

## Trends in Information Technology Development, And Strategy Selection in Increasing the Profitability of Banking Activities in Indonesia



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**ABSTRACT:** Information technology, strategy selection, and profitability can be used as variables in determining the strategy of the banking industry in Indonesia to increase productivity and profits of a company in the banking sector. This study aims to identify and analyze the relationship of information technology, and strategy selection to the profitability of the banking industry in Indonesia. The study was conducted by random sampling at 101 executive levels of banking companies which consisted of each president director, director, and manager. Data were analyzed using LISREL analysis with a structuring model (SEM) and hypothesis testing. The results of this study indicate that information technology has a positive and significant effect on strategy selection strategy selection has a positive and significant effect on profitability and information technology has a positive and significant effect on profitability in the Indonesian banking sector. This study suggests that decision makers in the banking industry in Indonesia take advantage of various forms of information technology and design strategies including the selection of strategies to increase financial profitability in each company.

**KEYWORDS:** Information Technology, Strategy Selection, Profitability, Financial, Banking.

### INTRODUCTION

The development of information technology today gives a lot of hope to various aspects of business activities (McLeod Jr & Rogers, 1985) Information technology has brought about very basic changes for organizations both government-owned, private and public organizations. Therefore, information technology becomes a very important thing in determining the competitiveness and ability of the company to improve business performance in the future. Sources of information technology become a good consideration for management and decision-makers in determining the success of the company (Devaraj & Kohli, 2003).

The relationship between information technology and generic strategies and corporate financial performance is of interest to academics and practitioners. Several studies that have been conducted by previous studies have found a significant relationship between information technology and company performance. For economic players market structure becomes a variable to consider because market structure can determine the level of competition, price formation, strategy and the level of profit earned by financial institutions (Heggstad, 1977). In this case, the market structure of the banking industry, especially banking in Indonesia is focused on large banks both in collecting third party funds and in distributing financing (Bank Indonesia, 2010). The banking industry still faces intense competition (Bourne et al., 2002) Competition can be seen from two sides. First, competition in obtaining third party funds with the lowest possible costs in the form of demand deposits, savings and time deposits. To get these cheap funds, banks try to offer products/services that meet various consumer needs, compared to small banks, large banks and foreign banks which have relatively better welfare to meet consumer needs, especially offering convenience for transactions by utilizing advances in information technology. (IT) such as internet banking, sms banking, ATM, mobile banking and office network services spread across various regional or regional locations.

The main objective of bank management is to increase shareholder profits which is reflected in the level of bank performance. In achieving these targets various strategies are taken by bank managers based on the possibility of risks borne by banks. The rapid development of risk impacting on the external environment due to globalization and changes in information technology has caused the risk of financing banking business activities to become increasingly complex. In its control, banks face risks such as credit risk, interest rate risk, currency exchange rate fluctuation risk, reputation risk, operational and technological risk, liquidity

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risk, and legal risk (David, 2017). In dealing with these risks, as a good risk control, it is the responsibility of decision makers of a banking system to be able to compete in domestic and global competition (Goddard et al., 2001).

The development of unique products/services through technology has become a major need for banking. By utilizing advances in information technology (IT), banks will differentiate service products by offering an internet/sms banking system, which can reduce business costs and allow transactions to be carried out anywhere, anytime, and not bound by distance and time. Differentiation strategy is very important in increasing revenue to reduce costs on the application of a risk management approach it can be done by building a cash fund management system for banks which in turn can improve performance. Accordingly this study aims to analyze the importance of the relationship of information technology to the differentiation strategy and financial performance of the banking industry in Indonesia. In this regard, the main problem to be studied is the factors that cause differences in banking performance. This can be related to economic factors (Charitou et al., 2004); (Muhammaddin et al., 2015), generic strategies (Porter, 1985) and financial performance (Mehra, 1996; Bank Indonesia, 2013).

