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Submission date: 20-Apr-2024 09:59PM (UTC+0700)
Submission ID: 2355909285
File name: 4.V19I01A8_10531876-Zn0xCuMNpH84Jhe_2_2.pdf (872.61K)
Word count: 9544
Character count: 52814

The Seybold Report

ISSN 1533-9211

DOI: 10.5281/zenodo.10531876

TECHNOPRENEOURSHIP CONTRIBUTION ON SMALL MEDIUM INDUSTRY BUSINESS PERFOMANCE IN BALI-INDONESIA

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Abstract

The purpose of this study was to analyze the role of technopreneurs in supporting the productivity of small and medium industry (SMIs). The effect of innovation on small and medium industry business performance, the influence of Information Technology on business performance, and the role of Information Technology in mediating innovation on business performance were tested in this study. Data were collected using an online questionnaire. A total of 347 questionnaires were sent to the business owner of SMIs in Bali province. This study used structural equation modeling analysis with partial least square (PLS) software to analyze three research problems. The result of the analysis shows that: 1) innovation has a positive effect and is significant on business performance; 2) innovation has a positive effect and is significant on IT; 3) Information Technology has a positive effect but does not significant on business performance.; 4) Information technology does not mediate the relationship between innovation and performance. The result of the analysis also shows that the three dimensions of innovation, namely product innovation, process innovation and distribution innovation are able to significantly shape the innovation construct. The implication of this research is that innovation plays an important role in improving business performance

Keywords: Technopreneurship, Innovation, Information Technology, and Business Performance.

1. INTRODUCTION

Economic globalization that is taking place in the world demands a change in economic management from resource-based to knowledge-based. Resourced-based demands the availability of large natural resources, while currently the natural resources owned by countries in the world are decreasing, mainly due to environmental degradation and unfriendly management (Institute for the development of student education and alumni relations Institute of Technology Sepuluh Nopember Surabaya/ [1]).

One of the keys to the creation of knowledge-based is the integration between entrepreneurship and the use of technology which is abbreviated as technopreneurship, namely as an activity of business by relying on innovation integrated with technology. Innovation plays an important role in improving business performance. Product innovation is one of the key factors for organizational success and an important strategy for increasing market share and business performance[2] . While process innovation is useful for reducing production costs and also for satisfying customers[2] . Meanwhile, the target of marketing innovation is to increase sales, market share and open new markets[3]. According to [4] creativity and innovation have an important role for the growth of organizational performance in the global market. Previous studies have shown that innovation has a positive effect on business performance[5]. Research [6] and [2] show that innovation has an effect on performance.

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

Thus, success in commercializing innovation is an important strategy for companies. The result of [5] research shows that innovation has a positive effect on business performance in small and medium-sized enterprises (SMEs) in the info-electronic industry in Taiwan. The result of research by [7] shows that the introduction of new products, process innovations and market innovations are positively related to company growth. The result of the research by [6] in the manufacturing industry in Turkey shows that the dimensions of innovation (product, process, marketing and organization) have an effect on performance. The same thing was also done by [2] in the manufacturing industry in Pakistan shows that the dimensions of innovation affect performance. Likewise, subsequent research shows that innovation has a positive and significant effect on performance[8] .

Likewise, technology, especially information technology (IT) plays an important role in business activities in the era of globalization. Information technology plays an important role in supporting the success of a company in situations of uncertainty and economic turmoil [9]. The result of research by [10] shows that IT is an important valuable resource in improving business performance. Based on the result of their research on the relationship between IT and firm performance and value, [11] state that IT is a strategic resource and has a significant positive effect on performance. The study of [12] shows that IT and innovation determine company performance. [13] Study shows that IT has a positive effect on future company performance and increases firm value. The result of [14] study also shows that IT has a primary influence on strategic orientation and company performance. The great potential for IT investment in improving business performance has also been carried out through a study by [15]. [16] Study also shows that IT investment strategies have a real influence on company performance.

Based on the description of the results of the study above, this study aims to analyze: 1) The effect of innovation on small and medium industry (SMIs) on business performance, 2) the influence of information technology on business performance, and 3) the role of Information Technology in mediating innovation on business performance. Based on the results of previous studies, the novelty of this study is to use IT as a mediating variable between innovation and business performance.

In Bali Indonesia, SMIs have a significant contribution to the expansion of job opportunities and employment, the formation of gross domestic product, and the provision of social safety nets for low-income communities to carry out productive economic activities. However, the contribution of SMIs is not sufficient to encourage economic growth and increase higher incomes. SMIs in Bali have difficulty in improving their business performance, where the Province of Bali ranks number 16 out of 33 provinces evaluated (National Development Planning Agency/BAPPENAS, 2015: 12). Business performance is defined as the company's ability to realize goals supported by good administrative skills, good governance and a reliable commitment to achieving business goals [17]. There will be a successful business activity if the business is built in accordance with the needs and desires of the target market demand. Besides, the products produced must have high specifications and effectiveness compared to competitors, so as to be able to build competitive advantage [18]. To answer these challenges,

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

the role of technopreneurship is a must for SMIs to improve their business performance.

