

# Analysis of business performance determination of transportation companies during post Covid-19 in Indonesia

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## Abstract

Business performance in post covid-19 transportation companies requires the right management accounting strategy. This study aims to test and analyze the factors that influence business performance in transportation companies, especially bus companies in Central Java and Yogyakarta. The sample was 118 respondents obtained using purposive sampling techniques with the criteria of bus companies operating in the Magelang and Jogjakarta bus station. Hypothesis testing was carried out using multiple linear regression analysis. The results show that management accounting strategies and information technology influence business performance in the transportation sector, especially bus companies. The indicators used to measure strategic management accounting variables, for the questionnaire adopted from [1] using the following indicators: Strategic Costing, Strategic Planning, Control and Performance Management, Strategic Decision Making, Competitor Accounting, and Customer Accounting. The indicators used to measure the organizational capability variables, for the questionnaire adopted from [2] using the following indicators: Motivation, Discipline, and Communication, and Organizational Performance. The indicators used to measure the organizational performance variables, for the questionnaire adopted [3] using the following indicators: Market share, Sales growth, Profit growth, Equity growth, and Customer satisfaction.

## Keywords

Business performance in transportation companies, Strategic management accounting, Information technology, Organizational capability

## Introduction

Covid-19 is an international outbreak. This outbreak began in 2020 in Wuhan, and spread widely to various countries in the world [4]. The spread of the virus has led the Chinese government to order the closure of large factories to contain the pandemic, followed by countries such as Iran, Italy and France which have issued national lockdown policies

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to control the spread of the virus to prevent deaths and put pressure on national health care infrastructure [5]. Not only health facilities, this outbreak also weakens the national economy which occurs in almost all countries [5–10]. This weakening occurred because the wheels of the economy stopped in almost all industrial sectors in the country [11–14]. Several studies have stated that the transportation sector is the sector affected by the Covid-19 outbreak [15–18]. The transportation sector is losing passengers due to restrictions imposed by each country, especially in countries with high tourist traffic.

The countries of the Southeast Asian Region (ASEAN) are a region that has high tourism potential. ASEAN is the center of world growth because it has potential in the field of natural resources, and the potential of the tourism industry [19]. Both potentials drive ASEAN's economic stability. Of the 11 ASEAN countries, there are 4 countries that support economic stability, especially those that have natural resource potential and tourism industry in ASEAN, namely Indonesia, Singapore, Malaysia, and Vietnam [20,21].

Although the four countries support economic stability in ASEAN, the COVID-19 pandemic still has an impact on the number of their tourists. Figure 1 shows that the four ASEAN countries experienced a drastic decline in 2020 and 2021. The decline occurred because each country issued a national restriction policy to control the spread of the COVID-19 virus.

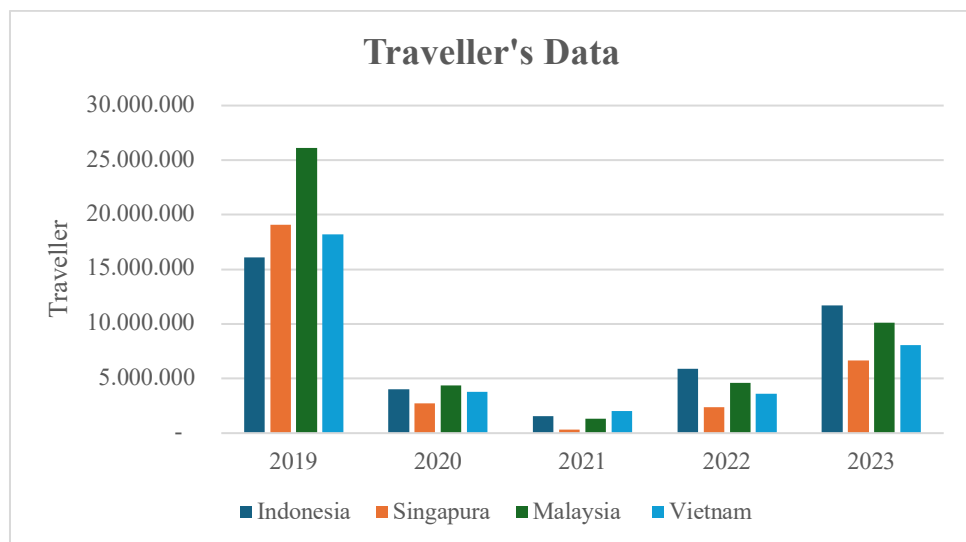


Figure 1. Traveler's Data 2019-2023 in Southeast Asia.

