

Conference Paper

Task Technology-Fit of a Village Financial System (Siskeudes) to Increase Officers' Performance

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Abstract

Village Financial System (Siskeudes) is a information system that assists village governments in reporting financial reports transparently and accountably. On the other hand, Siskeudes cannot be optimal, moreover various problems found in this system such as the delay of financial reporting and error recording. One of the factors of the problems is the incompatibility of tasks in operating the application. This study aims to analyze the causes and consequences of task mismatches by using task technology-fit model. The respondents in this research are thirty village officers who used Siskeudes from eleven villages in Cirebon. This study was analyzed using questionnaires and in-depth interviews. The method of this study used Partial Least Square (PLS) using SmartPLS 3.0. Moreover, the results of this study indicated that task of technology-fit model had a significance influence on Performance Impact. Villages that had tasks that are in accordance to Siskeudes operations, in this case the finance department who had a knowledge in the financial sector) had better levels of performance. However, the task characteristics do not have a significant effect on task technology-fit because task characteristic of the government are based on the regulations and the law

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1. Introduction

Allocation of village funds in the past four years has a positive trend. The Indonesian Ministry of Finance, reported that the government had channeled the Village Fund to approximately 20.7 billion rupiah in 2015, up to 46.9 billion rupiah in 2016, and for 2017 and 2018 it was set at 60 billion rupiah for 74 thousand villages throughout Indonesia. The amount of donations for this need to be able to explore the potential of food storage. Therefore, good supervision is needed. One form of supervision from the government of the Republic of Indonesia (RI) is by creating a tool to regulate and regulate centralized village finance. The tool was made by the Financial Supervisory

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Agency (BPK) in collaboration with the Government of Indonesia, the Ministry of Finance and related stakeholders, named the Village Financial System (Siskeudes). As the name implies, this tool is used by every village apparatus to solve financial problems and published by computerization. Thus, the approval and accountability of the village government began to be well organized and good village government could be achieved [1].

Although there are a series of benefits such as the previous explanation, it is undeniable that there are village funds from the central government which have various implications in the community. Some of the results of the research show that village funds are used. The first year the receipt of village funds proposed did not fulfill the principles of good, transparent and accountable governance [2]. Furthermore, village officials were referring to the management of village funds [3], which caused anxiety and confusion because they did not understand the application of village accounting that increased the delay in extracting village funds and disbursing village funds the following year [4].

In 2017, the implementation of the village financial system has been implemented an average of 54.25% [5]. West Java which is the object of research. This study has a number of participants as many as 51.19%. While the compilation saw data on the implementation of the socialization of this institution, there were 19 districts that had socialization, then in the process of guidance, there were 17 districts. but in fact West Java has only 10 districts or as many as 2,719 villages that have implemented the Siskeudes application [5]. In Rosnidah research, the greater the comfort in using a technology, the greater the intention to use it [6]. This raises a big question that was found by researchers who needed a large gap between the process of socialization and technical guidance on the implementation of the institutions themselves. Indonesia Corruption Watch (ICW) released a number of losses due to misappropriation of village funds of up to IDR 30 billion, which included 110 cases of misappropriation of village funds and village assistance funds throughout 2016 to August 2017 in combining funds, budgets, levies, fictitious reports, bribery, cutting budget, and increase the budget [7]. Based on this explanation, the researchers considered using the task technology model in accordance with Siskeudes technology to assess how the characteristics of the information system in Siskeudes can improve the performance of village officials.

2. Theoretical Background

2.1. Task Technology-Fit

Task Technology-fit is one model that is widely used in relation to research in the field of information systems that is used to study the relationship between systems, task needs and user needs [8]. Goodhue & Thompson's conformity model of technology assignments was first based on the idea that when the task characteristics and characteristics of users of information systems are well integrated together, the use of the system and user performance will be higher [9]. The suitability theory of technological tasks argues that information technology has a positive impact on individual performance and will be used if the capabilities produced by information technology are in accordance with the tasks that must be performed by the user [9].