### **LITERATURE REVIEW**

Banking is an institution that acts as a financial intermediary for those with surplus funds and deficit funds (intermediaries between banks and the public). These financial institutions have now undergone three stages of evolution over time (Rybczynski, 1997). The first phase is referred to as the bank needs phase (bank oriented) where external financing mostly obtained through loans from banks is financed by customer savings. The second phase is known as the market needs phase (market oriented), in which institutional investors and households from the start hold securities and non-bank financial institutions offer services similar to services offered by banks. Meanwhile, in the third phase, traditional banking functions have developed including trading, underwriting, consulting services (advising), and asset management. In this situation loans from banks have been replaced by the issuance of corporate bonds, commercial paper, mortgages, and other forms of credit that are no longer offered by banks.

Academics have emphasized the importance of strategic alignment. For example, (Boar, 1994) states that organizations need to build, align, and develop competitive advantages through empowering systems/information technology to respond to the challenges of global competition. (Khandelwal, 2001) added that for companies to achieve information systems that support business processes it is necessary to provide management information at the right time. To do this (IT) is a must in the company/organization.

According to (Premkumar & King, 1992), strategic adjustment is the relationship between the information system stage and planning. Business planning and information systems planning, as well as product functions, must be interrelated with each other. This can be done through mapping the information systems strategy and its impact on business strategy, to maximize the rewards earned by the organization (Calhoun & Lederer, 1990). According to (Premkumar & King, 1992), strategic adjustment is the relationship between the information system stage and planning. Business planning and information systems planning, as well as product functions, must be interrelated with each other. This can be done through mapping the information systems strategy and its impact on business strategy, to maximize the rewards earned by the organization (Calhoun & Lederer, 1990). Through information planning systems and business planning, information sources will be able to support business goals and gain profits in the use of information systems strategies (Premkumar & King, 1992). Thus, performance improvements can be achieved and competitive advantages will be obtained so that banks can continue to develop and be able to survive in an increasingly fierce competition.

Strategy is the main pattern of action chosen to realize the vision of the organization, through the mission. Strategy forms a pattern of decision making in realizing the organization's vision. With patterned actions, companies can direct all organizational resources effectively and in line with the organization's vision. The absence of the right strategy will result in organizational failure in realizing the company's vision and mission.

In Webster's New World Dictionary (1992) strategy is defined as "the science of designing and directing the operations of organizations". According to (Pearce & Robinson, 2013) strategy is the design of a company that aims to create competitive advantage. Thus, one of the strategic focuses is to decide whether one of these businesses should exist or not exist. Strategy can be seen as a tool that can determine the organization's steps both in the short and long terms. (Jauch & Glueck, 1997) stated that strategy is a unified, comprehensive and aligned design which links the advantages of an organization's strategy with environmental challenges and is designed to ensure that the main goals of the organization can be achieved through proper implementation by the organization.

Outlook (Porter, 1985) relates strategy to organizational efforts to achieve competitive advantage even saying that strategy is an important tool in order to achieve competitive advantage. This is in line with the strategic objectives namely to maintain or achieve a superior position compared to competitors (Karhi, 1997). The implication of the research is that organizations are said to still

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achieve an advantage if they can take advantage of opportunities from the environment which allows organizations to take advantage of areas that become their strengths.

As for the company's financial performance in another study it was measured using subjective measures. Subjective actions to meet the objectives/objective fulfillment and relative competitive performance include income to assets/return on assets (ROA), income to shares/return on equity (ROE), performance to financing/non-performing loans (NPL), total net income/net interest income (NII), total net interest margin (NIM) comparison of third party funds to financing/loan to deposit ratio (LDR), operating expenses to operating income (BOPO) and ratio of income/current ratio (Mehra, 1996; Bank Indonesia, 2008). Measures to meet the objectives of competitive advantage and performance, adapted from (Venkatraman & Ramanujam, 1987).