This research contributes to improving the business performance of SMIs in Bali Indonesia. This study also provides an important contribution in enriching the conceptualization of SMIs developed by previous researchers, demonstrating the importance of the role of technopreneurship in developing the performance of SMIs business performance.

2. LITERATURE REVIEW

2.1 The Scope of Research

The number of SMIs in Indonesia is very large, amounting to 99.99% of the total number of business activities [19] . This phenomenon shows that SMIs have enormous potential to support micro and macro-economic development. Therefore, it is very important for the Government of Indonesia to improve the performance of SMIs as an effort to increase the rate of economic growth both nationally and regionally, especially in the province of Bali. To improve the performance of SMIs, the role of technopreneurship which includes entrepreneurship based on the use of information technology is very important to do in the current era of globalization, where the transformation of information is growing very fast.

2.2 Business Performance

Performance or work performance is the result or output of a process [20]. According to the behavioral approach in management, performance is the quantity or quality of something produced or services provided by someone who does the job [21].

Performance is work performance, which is a comparison between work results and established standards[22]. Performance is the result of work, both in quality and quantity achieved by a person in carrying out tasks according to the responsibilities given [23]. Performance is the result or level of success of a person as a whole during a certain period in carrying out tasks compared to various possibilities, such as work standards, targets or targets or criteria that have been previously agreed upon [24]. [25] State that performance is basically what employees do or don't do. Performance management is all activities carried out to improve the performance of the company or organization, including the performance of each individual and work group in the company because performance is the result of work from behavior [26].

The concept of business performance is narrowly centered on the use of result based on financial indicators that are assumed to reflect the fulfillment of the company's economic objectives. This concept refers to financial performance such as market growth, profitability, earnings per share [27]. [28] Classifies performance into two groups, namely internal performance (financial) and external performance (marketing). Because from financial measures alone, the company cannot be used as an external measure of market growth, competitive prices, relative product and service quality, consumers satisfaction, customers loyalty.

Business performance measurement of this study uses the following indicators: 1) timely and quality service from both business owners and employees according to the concept proposed

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

by [29] ; [24] and [25] ; and the concept of level of skills possessed by employees by [22], [23] the concept of effectiveness of the existing financial reporting system[29] ; and the amount of sales turnover that is qualified and acceptable to the market [20], [21]

2.3 Technopreneurship

Tecknopreneurship comes from the words teknology and entrepreneurship, which means as a process of formation and collaboration between business fields with the application of technology as a supporting instrument and business basis, both in the process, system, parties involved and the resulting output [1]. Technopreneurship is also said to be an integral character between the competence of applying technology as an instrument with the spirit of building a business[30].

According to [31], there is a real difference between ordinary entrepreneurship and entrepreneurship that uses technology. Ordinary entrepreneurship is only related to selling and making profits, while entrepreneurship using technology must be successful in two fields at the same time, that is to ensure that technology functions properly according to the needs of the target customers and technology can be sold for a profit.

2.3.1 Entrepreneurship

Entrepreneurship has an important role in economic development [32] ; [33] ; [34]. The term entrepreneur was first proposed by Richard Cantillon (1755) when conducting research on entrepreneurial IQ. Entrepreneurship comes from the French language, namely "entreprendre" which means trying or trying. In the Encyclopedia of America (1984) it means entrepreneurs who have the courage to take risks by creating production including capital, labor, raw materials, and from business ventures they get profit.

[35] States that entrepreneurship is an activity that is consistently carried out to convert good ideas into profitable business activities. Furthermore, [36] said that entrepreneurship is the process of organizing and managing risks for a new business. Entrepreneurship is the process of organizing and managing risk for a business by identifying and evaluating the market, finding solutions to fill market opportunities, managing the necessary resources, and managing risks related to the business [1]. As a conclusion, entrepreneurship is defined as the process of creating value by combining these concepts with the aim of taking advantage of the available opportunities [37].

2.3.2 Innovation

[38] States that innovation is an entrepreneurial ability to support creativity in producing new products or better products or services or the ability to create technology based on the result of research and organizational development. [39] States that there are five types of innovation that can be carried out by companies, such as introducing new products, or products with better quality, new process innovations for the industry, opening new markets, developing sources of supply of raw materials or inputs. Others, and changes in the organization.

In this study, innovation is classified into three, namely: 1) product innovation, 2) process innovation and 3) marketing (distribution) innovation.

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DOI: 10.5281/zenodo.10531876

1) Product Innovation

Product innovation is the introduction of completely new goods or services or significant improvements from existing ones with regard to functional characteristics or their use, improvements in technical specifications, components and materials, friendliness in use or other functional characteristics [3]. Product innovation is one of the key factors for organizational success and is an important strategy for increasing market share and business performance [2]. The indicators for measuring product innovation in this study are: 1) being able to create new products, 2) making modifications to old products, 3) the products offered are different from products elsewhere, 4) and always improving the quality of the products provided (Soleh, 2014:74).

