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Relevance of Top Management Support, Personal Capabilities, Formalisation of Information System Development on the Performance of Accounting Information Systems at Expedition Companies

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Abstract: The growth of e-commerce has had a domino effect on various businesses, such as freight forwarding or logistics. Computer-based information systems are needed to process financial data. The data relates to transaction data in an accounting cycle, and presents it in financial reports, where it is needed for logistics company management. This is intended to evaluate the business being run. This study aims to examine and analyze the influence of Top Management Support, Personal Capabilities, Formalization of Information System Development on the performance of accounting information systems at national shipping/logistic/expedition companies in the city of Semarang. The selection of 64 respondents from 9 expedition companies used the convenience sampling method. The results of the study proved that Top Management Support, Personal Capabilities, Information System Development Formalization had a positive and significant effect on the performance of accounting information systems. The application of accounting information systems is expected to help various company activities in an effort to increase the success of performance. Keywords: Accounting Information System, Top Management Support, Personal Capabilities, Formalization of Information System Development.

I. INTRODUCTION

Indonesia Logistics market revenue will elevate in future owing to growing e-commerce in the country on account of high internet penetration and increasing number of players in the country. The e-commerce industry has been growing in Indonesia in past few years and this trend is expected to continue in future. This has led to high demand of the logistics services impacting the logistics industry in a positive manner. This has also accelerated the market size of express delivery

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as all the companies in e-commerce industry in the country are also offering the express delivery services other than the normal delivery.

The shipping service industry is increasing in the era of globalization. Increasing consumer demand for freight forwarding services has led to more companies entering the service market to be able to compete and survive. Facing this reality, shipping service providers such as TIKI, ESL, JNE, Pos Indonesia, DHL Express, UPS, TNT Express International, FedEx and others are required to continue to add competitive service features.

The shipping service industry, be it cargo, expedition, logistics, freight services and the like, is able to make a significant contribution to revenue. Along with this, it is certain that there will be an increase in transactions.

Therefore, a system that has the ability to collect, record and process all transaction data into useful information presented in financial reports for the decision-making process is needed [1]. The existence of an accounting information system is intended to support the company's stewardship function. All matters related to regulatory information and the use of organizational resources to achieve company goals.

The existence of an accounting information system is intended to support the company's stewardship function. All matters related to regulatory information and the use of organizational resources to achieve company goals. [2] The system aims to support decision-making by management, so that the operational section will work more effectively and efficiently.



This study aims to test and analyze the influence of Top Management Support, Personal Capabilities, Formalization of Information System Development on the performance of accounting information systems at shipping companies in the city of Semarang. Testing and analysis of the relevance of the factors that influence the performance of the accounting information system in this study using Theory of Reasoned Action, Theory of Planned Behavior and Theory of Acceptance Model as the theoretical basis for formulating hypotheses.

The performance of the accounting information system is affected by top management support. With the support from top management, the company can improve the performance of the accounting information system. Top management support has a positive effect on the performance of the accounting information system [3] [4]. Meanwhile, research conducted by [5]states that top management support has a negative effect on the performance of the accounting information system.

Personal capabilities are very relevant in a company to assess the performance of accounting information systems. This is because the company can find out ability and recognizing the value, and sensitivity of each person in completing the problem at hand.

Research results from [3] and [6] prove that personal capabilities have a positive effect on the performance of accounting information systems. This is contrary to the results of research from [7] which found that personal capabilities have a negative effect on the performance of accounting information systems.

The formalization of information system development affects the performance of the accounting information system. The formalization of information system development notifies the stages of the system development process that are actively recorded and makes adjustment to the existing system.

Research by [8] and [9] which prove that the formalization of development of the accounting information system has a positive effect on the performance of the accounting information system. However, research conducted by [10] shows different results that the formalization of information system development has a negative effect on the performance of the accounting information system.

