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Analysis of Innovation's Corporate Entrepreneurship on SMEs

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Abstract−This study aims to determine the effect of technological changes, organizational culture, and government policies and support on corporate entrepreneurial innovation in SMEs, through the mediation of strategic orientation, human capital, and policies and procedures, targeting SMEs located in Batam City. The method used is a quantitative approach, using statistical testing and hypothesis testing through SMARTPLS software, to conduct inner and outer modeling tests. Based on the research conducted, it can be concluded that technological changes, organizational culture, and government policies and support show a significant influence on the formation of strategic orientation and policies and procedures. Organizational culture is able to show a significant influence on human capital, but technological changes and policies and government support do not show a significant influence on the formation of human capital. In addition, this study also proves that strategic orientation and policies and government support show a significant influence on innovation and corporate entrepreneurship of SMEs in Batam City. Meanwhile, human capital does not significantly affect innovation and corporate entrepreneurship of SMEs in Batam City.

Keywords: Technological Change; Organizational Culture; Government Policy And Support; Strategic Orientation; Human Capital

1. INTRODUCTION

In today's modern era, SMEs are a type of business in Indonesia that has an important role in encouraging an increase in the country's national income, where this industry often takes advantage of sophisticated technological developments and advances to be applied in business life and the community's economy (Judijanto et al., 2024; Bawono, 2021). Where the industrial revolution taking place in the world has reached stage 4.0, which indicates that industrial development and progress has achieved significant results, resulting in changes in various areas of life, including finance, retail, insurance, transportation, health and so on (Reni et al., 2024; Schmidt et al., 2021). Apart from bringing about changes in the economic sector, the industrial revolution also caused changes in people's life patterns, thought patterns and creativity (Arifin et al., 2021).

The progress of this industrial revolution has also introduced the term SME 4.0, which is a type of business that has introduced the use of technology, information systems and sophisticated computerization in their business activities so that they can be processed as optimally as possible to reach more consumers (Ogbari et al., 2022; Abdissa et al., 2021). Basically, these SMEs target various economic sectors, starting from the financial sector, health, transportation, culinary, to certain hobby products (Mishra & Kiran, 2024). The progress of SMEs is marked by the ability and expertise of the people who manage these SMEs in using technology, information systems in accordance with social media or internet applications that they have to function for marketing and carrying out business operational activities (Arifin et al., 2021; Han et al., 2022). SME's need to innovate (Yuwono, 2020), and manage human resources so that their business can grow (Setyawan and Nelson, 2021).

This condition is in accordance with data shown from the Center for Parliamentary Analysis of the DPR RI Expertise Body written by (Suhayati, 2023) showing that by December 2023, the number of MSME players in the digital ecosystem of Indonesia has reached 27 million people (DPR.go.id, 2023). The Minister of BUMN, Erick Thohir, said that the MSME Digital Market (PaDi) had recorded transactions of IDR 37.2 trillion since its launch in 2019 to October 2023 (Kumparan.com, 2023). The MSME sector contributes 61% to Gross Domestic Product (GDP), equivalent to IDR 9,580 trillion. Based on data from the Ministry of Cooperatives and SMEs, Indonesia has around 65.5 million MSMEs, which account for 99% of the total business units in the country (Ekon.go.id, 2023). Until the first semester of 2021, the MSME sector absorbed around 117 million workers or 97% of the total workforce, and contributed 60.4% of total investment. MSMEs that adopt digital technology have higher competitiveness, especially in the aspects of payment, financial management and product marketing (Rakyat Merdeka, 2023).

This is also in line with a series of SME digitalization programs implemented by the government, namely through socialization programs and raising awareness for SME players spread across Sabang-Merauke to be able to compete in the tight industrial market and to be able to improve marketing strategies and disseminate their products so that they are better known in public (Abdissa et al., 2021). There are still a lot of small and medium-sized enterprises struggle with limited access to digital infrastructure, lack of technical expertise, and financial constraints that hinder their ability to adopt advanced digital tools (Kurniawan et al., 2023; Winarto, 2022). Moreover, the rapid pace of technological change can overwhelm SME owners, particularly in rural or underserved areas, where digital literacy may still be relatively low. These challenges, combined with fierce competition from both local and global players, create barriers for SMEs trying to fully leverage digital platforms for growth and sustainability (Rozak et al., 2021). As a result, while some SMEs have successfully embraced digitalization, many remain at a disadvantage, unable to capitalize on the full potential of digital marketing, e-commerce, and online financial management system (Judijanto et al., 2024).

