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THE EFFECT OF TECHNOLOGY ORIENTATION ON COMPANY PERFORMANCE MODERATED BY ORGANIZATIONAL CHARACTERISTICS

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ABSTRACT: This study aims to determine the role of organizational characteristics in moderating the influence of technology orientation on company performance. The population in this study were Go-Jek drivers in Denpasar City. The sampling method used was nonprobability sampling, incidental sampling and using the Slovin formula so that the sample size used was 98 respondents. Data collection was carried out through interviews and questionnaires. The analysis technique used is the Moderated Regression Analysis (MRA) technique. The results showed that Technology Orientation had a positive effect on Company Performance and Organizational Characteristics was able to moderate the influence of Technology Orientation on Company Performance. The results of this study can be used as a reference for Go-Jek company management to make decisions, especially those related to efforts to increase product innovation, increase company communication and conduct new product surveys of customers to be able to increase Go-Jek's company profit and performance.

Keywords: *technology orientation, organizational characteristics, company performance*

I. INTRODUCTION

Go-Jek is a transportation company from Indonesia that serves the transportation of people and goods through motorcycle taxi services. The company was founded in 2010 by Nadiem Makarin. Go-jek services are available in several regions in Indonesia such as Jabodetabek, Bali, Surabaya, Bandung and DIY. Go-JEK offers several transportation product features such as GoRide and GoCar, which are online motorcycle taxi features that are ready to serve human transportation. There is a GoBlueBird feature which is a feature resulting from collaboration with conventional transportation company BlueBird. GoFood feature that serves food delivery services. Some of these product innovations are expected to be able to maximize company performance.

Go-Jek is said to be a major player in the technology industry in Indonesia and has shown how the company is innovating in technology and continues to develop until now and helps improve the economy of the community, especially Go-Jek partners. This achievement also had an impact on the company's performance which continued to increase, this was reflected in Go-Jek Company's revenue which reached Rp. 126 trillion in 2018 and has increased an average of 3.5 times each year (cnnindonesia.com, 2019). The revenue contribution of the Gojek company in Denpasar City itself reaches Rp. 1.9 trillion during 2018 and has a tendency to increase again in the following years (Bisnis.com, 2019).

However, the phenomenon of increasing revenue that occurs as a reflection of the company's performance is not in line with information related to Go-Jek's position as an online transportation service provider with its competitors. Based on data from Playstore (2019), it can be seen that UBER occupies the first position in online transportation service providers, namely 3,995,512 application users, followed by GRAB in the second position with the number of application users of 1,178,324. The existence of Go-Jek in Indonesia has now shifted its position in the transportation service provider to the third position, amounting to 971,202, and followed by the fourth and fifth positions, namely OKE JEK and OJEK SYARI with each application user amounting to 913,000 and 424,000. The above phenomenon reflects that even though Go-Jek is a pioneer in online transportation services, its competitors are able to compete when viewed from the application user downloads on the Playstore. This indicates that the application of technology can be an important factor in measuring the performance of companies, especially those based on technology such as Go-Jek.

The success of company performance, especially those based on technology, is the presence of technology orientation. Technology orientation is a strategic instrument, with technology-oriented companies can apply competition management with the assumption that the higher the technology used, the more innovative the products produced and the greater the likelihood that the products or services offered can be sold

in certain target markets. Technology-oriented companies mean that companies can use their technical knowledge to create technical solutions to answer and meet the needs of their users (Gatignon & Xuereb, 1997).

The importance of technology orientation by Prahalad & Hamel (1994) and Grinstein (2008) states that long-term success is best achieved through new technology solutions, products and services. Several research studies by Wulandari (2015), Kusuma (2018), Lestari & Warmika (2019) found that technology orientation has a positive effect on company performance. In contrast to these researchers, the research results of Jones & Teegen (2001) state that there is a negative but insignificant relationship between technology and company performance which has a tendency for low internal resources. In line with this, Jumaili (2005) states that technology can have a negative effect on company performance when viewed from the perspective of the financing spent on investment in the technology if it is not fully utilized and when damage occurs.

The inconsistencies in the results of previous studies indicate that there are other factors that influence the relationship between technology orientation and company performance. Companies must not only focus on technology-oriented strategies but also there are other factors that can influence the relationship of technology orientation on company performance, namely the characteristics of the organization.