The difference between the results and the object in the research area from the performance of the accounting information system provides an opportunity for further research. So that it can get answers to the relevance of top management support, personal capabilities, and the formalization of information system development on the performance of accounting information systems.

II. LITERATURE REVIEW AND HYPOTHESIS

A. Theory of Reasoned Action

Theory of Reasoned Action (TRA) was developed by Ajzen and Fishbein in 1980 to examine the relationship between attitudes and behavior [11]. TRA deals with attitudes and behaviors individuals in carrying out activities or actions that are reasonable in the context of the use of information

systems technology. An important concept in this theory is the focus of attention (salience), which is to consider something that is considered important. Intention is determined by subjective attitudes and norms [12].

Belief in the opinions or input of others and motivation to obey that opinions of others will someone take an action, if it has a positive value from existing experiences, and that action is supported by the individual's environment. Top management support is defined as the support provided by top management for system users. The level of support provided by top management can be used as an important factor in achieving the success of all activities related to information systems. If the support provided by top management is greater, the performance of the accounting information system will increase.

[13] reveal that the support from top management is very positive and significant for the performance of the accounting information system. [8] also prove that top management has a positive effect on information systems especially in the performance of accounting information systems.

H1: Top Management Support has a positive effect and significance on the Performance of the Accounting Information System.

B. Theory of Planned Behaviour

Theory of Planned Behavior (TPB) is a development from Theory of Reasoned Action (TRA). TPB added a construct that does not exist in TRA, namely perceived behavior control (PBC). The TPB explicitly acknowledges the possibility that behavior is not always under full control. The main factor of individual behavior is behavioral intention which affects the individual's behavior. The intention to behave is influenced by the variable attitude (attitude), subjective norms (SN) and perceived behavior control (PBC). This theory is based on the postulate theory which states that behavior is a function of information that comes from prominent beliefs about the behavior [14].

Personal capability is defined as one's abilities who have behavior and actions that reflect personality to understand and recognize values and have a broad perspective and sensitivity against various problems. The better the personal capabilities, then the better the performance of that person in a company.

TPB is considered appropriate to be used in explaining any behavior that requires planning that is relevant to personal capabilities in order to improve the performance of the accounting information system. [13] and [15] states that personal capabilities have a positive and significant effect on information systems.

H2: Personal Capabilities have a positive effect and significance on The Performance of the Accounting Information System

C. Theory of Acceptance Model

The Technology Acceptance Model (TAM) is fundamental to the Theory of Reasoned Action (TRA) proposed by Ajzen and Fishbein in 1980. TRA explains the reactions and perceptions of Technology users Information which will



ultimately affect attitudes in acceptance of the technology. Initially, TAM was intended to provide an explanation of the determination of perceptions in computer reception general, provides an explanation of the user's behavior or attitude in a population [16].

Formalization shows clarity of rules and procedures that are documented and reported so that it is useful to ensure uniformity in business processes. With this reporting and documentation, all activities that take place in the agency, especially activities related to accounting information systems will be known by internal and external parties.

This is in accordance with TAM which states the main factor of the behavior of users of accounting information systems on the acceptance of system use concerning the formalization of information system development. A company that implements the formalization of its information system development will require a company view of the information system of each individual and the behavior of users of information systems to the acceptance of users of the system. [13] and [8] proves that the formalization of information system development has a positive and significant effect on the performance of the accounting information system.

H3: Formalization of Information System Development has a positive effect and significant on the Performance of Accounting Information Systems.

III. METHODOLOGY

Shipping service companies (expedition or cargo) in the city of Semarang are the objects of this research. The population in this study were employees of users of accounting information systems in shipping service companies in the city of Semarang. Determination of the sample in this study using convenience sampling method.

This study uses primary data through distributing questionnaires. The number of questionnaires distributed was 64 sets sent to 9 expedition companies in the city of Semarang. One company is represented by four respondents. All questionnaires can be used as sample data, so that they can be processed to the next stage.