2) Process Innovation

Process innovation is the implementation of completely new or significantly improved production or delivery methods including significant changes in techniques, equipment and/or software, delivery methods in terms of enterprise logistics and includes equipment, software and techniques for input sources, allocating supply within the company, or delivery of the final product [3]. Process innovation is useful for reducing production costs and also for satisfying customers[2]. The indicators for measuring process innovation are: 1) utilizing the latest methods for business, 2) using the latest tools/machines to facilitate production, 3) and always updating the working mechanism for the better.

3) Marketing Innovation

Marketing innovation is the implementation of a new marketing method in terms of product design, placement and promotion as well as pricing. In terms of product design, what has changed is the form and appearance, not its functions and characteristics. The goal of distribution innovation is to increase sales, market share and open new markets[3]. The indicators for measuring marketing innovation in this study are: 1) using new marketing methods when the old methods no longer encourage sales, 2) making wider distribution than before, 3) providing safe and attractive packaging for products, 4) and following exhibition event as a product distribution strategy.

2.4 Information Technology (IT)

[40] States that IT is a communication tool through computer media. While explains that IT is part of a machine that is able to carry out a series of instructions. The common wealth secretariat (1991) explains that the phrase of IT is used to describe new technologies and their applications, including all aspects of computers used, namely micro-electronic equipment, satellites and communication technology. From all these definitions it can be said that communication technology is an aspect of information technology.

Many researches on the use of IT have been carried out. [41], state that computers and other technologies have been widely used in all aspects of business, industry, banking, education and government. [9] State that IT plays an important role in supporting the success of a company in situations of uncertainty and economic turmoil. Research on the use of IT for entrepreneurial

ISSN 1533-9211

DOI: 10.5281/zenodo.10531876

activities has been widely carried out in the world, there are many factors identified related to entrepreneurship including: a combination of individual entrepreneurial abilities with personal innovation abilities, courage to take risks, proactivity in realizing ideas and a combination of ability to be responsible for success or fail [42] ; [37]. IT systems affect products and services, markets, production costs and product differentiation, therefore, success in corporate innovation is highly depended upon the implementation and creative use of IT [9].

[43] State that IT is related to social entrepreneurship which has an effect on sustainable development. Efficiency and improvement is a necessary part of the job, because it requires workers who have the ability to use IT to overcome geographic boundaries. The indicators used to measure IT are as follows: 1) the application of information technology as a driver of industrialization [9]; 2) understanding of the importance of using information technology [44] ; 3) and skills in using information technology [41].

2.5 Hypotheses Formulation

2.5.1 Innovation and Business Performance

Product innovation is one of the key factors for organizational success and an important strategy for increasing market share and business performance [2]. While process innovation is useful for reducing production costs and also for satisfying customers [2]. Meanwhile, the target of marketing innovation is to increase sales, market share and open new markets [3]. According to [45] creativity and innovation have an important role for the growth of organizational performance in the global market.

Several previous studies have shown that innovation has a positive effect on business performance[5]. Research [6] and [2] show that innovation has an effect on business performance. Innovation is often described as the lifeblood of an organization and is decisive in a company. A company's ability to trade innovation can help dominate current markets or develop new markets, contributing to continued industry leadership, thus, success in commercializing innovation is an important strategy for companies. The study of [5] shows that innovation has a positive effect on business performance in small and medium-sized enterprises (SMEs) in the info-electronic industry in Taiwan. The result of research by [7] show that the introduction of new products, process innovations and market innovations are positively related to company growth. The result of the research by [6], in the manufacturing industry in Turkey shows that the dimensions of innovation (product, process, marketing and organization) have an effect on performance. The same thing was also done by [2] in the manufacturing industry in Pakistan shows that the dimensions of innovation affect performance. Likewise, subsequent research shows that innovation has a positive and significant effect on performance [46] ; [8]. The application of innovation can improve organizational performance and there is no theory refuses it [47]. Based on the results of the research used as a reference for this study, the hypotheses in this study is as follows.

H1: Innovation has a positive effect on business performance.

ISSN 1533-9211

DOI: 10.5281/zenodo.10531876

2.5.2 Innovation and IT

For SMEs to achieve a higher level of innovation, all activities related to innovation made by companies should have a basic support of information technology and communication [48], [49]. [50] Also concluded in their study that the companies that made a major investment in information technology and communication, achieved a higher level of competition and innovation that companies that did not invest in it. According to [48] usually the ideas that become innovations are implemented by initiatives of the information and communication technology, commonly, the results of this improve significantly the innovation of new products and processes, which translates in a customer´s loyalty promotion and stimulate a demand for other products of the organization. Meanwhile, [49] considered in their study that the extent to which firms want to maximize innovation activities performed daily, should in the first instance, adopt and implement the information and communication technology and, on appeal, align initiatives in information and communication technology with all activities of the innovation made by organizations. Also, these businesses have regularly taken the information technology and communication for use in the management of customer relationships, improve the production process, managing the supply chain, innovation and other essential activities of organizations [51]; [52]; [53]. Based on the results of the research used as a reference for this study, the hypotheses in this study is as follows.