Due to increase competitiveness of SMEs, innovation's corporate entrepreneurship is the important aspect to be considered. Research by Judijanto et al. (2024), provide in-depth insight into the factors that influence innovation and

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entrepreneurship in the MSME sector in Indonesia. The research stated that innovation cannot be separated from the dynamics of various elements, such as technological developments, organizational culture, government policies, and the quality of human resources. Different from conventional approaches which often focus on one or two dimensions, this research shows that the interaction between these factors plays an important role in determining the success of MSMEs in facing challenges and exploiting opportunities (Islam & Wahab, 2021; Jin & Lee, 2020). Moreover, the research performed by Reni et al. (2024) highlights how technological adaptation, environmental policy, and human resource management are key elements in dealing with external dynamics, such as technological changes and government policies that directly influence innovation opportunities. This is supported by research by Han et al. (2022) and Thatrak (2021) which highly emphasizes the role of organizational culture and company strategy in optimizing MSMEs' ability to adapt. Meanwhile, those researchers haven't underlines the usage of another possible variables, including government policy and support, policies and procedures. Hence, this research is purposed to investigate the mix relationship between technological change, organizational culture, and government policy and support to innovation of corporate entrepreneurship in SMEs, through the mediation of strategic orientation, human capital, and policies and procedures, in targeting to SMEs located in Batam City, which haven't been researched before.

2. RESEARCH METHODS

This research uses quantitative methods with a focus on associative research. Apart from that, this research is intended for hypothesis testing (Hair Jr et al., 2021). In other words, this research tests to verify the research theory concerned to the relationship between variables, regarding the influence of technological change, organizational culture, government policy and support for innovation of corporate entrepreneurship in SMEs, through the mediation of strategic orientation, human capital, and policies and procedures.The population is all objects or subjects in the area and fulfills certain requirements related to the research topic, namely SMEs in Batam. In other words, the population determined in this research is all SMEs in Batam City. Meanwhile, the research sample, as a representation of such population, consists of SMEs in Batam that meet the criteria for this research, namely those that apply innovation to corporate entrepreneurship.

