The mediating effect of technology innovation on intellectual capital performance: Evidence from Indonesian SMEs

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A B S T R A C T

The purpose of this study is to empirically examine the role of technology innovation on the influence of intellectual capital on SMEs performance. Resources based view and stakeholder theory underlies this research. Primary data was collected using a survey method from 399 culinary business SMEs managers spread throughout Bali. The number of samples is determined using the Slovin formula. In this study, the partial least squares structural equation model (PLS-SEM) was applied to be tested for validity and reliability. The results of the study show that human capital, structural capital and customer capital have a significant positive effect on technology innovation. Human capital has no effect on SMEs' performance, but structural capital and customer capital have no significant effect on SMEs performance. Technology innovation has a significant effect on SMEs' performance. Furthermore, technology innovation can mediate the influence of human capital, structural capital and customer capital on SMEs performance.

1. Introduction

The performance of SMEs has attracted a lot of attention in recent years (Maciková et al. 2018). Increased concern about the performance of SMEs has shifted corporate focus from an economic growth model to a SMEs performance model (Khairunnisa et al., 2022). The change in focus from the economic growth model to the SMEs performance model is of concern to the business world because the concept of SMEs performance is an action in realizing company goals which is called a going concern. SMEs performance is very important because it is used as a measure of business success (Utami et al. 2018). Horne and Wachowicz (2001:230), mentions the SMEs performance rate is the maximum percentage of sales growth that can occur in accordance with operating targets, debt, and dividend payout ratios. In this highly dynamic and competitive condition, if the business world only relies on maximizing growth, it will not be able to generate asset maximization as desired. Maximized value creation occurs when actual growth does not exceed SMEs performance. This condition is proven by the results of empirical studies. Ataunal et al. (2016) state that value creation can maximize a company's SMEs performance rate, and value will decline sharply if actual growth exceeds the SMEs performance rate. To prevent a decline in value, companies should pay more serious attention to SMEs performance and integrate it into long-term strategic plans.

Factors that can influence SMEs performance is Intangible Capital which is used as a tool to maintain company survival, generate sustainable value and assist companies in achieving SMEs performance (Jun et al., 2020). However, the fundamental problem is that managers do not know exactly how to achieve a SMEs performance rate (Khairunnisa et al., 2022). Stewart (1997) divided the Intangible Capital component into three components, namely: Human Capital, Structural Capital

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and Customer Capital. Prior empirical evidence such as: Akhtar et al. (2015) researched SMEs in Malaysia, Omerzel and Jurdana (2016) examined with survey data conducted on 2800 SMEs in Slovenia and 1700 small and medium enterprises (SMEs) Croatia in tourism areas, Jardon (2018) researched SMEs in Latin America, and Khairunnisa et al. (2022) with respondents 1,041 managers of small and medium enterprises operating in Poland, which as a whole shows that in developing countries Intangible Capital and its components act as a key driver of SMEs performance.

This research is also motivated by the phenomenon of SMEs in Bali where Balinese SMEs are still focused on the marketing sector only (Laksmana, 2020). SMEs in Bali also experience limited funding, but SMEs have not maximized the use of intangible resources in the form of Intangible Capital effectively to improve performance and SMEs performance. To find out whether the component of Intangible Capital also functions as a catalyst for SMEs performance in Indonesia, especially in Bali, this research examines the effect of Intangible Capital on SMEs performance. Research results on the influence of Human Capital on SMEs performance. Akhtar et al. (2015) and Khairunnisa et al. (2022) stated that Human Capital had a positive effect on SMEs performance and vice versa. Khairunnisa et al. (2022) stated that Human Capital had no effect on SMEs performance. The results of a study on the positive influence of Social Capital on SMEs performance are found by Xu and Wang (2018), Khairunnisa et al. (2022), conversely, Social Capital has no effect on SMEs performance found by Xu et al. (2020). Positive effect of Customer Capital on SMEs performance found by Xu and Wang (2018), Zhang et al. (2019), Khairunnisa et al. (2022), Khairunnisa et al. (2022). Also, Luet al. (2021), found that Customer Growth has no effect on business continuity. Findings on the positive influence of Human Capital on technology innovation were found by Saunila (2020), Rodrigues et al. (2015), Liu et al. (2019) and Khairunnisa et al. (2022). Findings on the effect of Social Capital on technology innovation were found by Saunila (2020), Akhtar et al. (2015) and Xu et al. (2019). Findings on the influence of Customer Capital on technology innovation were found by Saunila (2020), Akhtar et al. (2015) and Jardon, (2018). The findings of the positive and significant influence of technology innovation on SMEs performance are stated by Khairunnisa et al. (2022) and Zhang et al. (2019).

