

Open innovation and disruptive innovation: Financial performance small and medium enterprises (SMEs) evidence in Tanjungpinang Indonesia

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Abstract: This study aims to examine the impact of open innovation and disruptive innovation on the financial performance of SMEs in the tourism sector in Tanjungpinang City, Indonesia. A quantitative research method was employed, utilizing a sample of 273 SMEs in the tourism sector. Data were collected through surveys and analyzed using regression and ANOVA techniques to understand the relationships between innovation, digitalization, and financial performance. The analysis revealed that both open and disruptive innovation significantly influence the financial performance of SMEs. The study found that innovation and digitalization explain approximately 79.6% of the financial performance variance in the tourism sector. The findings suggest that SMEs that adopt innovative practices and digitalization are more likely to achieve better financial outcomes, such as increased profitability and market share. Open and disruptive innovations are critical drivers of financial success for SMEs in the tourism sector. SMEs should focus on leveraging internal and external knowledge and adapting to technological changes to enhance their competitive advantage. Policymakers should create supportive environments that foster innovation and digitalization among SMEs. This could include providing access to technological resources, training programs, and incentives for innovative practices.

Keywords: digitalization; financial performance; innovation theory; SMEs

1. Introduction

In this era of globalization, small and medium enterprises (SMEs) must compete in an increasingly competitive market. Innovation can be a way to differentiate yourself from competitors, attract new customers and retain existing customers. Innovation can also help SMEs improve operational efficiency and productivity, which in turn can have a positive impact on Financial Performance (Morgan et al., 2009). Financial performance based on the conceptual framework (CF) according to the International Accounting Standards Board (IASB) is used as information for management in making business decisions. The business decisions in question also include decisions to innovate the company and enable the company or business unit to survive and develop in all conditions that are likely to occur in the company (Hull and Rothenberg, 2008).

Financial performance is a description of an entity's financial condition in a certain period regarding sales, assets, debts and the entity's activities, which are usually measured by indicators of capital adequacy, liquidity, sales growth and profitability (Smith and Grimm, 1987). Financial performance is a description of the

achievement of success of a business entity, which can be interpreted as the results that have been achieved for various activities that have been carried out, including SMEs (Morgan et al., 2009). SMEs are one of the driving forces of the national economy with their contribution and role in absorbing more labor compared to other business elements in Indonesia. SMEs have proven that they are able to reduce the number of unemployment and poverty rates and are able to improve the economy which is very much needed in a country, especially a country that has supporting resources (Ginzarly and Teller, 2018). SMEs are able to contribute to absorbing more labor, and 77% of the total Indonesian workforce is absorbed from SMEs, which is a number that really helps a country to achieve prosperity for its people (Ananda, 2022).

Data from the Ministry of Cooperatives and SMEs of the Republic of Indonesia in 2018, Indonesian SMEs contributed IDR 8573.9 trillion to Indonesia's gross domestic product. Indonesia's gross domestic product (GDP) in 2018 reached IDR 14,838.3 trillion, meaning that the contribution of SMEs reached 57.8% of GDP and in 2019, SMEs contributed 60% of GDP and then contributed 14% to total national exports, with number of SMEs and workforce (Ananda, 2022). SMEs are truly an important pillar as a strong pillar in the country's economic development in overcoming poverty and can reduce the number of unemployed in a country (Smith et al., 1987). Countries that have been categorized as developed countries, such as the United States, Japan, Germany, France, and Canada. These countries also recognize that SMEs are the driving force of the economy which is very important for economic growth and the process of technological growth in these countries (Wolff and Pett, 2006).

Study Benito et al. (2016), Heunks (1998), and Li et al. (2020) stated that financial performance is significantly influenced by the company's innovation, this is because innovation in business processes, technology and management can help improve operational efficiency such as reducing production costs, optimizing the supply chain, or speeding up the production process and expanding business partners. This efficiency often has a positive impact on financial performance by reducing operational costs thereby increasing profitability. Research result Anokhin et al. (2021), Mokhtarzadeh and Cardinali (2020) and Tian et al. (2021) also shows the same results, namely that innovation affects financial performance. In his research, it is said that innovation in products or services can make companies more competitive in the market. Better products or services can result in increased sales, lower selling prices and can open opportunities to enter new markets or diversify product lines and even services which in turn can increase revenue and profitability.

Differences in research results occur in research results Anokhin et al. (2021) which shows that the influence of networking innovation on financial performance is not significant. This result is a gap because basically networking is really needed by creative industry players to expand business partners, provide business support, and share to achieve competitive advantage. These results are not significant because the selection of business partners is not in accordance with the company's needs, so that the costs incurred by the company become ineffective and even cause losses. The tourism sector is an important sector for the Indonesian economy. In recent years, the contribution of the tourism sector has increased significantly. This increase can be seen from the contribution of the tourism sector to GDP of 4.8% in 2019, this value

increased by 0.30 percent from 2018, namely 4.5% (Syafii and Maripatul Uula, 2022). This increase in contribution was mainly supported by the increasing number of visits from foreign and domestic tourists as well as the increasing number of investments in the tourism sector.