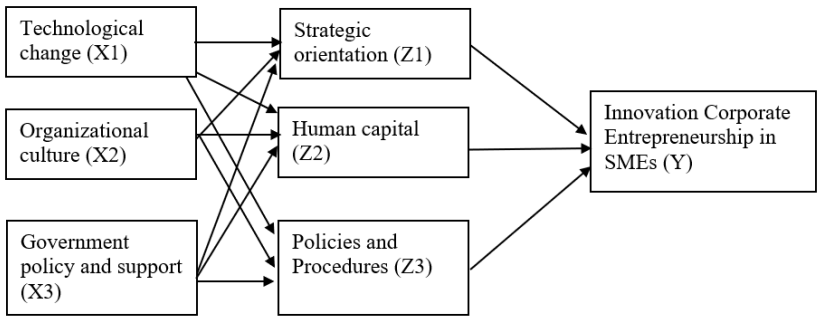

Figure 1. Research Model

Based on Figure 1, it can be seen that the model consists of 3 independent variables (technological change, organizational culture, and government policy and support), 3 mediating variables (strategic orientation, human capital, and policies and procedures), towards single dependent variable, which is innovation corporate entrepreneurship in SMEs. Sampling was based on a purposive sampling technique, namely taking samples according to the considerations of researchers, namely UKMs in Batam City. Regarding the calculations, researchers utilized the theory of (Hair Jr et al., 2019) that the minimum number of samples that must be processed in a study is at least greater than 5 times the number of formative indicators intended to measure the variable construct, for example 5 times the number of structural indicators intended in the construction of the structural model. In this study there were 49 question items, so the minimum sample that could represent this research was 245 samples. Technological change refers to the extent to which SMEs adopt, adapt, and integrate new technologies into their business operations to improve productivity, competitiveness, and innovation (Lakhwani et al., 2020). Strategic orientation describes the SME's long-term focus and strategic posture toward achieving competitive advantage (Han & Zhang, 2021). Organizational culture is defined as the shared values, beliefs, norms, and practices within an SME that shape employee behavior and influence decision-making processes (Aggarwal & Agarwala, 2023). Aggarwal & Agarwala (2023) also stated that human capital represents the knowledge, skills, competencies, and experiences possessed by individuals within an SME that contribute to innovation and organizational performance. Sadekin (2023) defined policies and procedures as the formalized internal rules, guidelines, workflows, and operational standards within an SME that structure employee behavior and ensure consistency in business processes, whereas government policy and support reflect degree of assistance and regulatory frameworks provided by the government to promote entrepreneurship and innovation in SMEs. Corporate entrepreneurship (also known as intrapreneurship) refers to the process by which SMEs innovate, take risks, and proactively seek out new business opportunities within the existing organization (Martin-Rojas et al., 2023).

Indicator or questionnaire for Technological Change refers to Lakhwani et al. (2020), Strategic Orientation refer to Han & Zhang (2021), Organizational Culture refer to Aggarwal & Agarwala (2023), Human Capital refer to Aggarwal

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& Agarwala (2023), Policies and Procedures refer to Sadekin (2023), Government Policies and Support refer to Sadekin (2023), and Corporate Entrepreneurship in SMEs refer to Martin-Rojas et al. (2023). The method used is a quantitative approach, using statistical testing and hypothesis testing through SMARTPLS software, to conduct inner and outer modeling tests.

3. RESULTS AND DISCUSSION

3.1 Result

a. Respondent Demographic Analysis
Respondent demographic data includes age category, gender, last education, type of business, type of asset, length of operation, average turnover per month, and number of employees.

Table 1. Respondent Demographics

Criteria	Category	Frequency	Percentage
Age	17-20 years old	37	15,1%
	21-25 years old	102	41,6%
	26-30 years old	60	24,5%
	>30 tahun	46	18,8%
Total		245	100.0%
Gender	Male	107	43,7%
	Female	138	56,3%
Total		245	100.0%
Last Education Status	Senior High School	104	42,4%
	Diploma D3	13	5,3%
	Bachelor S1	122	49,8%
	Master S2	6	2,5%
Total		245	100.0%
Business type	Culinary	89	36,3%
	Fashion	44	18,0%
	Art & Hobby	64	26,1%
	Stationary	5	2,0%
	Others	43	17,6%
Total		245	100.0%
Aset Amount	<Rp100 milion	154	60,6%
	Rp100 milion – Rp 1 billion	63	25,7%
	Rp 1 billion – Rp 10 billion	28	11,4%
Total		245	100.0%
Operating age	< 1 year	81	33,1%
	1-3 years	63	25,7%
	4-5 years	44	18,0%
	6-10 years	24	9,8%
	> 10 years	33	13,5%
Total		245	100.0%
Average Monthly Turnover	Rp 5.000.000 – Rp 20.000.000	95	38,8%
	Rp 20.000.001 – Rp 50.000.000	7	2,9%
	Rp 50.000.001 – Rp 100.000.000	35	14,3%
	Rp 100.000.001 – Rp 1.000.000.000	74	30,2%
	Rp 1.000.000.001 – Rp 5.000.000.000	1	0,4%
	>Rp5.000.000.000	33	13,5%
Total		245	100.0%
Number of employee	1-5 employees	169	69,0%
	6-10 employees	30	12,2%
	11-50 employees	33	13,5%
	>50 employees	13	5,3%
Total		245	100.0%

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Based on Table 1, the respondent demographic data includes age category, gender, last education, type of business, type of asset, length of operation, average turnover per month, and number of employees. Based on age, most respondents are in the range of 21-25 years (41.6%), followed by the age group of 26-30 years (24.5%), >30 years (18.8%), and 17-20 years (15.1%). Based on gender, respondents are dominated by women as many as 138 people (56.3%), while men number 107 people (43.7%).