### **The effect of information technology to strategy selection**

Information technology is an essential component of a business and an organization if it is to succeed. Information technology also plays an important role in expanding the business. Information Technology (IT) can help all types of businesses improve the effectiveness and efficiency of business processes management decision making and work group collaboration so as to strengthen a competitive position in a rapidly changing market. This is true either way if IT is used to support product development, customer support processes, electronic commerce transactions, or other business activities. Internet-based information technology and technology device systems have become necessary ingredients for business success in today's dynamic global environment (O'brien & Marakas, 2006).

Information strategy (IS) plays an important role in helping to maintain strategic position (Romney & Steinbart, 2006). Information technology supports efficient business operations, group work and corporate collaboration, or makes effective business decisions. IT can change the way businesses compete (O'brien & Marakas, 2006). The role of IS in the network of enterprise technology systems can provide information to make decisions. IS is a system that collects, stores and processes data to produce information for decision makers (Romney & Steinbart, 2006)

The relationship between information technology and corporate performance is of interest to academics and decision makers. Several studies that have been conducted by researchers before this get a significant relationship between information technology and company performance. (Devaraj & Kohli, 2003) state that some research results have a negative effect compared to information technology on company performance at the industrial level. (Devaraj & Kohli, 2003) also found a negative relationship between variables related to information technology and company performance. In addition, (Berndt & Morrison, 1995) state that there is no significant relationship between the effort to invest in information technology with company performance. The above findings are inconsistent with previous research by (Erwin Dieweri & Marie Smith, 1994).

According (Mahmood et al., 2000) stated that good investment in information technology needs to be considered, to improve economic performance and organizational strategy. With the right investment in IT the company will have a competitive advantage so that it will be able to compete within the company and success in competition will be able to improve the company's performance in the form of company output, effectiveness, efficiency, company strengths and advantages and demonstrated company value with the value of the company's shares.

Likewise (Mahmood et al., 2000) also conducted research on the relationship between investment in information technology with organizational strategy and economic performance. Research conducted on 100 companies shows a relationship between investment in information technology with organizational strategy and economic performance of the company. (Sircar et al., 2000) conducted a study by adding to the framework developed by (Mahmood et al., 2000). Through this framework (Sircar et al., 2000) can measure performance not just productivity like the previous framework. The company's tangible achievements include marketing, assets and market value. Based on a study conducted by (Sircar et al., 2000) obtained a significant relationship between investment in IT and company performance.

A study by (Uppal & Juneja, 2013) in India also found that the country's banking sector has undergone a major transformation due to the implementation of banking sector reforms through the introduction of IT. The major transformation of the banking industry in India with modern IT applications has also put Indian banks in a strong position, to face tough competition and be profit oriented. In modern banking products making a profit is the main goal of the banking industry. They consider that electronic banking has changed the whole face and parameters of operations and effective banking in India. In the era of e-banking the achievements of the commercial bank group are more consistent and superior because they can measure investment factors, assets, interest income, deposits, cash flows, and other distributions in the public sector.

According (Porter, 2004) to distinguishes three generic strategies, to create competitive advantage, in the face of competition namely through, (i) differentiation, (ii) leadership cost and (iii) focus. The three strategies are not interrelated one with the other. However, because each of these strategies requires commitment and organizational procedures, ideally the three strategies

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complement each other (Porter, 1985). The meaning of a differentiating strategy to create a product/service. The development of unique products through technology, becomes a key requirement, which is done by banking (David 2017).

In addition, (Calisir & Gumussoy, 2008) made a study on "internet banking networks against bank branch networks with new customers". They explained that new customers view internet banking as very relevant to six banking chains, such as telephon banking (mobile phone series, automated teller machines - ATM), laptop computer networks (WAP), transfer of funds with electronic messages (EFTPOS) from various bank branches. The results of their study also show that internet banking is considered effective for ease of use. In connection with the above discussion, the following hypotheses can be formulated:

**Hypothesis 1:** Information technology has a positive effect on strategy selection.

### **The effect of strategy selection on profitability**

Idea (Porter, 2004) states that, a company's strategic position is the result of strategic actions taken by the company to maintain a sustainable competitive advantage. Besides that (Porter, 2004) further distinguishes three strategies for dealing with competitors in the market, namely differentiation, cost leadership and focus.