Source: [22], [23], [24], [25]

In addition to the decline, Figure 1 also shows an increase in visitors starting in 2022 to 2023. Indonesia is the country with the highest increase in visitors followed by Malaysia, Vietnam, and Singapore. This increase is an indication that the tourism potential and natural resources of the four ASEAN countries have begun to grow. This momentum is an opportunity for transportation companies to improve the performance of bus companies through the number of tourists present, especially in Indonesia which ranks first in tourist growth in ASEAN.

To explain how important it is to improve performance, researchers use the Resource based view theory (RBV). RBV explains that company performance will be optimal if the company has a competitive advantage so that it can generate value for the company. Competitive advantage is obtained by utilizing and managing the resources it has well so that it is difficult for competitors to imitate. RBV believes that the company as a collection of capabilities in managing these resources [26]. In achieving optimal performance, transportation companies need to consider three company resources, namely Strategic Management Accounting (SMA) [27], Organizational Capability [28], and Information Technology (IT) [29].

SMA, Organization Capability and IT have a close relationship with organization performance when viewed from the RBV theory. The SMA uses to develop appropriate business strategies to use [30]. The SMA process begins with taking notes, classifying monetary and non-monetary items, and summarizing the results as past financial information that is used as a company forecast for the future. The purpose of SMA is to help plan, direct, control, and make accurate decisions to achieve organizational goals [31]. Organization Capability is the ability, knowledge, and experience possessed by employees and executives in a company to provide value to the organization that has an impact on the growth of the company's performance [32]. An organization that has high capabilities means that the workers in it also have the abilities and skills obtained from previous learning and knowledge to carry out tasks or activities in the organization [33]. The purpose of Organization Capabilities is to help business continuity and maintain high organizational performance [34]. IT has an important role in managing business resource to create high organizational performance. IT can help identify, collect, store, and analyze information across functions and organizational units so that organizations better understand their resources and utilize resources efficiently and effectively to create competitive advantage [29].

In studying previous literature, we found that there has been no research that combines the influence of the three factors on organizational performance, previous research only examined the three factors separately. In addition, we found inconsistent research results in previous research results. On the first factor, some research said SMA play a positive role in competitive advantage [27,35], meanwhile some previous studies also said there is no role of SMA on business performance [36,37]. On the second factor, some previous study said Organizational Capabilities has a positive influence on business performance [33,38,39], meanwhile some previous study also said Organizational Capabilities has no influence on business performance [40,41]. The last factor is IT. Some previous study said IT has a positive impact on business performance [29,42,43], meanwhile some previous study also said IT has no impact on business [44,45].

Opportunities for transportation companies will increase the number of tourists after the Covid-19 pandemic, there has been no research examining the influence of Strategic Management Accounting (SMA), Organizational Capability, and Information

Technology (IT) in one study and the inconsistent results of the three factors on company performance indicate research opportunities on this topic. This study aims to test the influence of Strategic Management Accounting (SMA), Organizational Capability, and Information Technology on business performance in transportation companies.

## Method

### Data collection

The population in this study were all transportation companies that were still operating after the Covid-19 outbreak. The data collection method used a purposive sampling using a questionnaire distributed to employees of transportation companies. The following are the criteria used in this study, transportation companies that are still actively operating after the Covid 19 outbreak and respondents are permanent employees of transportation companies who have worked for at least 1 year. We do this to accommodate the accuracy of the questionnaire results answered by respondents. The questionnaire contains four main variables with some indicators in each variable (Table 1).