H2: Innovation has a positive effect on IT

2.5.3 IT and Business Performance

Success in corporate innovation is highly depended upon the implementation and creative use of IT [9] Furthermore, it is said that information technology plays an important role in supporting the success of a company in situations of uncertainty and economic turmoil. The result of research by [10] shows that IT is an important valuable resource in improving business performance. Based on the result of their research on the relationship between IT and firm performance and value [11] state that IT is a strategic resource and has a significant positive effect on performance. [13] Study shows that IT has a positive effect on future company performance and increases firm value. The result of [14] study also shows that IT has a primary influence on strategic orientation and company performance. The great potential for IT investment in improving business performance has also been carried out through a study by [15]. [16] Study also shows that IT investment strategies have a real influence on company performance. Considering the results of the studies above, the hypothesis that could be formulated is as the following.

H3: IT has a positive effect on business performance

2.5.4 The Role of IT in Mediating Innovation on Business Performance

The role of IT in addition to providing a direct influence on improving performance can also have an indirect influence through its role in mediating the relationship between innovation and performance. Study by [54] stated that one of the many elements that characterize the present century is the information and communication technology, which plays a fundamental

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

role in establishing the basis for the adoption and implementation of the innovation activities that the organizations need to improve management and production methods, which will allow them to survive in a highly globalized and competitive market. The study of [12] shows that IT and innovation determine company performance. IT enables companies to maintain sustainability and gain success in various market changes so that it could increase profits and business performance [55]. [56] State that technology facilitates the acquisition of resources that facilitate internal processes in improving financial performance to improve business performance. Furthermore, it is said that IT plays an important role in increasing the output of the same resources to improve business performance [56]. IT is also the most recognized factor to support companies in winning the competition [57]. Based on the result of the study, the following hypothesis is proposed.

H4: IT mediates the relationship between innovation and business performance

3. METHODOLOGY

3.1 Research Setting and Sample

This research was conducted in the Province of Bali-Indonesia in 2021 with the total number of SMIs in the province of Bali is 15,198 (Bali Provincial Industry Office 2019), the number of samples studied is 347 SMEs, the method used to determine the sample size is Isaac and Michael [58] The method in determining the number of respondents in each district is proportionate stratified random sampling, while the selection of respondents using simple random sampling method. Respondents in this study were SMIs business owners. Data was obtained by distributing pre-prepared questionnaires directly to 347 respondents throughout Bali. The research objects are: SMIs business performance, innovation consisting of three dimensions, namely: product innovation, process innovation, and marketing innovation and information technology.

3.2 Measurement

Performance measurement of this study uses the following indicators: 1) timely and quality service from both business owners and employees according to the concept proposed by [29]; [24]; and [25]. 2); and the concept of level of skills possessed by employees by [22], [23]; 3), the concept of effectiveness of the existing financial reporting system [29], 4); and the amount of sales turnover that is qualified and acceptable to the market [20], [21].

The indicators for measuring product innovation in this study are: 1) being able to create new products, 2) making modifications to old products, 3) the products offered are different from products elsewhere, 4) and always improving the quality of the products provided (Soleh, 2014:74). The indicators for measuring process innovation are: 1) utilizing the latest methods for business, 2) using the latest tools/machines to facilitate production, 3) and always updating the working mechanism for the better [3]. The indicators for measuring marketing innovation in this study are: 1) using new marketing methods when the old methods no longer encourage sales, 2) making wider distribution than before, 3) providing safe and attractive packaging for products, 4) and following exhibition event as a product distribution strategy [3].

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ISSN 1533-9211
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The indicators used to measure IT are as follows: 1) the application of information technology as a driver of industrialization[9] understanding of the importance of using information technology [44] and skills in using information technology [41].

This study uses a quantitative design, data obtained by using the method of surveys with a questionnaire instrument. The measurement scale used is Likert with a scale of 5, with criteria 1 is strongly disagree, 2 is disagree, 3 is doubtful, 4 is agree and 5 is strongly agree[58] .

3.3 Data analysis

In analysing the effect of exogenous variables on endogenous variables use a structural equation model (SEM) based on Partial least suare (PLS). The reason is that PLS is not based on many assumptions (Wold, 1985), the data does not have to be normally distributed for all categories: ordinal, interval and ratio. Analysis is not based on measurement scale, data distribution and sample size. PLS can be used for both theory confirmation and latent correlation of variables. In analysis for the innovation construct using the second order model because innovation is divided into three dimensions, namely product, process and marketing innovation. While the constructs of information technology and business performance use the first order model because there are no analyzed dimensions in the model. In this study the indicators that make up the latent variable are reflexive, then the evaluation of the measurement model (measurement model/outer model), to measure the validity and reliability of these indicators are: a) convergent validity, b) discriminant validity, and c) composite reliability and cronbach alpha. While the evaluation of the structural model (Structural Inner Model) to evaluate the level of accuracy of the model in the research as a whole is carried out through the analysis of: a) R-Square (R^2), b) Q-Square Predictive Relevance (Q^2), c) Goodness of Fit (GoF), and d) Structural Model Analysis.