Organizational characteristics are expressed as a number of people who individually or in groups do certain jobs to achieve the stated goals (Wahab, 2008: 4). Companies that have good organizational characteristics will find it easier to carry out predetermined strategies to improve company performance. Several studies conducted by Firmansyah (2009), Widari (2017) and Aprizal (2017) state that organizational characteristics have a positive effect on company performance. Based on the above background, this study wants to examine the influence of technology orientation on company performance in Go-Jek companies moderated by organizational characteristics.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Technology-oriented companies will devote their resources to R&D and actively acquire new technologies and use advanced production technologies (Voss & Voss, 2000). Technology-oriented companies will have a competitive advantage in terms of technological leadership by offering different products, which can result in superior performance (Prahalad & Hamel, 1994). A technology-oriented company that combines customer value innovation with technological innovation has a greater chance of maintaining high profits and performance (Batra et al., 2015). Research conducted by Prahalad & Hamel (1994), Grinstein (2008) Wulandari (2015), Kusuma (2018), and Lestari & Warmika (2019) states that there is a positive and significant influence between technology orientation and company performance.

H1: Technology orientation has a positive effect on company performance.

RBV theory assumes how a company can compete with other companies, by managing the resources owned by the company concerned in accordance with the company's ability to achieve the company's competitive advantage (Wernerfelt, 1984). Companies that have good organizational characteristics that are reflected in effective resource management and have a good organizational structure will find it easier to improve company performance. Technology-oriented companies will have a competitive advantage in terms of technological leadership by offering different products, which can result in superior performance (Prahalad & Hamel, 1994). Companies that are able to utilize their resources both in terms of financial and human resources will be able to utilize technology as a tool to win the market so as to improve company performance. Voss and Voss (2000) state that organizational characteristics, seen from the organizational structure, can moderate the market orientation relationship, one of which is the technology / product orientation of company performance.

H2: organizational characteristics moderate the effect of technology orientation on company performance.

III. METHODS

The location in this research is Denpasar City, Bali. Denpasar City was chosen as the research location because Denpasar City had a significant increase in the number of GO-JEK drivers that exceeded other districts in Bali Province such as Badung Regency. This information was obtained during an interview with the marketing party of PT GO-JEK in Denpasar City. The time of implementation of this research is 2020.

The population in this study were Go-Jek drivers in Denpasar City. Based on the results of interviews conducted by researchers at the Go-Jek company Representative Office for the City of Denpasar, the number of Go-Jek drivers in Denpasar City until December 2019 was 4755 people. The sampling method chosen is incidental sampling, which means that the method of determining the sample is based on chance, that is, anyone who accidentally / incidentally meets the researcher can be used as a sample, if it is considered that the person who happened to be met is suitable as a data source. The calculation of the number of samples uses the Slovin technique according to Sugiyono (2013: 87), so that the sample collection includes representative indicators so that the results of the research can be generalized later. The slovin formula for determining the sample in this study is

$$n = \frac{N}{1 + N(e)^2}$$

$$= \frac{4755}{1 + 4755(0,1)^2}$$

$$= 97,94$$

Information:

N = Population

n = Number of samples taken

e = 10% (error rate)

Based on these calculations, the minimum sample size obtained is 97.94 or rounded to 98 respondents.

Data collection in this study was carried out using a method, namely a questionnaire is a data collection technique using a written list containing a set of questions or written statements that are closed or open which are submitted directly to respondents to be answered (Rahyuda, 2004: 80). The questionnaire distributed to measure respondents' perceptions, using a Likert scale 1-5.

Interaction testing or what is often called Moderated Regression Analysis (MRA) is done to find out whether a variable included in the study is a moderating variable. The moderating variable is an independent variable that will strengthen or weaken the relationship between the independent variable and the dependent variable. This study uses an interaction test with the following equation formula.

$$Y = \alpha + \beta_1X + \beta_2M + \beta_3X * M + \epsilon \dots \dots \dots (1)$$

Information:

Y = Company Performance

α = Constant

X = Technology Orientation

M = Organizational Characteristics

X * M = The interaction between technology orientation and organizational characteristics

β1 - β3 = Regression coefficient

ε = Error or other variables not identified in the model.

IV. RESULTS AND DISCUSSION

Results of Moderated Regression Analysis (MRA)

Testing with interaction variables is one part of the application of the Moderated Regression Analysis (MRA) model. The research data was processed using Moderated Regression Analysis (MRA) so that the results of data processing can be seen in Table 1.

Table 1. Results of Moderated Regression Analysis (MRA)

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error	Beta		
Konstanta	-3,505	7,783		-0,450	0,054
Orientasi Teknologi (X)	0,883	0,364	1,202	2,425	0,017
Karakteristik Organisasi (M)	0,838	0,650	0,653	1,290	0,002
Interaksi Orientasi Teknologi dan Karakteristik Organisasi (XM)	1,031	0,029	0,967	3,045	0,029
R ²	0,644				
Adjusted (R ²)	0,633				
F	56,693				
Sig. F	0,000				

Primary Data, 2020

Based on Table 1, a moderation regression equation can be drawn up from this study, which is as follows:

$$Y = -3,505 + 0,883X + 0,838M + 1,031XM + e$$

From the results of the Moderated Regression Analysis (MRA) test, it can be explained related to the feasibility of the model, the coefficient of determination and hypothesis testing (t-test).