Regarding the last education, most respondents were Bachelor's degree graduates (49.8%), followed by high school/vocational high school graduates (42.4%), Diploma D3 (5.3%), and Master's degree S2 (2.5%). Based on the type of business run, the culinary sector was the most dominant with 89 respondents (36.3%), followed by craft & hobby businesses (26.1%), fashion (18.0%), other businesses (17.6%), and office stationery (ATK) (2.0%). Based on the amount of assets, most respondents had assets of less than IDR 100 million (60.6%), while 25.7% had assets in the range of IDR 100 million to IDR 1 billion, and 11.4% had assets between IDR 1 billion and IDR 10 billion. Based on the length of business operations, 33.1% of respondents have only been running their business for less than one year, 25.7% have been operating for 1-3 years, 18.0% for 4-5 years, 9.8% for 6-10 years, and 13.5% have been operating for more than 10 years.

The average monthly turnover of the sample respondents is also quite varied, with the largest group being in the range of Rp5,000,000 – Rp20,000,000 (38.8%). As many as 30.2% of respondents have a turnover of Rp100,000,001 – Rp1,000,000,000, 14.3% are in the range of Rp50,000,001 – Rp100,000,000, 2.9% are in the category of Rp20,000,001 – Rp50,000,000, 0.4% have a turnover of Rp1,000,000,001 – Rp5,000,000,000, and 13.5% earn more than Rp5,000,000,000.

Meanwhile, in relation to the number of employees, most businesses are run on a small scale, namely 1-5 employees (69.0%). Meanwhile, 12.2% have 6-10 employees, 13.5% have 11-50 employees, and only 5.3% have more than 50 employees. These data show that most respondents are small and medium business actors with various operational scales.

b. Convergent Validity Testing

Outer Loadings, this test aims to measure the contribution of variable factors to indicator items. In measuring the validity of questionnaire items, researchers refer to the results of the outer load value, with the criteria that the question is said to be valid if the outer load value is above 0.6 (Hair Jr et al., 2021). Based on the results presented in Table 2, it can be said that all questions related to the research variables have an outer load greater than 0.6 which indicates that the item is valid.

Table 2. Outer Loading Test

Variable Construct	Outer Loading	Conclusion	Variable Construct	Outer Loading	Conclusion
TC_1	0.756	Valid	PP_5	0.837	Valid
TC_2	0.772	Valid	PP_6	0.755	Valid
TC_3	0.818	Valid	PP_7	0.839	Valid
TC_4	0.742	Valid	PP_8	0.805	Valid
SO_1	0.776	Valid	PP_9	0.766	Valid
SO_2	0.814	Valid	PP_10	0.789	Valid
SO_3	0.795	Valid	PP_11	0.752	Valid
SO_4	0.823	Valid	PP_12	0.734	Valid
SO_5	0.833	Valid	PP_13	0.815	Valid
SO_6	0.845	Valid	PP_14	0.796	Valid
SO_7	0.827	Valid	GPS_1	0.721	Valid
SO_8	0.833	Valid	GPS_2	0.759	Valid
SO_9	0.812	Valid	GPS_3	0.843	Valid
SO_10	0.794	Valid	ICE_1	0.754	Valid
OC_1	0.831	Valid	ICE_2	0.798	Valid
OC_2	0.814	Valid	ICE_3	0.836	Valid
OC_3	0.797	Valid	ICE_4	0.765	Valid
HC_1	0.793	Valid	ICE_5	0.802	Valid
HC_2	0.812	Valid	ICE_6	0.785	Valid
HC_3	0.814	Valid	ICE_7	0.779	Valid
PP_1	0.786	Valid	ICE_8	0.773	Valid
PP_2	0.780	Valid	ICE_9	0.767	Valid
PP_3	0.785	Valid	ICE_10	0.761	Valid
PP_4	0.847	Valid	ICE_11	0.755	Valid
			ICE_12	0.749	Valid

c. Construct Validity and Reliability

Reliability testing is carried out to check the consistency of the measuring instrument used. In line with the results of research conducted by Hair Jr et al. (2021), it states that an instrument can be said to be reliable if the Cronbach Alpha

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value ≥ 0.6, Composite Reliability ≥ 0.7, and the AVE value is above 0.5. In this context, the result displayed in Table 3 indicated that all variables are reliable because they meet these requirements.

