

SLEEKR Information System: Perceived Ease of Use and Usefulness

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Abstract. Information systems are required by some private national companies to help employees work more efficiently and effectively. PT X uses a Sleekr application for all employees. The goal of this study was to determine the perceived ease of use and usefulness of the Sleekr application, for which a descriptive quantitative analysis method was employed to collect data based on the results of observations. In the study, human resources (HR) and information technology (IT) employees responded to a questionnaire designed to evaluate the ease of use and overall usefulness of the application. The analysis results revealed that the Sleekr application met the criteria of ease of use and usefulness.

Keywords: information system, technology acceptance model (TAM), perception

1 Introduction

Rapid technological developments force companies to be efficient and effective, and information technology (IT) plays an essential role in the transformation of knowledge within an organization. The use of IT in an organization affects the business design, economy, and the working conditions of all employees (Islam, Jasimuddin, & Hasan, 2017). PT Ivonesia Solusi Data is a new startup engaged in technology. The nature of the business is such that it must continually adopt the latest data processing innovations. One of the strategies implemented by PT Ivonesia Solutions Data involves using a modern, sophisticated management information system to boost all work units' ability to process data, so that useful information is obtained more effectively and efficiently for ongoing company activities such as decision making processes and achieving goals.

Additionally, PT Ivonesia Solusi Data has a human resources (HR) unit that focuses on assisting the administrative processing of employees. The unit uses the Sleekr management information system, which is a web-based software system. It can record personal employee data and manage employee—HR functions, such as leaves, claims, salary, tax PPh 21, and job descriptions. Company employees that can access this system are employees of non-HR units and administrators for HR employees. This study aims to analyze the perceptions of HR and IT users of the Sleekr system regarding its ease of use and usefulness.

2 Literature Review

2.1 Management Information Systems

Hall (2001) defines a management information system as a collection of two or more mutually correlated components or sub-systems interacting to achieve a common goal. Implementation of IT and management information systems cannot be separated from the attitude aspect because the development of an information system is closely related to the problem individual and the organization as a system. Further, the development of a system must be user oriented. Lina (2007) states that successful implementation of information systems is determined by the extent to which the system can produce useful information and the level of individual acceptance of the system (Sahusilawane, 2015).

2.2 Technology Acceptance Model

Many studies have tested and detailed various research models related to the determinants of adoption and acceptance of the implementation of IT. Moreover, the technology acceptance model (TAM) proposed by Davis (Ahmad & Khalid, 2017) is widely used. TAM is an adaptation of the theory of reasoned action developed by Fishbein and Ajzen and argues that personal acceptance of information technology is influenced by two constructs: perceived usefulness and ease of use. In other words, users will accept new technology if they feel the system is useful and easy to use (Alagoz & Hekimoglu, 2012).



2.3 Perceived Usefulness

The decision to accept an information system is influenced by the degree of "trust." In general, "trust" can be divided into "belief" and "goodwill." Further, it has a direct and positive influence on the intent to use (Tung, Chang, & Chou, 2008). Perceived usefulness can be defined as the degree of confidence a person has that using an information system will improve their performance (Abdullah & Ward, 2016). In other words, if someone believes that the information system is useful, they will use it, otherwise they will not.

2.4 Perceived Ease of Use

The second construct in the TAM theory is the perception of ease of use. Perceived ease of use can be defined as the extent to which a person believes that using an information system is relatively free of effort (Kaur, Goh, & , 2016). If one feels confident that the information system is easy to use, they will use it, otherwise they will not.