The novelties of this study are: 1) the use of technology innovation as an intervening variable for the influence of Intangible Capital on SMEs performance. 2) The use of stakeholder orientation as a dimension of Customer Capital. 3) The reason for choosing the culinary business is because the growth in the number of SMEs in Bali who have culinary businesses in Bali in 2016-2021 averages around 5.35%. Based on the controversy over the results of previous research on the effect of Intangible Capital on SMEs performance and research on technology innovation and supported by practical phenomena, this study intends to examine the role of technology innovation in mediating the effect of intangible capital.

2. Literature Review

2.1 Resource Based View

The RBV assumption is that companies compete based on resources and capabilities. Differences in the resources and capabilities of the company with competing companies will provide a competitive advantage (Peteraf, 1993). RBV divides the organization's strategic resources into two types of resources (Barney, 1991). Both are characterized by their intrinsic properties, such as unique or common forms of organizational resources. Common resources are those that are available equally to all organizations operating in the organizational field. However, unique resources are those that are rare, valuable, difficult to imitate and obtain and not easily replaced (Barney, 1991). These unique resources are often referred to as intellectual capital (Stewart, 1997).

2.2 Stakeholder Theory

Stakeholder Marketing is built on the integration of RBV with Stakeholder Theory (Kull et al., 2016). Stakeholder marketing identifies the stakeholder relationship network as a strategic resource that enables companies to respond to stakeholders more effectively. RBV provides a useful avenue to understand Stakeholder Marketing because of Stakeholder Marketing highlighting the value generated by a network built on stakeholder relationships with companies.

2.3 Intellectual Capital

According to Stewart (1997), intellectual capital is the amount of collective knowledge, information, technology, intellectual property rights, experience, learning and organizational competence, team communication systems, customer relations, and brands that are able to create value for the company. Gogan (2014) divides Intangible Capital into three parts, namely Human Capital, Social Capital and Customer Capital.

2.4 Relationship between Variables

Becker (1962) revealed the importance of Human Capital both at the company and country levels. Becker (2009: 40) explains that increasing Human Capital through education and training can in turn improve organizational performance. Peters and Taylor (2017) believe that employees generate Intangible Capital through their competence, attitude and intellectual agility. Sardo et al. (2018) stipulate that Human Capital includes skills and knowledge, so that the intellectual abilities of employees are shown by their speed in adopting changes, innovations and effective solutions to the problems they face. Continuous employee learning and training can transform organizational knowledge into business value and enable companies to develop competitive behaviors that are conducive to technological innovation. Rodrigues et al. (2015) stated that Human Capital is a prerequisite and guarantee for technology innovation.

H₁: *Human capital has a positive effect on technology innovation.*

Social capital or organizational capital consists of internal organizational value drivers, namely: routines, processes, customer files, databases, manuals, and literature and organizational structure (Reza et al., 2020). Social capital represents the process and organizational structure through which it conducts its business transactions (Mahmood & Mubarik 2020). Social capital is important for influence, maintain, and improve performance in SMEs that operate with cloud computing (Cleary & Quinn, 2016). Social capital provides the environment and conditions for employees to learn knowledge and skills and stimulates employee enthusiasm to innovate. Organizational culture allows companies to formulate innovation strategies, which can positively influence the process of technology innovation (Mahmood & Mubarik, 2020).

