THE INFLUENCE OF STATE ASSET MANAGEMENT SYSTEMS-USER OF GOODS (SIMAN-PB) ON THE ADMINISTRATION OF STATE OWNED GOODS

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Abstract – *This study aims to prove empirically about the influence of SIMAN-PB in the administration of state owned goods ("BMN") as measured by the system quality factors, the quality of the information produced, the ease of use, user accessibility, and user competence in one of the regional level work units within the Ministry / Government Institution, in particular at the Regional Level Goods User Authority Unit (UAKPB-W) at the Directorate General of Customs and Excise. This research uses descriptive quantitative approach, which is measured using multiple linear regression-based methods with the SPSS 25 program. The population of this study were users/operators of SIMAN in the regional level unit (UAKPB-W) at the Directorate General of Customs and Excise. The sample was determined based on the nonprobability sampling method-total sampling, with 34 respondents who were users/operators of SIMAN. The data used in this study are primary data. The data collection technique uses a questionnaire that is submitted via online media (google form). Testing the feasibility of the model used (fit model) using the F test. Meanwhile, testing the hypothesis using the t test. The results of this study indicate that the quality of the information produced and the user competence have an effect on the administration of state-owned goods. Meanwhile, system quality, ease of use, and user accessibility do not affect the administration of state-owned goods*

Kata Kunci: *delone-mclean model, management assets state system-user of goods (SIMAN-PB), state-owned goods, system quality, quality of the information produced, ease of use, user accessibility, and user competence*

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I. INTRODUCTION

The government needs adequate facilities and infrastructure in carrying out effective and efficient governance. These facilities and infrastructure have an important role in government activities so that they are in line with the provisions of Law Number 17 of 2003 concerning State Finance. These facilities and infrastructure are part of the State Property (BMN). Article 1 point 10 of Law Number 1 Year 2004 concerning State Treasury explains that State Property is all goods purchased or obtained at the expense of the State Budget or originating from other legitimate acquisitions. Therefore, the accountability for the management of BMN must be carried out properly and accountably in accordance with the provisions of Law Number 15 of 2004 concerning Audit of Management and Accountability of State Finances. In addition, the government issued Government Regulation (PP) Number 24 of 2005 concerning Government Accounting Standards as a standard of accountability for the management of state finances.

The Minister of Finance as the Chief Financial Officer (CFO) of the Government of the Republic of Indonesia issued Regulation of the Minister of Finance Number 181/PMK.06/2016 concerning Administration of State Property. In article 3, the scope of BMN administration is Bookkeeping, Inventory and Reporting. The regulation is intended as a guideline and administrative order in the management of BMN. In addition, this regulation is also intended to address the development of BMN management, both at the central and regional levels. BMN administration is included in the scope of state finances which demands responsibility, accountability, and transparency (Saragih, 2017).

In the current era of digitalization, advances in information technology are developing so fast. In order to create optimal, efficient and effective control and supervision of BMN management, the Minister of Finance through Letter Number 220/MK.6/2015 dated June 26, 2015 stipulates that BMN management currently uses the State Asset Management System Application (SIMAN). Through the official website of the Directorate General of State Assets (DJKN), DJKN has socialized the use of the SIMAN application to work units as goods users since the beginning of 2016. This application was designed by the Ministry of Finance to support the BMN management process in government circles. BMN management includes planning, use, utilization, maintenance, administration, elimination and transfer of state assets. This application is based on the internet so that at any time it can be accessed by managers and users of goods. In the news column on the official DJKN page, it is also explained that SIMAN is designed with more complete features and attributes, such as: asset identity, management history, maintenance history, appraisal history, user history, mutation history, GPS position location, photos and digital documents.

The SIMAN application is a technology upgrade from the State Property-Owned Financial Accounting Management Information System (SIMAK-BMN) application. In practice, the SIMAN application data still comes from the SIMAK-BMN application data. The SIMAK-BMN application is a BMN management application that was effectively used in the period prior to the SIMAN application. The SIMAK-BMN application is held with the aim of producing the information needed as an accountability tool for the implementation of the APBN and the management / control of BMN which is controlled by a goods accounting unit (Rahardiyanti and Abdurachman, 2012). In using the SIMAK-BMN application, users still encounter problems related to the results of the BMN data reconciliation presented. Therefore, the SIMAN application is expected to be a solution to these problems and improve the quality of the results of BMN data reconciliation so that BMN reports can be presented accurately, completely, and on time.