Statement (Miller, 1988) suggests that a differentiation strategy can be carried out, among others, through continuous product/service innovation, as well as intensive marketing and creating brand management. Product/service innovation aims to create products/services which are always evolving and up-to-date and making them more attractive compared to competitors to meet customer needs. Intensive marketing is aimed at realizing the unique customer's imagination for the products/services offered. This is done by implementing marketing relationships, building and maintaining long-term relationships between customers and sellers/service providers (Reinartz & Kumar, 2003).

Firm performance restated by (Ferdinand, 2002) is a commonly used construct to measure the impact of corporate strategy. However, the issue of performance measurement has become a classic problem and debate. The results of the study by (Shrader et al., 1989) show that strategies with performance are closely related and appropriate to be implemented in small industries. Their research also implies a positive correlation between strategy and performance. Therefore, the strategy is expected to have a positive effect on financial performance (which includes ROA, ROE, NIM, BOPO, NII, LDR, and NPL).

Banks with a good strategy are also able to take advantage of added value economically, and can improve strategies in increasing profitability banking competitiveness (Muhammadin & Ramli, 2019). This is because in general large capitalized banks have a variety of products with a wider market. Innovation tends to be the main driver. In terms of fundraising banks with generic strategies can obtain lower funding costs and are not sensitive to changes in interest rates wide infrastructure network and varied services.

In this case the advantages of a bank with a generic strategy are a higher ability, to understand the prospects and risks of an industry as well as being able to avoid moral hazard problems and poor selection due to the competitive interest rates offered by banks so they do not get speculative customers. . Thus the relationship between generic strategy and company performance can be summarized in the following hypothesis:

**Hypothesis 2:** Strategy selection has a positive effect on profitability

### **The effect of information technology to profitability**

The banking industry faces environmental uncertainties which are markedly increasingly rapid and complex due to fundamental changes in government, information technology, globalization, macro and micro economies, as well as competition. In the era of globalization and technology the potential for human interaction has advanced. The importance of economic activity over the value of goods and services produced will be influenced by profitability resulting in international competition is becoming increasingly important (Eren, 2002). This process of change continues to expand where technology companies do their activities. Strategy analysis is, first from the basic level of strategy management, and involves the analysis of factor currents relevant to the technology in which the company conducts its operations (Ülgen, 2007).

The opinion of (Uppal & Juneja, 2013) states that, the banking sector in India has undergone a major transformation with the implementation of banking sector reforms with the introduction of information technology. The massive transformation of the banking industry in India involving high modern information technology has also put banks in India into an era of intense competition and profit-oriented where there are other things for banks. In this modern banking product printing profits is the goal of the banking industry. Mryan & Nofan (2012) in their research show that there is a statistically significant relationship between central bank research and development process towards bank competitive advantage. The study also proposes to provide financial allocation in the purpose of strategic planning with the need to attract specific individual competencies thus providing modern technology which is necessary for profit success. Finally, the banking sector is focusing on administrative problems in the face of competitiveness and competitive advantage.

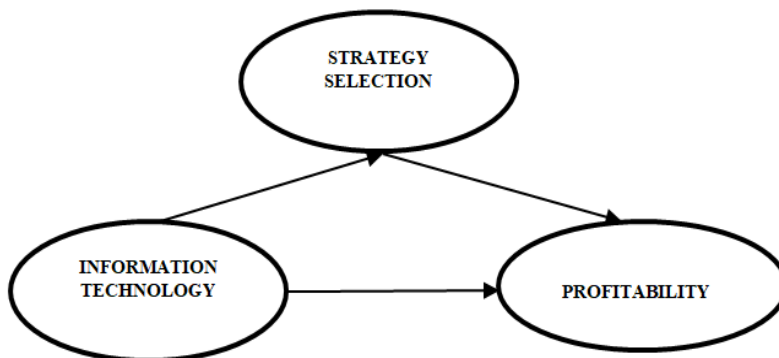
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High economic growth will require a level of financing among others through banking, while the economic slowdown, the need for funds is also low and leads to a tendency to lower the level of profitability of banking as well as industry (Chong, 2005)