H₂: *Structural capital has a positive effect on technology innovation.*

Technology innovation activities require effective cooperation from various departments, and good Customer Capital can reduce barriers in the process of technology innovation (Castro et al., 2013; Li & Yu, 2018). External customer capital can provide a new way for companies to seek new knowledge and enrich the company's internal resources (Zhang et al., 2019). Verbano and Crema (2015) found that relationships with external partners can help SMEs to achieve radical technology innovation performance.

H₃: *Customer capital has a positive effect on technological innovation.*

The availability of unique, rare, difficult to imitate and difficult to obtain resources will have an impact on competitive advantage, organizational performance and will subsequently have an impact on the company's SMEs performance (Xu & Wang, 2018). The effect of human capital on SMEs performance is strengthened by findings of Akhtar et al. (2015), Khairunnisa et al. (2022) and Lu, et al. (2021). They state that human capital has a positive effect on SMEs performance. Based on the theoretical and the empirical study, the hypothesis is formulated as follows:

H₄: *Human capital has a positive effect on the performance of the SMEs.*

Social capital can provide environmental guarantees for the growth of manufacturing companies (Xu & Wang 2018). Social capital accumulation is also a long-term process. Sardo and Serrasqueiro (2018) tested the effect of the IC component on growth opportunities in 14 Western countries and revealed that businesses that have high levels have opportunities for greater growth. The effect of social capital on SMEs performance is also strengthened by research results. Khairunnisa et al. (2022) and and Lu et al. (2021) stated social capital influential positively for SMEs performance. Based on the study theoretical and the empirical study, the hypothesis is formulated as follows:

H₅: *Social capital has a positive effect on the performance of the SMEs.*

Customers are a source of new activity and help companies obtain valuable resources from potential partners and in turn increase the company's growth and success (Cabrilo et al., 2018; Khairunnisa et al., 2022; Xu & Wang, 2018). Stakeholder Theory (Kull et al., 2016) states that stakeholders have an important influence on the survival of a company, the closer the company's relationship with various stakeholders, the greater the impact of Customer Capital on shareholder market behavior (Xu & Wang, 2018). Based on the study theoretical and the empirical study, the following hypotheses can be proposed:

H₆: *Customer capital has a positive effect on the performance of the SMEs.*

Based on an economic perspective, the definition of technology Innovation is the introduction of new technology in organizing the human and financial resources needed to transform ideas into products or processes that are useful in carrying out an activity (Verbano et al., 2015). On the OECD, Xu et al. (2019) specifically mentioned technology innovation with regard to product innovation and process innovation. Even Grimpe et al. (2017) recognized that marketing innovation as an

attribute of technology innovation is more relevant than any other attribute, and that marketing innovation plays an important role as well as being a prerequisite for corporate success. Lockett and Thompson (2001) in a resource-based view state that the success of the company's growth will depend on the development of new resources or with exploitation of old resources, which means that innovation plays an important role in achieving SMEs performance.

H7: *Technology innovation has a positive effect on SMEs' performance.*

The Role of Technology Innovation in Mediating the Effect of Human Capital on SMEs performance Particularly in SMEs, where individuals are the main resource, Human Capital plays a major role in increasing innovation capital (Verbania & Crema 2015). Human Capital is a new source of activity and helps companies obtain valuable resources which in turn increase the company's growth and success (Cabrilo et al., 2018; Khairunnisa et al., 2022; Xu & Wang, 2018). Based on the study theoretical and the empirical study, the proposed hypothesis is as follows:

H8: *Technology innovation in SMEs can mediate the influence of human capital on SMEs performance.*

Specifically, in SMEs, owners should promote an innovative culture that supports creativity (Alvonitis & Salavou, 2007). Ornek and Ayas (2015) stated that if the intellectual capital transferred into innovation is successfully managed in business, it will trigger performance development. Based on theory SMEs performance, Xu and Wang (2018) found that companies must develop new products and change the organizational structure and organizational culture to maintain SMEs performance. According to Delgado et al. (2011), Social Capital has a positive and significant effect on the performance of technology innovation. Khairunnisa et al. (2022) and Zhang et al. (2019) state that technology Innovation has a positive effect on SMEs performance. Based on the study theoretical and empirical studies, the hypothesis proposed is as follows:

H9: *Technology innovation in SMEs can mediate the effect of social capital on SMEs performance.*

Customer Capital is the knowledge inherent in marketing channels and customer relationships in which an organization develops it through its business (Bontis et al., 2000). Demir and Tolga (2014) reported that Customer Capital is positively related to company growth. Advertising allows companies to build corporate reputation by demonstrating the quality and status of products or services, which will encourage Research and Development activities that ultimately foster Technology Innovation. Technology innovation is a major factor in maintaining the company's competitiveness and SMEs performance. Akhtar et al. (2015) and Jardon (2018) found Customer Capital has a positive effect on Technology Innovation, then Khairunnisa et al. (2022) and Khairunnisa et al. (2022) and Lu et al. (2021) found that Technology Innovation influenced SMEs performance. Based on the study theoretical and the empirical study, the proposed hypothesis is as follows:

H10: *Technology innovation in SMEs can mediate influence customer capital on SMEs performance.*

3. Research Methods

This research is quantitative research, based on positivism, namely testing data and general theories through hypothesis testing. Survey data by distributing questionnaires was collected from 399 SMEs managers in Bali. Estimators developed by Xu et al. (2019); and Xu and Wang (2018) are used using a scale ratio. While the variables using a 5-point Likert scale consist of technology innovation, human capital, social capital, and consumer capital. Human capital measurement is formulated with 3 dimensions (10 statement items), namely: knowledge, skills and expertise; attitude; and intellectual agility. Social capital is formulated using 2 dimensions (8 statement items), namely, Infrastructure & systems and policies & procedures. Human capital and social capital measurements have been developed by Bontis (1998), Ismail (2005) and Khalique et al. (2018). Customer capital is proxied by stakeholder orientation and is measured in 4 dimensions (14 statement items), namely customer orientation (5 statement items), competitor orientation (3 statement items), owner orientation (3 statement items) and employee orientation (3 statement items). Measures of technology innovation were developed and tested by Omerzel and Jurdana (2016). There are 3 dimensions of technology innovation (10 statement items), namely process innovation; product innovation, and marketing innovation, all items are measured on a 5-point Likert type scale where 1 = strongly disagree and 5 = strongly agree. The collected data is processed using the alternative Partial Least Square (PLS) Structural Equation Modeling (SEM), the smartPLS 3.0 M3 program (Ghozali & Latan, 2015).

4. Results and Discussion

4.1 Test the Validity and Reliability of Research Instruments

Validity test can be done by correlating between item scores with the so-called total score Pearson correlation or correlation product moment with value cut-off 0.30 and if the correlation coefficient is below 0.30 it can be stated that the instrument is invalid so it must be repaired or discarded and if the correlation of each factor is positive and the magnitude is 0.30 and above then the factor is construct strong (Sugiyono, 2018). Reliability is the degree of precision, thoroughness and accuracy which

is shown by the measuring instrument where its use can be done internally, namely testing by analyzing the consistency of the existing items. Reliability is a tool for measuring a questionnaire which is an indicator of a variable or construct (Umar, 2009).