The suitability of technological tasks is the user's perception of the systems and services they use based on their personal task needs [10]. Lu and Yang define task suitability as the extent to which a technology is able to assist users in doing work [11].

Lin and Wang define the suitability of technological tasks as the level at which the system is in accordance with the interests, in accordance with the task and fulfill needs [12]. Based on the definition above the suitability of technological tasks is the conformity between the functions and features of technology with the user's task needs.

The relationship between factors related to the suitability of technological tasks such as compatibility of information (Compatibility), understanding of information (Meaning) and ease of information retrieval (Locatability) reflect consistency between user needs, task requirements and technology used to perform this task. Thus, consistency of system characteristics with user requirements leading to better performance [9].

Goodhue & Thompson [9] combines dimensions in Perrow's research [13] and Lundberg and Thompson [14] in relation to task characteristics and succeeded in measuring two-dimensional constructs of task characteristics namely lack of search behavior can be analyzed and mutual dependence (with other organizational units). While the characteristics of technology are attributes that are used by users when carrying out certain tasks that include hardware, software and support services [9].

2.2. Performance Impact

Performance impact is the fulfillment of individual portfolio assignments and performance that shows increased efficiency, increased effectiveness and higher quality [9].

Based on the suitability model of Goodhue and Thompson's technology assignments [9], the utilization and suitability of technological tasks (task technology fit) have an impact on performance. The impact of individual performance in the context of information systems refers to the actual performance of individuals in using information systems [15].

Performance impact is the extent to which the use of the system can improve the quality of work, help complete tasks quickly, allow control of work, improve performance, eliminate errors, and improve work effectiveness [16]. Whereas Benedetto et al [22] defines the impact of performance as a level of use of a system that is able to increase effectiveness, improve efficiency, and increase productivity and be able to identify problems.

Performance is measured by quantitative and qualitative indicators, which generally fall into three main indicators of effectiveness, efficiency and quality to describe the relationship between input and output resources, so that refers to effectiveness and efficiency [17]. While Cohen and Bailey [18] performance can be measured through three criteria, namely the output quantity, output quality and behavior outcomes. Cohen also included measures of productivity efficiency, quality response time.

3. Research Methodology

This study uses multivariate analysis, namely Structural Equation Model (SEM). SEM testing is done by using version 3.0 SmartPartial Least Square (PLS) tool which is an alternative to the structural model [19].

The population in this study were all villages in Arjawinangun District, Cirebon Regency, with 33 questionnaires distributed, but only 30 respondents returned them. Structured interviews are also conducted to obtain more valid information related to research, namely the performance of users in using Siskeudes.

4. Analysis and Result

4.1. Outer Model

The first step in the SEM PLS model is to test the measurement model. Measurement model aims to test the level of validity and reliability of data in order to form valid and reliable data validity [20].

Based on Figure 1 below, the value of the loading factor for all variables is more than 0.6. According to Hair et al [20] the value recommended for all loading factors is at least 0.6. That is, all of these variables have a strong relationship