**Hypothesis 3:** Information technology has a positive effect on profitability

### HYPOTHESIS MODEL

A study conducted by (McFarlan et al., 1983; Knight & Silk, 1990; Das et al., 1991), show that the importance of information systems strategy/technology is shown in the company's main choices, which are closely related to the implementation process and use of information system-based technology in the company. Conceptual construction of information technology, strategy selection and profitability can be mapped in Figure 1, Table 1, Table 2, and Table 3 based on the model developed by (Henderson & Venkatraman, 1992).



**Fig. 1: Conceptual Framework**

**Table 1: Variables and operationalization definitions**

Variable	Definitions	Operational
Information technology	Lack of technology and company innovation in running its business resulting in low public knowledge about banking products and services	X1.1: Development of information technology in Indonesia X1.2: Development, and technological knowledge about m-banking X1.3: development of science X1.4: banking transaction technology transfer speed X1.5: advances in information technology in real-time

**Source:** Processed based on primary data (2022)

And also (Porter, 1985) distinguishes three generic strategies which are usually applied by a company in an effort to increase sustainable competitive advantage, namely (i) differentiation (ii) cost leadership (iii) focus.

**Table 2: Variables and operationalization definitions**

Variable	Definitions	Operational
Strategy Selection	The company's strategy is to create the most up-to-date or unique products/services in terms of quality, efficiency, and service.	X2.1 : ability better product innovation. X2.2 : stronger brand image and reputation X2.3 : better professional banking services X2.4 : more different ATM facilities X2.5 : more different SMS banking convenience X2.6 : convenience more different internet banking

**Source:** Processed based on primary data (2022)

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Profitability in financial performance is important for banks because as a bank business entity it is necessary to provide adequate income for the benefit of shareholders. Measures of financial performance aimed at assessing the success of the bank in maintaining and maintaining the level of satisfaction and commitment to stakeholders as well as the alignment of the relationship between shareholders and the community synergy between work units and the relationship between the head office and branches. In this study, the indicator measures are technology, strategy and overall financial performance.

**Table 3: Variables and operationalization definitions**

Variable	Definitions	Operational
Profitability	The ability of banks in provide benefits for all stakeholders.	X3.1 : ROA Return on Asset X3.2 : ROE Return on Equity X3.3 : NIM Net interst Margin X3.4 : BOPO comparison of operating costs to operating income X3.5 : NII Net Interest income X3.6 : LDR Loan to Deposite Ratio X3.7 : NPL non performing loan

Source: Processed based on primary data (2022)

### RESEARCH METHODS

For the purposes of collecting primary data this study used a survey method. Questionnaires were distributed to respondents who met certain criteria. The questionnaire contains several questions with sufficient explanation to facilitate respondents in filling out the questionnaire. To avoid misinterpretation of the questions the draft questionnaire was discussed and tested first in a focus group discussion (FGD) consisting of bank managers and lecturers in finance and banking. Input from the focus group discussions will be used to refine the design of the questionnaire, before the actual study is carried out. The corrected questionnaire will be sent by post to the president director and bank director who are selected respondents. The data is then processed using Lisrel analysis with Structural Equation Modeling (SEM) processing.

The population in this study were conventional banks in Indonesia which amounted to 109 banks consisting of state banks, private banks, foreign banks. Random is easy to use to select samples. This is because the level of difficulty in ensuring the return of the questionnaire which is returned by the bank as a respondent is quite high. A total of 109 banks have been contacted and are ready to cooperate. However, 101 banks were finally able to complete and return the survey forms on time. The respondents who were chosen to represent the bank were the main directors and directors. This number (92,6 percent) is considered eligible, to represent the population in this study and is in line with the response rate of previous banking studies in Indonesia which ranged from 30 percent to 50 percent (Mardiyah & Gudono, 2001).