Table 3. Reliability Test

Variable	Cronbach Alpha	Composite Reliability	AVE
Technological change	0.728	0.837	0.684
Strategic Orientation	0.758	0.828	0.690
Organizational Culture	0.769	0.790	0.602
Human Capital	0.737	0.802	0.615
Policies and Procedures	0.796	0.800	0.614
Government Policies and Support	0.731	0.745	0.596
Innovation and Corporate Entrepreneurship in SMEs	0.809	0.789	0.602

d. Inner Model

The inner model test is run to test the causal relationship formed between research variables. Path coefficient is taken in order to test the direct influence on the variable without going through the mediator. In this context, the relationship is stated to be significant if t > 1.96, and the significance value p < 0.05. Based on the findings displayed in Table 4, it can be indicated that H1, H3, H4, H5, H6, H7, H9, H10, and H12 are significant because they meet those requirements. Meanwhile, H2, H8, and H11 are not significant.

Table 4. Path Coefficients Test

Path	T Statistics	Values	Hypothesis	Conclusion
Technological change –> strategic orientation	5.402	0.000	H1	Significant
Technological change -> human capital	0.455	0.611	H2	Not Significant
Technological change -> policies and procedures	2.129	0.035	H3	Significant
Organizational culture –> strategic orientation	6.793	0.000	H4	Significant
Organizational culture -> human capital	2.765	0.011	H5	Significant
Organizational culture -> policies and procedures	5.139	0.000	H6	Significant
Government policies and support –> strategic orientation	7.184	0.000	H7	Significant
Government policies and support -> human capital	1.185	0.128	H8	Not Significant
Government policies and support -> policies and procedures	8.105	0.000	H9	Significant
Strategic Orientation -> Innovation and Corporate Entrepreneurship in SMEs	4.976	0.000	H10	Significant
Human capital -> Innovation and Corporate Entrepreneurship in SMEs	0.962	0.337	H11	Not Significant
Policies and procedures -> Innovation and Corporate Entrepreneurship in SMEs	2.295	0.025	H12	Significant

R-Square

The greater the Adjusted R Square value, indicates that the greater the influence formed by the independent variables-dependent variables. A value close to 1 means that the independent variables provide almost all the information needed to explain the variables (Hair et al., 2021).

Table 5. R-Square Result

Variable	R-Square	Adjusted R-Square
Strategic Orientation	0.472	0.418
Human Capital	0.548	0.543
Policies and Procedures	0.563	0.549
Innovation and Corporate Entrepreneurship in SMEs	0.597	0.591

Inferring to Table 5, the customized R-Square of strategic orientation is 0.418, meaning that the variable can be explained by the independent variable by 41.8%. Then the adjusted R-Square value of human capital is 0.548, meaning that the independent variable can explain the human capital variable by 54.3%. The customized R-Square value of policies and procedures is 0.549, meaning that the independent variable can explain the human capital variable by 54.9%. Then, the adjusted R-Square value of corporate innovation and entrepreneurship is 0.591, meaning that the independent variable can explain the corporate innovation and entrepreneurship variables in SMEs by 59.1%.

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Standardized Root Mean Square Residual
This SRMR test is conducted to measure the level of suitability between the matrix in the model and the existing data. In relation to this test, it can be stated that the model is in accordance with the data if the SRMR value is less than 0.1 (Hair Jr et al., 2021). Based on the results presented in Table 6, it can be interpreted that for the saturated model and model estimation the value is below 0.1, indicating that the model is quite appropriate.