4. RESULT/FINDING

4.1 Respondent Profile

The profile of the respondents studied as shown in table 1 shows that of the 347 respondents studied, 49.50 percent were women and 50.50 percent were men. Judging from the age of the respondents, 8.70 percent are between 17-22 years old, 15.50 percent are 23-28 years old, 11.70 percent are 29-34 years old and 64.10 percent are over 34 years old. The respondents studied had a relatively high level of education, namely 56.30 percent with a college education background, 4.90 percent junior high school and 38.80 percent high school. Meanwhile, in terms of the products produced, 32 percent of them provide food and beverages, 43.70 percent of fashion, 7.8 percent of ceremony equipment, body care and furniture respectively 4.90 percent and 6.80 percent of souvenirs.

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

Table 1: Gender, Age, Education and Products Produced by Respondents

Gender	Percentage
Male	49,50
Female	50,50
Age (Year)	**Percentage**
17 - 22	8,70
23 - 28	15,50
29 -34	11,70
> 34	64,10
Education	**Percentage**
Junior High school	4,90
Senior High school	38,80
College	56,30
Product	**Percentage**
Food and Beverage	32,00
Fashion	43,70
Ceremonial Equipment	7,80
Body care	4,90
Furniture	4,90
Souvenirs	6,80

Source: Field research results

4.2 Data Analysis

Based on the result of the calculation of field research data using a structural equation modeling model based on PLS, the analysis can be described as follows.

4.2.1 Outer Model Evaluation

1) Convergent Validity

Convergent validity is a criterion in measuring the validity of reflexive indicators. This evaluation is carried out by examining the outer loading coefficient of each indicator on its latent variables. An indicator is said to be valid, if the coefficient of outer loading is between 0.60 – 0.70 but for an analysis whose theory is not clear then an outer loading of 0.50 is recommended [59], and is significant at the alpha level of 0.05 or t- statistics 1.96. The value of the outer loading of each indicator on the latent variable can be seen in Table 1 shows that all indicators are valid.

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DOI: 10.5281/zenodo.10531876

Table 1: Outer Loading Index Indicators

Construct	Indicators	Original Sample	Description
Performance	Y11	0,76	Valid
	Y12	0,90	Valid
	Y13	0,80	Valid
	Y14	0,77	Valid
Information Technology	X11	0,89	Valid
	X12	0,96	Valid
	X13	0,93	Valid
Process Innovation	X211	0,85	Valid
	X212	0,87	Valid
	X213	0,86	Valid
	X214	0,83	Valid
Distribution Innovation	X221	0,83	Valid
	X222	0,68	Valid
	X223	0,88	Valid
Product Innovation	X231	0,84	Valid
	X232	0,82	Valid
	X233	0,85	Valid
	X234	0,78	Valid

Source: research data calculation results 2021

2) Discriminant Validity

Measurement of the validity of the indicators that make up the latent variable can also be done through discriminant validity. Discriminant validity can be done by comparing the coefficient of the AVE Root (√AVE or Square root Average Variance Extracted) of each variable with the correlation value between variables in the model. A variable is said to be valid, if the AVE root is greater than the correlation value between variables in the research model [59], and the AVE is greater than 0.50.

Table 2: AVE Value

Construct	AVE	√AVE
Performance	0,65	0,81
Information Technology	0,86	0,92
Process Innovation	0,73	0,85
Distribution Innovation	0,67	0,82
Product Innovation	0,68	0,82
Innovation	0,55	0,74

Source: research data calculation results 2021

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Table 2 shows that all constructs show a value of AVE > 0.50, the AVE root value ranges from 0.74 - 0.92 while the correlation value between constructs ranges from 0.62 - 0.90, meaning that the discriminant validity test results show that all constructs are valid.

3) Composite Reliability and Cronbach Alpha

A measurement can be said to be reliable, if the composite reliability and Cronbach alpha have a value greater than 0.70. Composite reliability and Cronbach alpha are a measure of reliability between indicator blocks in the research model.

Table 3: Cronbach Alpha and Coposite Reliability Index

Construct	Cronbachs Alpha	Composite Reliability
Performance	0,82	0,88
Information Technology	0,92	0,95
Process Innovation	0,87	0,92
Distribution Innovation	0,76	0,86
Product Innovation	0,84	0,89
Innovation	0,92	0,93

Source: Survey data calculation results 2021

Table 3 shows that all constructs have Cronbach alpha and composite reliability values greater than 0.70, so they have met the valid requirements.

4.2.2 Inner Model Evaluation

Evaluation of the structural model (Inner Model) is a measurement to evaluate the level of accuracy of the model in the research as a whole, which is formed through several variables and their indicators. The results of further calculations are described below.