3. Methodology

This research employed a descriptive quantitative analysis method that aims to provide an idea about a research object through sample or data collection which can be used to derive generally accepted conclusions (Sugiyono, 2011). In this context, a population is a set of units, typically comprising people, objects, transactions, or events to be investigated, and the sample is a subset of the population (McClave & Sincich, 2011). In this research, the population comprised PT Ivonesia Solusi Data employees, and the sample comprised HR and IT employees. The authors developed a questionnaire that used a Likert scale. According to Sugiyono (2011), a Likert scale can be used to measure attitudes, opinions, and perceptions of an individual or group of people about social phenomena. Hence, to assess the level of satisfaction/reality conveyed by respondents, the following four assessment categories were used:

- a. Strongly disagree 1
- b. Disagree 2
- c. Agree 3
- d. Strongly agree 4

The questionnaire was adapted from Davis' research using TAM. According to Davis in Jogiyanto (2007), technological usability is measured by considering the following indicators: improved work speed and job performance, increased productivity, effectiveness, task simplification, and usefulness. Further, the indicators used to measure the ease of use of technology were ease of learning, controllability, clarity, comprehensibility, flexibility, ease of skill acquisition, and ease of use.

The criteria levels are determined through the following steps:

1) Determine the highest percentage rate as

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Maximum score x 100%
Maximum score
4 x 100% = 100%
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 $\frac{4}{4}$ X 100% = 100%

2) Determine the lowest percentage rate as

Minimum score × 100% Minimum score

$$\frac{1}{4} \times 100\% = 25\%$$

- 3) Percentage range is given as 100% 25% = 75%
- 4) Percentage class interval is given as $75\% \div 4 = 18.75\%$

Table 1. Criteria Level

No	Score Range (%)	Utilization Level	Facility Level
1	>81.25 to 100	Very Useful	Very easy to use
2	>62.5 to 81.25	Useful	Easy to use



No	Score Range (%)	Utilization Level	Facility Level	
3	>43.75 to 62.5	Enough Usefulness	Somewhat easy to use	
4	>25 to 43.75	Not Useful	Not easy to use	

To determine the criterion level, the score obtained (in %) by descriptive analysis is matched with the criteria level listed in Table 1.

4. Results and Discussion

Table 2. Description of respondents

Variables	N (%)		
Sex			
Male	15 (83.3)		
Female	3 (16.7)		
Education			
High School	2 (11.1)		
Associate Degree (D3)	5 (27.8)		
Bachelor's degree (S1)	8 (44.4)		
Postgraduate (S2)	3 (16.7)		
Length of Work			
6–12 months	8 (44.4)		
> 12 months	7 (38.9)		
< 6 months	3 (16.7)		
Job Position			
Director	3 (16.7)		
Manager	1 (5.6)		
Supervisor	1 (5.6)		
Staff	13 (72.2)		

As shown in Table 2, fifteen (83.3%) respondents were male and three (16.7%) respondents were female, eight respondents (44.4%) received S1 education, five (27.8%) received D3 education, three (16.7%) received S2 education, and two (11.1%) received SMA/K education. As shown in Figure 3, held staff positions and held directorial positions. In addition, was a manager, supervisor. As shown in Figure 5, eight (44.4%) respondents had been working for 6–12 months, seven (38.9%) for more than 12 months, and three (16.7%) for less than 6 months.

b. Perceived usefulness

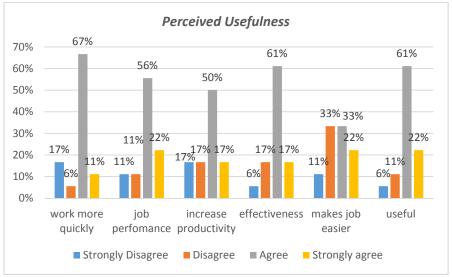


Figure 1. Degree of Perceived Usefulness

Based on Figure 1, we can deduce the extent to which the respondents perceived the information system to be useful. The majority of Sleekr SIM users chose "Agree" for all six usability indicators. The greatest weight



(67%, 12 respondents) was given to the "improved work speed" indicator. The weight values for the six indicators of perceived usefulness are listed in Table 3.