Questionnaires were distributed by various methods. The face-to-face method is used for banks located in Central Jakarta, East Jakarta, West Jakarta, South Jakarta and North Jakarta. Meanwhile, the method of sending e-mail and post must be done for banks located outside the center of Jakarta. Follow-up measures were performed after three weeks as recommended by (Dillman, 1978). The survey respondents consisted of state banks (20.5 percent), private banks (69.2 percent) and foreign banks (10.2 percent). Most of the questionnaires were filled out by managers (79.4 percent), followed by directors (12.8 percent) and then president directors (7.6 percent). Table 4 shows the profile of banks and research respondents.

**Table 4: Bank and respondent profiles**

Type of bank and respondents	Percentage
<i>Bank category</i>	
Government bank	20.5%
Private banks	69.2%
Foreign banks	10.2%
<i>Position</i>	
Manager	79.4%
Director	12.8%
President Director	7.6%



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<i>Education</i>	
Doctor	79.4%
Master	12.8%
Bachelor	7.6%

Source : 109 banks or managing directors/directors of various levels (2022)

### RESULT ANALYSIS

The results of the analysis of this study are shown in the following table. Table 5 shows the mean and standard deviation; Table 6 shows the Cronbachs Alpha value and total correlation; Table 7 is an analysis of the correlation matrix of information technology variables, table 8 is the validity and reliability of information technology, table 9 is using the correlation matrix of strategy selection, table 10 is the validity and reliability of strategy selection, table 11 shows the matrix correlation of profitability variables, table 12 shows the correlation matrix of profitability variables and table 13 states the Goodness of Fit Indexes of each variables.

**Table 5: Mean and standard deviation in a combination of variables**

Variable	Mean	Standard Deviation
Information Technology	21.15	3.352
X1.1	4.23	0.842
X1.2	4.31	0.694
X1.3	4.21	0.894
X1.4	4.18	0.885
X1.5	4.23	0.972
Strategy Selection	23.08	3.673
X2.1	3.95	1.025
X2.2	3.85	0.745
X2.3	4.00	0.761
X2.4	3.84	0.885
X2.5	3.74	0.910
X2.6	3.72	0.857
Profitability	26.70	4.797
X3.1	3.74	0.966
X3.2	3.77	0.902
X3.3	3.74	0.910
X3.4	3.97	0.743
X3.5	3.79	0.801
X3.6	4.00	0.725
X3.7	3.77	0.902

Source : Research (2022)

Table 5 lists the mean, and standard deviation of the information technology factor variables with a mean of 21.15 and a standard deviation of 3.352 strategy selection with a mean of 23.08 and a standard deviation of 3.673 as well as profitability with an average mean 26.70 and standard deviation 4.797.

Furthermore, Table 6 shows the reading of Cronbach's alpha and the total correlation of the following variables: information technology variable 0.857; the strategy selection variable is 0.797; and profitability variable 0.908. Overall, the readings of descriptive statistics for each variable including the measure of reliability (cronbach's alpha) were in the range 0.857, 0.797 and 0.908. Generally, The score is above the minimum value of 0.7 which was proposed by (Nunnally, 1978).

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Table 6: Cronbachs alpha dan total corralation

Variable	Cronbachs alpha	Total Correlation
Information Technology	0.857	
X1.1		0.632
X1.2		0.485
X1.3		0.701
X1.4		0.774
X1.5		0.776
Strategy Selection	0.797	
X2.1		0.441
X2.2		0.458
X2.3		0.626
X2.4		0.715
X2.5		0.611
X2.6		0.504
Profitability	0.908	
X3.1		0.739
X3.2		0.769
X3.3		0.876
X3.4		0.718
X3.5		0.669
X3.6		0.586
X3.7		0.719