Table 6. SRMR Result

Variable	SRMR
Saturated model	0.067
Estimated model	0.098

Quality Index Testing
The goodness of fit value is characterized as a form of comparison given between the specified model and the covariance matrix between indicators or observed values. The goodness of fit value is classified as low if the value is greater than 0.10. If the value is medium > 0.25, and high if the value is > 0.36 (Hair et al., 2021). This study obtained a GoF index value of 0.575 indicating that the quality is classified as high.

$$GoF\ Index = \sqrt{Average\ AVE\ x\ Average\ R^2}$$

$$Average\ AVE = \frac{0.684+0.690+0.602+0.615+0.614+0.596+0.602}{7} = 0.629$$

$$Average\ R2 = \frac{0.418+0.543+0.549+0.591}{4} = 0.52525$$

$$GoF\ Index = \sqrt{0.629\ x\ 0.52525}$$

$$GoF\ Index = 0.575$$

3.2 Discussion

a. The Relationship Between Technological Change and Strategic Orientation
The research findings indicated that technological change has a significant influence on strategic orientation, proven by the T-value of 5.402 and the p-value of 0.000. This findings supported research implemented by Kindermann et al. (2021) which stated that technological change affects strategic orientation by showing that adaptation to digital technology directly changes the mindset and strategic approach of companies to achieve innovation and efficiency. Moreover, this research also in line with what stated by Ogbari et al. (2022) that technological orientation is one of the key strategies in increasing the economic impact of entrepreneurs and SMEs. Their findings show that rapid technological change encourages small and medium-sized companies to integrate technology as the core of their business strategy. This means that technological change not only changes the way companies operate but also forces management to reformulate strategic orientation to be relevant in a competitive business environment (Wang et al., 2022; Chege & Wang, 2020). Hence, H1 is accepted.

b. The Relationship Between Technological Change and Human Capital
The research findings indicated that technological change does not have a significant influence on human capital, proven by the T-value of 0.455 and the p-value of 0.611. This findings is not in line with research implemented by Bawono (2021) which stated that technological developments directly increase the capacity of individuals to use more advanced technology, thereby strengthening human capital in Indonesia. This shows that technological progress not only creates new tools, but also demands an increase in the skills and knowledge of human resources, which ultimately has a positive impact on the quality of human capital. Moreover, this findings also reject the hypothesis stated in research by Akhvlediani and Cieślik (2020) which revealed that the spread of technology in Europe provides great opportunities for the development of human capital through technology-based education and training. Their findings show that technology encourages the process of learning and absorbing new knowledge, which significantly improves the quality of human resources. Hence, H2 is rejected.

c. The Relationship Between Technological Change and Policies and Procedures
This research findings indicated that technological change has a significant influence on policies and procedures. Proven by the T-value of 2.129 and the p-value of 0.035. This research findings supported the research implemented by Yuan & Zhang (2020) which stated that flexible environmental policies, combined with technological innovation, can improve industrial sustainability in China. This finding shows how technological change not only affects operational efficiency but also drives more dynamic and relevant policy adjustments. In addition, environmental regulatory enforcement strengthens the impact of technological change on sustainability-oriented policies (Twum et al., 2021). Moreover, this research also in accordance with research performed by Chege & Wang (2020) also provide evidence that technological innovation in the SME sector improves environmental sustainability practices, which in turn affects internal company policies. Company procedures become more structured to support sustainability through the implementation of new technologies. Other studies, such as by Jahanger et al. (2022), reveal that technological innovation is a catalyst in improving the relationship between natural resources, economic growth, and environmental policies. Hence, H3 is accepted.