Table 1
Validity and Reliability

No	Variable	Indicator	Dimensions	Pearson Correlation	Alpha Cronbach	Description
1	Human Capital (X1)	Knowledge, skills and expertise	X1.1.1	0.564	0.718	Valid & Reliable
			X1.1.2	0.623		
			X1.1.3	0.529		
			X1.1.4	0.581		
		Attitude	X1.1.5	0.627		
			X1.1.6	0.702		
			X1.1.7	0.498		
		Intellectual Dexterity	X1.1.8	0.422		
			X1.1.9	0.613		
			X1.1.10	0.503		
2.	Structural Capital (X2)	Infrastructure and systems	X2.1	0.859	0.798	Valid & Reliable
			X2.2	0.943		
			X2.3	0.965		
			X2.4	0.933		
			X2.5	0.828		
		Policies and procedures	X2.6	0.864		
			X2.7	0.963		
			X2.8	0.708		
3.	Customer Capital (X3)	Customer orientation	X3.1	0.873	0.773	Valid & Reliable
			X3.2	0.902		
			X3.3	0.840		
			X3.4	0.770		
			X3.5	0.835		
		Competitor orientation	X3.6	0.795		
			X3.7	0.740		
			X3.8	0.725		
		Owner orientation	X3.9	0.462		
			X3.10	0.873		
			X3.11	0.902		
		Employee orientation	X3.12	0.918		
			X3.13	0.873		
			X3.14	0.902		
			M.1.10	0.895		
4.	Technology Innovation (M)	Product Innovation	M.1.1	0.823	0.789	Valid & Reliable
			M.1.2	0.910		
			M.1.3	0.952		
			M.1.4	0.912		
		Process innovation	M.1.5	0.857		
			M.1.6	0.893		
			M.1.7	0.954		
		Marketing innovation	M.1.8	0.771		
			M.1.9	0.858		
			M.1.10	0.895		
5.	SMEs performance	Encourage growth	Y1.1	0.899	0.867	Reliable
		Retention	Y1.2	0.819		
		Leverage	Y1.3	0.972		

Source: Results Processed by the Author (2022)

Test results based on the processing of Table 1 show the Pearson correlation coefficient > 0.30 and all of them are significant, and the value of Cronbach alpha is greater than> 0.60. This means that all the instruments used in the research are valid and reliable so that the next analysis can be continued.

4.2 Measurement Model Evaluation (Measurement Model/Outer Model)

The indicators that make up the latent variables in this study are reflexive, so the evaluation of the measurement model (measurement model/outer model), to measure the validity and reliability of these indicators are: 1) Convergent Validity, 2) Composite Reliability Cronbach alpha, 3) AVE (Average Variance Extracted) 4).

Discriminant validity

This measurement model is used because the indicators that form latent variables in this study are reflexive and formative. A

variable is said to be valid, if the value that forms a construct is higher than the value cross loading those latent variables and their respective value construct AVE greater than 0.50, value loading the whole construct is higher than the value Cross loadings and the AVE value is greater than 0.5 so that it meets the valid requirements based on the criteria discriminant validity. Mark Composite reliability and Cronbach Alpha each construct has shown a value greater than 0.70 so that it meets the requirements of being reliable based on the criteria composite reliability.

4.3 Evaluation of the Structural Model (Structural Model/Inner Model)

Evaluation of the structural model (Structural Model/Inner Model) is a measurement to evaluate the level of accuracy of the model in the overall research, which is formed through several variables along with their indicators. The evaluation of this structural model will be carried out through several approaches, including: a) R-Square (R^2), b) Q-Square Predictive Relevance (Q^2), and c) Goodness of Fit (GoF).

R-Square (R^2)

The R-Square shows the strength and weakness of the influence caused by the independent variable on the dependent variable. R-Square (R^2) can also show the strengths and weakness of a research model. According to Chin (Ghozali & Latan, 2015), value R-Square (R^2) of 0.67 is classified as a strong model, R-Square (R^2) of 0.33 moderate model, and R-Square (R^2) of 0.19 is classified as a weak model.

Table 2
Evaluation of the Structural Inner Model

Construct	R Square
Technology innovation	0.832
SMEs performance	0.936

Source: Data Processed by the author (2022)

Based on table 2 shows that the structural model is relatively strong, Q-Square Predictive Relevance (Q^2) Q-Square Predictive Relevance (Q^2) is a measure of how well the observations made give results to the research model. Mark-Square Predictive Relevance (Q^2) ranges from 0 (zero) to 1 (one). The closer to 0 value Q-Square Predictive Relevance (Q^2), gives an indication that the research model is getting worse, while on the contrary it is getting away from 0 (zero) and getting closer to the value 1 (one), this means that the research model is getting better. The criteria for the strength and weakness of the model are measured based on Q-Square Predictive Relevance (Q^2) according (Ghozali & Latan, 2015) are as follows: 0.35 (strong model), 0.15 (moderate model), and 0.02 (weak model). The Q-Square formula is: $Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$. The magnitude of the value Q-Square is $= 1 - (1 - 0.832)(1 - 0.936) = 1 - (0.168)(0.064) = 1 - 0.010 = 0.990$. Based on these results, the estimation result model is included in the strong criterion, meaning that 99.0% percent of endogenous construct variations can be predicted by exogenous construct variations.