Source : Research (2022)

Table 7: Matrix correlation of information technology variables

Variabel	Mean	Standard deviation	1	2	3	4	5
X1.1	4.23	0.842	1.000				
X1.2	4.31	0.694	0.471	1.000			
X1.3	4.21	0.894	0.305	0.405	1.000		
X1.4	4.18	0.885	0.172	0.465	0.618	1.000	
X1.5	4.23	0.972	0.300	0.401	0.714	0.729	1.000

Source: Research (2022)

Table 8: information technology latent variables

Variable	*SLF $\geq 0.5$	Error	*CR $\geq 0.7$	*VE $\geq 0,5$	Conclusion
Information Technology			0,82	0,54	Good reliability
X1.1	0,51	0,74			Good Validity
X1.2	0,63	0,60			Good Validity
X1.3	0,84	0,30			Good Validity
X1.4	0,91	0,17			Good Validity
X1.5	0,93	0,42			Good Validity

Source: Research (2022)



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**Table 9: Matrix correlation of strategy selection variables**

Variable	Mean	Standard Deviation	1	2	3	4	5	6
X2.1	3.95	1.025	1.000					
X2.2	3.85	0.745	0.245	1.000				
X2.3	4.00	0.761	0.205	0.511	1.000			
X2.4	3.84	0.885	0.276	0.436	0.469	1.000		
X2.5	3.74	0.972	0.369	0.329	0.418	0.726	1.000	
X2.6	3.72	0.857	0.026	0.178	0.404	0.452	0.479	1.000

Source: Research (2022)

**Table 10: Validity and Reliability of Strategy Selection Latent Variables**

Variable	*SLF $\geq$ 0.5	Error	*CR $\geq$ 0.7	*VE $\geq$ 0,5	Conclusion
Strategy Selection			0,80	0,59	Good reliability
X2.1	0,68	0,54			Good Validity
X2.2	0,98	0,05			Good Validity
X2,3	0,60	0,64			Good Validity
X2.4	0,88	0,23			Good Validity
X2.5	0,54	0,71			Good Validity
X2.6	0.51	0.74			Good Validity

Source: Research (2022)

**Table 11: Matrix correlation of profitability variables**

Variable	Mean	Standard Deviation	1	2	3	4	5	6	7
X3.1	3.74	0.966	0.000						
X3.2	3.77	0.902	0.806	1.000					
X3.3	3.74	0.910	0.702	0.696	1.000				
X3.4	3.97	0.743	0.577	0.619	0.730	1.000			
X3.5	3.79	0.801	0.509	0.443	0.685	0.610	1.000		
X3.6	4.00	0.725	0.451	0.563	0.479	0.391	0.391	1.000	
X3.7	3.77	0.902	0.360	0.125	0.345	0.088	0.356	0.321	1.000

Source: Research (2022)

**Table 12: Validity and Reliability of Profitability Latent Variables**

Variable	*SLF $\geq$ 0.5	Error	*CR $\geq$ 0.7	*VE $\geq$ 0,5	Conclusion
Profitability			0,89	0,74	Good reliability
X3.1	0,84	0,30			Good Validity
X3.2	0,86	0,26			Good Validity
X3,3	0,88	0,23			Good Validity
X3.4	0,73	0,47			Good Validity
X3.5	0,91	0,16			Good Validity
X3.6	0,62	0.61			Good Validity
X3.7	0.57	0.36			Good Validity

Source: Research (2022)

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**Table 13: Goodness of Fit Indexes (GOFI) Research Structuring Model**

GOFI	Calculate Result Value	Standard Value for Good Match	Conclusion
RMSEA	0,00	$RMSEA \leq 0,08$	Good match
NFI	0,94	$NFI \geq 0,90$	Good match
NNFI	1,01	$NNFI \geq 0,90$	Good match
CFI	1,00	$CFI \geq 0,90$	Good match
RFI	0,88	$RFI \geq 0,90$	Good match
Std. RMR	0,04	$Std. RMR \leq 0,05$	Good match
GFI	0,97	$GFI \geq 0,90$	Good match
AGFI	0,93	$AGFI \geq 0,90$	Good match