1) Evaluation of Structural Models Through R-Square (R^2)

R^2 can show the strength and weakness of the influence caused by the dependent variable on the independent variable. R^2 can also show the strength of a research model. According to Hair [59], the R^2 value of 0.75 is classified as a strong model, while the R^2 of 0.50 is classified as a moderate model and the R^2 value of 0.25 is classified as a weak model.

Table 4: R-Square Index

Construct	R-Square
Performance	0,52
Information Technology	0,62
Process Innovation	0,76
Distribution Innovation	0,80
Product Innovation	0,81

Source: Survey data calculation results 2021

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ISSN 1533-9211
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Table 4 shows that the dimensions of process, distribution and product innovation show a strong R^2 value with each value greater than 0.75. Meanwhile, performance and IT showed moderate values with values ranging from 0.50 to 0,62.

2) Structural Model Evaluation through Q-Square Predictive Relevance (Q^2)

Q^2 is a measure of how well the observations made give results to the research model. The criteria for the strength of the model measured based on the Q^2 according to [59] are as follows: 0.35 (strong model), 0.15 (moderate model), and 0.02 (weak model). The calculation results show the value of Q^2 = 1 - (1-0.62)(1-0.80)(1-0.76)(1-0.81)(1-0.52) = 0.99, included in the strong model criteria.

3) Structural Model Evaluation through Goodness of Fit (GoF)

Goodness of Fit (GoF) is a measurement of the accuracy of the overall model, because it is considered a single measurement of the measurement of the outer model and the measurement of the inner model. The criteria for the strength of the model based on the measurement of Goodness of Fit (GoF) according to [59], are as follows: 0.36 (GoF large), 0.25 (GoF medium), and 0.10 (GoF small). The calculation results show the value of GoF = V 0.70 * 0.69 = 0.69 or includes a strong model.

4) Structural Model Analysis

The aim is to determine the effect and significance of exogenous constructs on endogenous constructs. The results of this analysis at the same time answer the research questions posed.

Table 5: Path Coefficient and Statistical Test

Construct	Coefficient	P-Value	Description
IT -> Business Performance	0,20	0,14	Not Signifikan
Innovation -> Business Performance	0,55	0,00	Signifikan
Innovation -> IT	0,79	0,00	Signifikan
Innovation -> Innovation Process	0,87	0,00	Signifikan
Innovation -> Innovation Marketing	0,89	0,00	Signifikan
Innovation -> Innovation Product	0,90	0,00	Signifikan

Source: Survey data calculation results 2021

The findings in this study (Table 5, Figure 1) show that innovation has a positive and significant effect on business performance (b = 0.55 P-Value = 0.00), so that hypothesis 1 which states that innovation has a positive and significant effect on business performance is accepted. Innovation also has a positive and significant effect on IT (b = 0.79 P-Value = 0.00), so that hypothesis 2 which states that innovation has a positive and significant effect on IT is accepted. IT has a positive but not significant effect on business performance (b = 0,20 P-value = 0,14), meaning that hypothesis 3 which states that IT has a positive and significant effect on business performance cannot be accepted.

The results of the study also show that process, marketing and product innovation are able to reflect the innovation construct, each with an index coefficient of 0.87; 0.89 and 0.90 and all of them were statistically significant (Table 5).

ISSN 1533-9211

DOI: 10.5281/zenodo.10531876

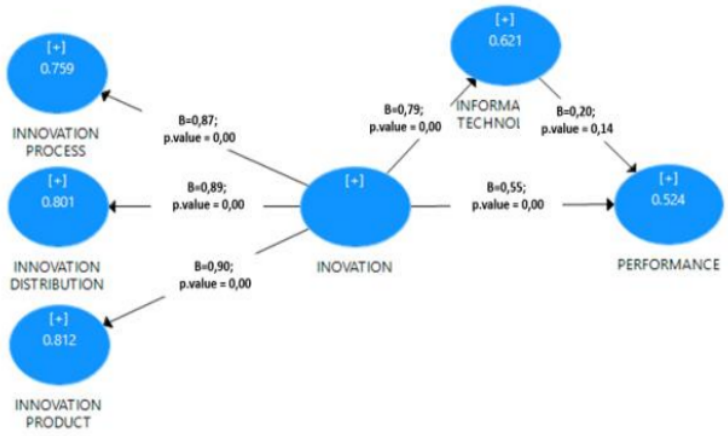

Figure 1: PLS Result

Subsequent findings also show that IT is not a mediation between innovation and business performance, it is shown that the direct relationship coefficient between innovation and business performance is 0,71 and is significant, while the indirect relationship between innovation on IT and business performance is 0,16 and is not significant. Therefore, hypothesis 4 which states that IT is a mediation between innovation and business performance cannot be accepted (Table 6).