Improving creative economic performance is one of the government's focuses in efforts to achieve economic success in the sustainable development goals (SDGs) era until 2030. According to Biondi and Lapsley (2014), the performance of the creative economy can increase significantly if the creative industry is able to expand and penetrate markets, both domestic and international markets. Today's consumers are also increasingly selective in choosing the products they consume so that only superior products that are unique, creative and innovative are able to compete in the global market (Oliveira and Rosado, 2014). This unique, creative and innovative process is important for the creative industry to increase product innovation in achieving competitive advantage and winning new customers (Oliveira et al., 2014).

One of the cities in the Riau Island, Indonesia is Bintan Island, which is currently developing its tourism industry is Tanjungpinang City. Tanjungpinang is the capital of the Riau Islands Province. The diversity of culture, historical sites, and beautiful views in this city, such as the Penyengat Island Historical Tour, Religious Temple Tour, Senggarang Garden Tour, Dompok Maritime Tourism, and Culinary Tourism, can have tourism potential if developed well. The development of Tanjungpinang City Tourism has not shown the expected results. Not only is it related to the pandemic, but also the lack of information regarding tourist areas in Tanjungpinang City is quite worrying. From 2018 to 2022 there was a decrease in the number of tourists coming to the Riau Islands Province, especially the provincial capital, namely Tanjungpinang City. The largest percentage was in 2020, apart from the pandemic, the lack of local government in promoting various cultures in Tanjungpinang City and the lack of SMEs in innovating to market products through digitalization, is another trigger for the decline in the number of tourists. This data and conditions were confirmed by the head of the Tanjungpinang City Culture and Tourism Service.

This negative impact is of course very difficult, especially for the economy, especially SMEs in Tanjungpinang City, to be able to gain profits from the business activities they carry out, because the orientation for business actors is how the business, they run can improve financial performance as high as possible and reduce business losses to as little as possible. small (Wolff et al., 2006). According to Claudia (2022), a significant decrease in the number of foreign tourist visits to Tanjungpinang City occurred, especially during 2019 to 2020. The decrease in the number of visits reached 89%, meaning that there were almost no significant foreign tourist visits to Tanjungpinang City. This research was conducted based on the phenomenon of decreasing profits and losses in SMEs in the tourism sector in Tanjungpinang City. From SMEs financial report in 2021 in Tanjungpinang City found that most types of business such as tourism, culinary, trade, handicrafts and services experienced a decrease in the average percentage of income, while in the Agribusiness sector it experienced an increase of 39.60%. The type of business that experienced the largest decrease in average monthly income was the tourism business, namely 78.8%. This decline was caused by tourism visits which experienced a rapid decline, resulting in reduced income from sales in the tourism sector (Pratiwi et al, 2021). This research is

important to carry out because financial performance can be the basis for company decision making, knowing the company's weaknesses and deficiencies, and the basis for future company planning.

This study seeks to investigate the impact of innovation and digitalization on the financial performance of SMEs within the tourism sector in Tanjungpinang City. Identification the specific strategies and practices by examining empirical evidence will be led to improved financial outcomes. Understanding these relationships is essential for policymakers, business leaders, and entrepreneurs who strive to create an environment conducive to sustainable economic growth. The anticipated findings of this research are expected to offer valuable insights into the practical implications of open and disruptive innovation for SMEs. By identifying successful innovation strategies, the study will provide actionable recommendations for SMEs to enhance their competitiveness and financial performance. Furthermore, it will contribute to the academic discourse on innovation management, particularly in the context of emerging economies like Indonesia.

2. Materials and methods

2.1. Research method

Research method in this research is quantitative. Quantitative data according to Kersting and Wagner (2011) is data in the form of numbers, or quantitative data that is numbered (scoring). This data can be in the form of numbers or scores and is usually obtained using data collection tools where the answers are in the form of a range of scores or weighted questions. Quantitative methods are also called positivistic methods because they are based on the philosophy of positivism. Apart from that, this method is also known as the scientific method because it meets scientific principles such as empirical, measurable, objective, systematic and rational. This method is also called the discovery method because. This type of method can be developed, and various new science and technology can be discovered. This method is also called a quantitative method because the data is in the form of numbers and the analysis uses statistics. In conducting this research, the author used a research approach with descriptive and verification methods. The descriptive method is a research method used to describe or analyze research results but without the intention of making broader conclusions (Kersting et al., 2011). The verification research method is a research method that aims to determine the relationship between two or more variables (Leavy, 2017). This method is used to test the truth of a hypothesis studied in a study.