Goodness of Fit (GoF)

Measurement value based on Goodness of Fit (GoF) has a value range between 0 (zero) to 1 (one). Mark Goodness of Fit (GoF) which is getting closer to 0 (zero), indicating the model is getting less good, conversely getting away from 0 (zero) and getting closer to 1 (one), then the model is getting better. The criteria for the strength and weakness of the model are based on measurements Goodness of Fit (GoF) according to Ghozali & Latan (2015), are as follows: 0.36 (GoF wide), 0.25 (GoF medium), and 0.10 (GoF small) (Tenenhaus et al., 2004: 175). Path Analysis and the expected hypothesis testing is that Ho is rejected or the sig value < 0.05 or the statistical t value > 1.96 with a significant level of 0.05.

Table 3
Path Analysis

Direct Influence Between Variables	Original Sample (O)	Uji.t	P Values	Information
Human Capital→ Technology Innovation	0.130	3.231	0.001	Significant
Social Capital→ Technology Innovation	0.247	3.145	0.002	Significant
Costumer Capital→ Technology Innovation	0.571	6.721	0.000	Significant
Human Capital→ SMEs Performance	0.000	0.007	0.994	Not Significant
Social Capital→ SMEs Performance	0.067	1.197	0.232	Not Significant
Costumer Capital→ SMEs Performance	0.006	0.104	0.917	Not Significant
Technology Innovation → SMEs Performance	0.898	17.019	0.000	Significant

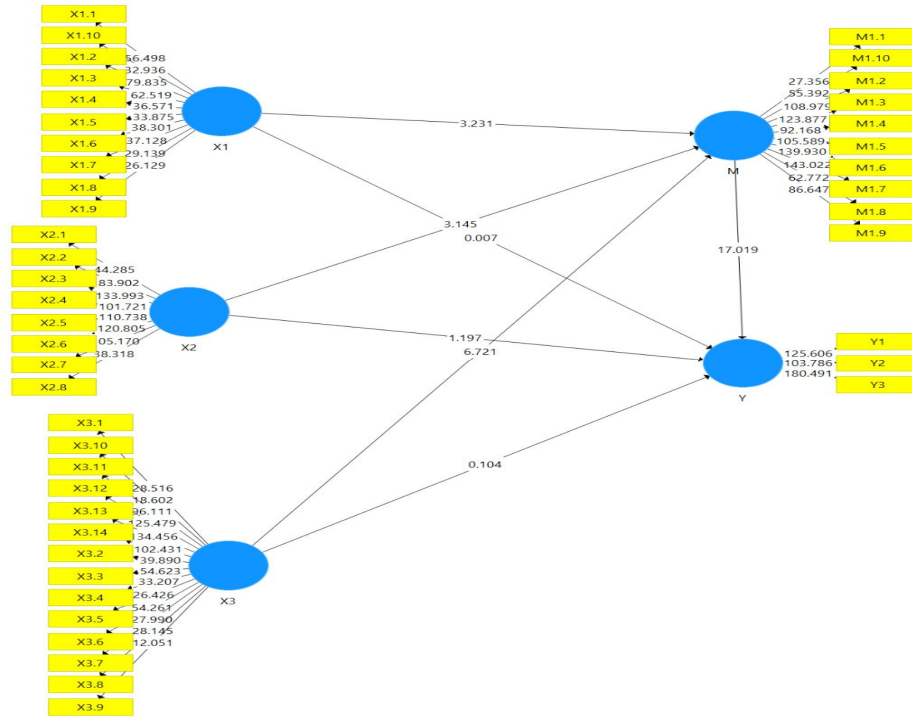Source: Data Processed by the author (2022)