Table 6: Direct and Indirect Effect

Constructs Relationships	Coefficient	P-Value	Description
Direct Effect			
Innovation-> Performance	0,71	0	Significant
Indirect Efeect			
Innovation-> IT-> Performance	0,16	0,14	Not Significant

5. DISCUSSION

5.1 The Effect of Innovation on SMIs Business Performance

The result of calculation on the field research data shows that innovation has a positive effect of 0.55 and is significant at the 0.05 level on business performance (Table 5). This means that increasing innovation in SMIs will improve the business performance of SMIs in Bali Province. The result of the analysis also shows that the three dimensions of innovation, namely product, process and distribution innovation, are able to significantly shape the innovation construct. The result of this study is in accordance with the result of previous studies stating that product

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

innovation is one of the key factors for organizational success and is an important strategy for increasing market share and business performance [2]. The process innovation, meanwhile, is useful for reducing production costs and also for satisfying customers [2]. Besides, the target of marketing innovation is to increase sales, market share and open new markets [3]. According to [4] creativity and innovation have an important role for the growth of organizational performance in the global market.

A company's ability to trade innovation can help dominate current markets or develop new markets, contributing to continued industry leadership. Thus, success in commercializing innovation is an important strategy for companies (Datta, et al., 2013). The study done by [5] shows that innovation has a positive effect on business performance in SMEs in the info-electronic industry in Taiwan. The research result of [7] also shows that the introduction of new products, process and market innovations are positively related to company growth. The result of the research by [6] in the manufacturing industry in Turkey shows that the dimensions of innovation (product, process, marketing and organization) have an effect on performance. The same thing was also stated by [2] in the manufacturing industry in Pakistan that the dimensions of innovation affect performance. According to the study of [46] ; [8] shows that innovation has a positive and significant effect on performance. The application of innovation can improve organizational performance and there is no literature that refutes it[47].

5.2 The Effect of Innovation on IT

The result of analysis in Table 5 shows that innovation has a positive effect of 0,79 and is significant in 0,05 level of significant on IT, it mean that the increasing of innovation both product, process and marketing innovation will boost higher of using IT. The result of this study is in accordance with the underlying theori of this reseacrh, that there is a positive relationship between inovation and IT. The result of this study is in accordance with the result of previous studies stating that the information and communication technology also plays an important role in the new milllenium companies, since its adoption and implementation in business activities generates, on one hand, a higher level of process innovation [60]. SMEs to achieve a higher level of innovation, all activities related to innovation made by companies, should have a basic support of information technology and communication [48], [49]. Study by [54] stated that one of the many elements that characterize the present century is the information and communication technology, which plays a fundamental role in establishing the basis for the adoption and implementation of the innovation activities that the organizations need to improve management and production methods, which will allow them to survive in a highly globalized and competitive market. According to [48] usually the ideas that become innovations are implemented by initiatives of the information and communication technology, commonly, the results of this improve significantly the innovation of new products and processes, which translates in a customer´s loyalty promotion and stimulate a demand for other products of the organization. Also, [61] concluded in their study that the adoption and implementation of the information and communication technology, have significant positive effects on the development of new products and therefore, innovation, which allows companies to make better use of information and, communication technology for the generation of new ideas and

ISSN 1533-9211

DOI: 10.5281/zenodo.10531876

implementing these in production processes for the production of products demanded by customers and consumers of the organization. [49] in their study stated that the extent to which firms want to maximize innovation activities performed daily, should in the first instance, adopt and implement the information and communication technology and, on appeal, align initiatives in information and communication technology with all activities of the innovation made by organizations. These businesses have regularly taken the information technology and communication for use in the management of customer relationships, improve the production process, managing the supply chain, innovation and other essential activities of organizations [51]; [52]; [53].

5.3 The Effect of IT on Performance

The result of the analysis in Table 5 shows that IT has a positive effect on business performance, meaning that the increasing use of information technology will encourage higher busniness performance. This means that the result is in accordance with the underlying theory of this research, that there is a positive relationship between IT and performance. However, this relationship is not significant at the 0.05 level as shown in Table 5. The result of this calculation is in accordance with the reality on the ground that the use of IT among SMIs in Bali Province is still limited. SMIs in Bali Province in marketing their products dominantly still uses traditional methods, namely door-to-door. The role of promotion using print and electronic media or the internet is still relatively small. The data shows that SMEs in Bali generally use the door to door marketing method, which is 70.40%. They generally use promotional media from person to person on a limited scale, this condition is a traditional business management model with limited production quantities. Of all respondents studied, only 22.40% have used modern information technology in the form of the internet in marketing their products. In addition, there are also as many as 7.10% of SMIs that use other methods besides the two methods, namely handing over to collectors or production is ordered only so that it does not require marketing media to sell its products.

The result of this study is different from the result of previous studies which states that IT has a significant effect on performance, including the result of research by [10] showing that IT is an important valuable resource in improving business performance. [11] Research result on the relationship between IT and firm performance and value shows that IT as a strategic resource has a significant positive effect on performance. The study of [12] shows that IT and innovation determine company performance. [13] Study shows that IT shows a positive influence on future company performance and increases firm value. The great potential of IT investment in improving business performance has also been carried out through a study by[15]. [16] Study also shows that IT investment strategies have a real influence on company performance.