Model Feasibility Test

The model feasibility test (F test) is intended to determine whether in this study, the model being analyzed is feasible to use. Based on Table 1, it is known that the calculated F coefficient value is 56.693 with a significance of 0.000 less than 0.05. This means that this research model deserves to be analyzed further.

Coefficient of Determination

The coefficient of determination aims to measure how much the independent variable is able to explain changes in the dependent variable. Based on Table 1, it can be seen that the adjusted R square value is 0.633, which means that 63.30 percent of the variations in the ups and downs of changes in Go-Jek company performance are influenced by technology orientation variables, organizational characteristics and interaction of technology orientation and organizational characteristics, while 36.70 percent the rest is influenced by other variables that are not explained in this research model.

Hypothesis testing

The Effect of Technology Orientation on Company Performance

The first hypothesis (H1) put forward in this study is that technology orientation has a positive effect on company performance. The results presented in Table 1 show that the beta coefficient (β_1) is 0.883 with a significance level of 0.017 less than 0.05. This means that technology orientation has a positive effect on Go-Jek company performance. The better the level of technology orientation owned by the Go-Jek company, the better the Go-Jek company's performance will be.

These results are supported by the results of research conducted by Prahalad & Hamel (1994), Grinstein (2008) Wulandari (2015), Kusuma (2018), and Lestari & Warmika (2019) stating that there is a positive and significant influence between technology orientation and company performance. According to Gatignon & Xuereb (1997), technology orientation is seen in the behavior of consumers who prefer products and services with technological advantages. Like the Go-Jek company which was the originator of a technology-based motorcycle taxi service company. Technology-oriented companies will have a competitive advantage in terms of technological leadership by offering different products, which can produce superior performance (Prahalad & Hamel, 1994) and have a greater chance of maintaining high profits and performance (Batra et al., 2015).

The Go-Jek company, which has a technology-oriented strategy as measured by the company's policy of adopting the latest technology, buying and using technology devices to be ahead of competitors, is always the first to try new technologies and always improves internal processes such as proven reliability and speed. able to improve the performance of Go-Jek Company. This finding can be interpreted that if the intensity of the application of technology orientation by Go-Jek companies is increased, it will be able to make a significant contribution to the success of the performance achieved by Go-Jek companies.

Organizational Characteristics Moderate the Effect of Technology Orientation on Company Performance

The second hypothesis (H2) put forward in this study is that organizational characteristics moderate the effect of technology orientation on company performance. The results presented in Table 1 show that the beta coefficient (β_3) is 1.031 with a significance level of 0.029 less than 0.05. This means that organizational characteristics are able to moderate the influence of technology orientation on Go-Jek company performance. The better the level of technology orientation and organizational characteristics of the Go-Jek company, the better the Go-Jek company's performance will be.

The results of this study are supported by the results of research conducted by Voss and Voss (2000) which states that organizational characteristics seen from the organizational structure can moderate the relationship of market orientation, one of which is technology / product orientation towards company performance.

Technology-oriented companies will have a competitive advantage in terms of technological leadership by offering different products, which can result in superior performance (Prahalad & Hamel, 1994). Companies that are able to utilize their resources both in terms of financial and human resources will be able to utilize technology as a tool to win the market so as to improve company performance.

Go-Jek company that has a good technology orientation which is reflected in the company's policies in applying the latest technology and is supported by the organizational characteristics of the Go-Jek company such as good resources, a comfortable organizational climate for drivers and a career path. What is clear is that it will prove to be able to improve the performance of the Go-Jek company which can be seen from the increasing revenue turnover of Go-Jek Company.

V. CONCLUSION

The results showed that technology orientation was able to have a positive and significant effect on company performance and organizational characteristics were able to moderate the effect of technology orientation on company performance. The implications of the research results obtained are able to make additional knowledge, references and material for consideration for Go-Jek company management, especially for the City of Denpasar in the decision-making process and the determination of company policies to improve company performance. Go-Jek companies need to improve and maintain the use of internet technology, always try to create the latest technology, and always improve internal processes such as speed, reliability and information management so that technology orientation can be maximized. Then, organizational characteristics such as resources, climate and organizational structure need to be maintained and even increased their

effectiveness so that they can run optimally, so that company performance can increase. If the technology orientation and organizational characteristics are able to be implemented and implemented properly, then Go-Jek's company performance will improve.

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