2.2. Population and sample

Population is a generalized area consisting of objects or subjects that have certain quantities and characteristics determined by researchers to be studied and then conclusions drawn (Leavy, 2017). The population in this research is SMEs in the tourism sector in Tanjungpinang City. Tourism fields in the Tanjungpinang are culinary and crafts. The population in this study corresponds to the population in 2022, namely 989 SMEs in the tourism sector in Tanjungpinang City. The population

number was obtained from the Tanjungpinang City Cooperative and Micro Enterprise Labor Service as in **Table 1**.

Table 1. Number of SMEs in the tourism sector of Tanjungpinang City.

No	Subdistrict	Number of SMEs in the tourism sector			
		2019	2020	2021	2022
1	Bukit Bestari	240	231	217	220
2	Tanjungpinang Timur	218	201	191	181
3	Tanjungpinang Kota	130	82	61	63
4	Tanjungpinang Barat	564	528	522	525
Total		1152	1042	991	989

Source: Tanjungpinang city cooperative and micro enterprise labor office.

Samples are parts taken from a population based on certain numbers or characteristics (Leavy, 2017). Sampling is the process of selecting a number of elements from the target population so that, based on analysis of samples that have certain characteristics, general conclusions can be drawn (generalizations) regarding the population. In relation to research samples, Glenwick (2016) stated that a sample is a data collection procedure where only a portion of the population is taken and used to determine the desired traits and characteristics of a population. According to Glenwick (2016), a sample can be defined as part of the number and characteristics of the population. If the population is large, and it is impossible for the researcher to study everything in the population, for example due to limited funds, energy, time, then the researcher can use samples taken from the population, so that samples taken from the population must be truly representative and can describe the actual population.

The sample design in this research used purposive sampling. This technique takes samples by determining certain criteria needed by researchers. Purposive sampling is also called an assessment sample or a type of non-probability sampling sample (Leavy, 2017). The sample criteria determined and required by researchers are:

- SMEs that carry out Maklon activities.
- SMEs that have financial reports.
- SMEs that utilize digitalization in company operational activities.

This sampling method was chosen to facilitate the implementation of research on the grounds that researchers have the freedom to determine and select samples according to the researcher's research needs and problems. The results from the Krejcie and Morgan tables obtained a sample of 273 SMEs in the tourism sector in Tanjungpinang City (Sekaran and Bougie, 2016). Sample for this research by region is shown in **Table 2**.

Table 2. Research sample by region.

NO	Subdistrict	Number of samples
1	Tanjungpinang Barat	105
2	Bukit Bestari	89
3	Tanjungpinang Timur	59
4	Tanjungpinang Kota	20
Total		273

2.3. Hypothesis

Our study focuses on several key independent variables, including Maklon, packaging, diversification, creation, and networking. The dependent variable in this study is financial performance, which is measured using indicators such as profitability, sales growth, and market share. These metrics provide a comprehensive view of the financial health and success of SMEs. Additionally, we used digitalization as a moderating variable. Digitalization refers to the adoption and integration of digital technologies in business operations, such as e-commerce platforms, digital marketing, and automated processes. Digitalization is expected to enhance the relationships between the independent variables (Maklon, packaging, diversification, creation, and networking) and financial performance. By leveraging digital tools, SMEs can streamline operations, reduce costs, and expand their market reach, thus amplifying the positive effects of innovative practices on financial performance. Research framework formulated into the hypotheses presented in **Figure 1**.

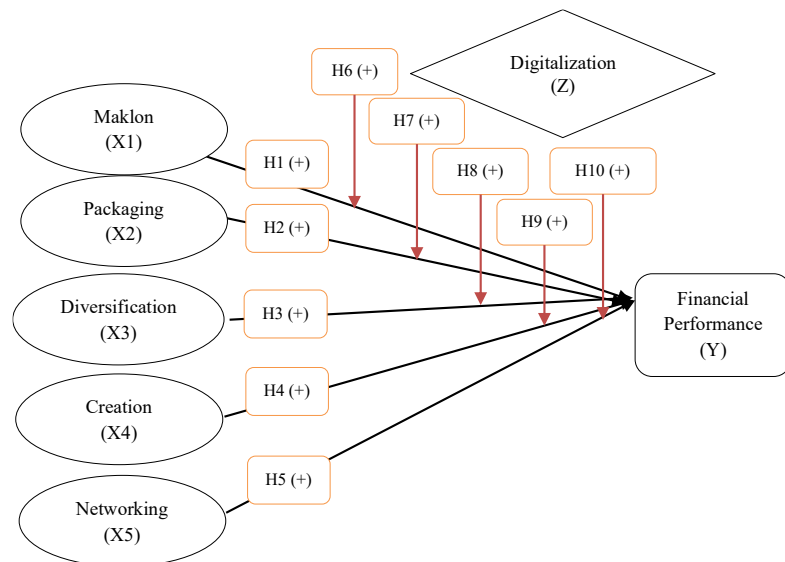


Figure 1. Research hypothesis.