Fig. 1. Structural Model

Based on the results of the path analysis in Fig. 1 and Table 3, the results of the H$_1$ test were obtained and it states human capital has positive and a significant influence on technology innovation and the first hypothesis is acceptable (β = 0.130 and P-Values 0.001). H$_2$ states that social capital has a positive and significant impact on technology innovation and our statistics confirmed this hypothesis (β = 0.247 and P-Values 0.002). H$_3$ states that customer capital has a positive and significant impact on technology innovation which is also confirmed, (β =0.571 and P-Values 0.000). While H4 states that state human capital does not have any positive and significant effect on SMEs performance (β =0.000 and P-Values 0.994). H5 states that state social capital positive and significant effect on SMEs performance is not acceptable, proven by obtaining an original sample of 0.067 and P-Values 0.232. H6 states that state costumer capital positive and significant effect on SMEs performance is not acceptable, proven by obtaining the original sample value of 0.006 and P-Values 0.917. On the other hand, H$_7$ which states that Technology Innovation has a positive and significant effect on SMEs performance acceptable, proven by obtaining an original sample of 0.898 and P-Values 0.000.

Table 4
Mediation Test

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Information
X1→ M → Y_	0.116	3.204	0.001	Significant
X2 → M → Y_	0.222	3.008	0.003	Significant
X3 → M → Y_	0.513	6.449	0.000	Significant

Source: Data Processed by the author (2022)

Furthermore, the results of the mediation test obtained the result that technology innovation has a role in mediating influence human capital positively and significant effect on SMEs performance, with the obtained value original sample of 0.116 and P-Values 0.001, which means H$_8$ is accepted. Technology innovation has a role in mediating social capital's positive and significant effect on SMEs performance, with the obtained value original sample of 0.222 and P-Values 0.003, which means H$_9$ accepted. Technology Innovation has a role in media influence consumer capital positively and has a significant effect on SMEs performance, with the obtained value original sample of 0.513 and P-Values 0.000, which means H$_{10}$ accepted.

5. Discussion

Based on the results of testing Hypothesis, denoting the estimated value of the effect human capital on Technology Innovation is declared positive and significant, so that H1 is accepted. These results are in accordance with the theory RBV which shows

that human capital owned by SMEs actors in Bali has affected their Technology Innovation performance, which means that the better the knowledge, attitude and intellectual agility possessed by SMEs employees, the more employees will be encouraged to innovate, as well as the more skills and expertise possessed by SMEs actors will encourage creative ideas to create superior SMEs products. Rhynes et al. (2002) found that knowledge, experience, and skills significantly influence technology innovation. Another study found that human capital has a positive effect on Technology Innovation (Park et al., 2017; Khairunnisa et al. (2022).

Hypothesis 2 denotes the estimated value of the effect social capital on Technology Innovation is declared positive and significant, so that H_2 accepted. These results prove that SMEs have strong structural capital and are supported by a strong organizational culture, enabling SMEs actors to try new things, such as providing the best and integrated infrastructure, accounting and management systems that allow access to relevant information, systems and organizational procedures that allow for innovation, organizational structures that can strengthen relationships between employees. Positive impact over influence social capital with Technology innovation was also invented by Cabriolet al. (2018) and Xuet al. (2019).

Based on the results of testing Hypothesis 3, the estimated value of the influence CC on Technology Innovation is declared positive and significant, so that H_3 accepted. These results indicate that the creation of strong relationships with stakeholders is good customer capital internal and customer capital external activities carried out by SMEs actors led to more intensive SMEs technology innovation activities in designing innovative new products. The results of this study are also supported by previous research conducted by Akhtar et al. (2015) and Jardon (2018) who found that customer capital has a positive and significant effect on Technology Innovation.