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d. The Relationship Between Organizational Culture and Strategic Orientation
The research findings indicated that organizational culture has a significant influence on strategic orientation. Proven by the T-value of 6.793 and the p-value of 0.000. This research findings is in accordance with research by Kerdpitak & Boonrattanakittibhumi (2020) identified that an organizational culture that supports innovation, collaboration, and adaptation can encourage the development of a strategic orientation that is more focused on long-term goals, thereby improving firm performance. This study highlights that elements of organizational culture, such as flexibility and risk-taking, play an important role in shaping a firm's strategic mindset. The findings also supported the arguments stated in research by Ashlal (2021) also shows that a learning culture in an organization significantly mediates the relationship between strategic orientation and organizational performance. In this context, a proactive and learning-oriented organizational culture encourages organizations to be more responsive to market dynamics, which in turn strengthens their strategic orientation. This is in line with research by Wang et al. (2022), which revealed that an organizational culture that supports exploratory innovation can enhance strategic orientation through effective digital leadership. Hence, H4 is accepted.

e. The Relationship Between Organizational Culture and Human Capital
The research findings indicated that organizational culture has a significant influence on human capital. Proven by the T-value of 2.765 and the p-value of 0.011. This findings supported the research by Alshammari (2020), in which stated that strong organizational culture positively influences human resource management by creating a supportive learning environment. Organizations with a learning-oriented culture tend to enhance employees' ability to manage and share knowledge, which is a key component of human capital. In this case, organizational culture serves as a catalyst for improving employee skills, competencies, and productivity (Ahmed et al., 2021). It also supported the research by Sabuhari et al. (2020) which shows that organizational culture adaptation significantly increases human resource flexibility and employee competency. This confirms that an inclusive and change-supportive organizational culture can strengthen human capital, especially in terms of adaptability and job satisfaction. Hence, H5 is accepted.

f. The Relationship Between Organizational Culture and Policies and Procedures
The research findings indicated that organizational culture has a significant influence on policies and procedures. Proven by the T-value of 5.139 and the p-value of 0.000. This findings supported the research by Lubis & Hanum (2020), which explained that organizational culture plays an important role in the formation of organizational policies and procedures. They showed that the values and norms adopted in an organization can be a guide in designing policies that are in line with the company's vision and mission. Thus, a strong organizational culture helps create consistency in the policies and procedures implemented, strengthens relationships between members of the organization, and ensures that each individual understands their roles and responsibilities. It also in line with the research performed by Guerra et al. (2020) highlighted that organizational culture influences how conflict is managed and its impact on internal policies. They stated that an adaptive culture allows organizations to respond to conflict in a constructive manner, which in turn improves policies and procedures to increase organizational effectiveness. Hence, H6 is accepted.

g. The Relationship Between Government Policies and Support and Strategic Orientation
The research findings indicated that government policies and support has significant influence on strategic orientation. Proven by the T-value of 7.184 and p-value of 0.000. The research findings supported the research performed by Prasannath et al. (2024) which showed that government policies designed to support small and medium-sized enterprises (SMEs) can enhance entrepreneurial orientation, which is an important part of strategic orientation. Their study highlights how government incentives, training, and funding can encourage innovation and risk-taking among SMEs, thereby strengthening the positive relationship between government policies and strategic orientation. Similar findings were confirmed by Nakku et al. (2020) who found that government support programs in developing countries play a significant role in fostering strategic orientation through increasing entrepreneurs' resources and self-confidence. Hence, H7 is accepted.

h. The Relationship Between Government Policies and Support and Human Capital
The research findings indicated that government policies and support do not have a significant influence on human resources. Proven by the T-value of 1.185 and p-value of 0.128. This research findings rejected the statement of research performed by Libanova et al. (2020) which highlighted that activation policies aimed at improving skills and labor force participation can be viewed as investments in human capital. They underlined that these policies not only boost labor productivity but also support sustainable socio-economic development. The findings is not accordance with what stated by Lin et al. (2023) that human capital plays a critical role in achieving green growth, where public policies are often the main channel for enhancing human capacity. Hence, H8 is rejected.

i. The Relationship Between Government Policies and Support Towards Policies and Procedures
The research findings indicated that government policies and support have a significant influence on policies and procedures. Proven by the T-value of 8.105 and p-value of 0.000. This research supported the research of Prasannath et al. (2024) which showed that supportive government policies, such as subsidies, training, and friendly regulations, enhance the entrepreneurial orientation and performance of SMEs. This support provides the framework and resources that enable organizations to develop more structured internal policies and efficient operational procedures. This finding supports the hypothesis that government policies and support have a positive effect on policies and procedures, indicating that the support provided not only improves performance but also dictates better policy formation (Libanova et al., 2020). Hence, H9 is accepted.