According to **Figure 1**, the following hypotheses have been formulated:

- H1: There is a positive influence of Maklon on financial performance.
- H2: There is a positive influence of packaging on financial performance.
- H3: There is a positive influence of diversification on financial performance.
- H4: There is a positive influence of creation on financial performance.
- H5: There is a positive influence of networking on financial performance.
- H6: Digitalization moderates the relationship between Maklon and financial performance.
- H7: Digitalization moderates the relationship between packaging and financial performance.
- H8: Digitalization moderates the relationship between diversification and financial performance.
- H9: Digitalization moderates the relationship between creation and financial performance.

- H10: Digitalization moderates the relationship between networking and financial performance.

2.4. Data collection and analysis

To investigate the impact of innovation and digitalization on the financial performance of (SMEs) within the tourism sector of Tanjungpinang City, a comprehensive data analysis framework will be employed. Initially, data will be collected from SMEs, encompassing variables related to innovation, digitalization, and financial performance. Subsequently, thorough data preprocessing steps will be undertaken to ensure data accuracy and reliability, including cleaning, transformation, and handling of missing values. Descriptive analysis will follow, allowing for a detailed exploration of the data's characteristics and relationships between variables. Regression analysis will then be conducted to ascertain the relationships between innovation, digitalization, and financial performance, employing robust regression techniques to account for outliers and heteroscedasticity. Furthermore, analysis of variance (ANOVA) will be utilized to evaluate the overall impact of innovation and digitalization on financial performance, while robust test analysis will ensure the validity of results under varying conditions (Gujarati et al, 2012). Model evaluation will involve assessing goodness-of-fit metrics and conducting diagnostic tests to validate model assumptions. Finally, interpretation of results will be carried out, emphasizing the implications for SMEs in Tanjungpinang City's tourism sector, discussing limitations, and suggesting avenues for future research. This structured approach will provide robust insights into the influence of innovation and digitalization on SME financial performance, contributing to both academic understanding and practical implications for businesses in the tourism industry. The data is analyzed using IBM SPSS version 20 software.

3. Results and discussion

The research aim in this study is to examine the influence of Innovation and Digitalization on the Financial Performance of SMEs in the tourism sector in Tanjungpinang City. The descriptive statistics for this study in each variable are shown in **Table 3**. Descriptive statistical tests show that the highest mean lies in the financial performance variable (Mean = 4.6733). These results show that respondents prioritize financial outcomes, indicating that profitability and revenue generation are crucial aspects in their business context. Meanwhile, the lowest mean lies in the Maklon variable (Mean = 2.0147). This suggests that it may not be a central focus for the surveyed businesses.

Table 3. Descriptive statistics in each variable.

Variable	Minimum	Maximum	Mean (N = 273)	Std. Deviation	N
Financial performance	-3.80	7.99	4.6733	1.97631	273
Maklon	0.00	3.00	2.0147	0.69648	273
Packaging	0.00	3.00	2.1062	0.69112	273
Diversification	0.00	5.00	2.8022	0.80284	273

Table 3. (Continued).

Variable	Minimum	Maximum	Mean (N = 273)	Std. Deviation	N
Creation	1.00	4.00	2.5201	0.94351	273
Networking	1.00	5.00	2.4579	0.86553	273
Digitalization	1.00	7.00	4.2418	1.55067	273
Valid N					273

Source: Author's computation, 2023.

Table 4 shows the model summary of the effect of innovation and digitalization on the financial performance of SMEs in the tourism sector in Tanjungpinang City. The results indicate that the value of R^2 is 0.796. This suggests that innovation and digitalization explain approximately 79.6% of the financial performance of SMEs in the tourism sector. Meanwhile, the remaining 20.4% is accounted for by other variables that are not included in the model. Additionally, the Durbin-Watson statistic, which is 2.310, demonstrates that the model is free from serial correlation as the value is close to 2, indicating no significant autocorrelation issues.

Table 4. Model summary^b.

Model	R	R square	Adjusted R square	Std error of the estimate	Durbin watson
1	0.892 ^a	0.796	0.788	0.91026	2.310

a. Predictors: (Constant), Maklon, Diversifikasi, Packaging, Diversification, Creation, Networking, Digitalization.

b. Dependent variable: Financial performance.

(Source: Author's computation, 2023).

Table 5 presents the results of the ANOVA test. The regression model's sum of squares is 846.117 with 11 degrees of freedom, while the residual sum of squares is 216.257 with 261 degrees of freedom. The F -statistic is 92.834, and the significance value (Sig) is 0.000, indicating that the model is statistically significant. It means that innovation and digitalization significantly impact the financial performance of SMEs in Tanjungpinang City's tourism sector. The high explanatory power of the model highlights the importance of these factors, while the statistical significance underscores the robustness of the findings. This suggests that SMEs should prioritize innovative practices and digital transformation to enhance their financial performance.

Table 5. Result of analysis of variance (ANOVA^a).