Source: Research (2022)

Overall, all the tables above tend to support the statement that there is a positive and significant relationship between (1) information technology to strategy selection, (2) strategy selection to profitability, and (3) information technology to profitability. Furthermore, this study also tested several hypotheses. As previously stated, the hypothesis H1 of information technology has a positive and significant effect on strategy selection, H2 of strategy selection has a positive and significant effect on profitability, and H3 information technology has a positive and significant effect on profitability. The first test shows in Table 8 the value of the standardized loading factor of information technology X1.1 to X1.5 ( $> 0.5$ ), the value of construct reliability ( $> 0.7$ ) and the value of variance extracted ( $> 0.5$ ). The second test is shown in Table 10, the value of the standardized loading factor for the strategy selection X2.1 to X2.6 ( $> 0.5$ ), the construct reliability value ( $> 0.7$ ) and the variance extracted value ( $> 0.5$ ). While the third test in table 12 profitability variables is the standardized loading factor profitability value of X3.1 to X3.7 ( $> 0.5$ ), the value of construct reliability ( $> 0.7$ ) and the value of variance extracted ( $> 0.5$ ). The last test is the Goodness test. of Fit Indexes (GOFI) with values RMSEA: 0.00, NFI: 0.94, NNFI: 1.01, CFI: 1.00, RFI: 0.88, Std. RMR: 0.04, GFI: 0.97, AGFI: 0.93. With that, it can be concluded that the hypothesis which states that the variables of information technology, strategy selection and profitability are acceptable.

### DISCUSSION

The results of this study indicate that information technology (IT) has an effect on financial profitability. Information technology is very important in determining the competitiveness and ability of companies to improve business performance in the future. That is, the use and application of information technology in a company will improve company performance. The results of this study are in line with the research of (Uppal & Juneja, 2013) in India, which found that the banking sector in the country has undergone a major transformation as a result of the implementation of banking sector reforms through the introduction of IT. The theory of strategy selection states that generic strategies can provide competitive advantage benefits and increase financial profitability. In addition, financial performance can increase if adjusted for optimal performance (Muhammadin et al., 2020). In fact, to produce good performance companies need a good technology system as well. Information technology systems not only existing network standards but also involve other aspects related to banking product indicators such as internet banking, real time online systems, and speed systems. Another source of strength is the determination of strategies namely brand images, banking services, and m-banking. Furthermore, profitability indicators such as bank financial performance which include ROA, ROE, NIM, BOPO, NII, LDR, and NPL are the most important ratios which are managed by banks as a management tool to increase profits. Management science is a methodology that is applied to the business practices of information technology. Nevertheless, information technology is critical to the success of the strategic management selection system. Information technology allows strategic management to develop company plans to be built. In fact, information technology can support knowledge based systems by applying that knowledge into enterprise routines, so that information technology can enhance the integrity and sustainable use of knowledge. Then it allows the application of knowledge into the management system to increase the profitability of the company's performance, even to achieve strategic goals which the company wants (Ridjal & Muhammadin, 2018).

### CONCLUSIONS

From the results of this study it can be concluded that the information technology factor has a very influential role starting from the financial sector because it can affect other sectors especially the banking industry in Indonesia. Judging from the results of this

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study it can be concluded that, (1) the development of information technology in Indonesia, including the development and knowledge of m-banking technology, the development of science, the speed of transfer of banking transaction technology, and the advancement of information technology in real-time are very important, (2) better product innovation capabilities, stronger brand image and reputation, more professional banking services, more diverse ATM facilities and mobile/SMS banking facilities, as well as different internet banking facilities, must be carried out by each institution. finance in winning the competition, and (3) one of the strategies to increase the profitability of the bank's financial performance is to pay attention to the calculation of the profit ratio.

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