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j. The Relationship Between Strategic Orientation on Innovation and Corporate Entrepreneurship in SMEs
This research findings indicated that strategic orientation has a significant influence on corporate innovation and entrepreneurship in SMEs. Proven by the T-value of 4.976 and p-value of 0.000. This findings supported the research performed by Al Mamun et al. (2022), stated that strategic orientation plays an important role in driving innovation, which in turn improves the performance of manufacturing MSMEs in Malaysia. The research proved that strategic orientation not only enhances innovation capabilities but also drives corporate entrepreneurship through the creation of new opportunities. This findings also in accordance with research by Ziyae & Sadeghi (2020) which strengthens this relationship by showing that strategic entrepreneurship is a mediating element between strategic orientation and firm performance. In the context of MSMEs, a strong strategic orientation drives the development of corporate entrepreneurship through proactive strategies, risk-taking, and long-term oriented innovation. Kowo & Akanmu (2021) also emphasized that entrepreneurial orientation has a close relationship with MSME performance, where elements such as courage in taking risks and proactivity are supported by a planned business strategy. Hence, H10 is accepted.

k. The Relationship Between Human Capital on Innovation and Corporate Entrepreneurship in SMEs
The research findings indicated human capital does not have a significant influence on corporate innovation and entrepreneurship in SMEs. This is proven by the T-value of 0.962 and the p-value of 0.337. This research rejected the statement of Thatrak (2021) which stated that human capital orientation directed at developing employee creativity can improve organizational innovation capabilities, which ultimately contributes to superior MSME performance. This shows that employee knowledge, skills, and abilities as part of human capital are key elements that support the creation of innovative ideas and the implementation of entrepreneurial activities in small and medium-sized enterprises. Hence, H11 is rejected.

l. The Relationship Between Policies and Procedures and Corporate Entrepreneurship in SMEs
The research findings indicated that policies and procedures have a significant influence on corporate innovation and entrepreneurship in SMEs. This is proven by the T-value of 2.295 and the p-value of 0.025. This research findings is in accordance with research by Abdissa et al. (2021) which identified that dimensions of corporate entrepreneurship, such as proactivity and innovation, contribute positively to organizational performance. This suggests that policies that support creativity and structured procedures enable MSMEs to be more innovative in facing market challenges. This study supports the argument that appropriate policies and procedures can create a conducive environment for corporate entrepreneurship in MSMEs. Moreover, this research also in line with research by Islam & Wahab (2021) which strengthen this hypothesis by stating that strategic innovation, which is influenced by internal regulations and policies, acts as a key driver of sustainable business growth in Malaysian MSMEs. Good policies can serve as a catalyst for the implementation of innovative practices, while systematic procedures ensure the sustainability of implementing these innovations. Hence, H12 is accepted.

4. CONCLUSION

Based on the research implemented, it can be concluded that technological change, organizational culture, and government policies and support shows a significant influence towards shaping strategic orientation and policies and procedures. Organizational culture able to show significant influence towards human capital, but technological change and government policies and support doesn't show a significant impact on shaping human capital. Moreover, the research also proved that strategic orientation and government policies and support shows a significant influence towards innovation and corporate entrepreneurship of SMEs in Batam City. Meanwhile, human capital doesn't significantly influence innovation and corporate entrepreneurship of SMEs in Batam City. This study is limited to SMEs located in Batam City, so the findings may not be generalizable to other regions. Moreover, this study involve cross-sectional design, which cannot capture long-term effects or causality. The data is based on self-reported questionnaires, which may be subject to response bias. Hence, the researcher delivers recommendation for SMEs in Batam City to enhance organizational culture to strengthen human capital, by focusing on fostering a strong, adaptable, and innovation-driven culture, leveraging government policies and support for innovation, by increasing engagement with government programs, grants, and incentives., and maximizing strategic orientation for sustainable growth, through the adoption of forward-thinking approach by integrating digital transformation, market expansion strategies, and customer-centric business models.

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