Model	Sum of squares	df	Mean square	F	Sig
Regression	846.117	11	76.920	92.834	0.000 ^b
1 Residual	216.257	261	0.829		
Total	1062.374	272			

a. Dependent Variable: Financial performance.

b. Predictors: (Constant), Maklon, Diversifikasi, Packaging, Diversification, Creation, Networking, Digitalization.

(Source: Author's computation, 2023).

Table 6 provides the coefficients for the regression model analyzing the impact of various factors, including innovation and digitalization, on the financial performance of SMEs in the tourism sector in Tanjungpinang City. The table

distinguishes between variables with statistically significant effects and those without, providing insights into their respective roles. The significant variables are Maklon, Packaging, Diversification, Creation, and Digitalization ($p < 0.05$). This indicates that improvements in these predictors can enhance the financial outcomes for SMEs. The significant variables in this study—Maklon, Packaging, Diversification, Creation, and Digitalization—demonstrate that various aspects of innovation and operational strategies have a substantial impact on the financial performance of SMEs in the tourism sector. Specifically, innovation in terms of creation and diversification emerges as a critical driver of financial success, highlighting the need for SMEs to continuously develop new products and services and explore diverse market opportunities. Digitalization’s significant positive effect reinforces the necessity for SMEs to adopt digital technologies. This can range from online marketing and e-commerce platforms to digital management systems, which help streamline operations and enhance customer reach. However, the effect of networking is not statistically significant ($p > 0.05$). It means that networking having connections or partnerships may not be enough to boost financial performance. This could indicate that the quality of networks, or how networking activities are leveraged, plays a more crucial role than the mere existence of networks. It also suggests that other unmeasured factors might be influencing the financial outcomes of SMEs in this context.

Table 6. Result of hypothesis testing coefficients^a.

Model	Unstandarized coefficients		Standarized coefficients beta	T	Sig
	B	Std. error			
(Constant)	-3.366	0.423		-7.963	0.000
Maklon	0.251	0.112	0.089	2.242	0.026
Packaging	0.414	0.185	0.145	2.234	0.026
1 Diversification	0.244	0.105	0.099	2.329	0.021
Creation	2.428	0.233	1.159	10.440	0.000
Networking	-0.262	0.150	-0.115	-1.741	0.083
Digitalization	0.550	0.114	0.432	4.819	0.000

a. Dependen variable: Financial performance.
(Source: Author’s computation, 2023).

The results of the Maklon test on Financial Performance in this research show a positive influence or in other words hypothesis 1 is accepted. In SMEs in Tanjungpinang City, because Maklon product services often offer lower production costs compared to the company’s internal production costs. Thus, companies can increase their profits by taking advantage of the efficiency and economies of scale offered by Maklon product services. The Maklon innovation carried out by SMEs in the tourism sector in Tanjungpinang City is more about switching to another company that has a better reputation. This is done of course with the hope of getting positive value in the eyes of consumers for the products they produce, even though they are switching to the company those with a better reputation will increase costs and reduce financial performance. However, customers are willing to pay more for products with good quality because the target of SMEs is local tourists and foreign tourists so that products that are not available in their city or country, they are willing to pay more if

the product produced is of high quality. These results are in accordance with research by Tian et al. (2021) which shows that Maklon services have a positive effect on financial performance.

Packaging products can be implemented in various forms and are one of the most significant types of innovation. In several literature studies discussing packaging innovation on financial performance (Oliveira et al., 2014). Packaging Innovation is defined as a way of coming up with new ideas in the performance attributes of trade products that are offered by minimizing all costs but remaining attractive to increase sales. In this research, packaging has a positive effect on financial performance, this is because basically attractive and environmentally friendly packaging should result in additional costs for the product which in the end will increase the selling price of the product, but in the research object carried out by the researcher, business actors did not at all increasing the selling price of their products even though they have made packaging changes, but the business actor's strategy is to reduce the quantity so that with a more attractive and hygienic appearance the selling price remains the same. In line with other research, Utterback and Abernathy (1975) and Parthasarthy et al. (2002) which revealed that product innovation has a positive relationship with company performance because successful product packaging innovation generates profits, increases market share, and can create its own market (Oliveira et al., 2014).

Diversification has a positive effect on financial performance. This is because the diversification carried out does not require new raw materials in the business production process, so it can meet consumer needs and improve financial performance. The diversification carried out by business actors is by adding new products from products that are already available at the business premises, such as the Rumah Tanjak and Bintan Accessoris craft businesses which are diversifying into 4 products in 2022, namely songket gonggong, tanjak gonggong, potpourri gonggong and shoes gonggong. while Bintan Accessories are Malay sultan cloth, Malay decorations, pottery, and yellow pottery. The diversification of these four products is considered by business actors to obtain profitable sales because tourists both outside Tanjungpinang City and abroad are very interested in the typical regional craft products of Tanjungpinang City.