The expedition company consists of Indah Cargo, Sicepat Express, J & T Express, JNE, Karisma Logistik, MSA Cargo, Family Utama, POS Indonesia, and Solid Logistik. Employees as respondents in this study are in the department of administration, finance, e-commerce, and human resources. With an average working time of four years.

Variables Y, X1, X2, and X3 use a Likert scale, starting from 1 = Strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = uncertain, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Operationalization and measurement are carried out to facilitate research implementation (Table I).

TABLE I. OPERATIONALIZATION AND MEASUREMENT OF RESEARCH VARIABLES

Variable	Notation	Indicator	Scale
Performance of Accounting	Y	1. The system is able to help the	Ordinal

Information		department function properly.	
System (PAIS) is the ability of a		2. The system is an important	
system in		factor in the success of the	
accordance with		department's performance.	
its function in		3. The system can increase	
producing the information		satisfaction.	
needed to achieve		4. The system always provides the	
certain goals that		information needed by the	
can be seen		department.	
through the satisfaction of		5. Systems in other applications	
users of		such as Spreadsheets can be	
accounting		used to access information to	
information		meet departmental needs.	
systems and from users of		6. The frequency of using the	
accounting		available system.	
information		7. With the existing system, the	
systems themselves.		department is able to do its	
themselves.		job more easily and efficiently.	
		·	
		8. The system can contribute to	
		the achievement of organizational goals and	
		missions.	
		9. Most of the employees in the	
		department are interested in	
		using.	
Top Management	X1	Top management is very	Ordinal
Support (TMSP)	711	good at using computers.	Ordinar
is the manager's		2. Top management has high	
involvement in the progress of		achievements in the use of	
the project and		information systems.	
providing the		3. Top management is actively	
necessary		involved in the operational	
resources.		planning of the information	
		system.	
		4. Top management pays high	
		attention to the performance	
		of the accounting information system.	
		5. Top management is very pleased with the information	
		system usage ratings of the	
		user departments	
Personal	X2	The ability and knowledge of a	Ordinal
Capabilities		person about the computer as a	
(PSCB) is a		system user is very important.	
Capability personal have			
Behavior and			
action that shows			
a personality in			
understand and get to know			
values, and			
have overview			
and sensitive			
to various			
problems. Formalization of	X3	Indicators to measure the	Ordinal
Information	110	formalization of information	O.G.IIIII
System		system development are:	
Development (FISB) is a		(1) project development reports,	
system that is			
systematically		(2) development documentation,	



documented and confirmed through a document that can affect the	(3) recording techniques and time, (4) development costs and information system control
success of implementing information systems.	

Analysis to examine the relevance of the influence between Top Management Support, Personal Capabilities, Formalization of Information Systems Development on the Performance of Accounting Information Systems using multiple linear regression analysis.

$$PAIS = \alpha + \beta 1TMSP + \beta 2PSCB + \beta 3FISD + e \tag{1}$$

Where are:

 α = Constanta

 $\beta 1, \beta 2, \beta 3$ = Coefficient regression

PAIS = Performance of Accounting Information System

TMSP = Top Management Support

FISB = Formalization of Information System Development

e = error

IV. RESULT AND DISCUSSION

The validity and reliability tests were conducted after the questionnaire was complete. The validity test is used to measure whether a questionnaire is valid or not. The validity test in this study uses the factor analysis method. If the KMO value is> than 0.5, the sample sufficiency is fulfilled. If the loading factor value is> 0.4, then the instrument is valid [17].

TABLE II. RESULTS OF INSTRUMENT VALIDITY TEST

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Variable	r-value	r-table	Decision	
Top Management Support (TMSP)	0,771	0,163	Valid	
Personal Capabilities (PSCB)	0,786	0,163	Valid	
Formalization of Information System Development (FISB)	0,737	0,163	Valid	

The measurement of reliability in this study was carried out using the one-shot measurement technique. Furthermore, the measurement results were compared with other questions using the Cronbach's Alpha (α) statistical test. A variable is considered reliable, if it has a Cronbach's Alpha value> 0.70 [18]. Table III shows all variables are reliable, because they have a Cronbach Alpha value> 5% (more than 5%).