5.4 The Role of Information Technology in Mediating the Relationship between Innovation and Business Performance.

To find out the role of IT in mediating the relationship between innovation and business performance. The examination method is done by doing two analysis, namely analysis involving mediating variables (indirect effect) and analysis without involving mediating

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

variables (direct effect). The method of examining the mediating variable with the coefficient difference approach is carried out as follows: if the indirect relationship is significant while the direct relationship is not significant, it is said that IT is a perfect mediation of the relationship between innovation and business performance. If the direct relationship is significant while the indirect relationship is not significant, it is said that IT is not a mediating relationship between innovation and business performance [62].

Based on the coefficient relationship between constructs, it can be seen that the direct relationship coefficient between innovation and business performance is 0,71 and is significant, while the indirect relationship between innovation on IT and business performance is 0,16 and is not significant. From the result of the analysis, it can be stated that IT is not a mediation between innovation and business performance. This is in accordance with the result of the previous analysis between IT and performance that has an insignificant relationship, this condition is strongly influenced by the use of IT in SMIs in Bali which is generally still relatively limited, the dominant marketing activity is at the local district level with the most method using door to door without IT assistance. Meanwhile, SMIs that market their products for export are still relatively limited. The role of promotion using print and electronic media or the internet is still relatively small. The data in Figure 1 shows that SMEs in Bali generally use the door to door marketing method, which is 70.40%. They generally use promotional media from person to person on a limited scale, this condition is a traditional business management model with limited production quantities. The result of this study is different from the result of previous studies which state that IT plays an important role as a mediator between innovation and performance, including a study by [9] which states that success in corporate innovation is highly depend on the implementation and creativity of using IT. The result of studies also states that IT enables companies to maintain sustainability and gain success in various market changes so that it can increase profits and business performance [55]. The result of this study is also different from the result of the study by [56] which states that technology facilitates the acquisition of resources that facilitate internal processes in improving financial performance to improve business performance. The result of this study differs from the study of [56] which states that IT plays an important role in increasing the output of the same resources to improve business performance. Besides that, it is different from the study result which states that IT is also the most recognized factor to support companies in winning the competition [57]. Thus the hypothesis which states that IT mediates innovation on organizational performance cannot be accepted.

6. CONCLUTION

The results of this study indicate that innovation has a positive and significant effect on business performance, the increasing innovation will improve business performance. In addition, innovation also has a positive and significant effect on IT, meaning that the higher the innovation will also encourage the higher use of IT. The next finding also shows that IT has a positive but not significant effect on business performance. In addition, IT also does not mediate the relationship between innovation and business performance. This is due to the low use of IT among SMIs entrepreneurs in Bali in supporting their business activities, in product

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ISSN 1533-9211
DOI: 10.5281/zenodo.10531876

marketing still dominant using traditional methods such as door to door. Another contributing factor is that the scope of marketing is generally still limited on a local scale, only a small number of which have exported, so the use of IT is also limited.

7. IMPLICATIONS

The findings of this study are expected to provide benefits for the development of entrepreneurship in Bali-Indonesia as an effort to improve business performance. This condition is a fact that SMIs in Bali-Indonesia cannot be separated from the role of employee production skills because SMIs products in Bali are dominantly based on local wisdom that comes from skills born of Balinese human artistic talent. However, as an effort to improve product marketing, the role of information technology is also very important to be improved. Technopreneurship which is the integration of innovation with information technology is an important factor in supporting the business performance of SMIs in Bali-Indonesia. However, nowadays the use of IT is still limited so it is very important to be improved in the future. The result of this study is expected to be a guide line for SMIs and policy makers in their effort to improve business performance, which is currently still relatively low.

7.1 Theoretical Implications

The results of this study are expected to contribute to the development of science, especially the importance of the role of technopreneurship for improving the performance of SMIs, especially in Bali Indonesia. SMIs are generally based on the use of local wisdom in supporting their business performance, but to increase business growth, the role of technopreneurship is very decisive in winning business competition.

7.2 Practical Implications

It is hoped that the result of this study can give contribution to SMIs in Bali, especially in giving better attention to the use of information technology to improve business performance, especially in increasing the quantity of marketing to a wider market, namely exports both domestically and abroad. It is also expected that the result of this study can give input for the Balinese government to make policies in an effort to improve the business performance of SMIs in Bali, especially in facilitating the need for IT facilities which are currently still relatively low in use.

8. LIMITATIONS OF THE RESEARCH

This study is limited to the analysis of the relationship between innovation and information technology as a predictor of business performance. Therefore, it is hoped that for future research it is necessary to add other variables that affect business performance such as production technology, investment, type of education, leadership, work environment and organizational culture. This research was only conducted on SMIS in Bali and private companies so it cannot be used for generalization in an effort to improve business performance as a whole. Further research can be carried out on companies in non-manufacturing industries or other industrial sizes.

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