SMEs can diversify when they have excess resources and capabilities that can channel new ideas and concepts (Chatterjee and Wernerfelt, 1991; Cardinal and Mille, 2000). Previous research on diversification on the financial performance of SMEs in developing countries has received positive responses, in which the more diversification carried out by a business unit can improve the financial performance of the business unit so that it can develop itself into a larger business unit (Chakrabarti et al., 2007; Montgomery and Hariharan 1991). However, it is currently difficult for SMEs to improve their financial performance because they do not have enough resources to develop appropriate diversification strategies to be able to face all current market conditions and competition (Colombo et al., 2014).

Creation has a positive effect on financial performance. This is because creating new products is not an easy thing, but in the mid of post-pandemic economic difficulties, business actors in the tourism sector in Tanjungpinang City are doing a lot of creativity so that the businesses they run remain consistent and don't go bankrupt. There is not a single SME that does not create products such as the Lewi collection and Tanjak Melayu shops. Kedai Lewi collection which adds business creativity to

Malay carpets which were initially just products such as typical Malay crafts. However, products such as Malay carpets have become new products and have even become superior products that tourists look for when visiting Tanjungpinang City, while Tanjak Melayu has added the creation of typical Malay songket and sequin products which are currently an attraction for tourists, especially Singapore. This is in line with research Ojha (2018) who said product creation has a positive effect on financial performance.

The results in this research show that networking has no effect on financial performance. This is because in Tanjungpinang City, sales of products such as crafts and special foods are carried out without fully expecting the support of suppliers or distributors, because specifically in the tourism sector, most sales actually come from collaboration with tour and travel parties and the government, in this case the Tourism Department which carries local tourists or foreign tourists to local craft or culinary places, but this is not really realized by most of the SMEs sampled in this research. This is in line with research Churchill and Olm (1987) which says that no matter how much a company carries out business collaboration, if it is not on target, it will not have an impact on the company's financial performance.

The results in this research show that digitalization moderates Maklon's financial performance. Digitalization is moderating because consumers see a product for quality, such as most SMEs in the tourism sector in Tanjungpinang City, using raw materials to make products that are produced from outside Tanjungpinang. This is described on digital media so that consumers can know that the product they produce has good quality even though the product brand is a typical brand from the Tanjungpinang City area, as in Gonggongcode, in 2022 product sales will have reached 712 products sold out of all goods with e-commerce, the results of this research are in line with research (Mbuyisa and Leonard, 2017) who said digitalization moderates Maklon's financial performance.

The results in this research show that digitalization moderates packaging on financial performance. With digitalization, it can make it easier for consumers to search for a product. The product they are looking for cannot be separated from the condition of the goods and the appearance of the product produced. SMEs in the tourism sector in Tanjungpinang City have made changes not only to make the packaging more attractive, but the packaging has become more economical, environmentally friendly and looks cleaner, thereby attracting consumers to consume or obtain the goods before judging the taste. and the quality of the product, such as products from PD Adi Anugrah, the packaging produced is very environmentally friendly, hygienic and also has an attractive appearance, even though the production and packaging process is carried out by a third party, it is the ideas of business actors that support the success of good packaging, hygienic and economical so that in the e-commerce application in 2022 business sales can increase. These results are in line with research Anderson and Tushman (2018); Robey and Holmström (2001) who said that technology can really challenge the existing market if a business unit can utilize it well when combined with good packaging and can improve financial performance. Product diversification must be based on a good understanding of the market, customers, and consumer trends. Companies must carry out careful market research and analyze customer data to identify product diversification opportunities that suit

their business strategy, because this can minimize new products that will be diversified.

This research found that digitalization moderates' creation on financial performance. Lewi collection and Tanjak Melayu shop entrepreneurs said that the nature of consumers is that they tend to feel bored, including certain products. These SME actors create products within a certain period which can increase sales volume because business actors feel that there is starting to become saturation of the products produced or sold on the market, so that not only offline, but online there is no significant difference at first. By creating new products and then marketing them through digitalization, it is very effective for increasing sales because new products are considered capable of making consumers eliminate boredom from a product, and can also reach consumers wherever they are, these two methods have proven to be very effective in generating income for business actors, they said that They have benefited from the pandemic, where currently almost all groups can use digitalization, especially shopping on e-commerce. These results are in line with research Pan et al. (2018); Yoo et al. (2012) which says with digitalization consumers can find out about new products in the company, thereby creating an attraction for consumers to consume these products.

The results in this study show that digitalization moderates networking on financial performance but the relationship weakens. The business owners of the Lewi collection and Tanjak Melayu shops said that the system they have tends to have problems such as errors and even being entered by online gambling sites so it is not uncommon to always carry out maintenance by calling technicians from business partners to fix this, then installing algorithms on e-commerce so that business products can appear on the main page when consumers open the application. The costs incurred for these improvements are certainly not small, causing financial performance to decline. Thus, digitalization tends to weaken the relationship between business partners and financial performance if conditions are like that but can be a challenge if not managed well. It is important to consider these impacts and take steps to mitigate risks in the digitalization process so that business relationships remain strong and financial performance remains positive, these results are in line with research Churchill and Olm (1987) which says that no matter how much a company carries out business collaboration, if it is not on target, it will not have an impact on the company's financial performance.