Table 3. Summary Weight and % (percent) of Perceived Usefulness

Info	Var 1	Var 2	Var 3	Var 4	Var 5	Var 6	Average
Weight	2.72	2.89	2.67	2.89	2.67	3.00	2.81
% Value	68%	72%	67%	72%	67%	75%	70%

As shown in Table 3, the average weight value for perceived usefulness is 2.81. The average level of satisfaction for perceived usefulness was 70%. This value indicates that the respondents perceived Sleekr to be useful.

c. Perceived Ease of Use

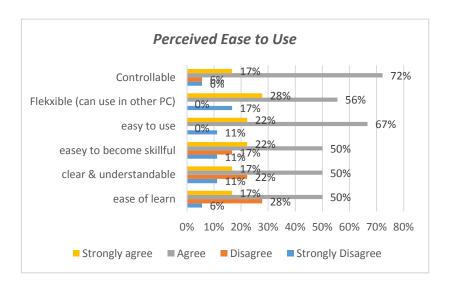


Figure 2. Degree of Perceived Ease of Use

Based on Figure 2, we can deduce the extent to which the respondents found the information system easy to use. The majority of Sleekr SIM users selected "Agree" for the six indicators of ease of use. The greatest weight was given to "Controllable." For this indicator, thirteen (72%) respondents chose "Agree." The weight values for the six perceived ease of use indicators are listed in Table 4.

Table 4 Summary Weight and % (percent) for Perceived Ease of Use

Info	Var 1	Var 2	Var 3	Var 4	Var 5	Var 6	Average
Weight	2,78	2,72	2,83	3,00	2,94	3,00	2,88
% Value	69%	68%	71%	75%	74%	75%	72%

As shown in Table 4, the average weight value for aspects of perceived ease of use was 2.88. For the percentage of conformity with expectations of respondents to the time aspect of 72%. This value indicates that the system was perceived easy to use.

5. Conclusion

The research results indicate that the Sleekr management information system is useful and easy to navigate. In the future, Sleekr system developers should make improvements in the application such that the usability and ease of use levels are further enhanced.



References

- Abdullah, F., & Ward, R. (2016). Developing a General Extended Technology Acceptance Model for e-learning (GETAMEL) by analysing commonly used external factors. *Computers in Human Behavior*, 56, 238–256. doi: 10.1016/j.chb.2015.11.036.
- Ahmad, S. Z., & Khalid, K. (2017). The adoption of M-government services from the user's perspectives: Empirical evidence from the United Arab Emirates. *International Journal of Information Management*, *37*(5), 367–379. doi: 10.1016/j.ijinfomgt.2017.03.008.
- Alagoz, S. M., & Hekimoglu, H. (2012). A study on TAM: Analysis of customer attitudes in online food ordering system. *Procedia Social and Behavioral Sciences*, 62, 1138–1143. doi: 10.1016/j.sbspro.2012.09.195.
- Islam, M. Z., Jasimuddin, S. M., & Hasan, I. (2017). The role of technology and socialization in linking organizational context and knowledge conversion: The case of Malaysian Service Organizations. *International Journal of Information Management*, 37(5), 497–503. doi: 10.1016/j.ijinfomgt.2017.06.001.
- Jogiyanto, P. (2007). Sistem informasi Keprilakuan, Yogyakarta: Penerbit Andi.
- McClave, B., & Sincich, B. (2011). Statistik untuk bisnis dan ekonomi Jilid 1, Jakarta: Penerbit Erlangga.
- Kaur, S., Goh, W. W., & P. G. (2016). Redesigning massive open online courses (MOOCs) based on lecturers, redesigning learning for greater social. Singapore: Impact Publications.
- Sahusilawane, W. (2015). The impact of effectiveness to use and trust of local financial and information system (SIKD) to individual performance in southeast Moluccas. *Procedia Social and Behavioral Sciences*, 211, 960–965. doi: 10.1016/j.sbspro.2015.11.127.
- Sugiyono, P. D. (2011). Metode penelitian Kuantitatif. Kualitatif, dan R&D. Bandung: CV Alfabeta.
- Tung, F. C., Chang, S. C., & Chou, C. M. (2008). An extension of trust and TAM model with IDT in the adoption of the electronic logistics information system in HIS in the medical industry. *International Journal of Medical Informatics*, 77(5), 324–335. doi: 10.1016/j.ijmedinf.2007.06.006.