014). Multiple dimensions of human resource development and organizational performance. *Journal of Organizational Behavior*, *35*(6), 851–870.

Tjahjadi, B., Soewarno, N., Nadyaningrum, V., & Aminy, A. (2022). Human capital readiness and global market orientation in Indonesian Micro-, Small-and-Medium-sized Enterprises business performance. *International Journal of Productivity and Performance Management*, *71*(1), 79–99.

Urgal, B., Quintás, M. A., & Arévalo-Tomé, R. (2013). Knowledge resources and innovation performance: The mediation of innovation capability moderated by management commitment. *Technology Analysis & Strategic Management*, *25*(5), 543–565.

Wang, Y., Bhanugopan, R., & Lockhart, P. (2015). Examining the quantitative determinants of organizational performance: Evidence from China. *Measuring Business Excellence*, *19*(2), 23–41.

Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, *5*(2), 171–180.

Widjajanti, K., Sugiyanto, E. K., & Marka, M. M. (2017). Strategi Pengembangan Kinerja Pemasaran Melalui Human Capital Dan Social Capital Dengan Kemampuan Inovasi Sebagai Variabel Pemediasi. *Jurnal Dinamika Sosial Budaya*, *18*(1), 95.

Wu., W., Chang, M., & Chen, C. (2008). Promoting Innovation through The Accumulation of Intellectual Capital, Social Capital, and Entrepreneurial Orientation. *R&D Management*, *38*(3), 265–277.

Yang, C. C., Marlow, P. B., & Lu, C. S. (2009). Assessing resources, logistics service capabilities, innovation capabilities and the performance of container shipping services in Taiwan. International Journal of Production Economics, 122(1), 4-20.

Yusr, M. M. (2016). Innovation capability and its role in enhancing the relationship between TQM practices and innovation performance. *Journal of Open Innovation: Technology, Market, and Complexity*, *2*(1), 1–15.

Zahra, S. A., & Covin, J. G. (1993). Business strategy, technology policy and firm performance. *Strategic Management Journal*, *14*(6), 451–478.

Zhang, M., & Hartley, J. L. (2018). Guanxi, IT systems, and innovation capability: The moderating role of proactiveness. *Journal of Business Research*, *90*, 75–86.

Conflict of Interest Statement: 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.

LIST OF TABLE

TABLE 1 | ***Item Measurement***

Variable	Item	Source
Human Capital Readiness	HCR1. Employees' knowledge readiness to carry out operational activities properly	(Tjahjadi et al., 2022)
	HCR2. Employees' knowledge readiness in relation to customer needs;	
	HCR3. Employees' knowledge readiness on quality at an affordable price;	
	HCR4. Employees' skills readiness when processing the current line of business;	
	HCR5. Employees' skills readiness when providing a consultation, suggestions and responses to customers	
	HCR6. Employees' values or attitude towards readiness in relation to the business strategies, politeness and quick responses;	
	HCR7. Employees' values or attitude readiness toward good teamwork to achieve a common goal.	
Innovation Capability	INC1. We develop efficient production processes to cut production costs.	(Saunila & Ukko, 2011)
	INC2. We use the latest technology in the production process.	
	INC3. We developed new products in the last three years.	
	INC4. We change or improve existing products.	
	INC5. We market new products as well as existing products.	
	INC6. Our organizational structure and culture support innovation.	
	INC7. We develop products with other companies (e.g. suppliers)	
Business Performance	BP1. Sales have tended to increase	(Tjahjadi et al., 2022)
	BP2. We have succeeded at cost efficiency	
	BP3. Profits have tended to increase.	
	BP4. We have been able to sell quality products at affordable pricesand deliver them on time.	
	BP5. Customer complaints have tended to decrease	
	BP6. We have succeeded at building an image and reputation, so then we have loyal customers.	
	BP7. We have succeeded at improving the quality of our products and services.	
	BP8. We have succeeded at getting new customers and retaining existing customers.	
	BP9. We have succeeded at innovating our products and services	
	BP10. The expertise of our employees has tended to improve.	
	BP11. Our ability to process information using computers has tended to increase.	
	BP12. The cooperation among our employees (teamwork) has tended to be better.	

TABLE 2 | *Statistic Descriptive*

Variable	Min	Max	*Mean*	Std. Dev	Category
Human Capital Readiness	1	5	4,157	0,817	Agree
Business Performance	1	5	4,068	0,812	Agree
Innovation Capability	1	5	4,075	0,863	Agree

Source: Processed Data

TABLE 3 I Reliability and Convergent Validity

Variabel Laten	*Loading*	*P-values*
Human Capital Readiness (*composite reliability* = 0,93; AVE = 0,655)		
HCR1	0,79	<0,001
HCR2	0,845	<0,001
HCR3	0,791	<0,001
HCR4	0,76	<0,001
HCR5	0,807	<0,001
HCR6	0,845	<0,001
HCR7	0,825	<0,001
Business Performance (*composite reliability* = 0,935; AVE = 0,57)		
BP1	0,67	<0,001
BP2	0,738	<0,001
BP3	0,661	<0,001
BP4	0,668	<0,001
BP6	0,833	<0,001
BP7	0,757	<0,001
BP8	0,831	<0,001
BP9	0,787	<0,001
BP10	0,867	<0,001
BP11	0,712	<0,001
BP12	0,746	<0,001
Innovation Capability (*composite reliability* = 0,874; AVE = 0,501)		
INC1	0,644	<0,001
INC2	0,652	<0,001
INC3	0,764	<0,001
INC4	0,738	<0,001
INC5	0,686	<0,001
INC6	0,812	<0,001
INC7	0,638	<0,001

Source: Processed Data

TABLE 4 | ***Discriminant Validity***

	Business Performance	Human Capital Readiness	Innovation Capability
Business Performance	**0,755**	0,454	0,642
Human Capital Readiness	0,454	**0,809**	0,429
Innovation Capability	0,642	0,429	**0,708**

Source: Processed Data

TABLE 5 | *SEM-PLS Result*

Panel A. Direct Effect		
Variable	***Path Coefficient***	
	Business Performance	
Human Capital Readiness	0,219***	
R^2	0,451	
Panel B. Indirect Effect		
Variable	***Path Coefficient***	
	Innovation Capability	**Business Performance**
Human Capital Readiness	0,429***	0,454***
Innovation Capability		0,548***
R^2	0,184	0,451

Notes: ***p < 0,01

Source: Processed Data

TABLE 6 I VAF calculation for Hypothesis H4.

Indirect Effect = 0.429 x 0.548	0.235
Direct Effect (before innovation capability)	0.454
Total Effect	0.689
VAF = Indirect Effect/Total Effect	**0.341**

Source: Processed Data

FIGURE 1 l Conceptual Model.