The tourism sector in Tanjungpinang City may have unique characteristics that influence the effectiveness of networking. For instance, the dependence on seasonal tourist flows and the variability in tourist demographics can affect how networking activities translate into financial outcomes. Additionally, SMEs might lack the resources or knowledge to engage in effective networking practices, focusing instead on immediate sales rather than long-term strategic partnerships. Jack et al. (2010) highlights the importance of context in determining the impact of networking on business performance, suggesting that the local economic environment and industry-specific factors play crucial roles. Similarly, Anderson et al. (2010) found that in certain contexts, informal networks and community-based relationships can be more influential than formal business networks. Conversely, studies by Johanson and Vahlne (2009) emphasize the significance of networks in international business expansion, which might not be as applicable to the predominantly local-focused SMEs

in Tanjungpinang City. This contrast highlights the need to consider the specific economic and cultural context when evaluating the role of networking in SME performance. Conversely, studies by Johanson and Vahlne (2009) emphasize the significance of networks in international business expansion, which might not be as applicable to the predominantly local-focused SMEs in Tanjungpinang City. This contrast highlights the need to consider the specific economic and cultural context when evaluating the role of networking in SME performance.

The specific benefits and challenges of digitalization for these SMEs are multifaceted. Digital tools and platforms, such as social media, websites, and online advertising, enable SMEs to reach a broader audience, enhance customer experience, and improve operational efficiency. This aligns with Rogers' diffusion of innovations theory, which posits that innovations are more likely to be adopted if they provide clear advantages over existing practices (Rogers, 2003). For example, a local craft shop in Tanjungpinang might use Instagram to display its handmade products, attracting tourists who are searching for unique local souvenirs. The enhanced customer experience through online reservation systems and mobile apps further supports this theory, as these tools provide convenient booking options and personalized services, thereby improving customer satisfaction and loyalty (Sørensen and Jensen, 2019).

Moreover, digitalization streamlines operations through tools like inventory management software, automated accounting systems, and customer relationship management (CRM) systems, which help SMEs manage their resources more effectively, reduce errors, and save time. This is consistent with the resource-based view (RBV) of the firm, which emphasizes that unique resources and capabilities, such as digital tools, can provide a competitive advantage (Barney, 1991). For instance, a local restaurant might use a digital inventory system to track ingredient stock levels in real time, ensuring they never run out of key items. Furthermore, digital tools provide valuable data analytics that help SMEs understand customer preferences, market trends, and business performance, which informs strategic decisions and marketing efforts. This aligns with the concept of data-driven decision making, which has been shown to enhance organizational performance (Brynjolfsson and McElheran, 2016).

Despite these benefits, many SME owners and employees in the tourism sector may lack the necessary digital skills to effectively implement and manage digital tools. This skills gap can hinder the adoption of digital innovations and limit their potential benefits. Training programs and workshops can help bridge this gap, but they require time and resources that some SMEs might find challenging to allocate. This challenge aligns with the technology-organization-environment (TOE) framework, which suggests that technological, organizational, and environmental contexts influence technology adoption (Tornatzky and Fleischer, 1990).

Reliable internet connectivity and access to modern digital devices are essential for successful digitalization. However, in some areas of Tanjungpinang, infrastructure limitations might impede the use of digital tools. SMEs in remote or underserved areas might struggle with slow internet speeds or lack of access to affordable digital technology. This barrier is consistent with the Digital Divide theory, which highlights the gap between those who have access to digital technologies and those who do not. The initial cost of adopting digital tools and platforms can also be a barrier for SMEs

with limited financial resources. Investing in new technology, software licenses, and training can be expensive, and the return on investment might not be immediate. Financial constraints can make it difficult for SMEs to prioritize digitalization over other pressing business needs, echoing findings from previous research on financial barriers to technology adoption (Savrul et al., 2014).

Cultural resistance to change and a lack of awareness about the benefits of digitalization can also pose challenges. Some SME owners might be hesitant to adopt new technologies due to fear of the unknown or a preference for traditional business practices. Overcoming this resistance requires education and demonstrating the tangible benefits of digitalization, which aligns with the theory of planned behavior (Ajzen, 1991).

Effective digital innovations include e-commerce platforms, digital payment systems, and social media marketing. Online marketplaces and e-commerce websites allow SMEs to sell their products directly to consumers, expanding their market reach beyond local boundaries. For instance, a local handicraft maker in Tanjungpinang could use an e-commerce platform like Tokopedia or Bukalapak to reach customers across Indonesia and even internationally. Mobile payment solutions and digital wallets, such as GoPay and OVO, offer convenient and secure payment options for customers. These systems reduce the reliance on cash transactions and improve the overall customer experience. A local café, for example, can attract more tech-savvy tourists by accepting digital payments. Leveraging social media for marketing and customer engagement is one of the most effective digital innovations for SMEs. By creating compelling content and engaging with followers, SMEs can build strong customer relationships and drive sales. A tour operator in Tanjungpinang could use YouTube to share video tours of popular destinations, attracting potential tourists and providing a virtual experience of their services.