Table 1. Research Variables and Variable Measurement

Variable	Definition	Indicator	Source
Strategic Management Accounting	Operations of a business include all operations that enable accountants and other business managers to be outward rather than inward oriented [46].	Strategies Costing Strategies Planning Control and Performance Management Competitor Accounting Customer Accounting.	[46]
Organizational Capabilities	The ability to interact both socially and economically which can be formed by good competence [47].	Ability to increase the spirit of employees Employee discipline Ability to connect to the buyers Ability to connect to the Suppliers.	[47]
Information Technology	IT reflects three dimensions, IT infrastructure, integration, and IT human resources. These three dimensions complement each other, so that companies can improve organizational performance at a higher level [48].	IT Infrastructure Flexibility Integration Trained Worker IT Function	[48]
Business Performance	Business Performance is a process consisting of actions, planning, organizing as well as movement and supervision which are used to determine predetermined targets by utilizing human resources and other source [3].	Market Share Sales Growth Profit Growth Return On Equity Customer Satisfaction	[3]

### Data Analysis

This study uses questionnaires to collect data. The data collected in this study amounted to 118 respondents from transportation company employees. We used validity and reliability tests to measure the consistency of the answers to the questionnaires we distributed. Finally, we conducted a multiple linear regression test to find out the influence between Business Performance and Strategic Management Accounting (SMA), Organizational Capability, and Information Technology (IT). The following is the regression equation in this study.

$$P = \alpha + \beta_1 \text{SMA} + \beta_2 \text{OC} + \beta_3 \text{IT} + e$$

### Results and Discussion

The research questionnaire was distributed directly to employees working in transportation companies in Magelang and Yogyakarta. Based on the purposive sampling technique in this study, data was obtained from 118 respondents. The respondent profile shows that most respondents are male (85.3%). The educational background of respondents is undergraduate (58.7%) and the majority of respondents are under 40 years old (45%).

#### Validity and Reliability Test

Validity testing in this study uses the Pearson correlation method, while reliability testing looks at the Cronbach alpha value. The results show that all statement items are valid because the significance value is less than 0.05. The results of the reliability test show that the Cronbach alpha value is greater than 0.7, so all variables are declared reliable.

#### Multiple Linear Regression

The influence of independent variables on dependent variables is tested using multiple linear regression. The results of multiple linear regression testing can be seen in Table 2.

Table 2. Multiple Linear Regression Result

Note	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	37.404	5.786		6.464	0.000
Information Technology	-0.004	0.159	-0.002	-0.002	0.982
Organizational Capabilities	-0.270	0.129	-0.190	-2.091	0.039
Accounting Management Strategic	0.155	0.073	0.191	2.115	0.037

#### Test of Determination Coefficient (Adjusted R Square)

The coefficient of determination is used to determine how far the model's ability to explain the variation of variables. The test results can be seen in Table 3.

Table 3. Determination Coefficient Test Result

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.286	0.082	0.058	3.498

Based on Table 3 shows the Adjusted R Square value of 0.058 (5.8%). This means that information technology, organizational capabilities and strategic accounting management can explain 5.8% of business performance. While 71.6% is explained by other factors not included in this study.

### F test (Goodness of Fit Test)

The F test is basically used to measure the accuracy of the sample regression function in estimating the actual value (goodness of fit). Based on the test results, the calculated F value is 3.388 with a significant level of 0.021. This indicates that the research model used in this study is feasible or fit.

### Hypothesis Result

Statistical t-test is used to test the influence between independent variables on dependent variables. It is said to have an effect if the significance value is less than 5% (Table 4).

Table 4. Hypothesis Result

	Sig.	Desc.
Information Technology → Bussines Performance	0.982	H1 not supported
Organizational Capabilities → Bussines Performance	0.039	H2 supported
Accounting Management Strategic → Bussines Performance	0.037	H3 supported

The test results show that information technology does not affect business performance. This is because human resources do not yet have the readiness to adapt to technology, thus inhibiting the application of technology in supporting the improvement of business performance of transportation companies. The results are consistent with [44,45],

Organizational Capabilities have a negative impact on the business performance of bus companies. This is because the long implementation of work from home regulations has made employees accustomed to working online, resulting in reluctance to do physical activities. The results are consistent with [1,2,49].

Other results show that Accounting Management Strategic has a positive impact on business performance. Good strategic and finance planning supports the sustainability of the company. In addition, attention to consumers and the ability to identify competitors can create loyal customers, so that the company has good performance. The results are consistent with [27,35].



## Conclusion

This study concludes that Accounting Management Strategic has a positive effect on business performance, and Organizational Capabilities has a negative effect on business performance. Meanwhile, information technology has no effect on business performance. The limitation of this study is that the variables studied only have a small effect on performance, so further research can add variables of operational efficiency, innovation, adaptability, and customer capabilities. The implications of this study prove that IT does not affect performance, but transportation companies must pay attention to Organizational Capabilities and Accounting Management Strategic to drive their company's performance.

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