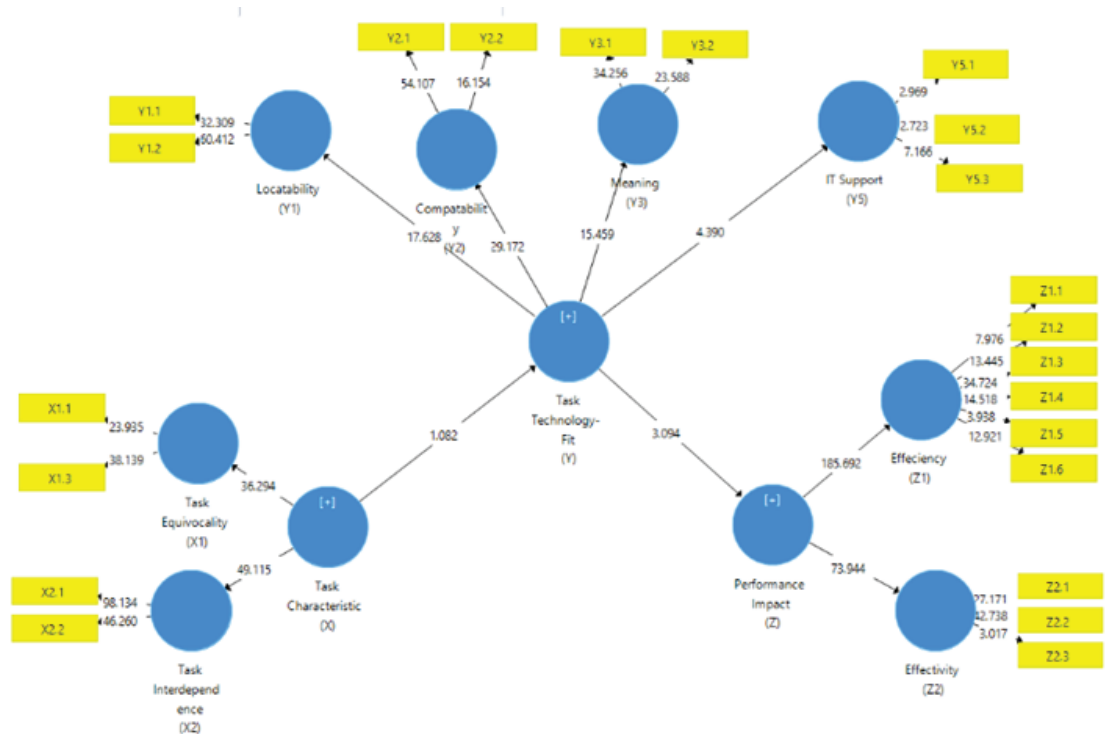


Figure 1: Research Model.

In addition to measuring the level of validity and reliability of a construct, it can be seen by looking at Cronbach Alpha (CA) and Average Variable Extracted (AVE) with the recommended value according to Hair is 0.7 for CA and the AVE value is 0, 5 [20]. While to measure the reliability of a construct, reliability is used by looking at the value of Compo-site Reliability (CR) with the lowest standard value of 0, 7 [20]. In detail the values of CA, ACE, and CR can be seen based on the table below:

TABLE 1: Cronbach alpha (CA), Composite Reliability (CR) and Average Variance Extracted (AVE).

Variable	CA	CR	AVE
Task Characteristic (X)	0.856	0.900	0.651
Task Technology-Fit (Y)	0.868	0.897	0.511
Performance Impact (Z)	0.914	0.932	0.612

Source: result of SmartPLS 3.0 (2019)

Based on the results of calculations in table 1, the Task Characteristic, Task Technology-fit, and Per-formance Impact variables have AVE values above the recommended value of 0.5, which means that the variable has a good validity level.

Then to measure the level of validity of a construct, it can be seen through the value of Cronbach's Alpha (CA) with the minimum value that must be achieved is 0.7 [20]. Based on table 1 above, Task Characteristic, Task Technology-fit, and Performance Impact variables have CA values above 0.7, which means the three variables are valid. Then to test the construct's reliability, Composite Reliability (CR) is used. Based on table 1 above, the CR value of each Task Characteristic variable, Task Technology-fit, and Performance Impact is above 0.7. This means that the three variables have values above those recommended by Hair et al [20] which are 0.7. This means that the three variables have good reliable levels.

4.2. Inner Model

R Square testing is used to test the effect of jointly between dependent variables and independent variables. According to Hair et al [20] the value of the relationship together between the independent variables is dependent said to be strong if it has a value of 0.67, while it is called moderate when it has a value of 0.33, and is said to be weak if it has a value of 0.19. Based on SmartPLS 3.0 calculations, the value of R Square is as follows:

TABLE 2: R Square.

	<i>Task Technology-Fit (Y)</i>	<i>Performance Impact (Z)</i>
<i>R Square</i>	0.036	0.346
<i>R Square Adjusted</i>	0.002	0.322

Source: result of SmartPLS 3.0 (2019)

Based on table 2, the value of the R Square Task Characteristic variable on Task Technology-Fit (Y) is 0.002 or 0.2% where the remaining 99.8% is influenced by various other variables. This shows that the relationship between variables X and Y has a weak relationship.