4. Conclusion

Based on the findings, several conclusions were drawn regarding the factors influencing the financial performance of tourism SMEs in Tanjungpinang City. Firstly, Maklon services were found to have a positive impact on financial performance due to their ability to reduce raw material and production costs, enhance flexibility in meeting market demands, and increase profit margins. Similarly, packaging innovations were observed to positively affect financial performance by differentiating products, improving consumer experience, and aiding in marketing objectives. Furthermore, diversification strategies were identified as contributing positively to financial performance by expanding market reach and mitigating market fluctuations. Additionally, product creation was found to enhance financial performance by enabling companies to differentiate themselves and attract new customers. However, networking was found to have no significant effect on financial performance, emphasizing the importance of efficient collaboration practices to avoid unnecessary costs.

Moreover, digitalization was found to moderate the relationships between various factors and financial performance. In the case of Maklon and packaging, digitalization through e-commerce platforms facilitated wider market reach and enhanced product

information dissemination, thereby improving operational efficiency, and increasing sales potential. Similarly, digitalization moderated the relationship between diversification and financial performance by enabling companies to explore diverse market segments and adapt product offerings accordingly. Additionally, digitalization influenced the relationship between creation and financial performance by providing access to market data and facilitating rapid product testing and validation, thereby optimizing product development processes, and enhancing financial performance. However, the impact of digitalization on networking and financial performance was mixed, as while it offered potential benefits such as increased visibility and market access, it also posed challenges related to initial investment costs and management complexities, highlighting the importance of strategic partnerships and effective management practices in leveraging digitalization for financial performance improvement.

This study can significantly bolster academic discourse, particularly in the realm of innovation theory. By integrating aspects of open innovation theory and disruptive innovation theory, the findings contribute to a more robust theoretical framework. This synthesis emphasizes the contemporary imperative for businesses to leverage external knowledge and ideas alongside internal resources, thereby fostering adaptability to rapid market and technological changes. Moreover, the research underscores the importance of objective measurements, devoid of subjective perception data, in elucidating real-world implications, thereby enhancing the credibility and applicability of theoretical constructs in empirical settings.

Furthermore, the study highlights the potential socioeconomic benefits of innovation and digitalization at the local level. By enabling SMEs to thrive through innovation and digitalization, the research contributes to job creation and stimulates economic growth within communities. Moreover, the adoption of innovative practices and digital technologies empowers SMEs to develop unique products and services, thereby gaining a competitive edge in the market and enhancing profitability. Additionally, innovation and digitalization equip businesses with agility in response to market dynamics. By monitoring trends and customer preferences, SMEs can swiftly adapt to changes, ensuring continued relevance and resilience in volatile market environments. Thus, the practical implications of the research extend beyond theoretical discourse, offering actionable insights to policymakers, industry stakeholders, and SMEs alike, thereby fostering sustainable growth and competitiveness.

Furthermore, this study provides valuable insights for policymakers, business leaders, and entrepreneurs regarding the enhancement of innovation and digitalization efforts among SMEs in the tourism sector in Tanjungpinang City. SMEs can take several concrete actions to leverage digital tools and platforms effectively. They should invest in digital marketing strategies, utilizing social media platforms, e-commerce websites, and online advertising to reach a broader audience and engage with customers. This includes creating compelling content, using targeted ads, and maintaining an active online presence. Second, SMEs should adopt digital management tools such as inventory management systems, customer relationship management (CRM) software, and online booking platforms to streamline operations

and improve customer service. Training programs should be implemented to equip employees with the necessary digital skills to manage these tools effectively.

Policymakers and industry associations have a crucial role in supporting the growth and competitiveness of tourism SMEs. Local government can facilitate digitalization by improving internet infrastructure and ensuring reliable connectivity across Tanjungpinang City. Additionally, offering financial incentives, such as grants or low-interest loans, can help SMEs overcome the initial cost barriers associated with adopting digital technologies. Policymakers should also consider establishing digital literacy programs and workshops to bridge the skills gap and promote the benefits of digitalization among SME owners and employees. Industry associations can further support SMEs by creating platforms for collaboration and knowledge sharing, fostering an environment where businesses can learn from each other's experiences and best practices. Future research could explore several promising areas to build on the findings of this study. One potential area is the role of government policies and support mechanisms in enhancing the innovation capabilities of SMEs in the tourism sector. Investigating how different types of government interventions, such as financial subsidies, training programs, and infrastructure development, impact SME performance could provide valuable insights for policymakers.

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