TABLE III. RESULTS OF RELIABILITY TEST AND DETERMINATION
TEST

No.	Variable	Cronbach's Alpha	N of Items
1	Performance of Accounting Information System (PAIS)	86,5%	6
2	Top Management Support (TMSP)	92,5%	5
3	Personal Capabilities (PSCB)	90,7%	4

4		zation of Info pment (FISB)	ormation System	m 91,1%	6
M	odel	R	R Square	Adjusted R Square	Std. Error of the estimate
1		0,708 ^a	0,594	0,578	1,144

Table III shows that performance of accounting information system can be measured by top management support, personal capability, and formalization of information system development, the remaining 42,2% is influenced by other variables not examined in this study.

Based on the results of the t statistical test, the multiple linear regression equation is obtained as follows:

$$P \setminus AIS = 7,108 + 0,089TMSP(X1) + 0,210PSCB(X2) + 0,099FISD(X3) + e$$
 (2)

The results of the coefficient of t-value show that the top management support (TMSP) variable (X1) has a t-value of 2.927, which is greater than the t-table value = n - k - 1 = 100 - 6 - 1 = 93, then the t table value is 1.66140 or can it is said that the top management support variable (X1) has a significant effect on the performance of the accounting information system (Y) with a significance level of 0.004 <0.05.

Based on the results of the analysis carried out in this study regarding the influence of top management support on the performance of the accounting information system supporting or in line with Theory of Reasoned Action (TRA). Top management support is very important for a company in order to improve the existing system within their company. Top management support has a positive and significant effect on the performance of the accounting information system. The results of this study support the evidence of research conducted by [13].

The results of the coefficient t-value show that the personal capability (PSCB) variable (X2) has a t-value of 4.667, which is greater than the t-table value = n - k - 1 = 100 - 6 - 1 = 93, then the t table value is 1.66140 or it can be said that the capability variable personal (X2) has a significant effect on the performance of the accounting information system (Y) with a significance level of 0.000 <0.05.

Based on the results of the analysis regarding the personal capabilities of the accounting information system performance that has been proven in this study, which supports or is in line with the Theory of Planned Behavior (TPB). TPB explains how to control individual behavior which is limited by the shortcomings and limitations of the lack of resources used to determine their behavior. This study supports [6] and [3] research which states that personal capabilities have a positive effect and significant on the performance of accounting information systems.

The results of the coefficient t-value show that the formalization of information system development (FISD) variable (X3) has a t-value of 3.964, which is greater than the value of t table = n - k - 1 = 100 - 6 - 1 = 93, then the t table value is 1.661 It is said that the formalization variable of



information system development (X3) has a significant effect on system performance with a significance of 0.000 < 0.05.

Based on the results of the analysis regarding the effect of formalization of information system development on the performance of the accounting information system, this supports or is in line with the Technology Acceptance Model (TAM) theory. TAM describes the determination of a person's acceptance which can be measured by how one's attitude or behavior is in the presence of a new information system.

The formalization of information system development is a procedure designed to solve a problem faced by a company. The level at which a company uses procedures, including written instructions and communications. [8] also declared that the formalization of information system development has a positive effect and significant on the performance of the accounting information system.

V. CONCLUSION

The results from the test of this research proved that Top Management Support, Personal Capabilities, Information System Development Formalization had a positive and significant effect on the performance of accounting information systems. Research on the factors that affect the performance of the accounting information system in this study is concerned with shipping/expedition companies in the city of Semarang, so it has limitations on the generalization aspect. This research was conducted during the Covid-19 pandemic in March 2020, so distributing questionnaires was a challenge in completing this research.

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