4.3. Hypothesis Testing

The next step in the PLS SEM method is by testing the hypothesis. The way to test hypotheses is to compare between ρ value with a predetermined error rate (5%). If the ρ value is smaller than the error level, the hypothesis is accepted.

Table 3 shows the results of a SmartPLS 3.0 based calculation the ρ value on the Task Technology-Fit variable on Performance Impact is 0.002 smaller than the specified

TABLE 3: Hypotesis Testing.

	Original Sample (O)	T Statistics (O /STDEV)	ρ value
Task Characteristic (X) ->Task Technology-Fit (Y)	0,191	1,082	0,280
Task Technology-Fit (Y) ->Performance Impact_(Z)	0,588	3,904	0,002

Source: result of SmartPLS 3.0 (2019)

error rate of 5%. Thus Task Technolgy-Fit has an influence on Performance Impact with a magnitude of influence of 0.588 or 58.8%. While the magnitude of the ρ value in the Task Characteristic and Task Technology-Fit variables is 0.284 greater than the specified error rate of 5%. Thus the Task Characteristic variable does not have a significant influence on Task Technology-Fit.

4.4. Hypothesis Discussion

4.4.1. The relationship of task characteristic with task technology fit

The first hypothesis of this study showed insignificant result. Task characteristic has no effect on task technology-fit in using Siskeudes. Ghodue & Thomson [21] emphasizes that in terms of the theory of task technology-fit, IT has a positive impact on individual performance and will be used if the capabilities produced by IT are in accordance with the tasks that must be performed by the user. However, this explanation is slightly different from the conditions in the field.

Based on the results of interviews conducted by researchers at the time of distributing the questionnaire, various conditions were found to be inappropriate in carrying out the task of using Siskeudes. For example, several villages in Arjawinangun Subdistrict, work on inputting data with the Siskeudes application was not fully carried out by the treasurer as financial handler and financial report maker to be reported to the village head and other interested parties. Parts of the program which focus on IT, sometimes also input data in Siskeudes. That is, there is the possibility of confusion in inputting financial data, because it is not entirely the party understands how recording should be done. Another reason why this happens is because Siskeudes users still experience confusion in using the application.

4.4.2. The relationship of task technology fit with performance impact

The second hypothesis of this research showed different result to the previous one. Task technology-fit has a real effect on performance impact in using Siskeudes. Even though there was a mismatch of tasks in using the Siskeudes application, the final results had a performance impact on each village that did financial reporting through Siskeudes. This is because the use of Siskeudes is a government program that has collaborated with the financial supervisory body (BPK) as an integrated indicator of financial recording and reporting in all villages in Indonesia. Every village is obliged to report with Siskeudes and each village has also been given a village facilitator whose job is to assist village officials if they experience difficulties in fulfilling their obligations. These include the use of Siskeudes. Therefore, if there is a delay in financial reporting, the village will get strict sanctions related to receiving village funds in the following period.

This means that the Siskeudes application is an application that has been designed in such a way as to facilitate the work of village officials in terms of recording and reporting. Although there are problems in the use process such as inequality of duties, this has been supported by village facilitators so that the use of the Siskeudes application can support the work of village officials efficiently, effectively and make their resources more creative in completing their duties [21]– [27].

5. Conclusion

Based on the calculations above the Characteristic Task does not have a significant effect on the technology-fit task. This is because in the public sector, policies and rules made by the government are absolute so that they do not affect differences in task characteristics and their relationship with task technology-fit.

While task technology-fit variables have proven to have a strong influence on performance impact. The greater the suitability of the tasks given by the leadership, the better the performance of village officials. In the application of the Siskeudes application, village officials argue that the application of the Siskeudes application has a positive impact and is able to improve its performance. It's just that in fact in Indonesia, especially Cirebon, many village officials have not yet matched their job duties with the operation of Siskeudes so that the performance is not optimal.

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