Result hypothesis 4, H_5 and H_6 show the estimated value of influence of human capital, social capital and customer capital to SMEs performance declared insignificant. These results are supported by the results of Khairunnisa et al. (2022), and Xu et al. (2020. The inability of human capital encouraging the SMEs performance shows that this research is not able to support the RBV theory developed by Krisstandl and Bontis (2007). The inability of SMEs to utilize human capital as a driving force SMEs performance, it is hoped that in the long-term SMEs leaders will invest their funds in human resource development strategies such as providing regular training, providing opportunities to receive higher formal education and holding religious lectures more often to improve employee attitudes, ethics and integrity.

Infrastructure and systems as well as policies and procedures established and implemented by SMEs have not been able to optimally promote SMEs performance or have not been able to optimally encourage growth, company retention and reduce SMEs leverage. Social capital encouraging the SMEs performance is not able to support the RBV theory developed by Gogan (2014) stating intellectual capital plays a role in ensuring the long-term performance of the company. The inability of SMEs to take advantage of social capital as pushing leaders are expected in the long term to develop a strategy to invest funds in infrastructure development, systems, develop policies and procedures and organizational culture that are in accordance with the internal and external conditions of SMEs.

Customer capital has also not been able to optimally encourage the SMEs performance of SMEs, because the development of a strong customer capital requires the time and effort of all network members. In accordance with Stakeholder Marketing (Kull et al., 2016), SMEs performance can be achieved if SMEs are able to create harmonious relationships with customers, competitors, owners and employees. Therefore, in the long term, SMEs leaders should invest and allocate their resources optimally in customer capital and create an organizational culture in a comfortable environment so as to create harmonization between employees, customers and competitors, and ultimately create value for the company and encourage SMEs performance.

On the other hand, Technology Innovation has a significant impact on SMEs' performance. Evidenced by the fairly good response to product innovation indicators, namely introducing modified products, products that outperform competitors, process innovation indicators (updating product completion methods, technology utilization and investment in technology) and marketing innovation indicators (new marketing channels, new marketing methods, application of SMEs marketing methods by competitors) from respondents, according to the RBV theory developed by Lockett and Thompson (2001). This study supports the results of the research by Khairunnisa et al. (2022), and (Zhang et al. 2019). Furthermore, Technology Innovation also plays a role in mediating the influence of human capital, social capital and customer capital on SMEs performance. These three dimensions of IC can encourage the SMEs performance of SMEs through all indicators of technology innovation even though these indicators do not make an equal contribution in efforts to encourage the achievement of SMEs performance in Bali.

6. Conclusions, limitations and policy implications

Based on the results of the analysis and discussion, the performance of technology innovation will increase if it is supported by adequate human capital, social capital and consumer capital. Continuous employee learning and training can quickly transform organizational knowledge into business value and enable companies to develop competitive behaviors that are

conducive to technological innovation. The RBV Theory developed by Bontis (2000) states that organizations with strong structural capital will have a supportive culture that allows individuals to try new things, continue to learn in overcoming failure. Customer capital which has the most influence on technology innovation compared to variable others. These results strengthen Stakeholder Theory (Kull et al., 2016). On the other hand, human capital, social capital and customer capital were not able to encourage the achievement of SMEs' performance. Based on the results of testing H_7 it was found that Innovation had a significant positive effect on SMEs performance. Technology innovation plays a role in mediating the influence of human capital, social capital, and customer capital on SMEs' performance.

It is better for the government through the Office of Cooperatives and SMEs to provide training and assistance intensively and continuously to SMEs actors, both in the areas of increasing Human Resource competencies, developing structural capital in the form of systems, procedures and organizational structures of SMEs as well as developing marketing systems and methods, in addition to providing grants for SMEs that are starting up. The existence of limited capital ownership must be balanced with investment in intangible assets such as human capital, social capital, and customer capital in the hope that the business can run smoothly and sustainably. For further research, it is recommended to examine other sectors such as woodworking or bamboo handicrafts or at Village Credit Institutions, as well as testing other variables such as social capital and spiritual capital which are expected to affect SMEs performance.

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