Research related to the effectiveness of the BMN management application system has been conducted previously by Rahadiyanti and Abdurachman (2012) and Nasrudin (2015). According to Rahardiyanti and Abdurachman (2012), factors that significantly influence the effectiveness of the management of BMN based on information systems are convenience (Stapples and Seddon, 2004; Kassim *et al.*, 2012), usability, and system quality (Delone and Mclean, 1992; 2003; 2016).

Meanwhile, according to Nasrudin (2015), the information that can be presented by the information system and the quality of user capabilities (Veriana and Budiartha, 2016; Kusumawati and Ayu, 2019; Putri and Srinandi, 2020) determine the level of effectiveness of using a system. The results of Sabario and Hendri's (2017) research show that the existence of the SIMAK-BMN application has a significant effect on the effectiveness of reporting BMN assets. These tools can be used effectively if employees who are placed as system operators have adequate knowledge in operating the application (Nasrudin, 2015).

Similar studies have also been conducted regarding the effectiveness of using a system. The effectiveness of a system can be interpreted through system user satisfaction (Remenyi *et al.*, 2007: 79). The application of measuring the effectiveness of a system generally adopts the Delone and McLean model (Livari, 2005; Wahyuni, 2011; Arifin 2012; Roky and Meriouh, 2015; Mardiana *et al.*, 2015; Saputro *et al.*, 2015; Stefanovic *et al.*, 2016 ; Rosadi *et al.*, 2016; Rukmiyati, 2016; Antong and Usman, 2017; Ikhyanuddin, 2017; Krisdiyantoro *et al.*, 2018). This model is proven to be applicable to both the private and public sectors, especially non-governmental institutions such as education and health institutions (Petter *et al.* In Ikhayanuddin, 2017). Delone and Mclean's model was successfully developed in the public sector by Livari (2005).

Research related to the effectiveness of the BMN management application system has been conducted previously by Rahadiyanti and Abdurachman (2012) and Nasrudin (2015). According to Rahardiyanti and Abdurachman (2012), factors that significantly influence the effectiveness of the management of BMN based on information systems are convenience (Stapples and Seddon, 2004; Kassim *et al.*, 2012), usability, and system quality (Delone and Mclean, 1992; 2003; ; 2016). Meanwhile, according to Nasrudin (2015), the information that can be presented by the information system and the quality of user capabilities (Veriana and Budiartha, 2016; Kusumawati and Ayu, 2019; Putri and Srinandi, 2020) determine the level of effectiveness of using a system. The results of Sabario and Hendri's (2017) research show that the existence of the SIMAK-BMN application has a significant effect on the effectiveness of reporting BMN assets. These tools can be used effectively if employees who are placed as system operators have adequate knowledge in operating the application (Nasrudin, 2015).

The effectiveness of BMN administration in an entity can be viewed in terms of bookkeeping, inventory and reporting which are carried out in accordance with established standard procedures (Saragih, 2017). If it is not supported by sufficient and competent human resources, BMN administration will not run effectively. Besides that, the factors of planning, administration, use, and technical guidance of BMN also affect the management of BMN assets in a public entity (Tulungen, 2014). Ideally, review through evaluation and technical guidance (education) on the use of a system needs to be done so that the information produced can be used optimally by interested parties (Arifin and Suryo, 2012). Available resources such as system quality and required service quality can determine the success of the information used (Ikhyanuddin, 2017).

The Delone-Mclean Model for Information System Success is generally considered to be able to be used to assess the success of a system in meeting user satisfaction (Wahyuni, 2011; Rosadi *et al.*, 2016; Antong and Halim, 2017; Ikhyanuddin, 2017). This model is simple and is considered quite valid even though there are also quite a lot of criticisms of this model (Ikhyanuddin, 2017). Then, DeLone and Mclean perfected the information system success model with a term known as the Updated D&M IS Success Model (2003). This D&M IS Success Update Model is the impact of tremendous progress on the influence of information systems on business and society as well as research related to the success of an information system. Currently, the literature on the method of measuring the effectiveness of information systems has been widely published. One of them is entitled "The Effective Measurement and Management of ICT Costs & Benefits" (Remenyi *et al.*, 2007). According to Remenyi *et al.* (2007: 198), an information system

used can be assessed for its benefit level using factor analysis on data performance and performance.

BMN administration is something that must be carried out by every user of goods. This is a form of accountability for BMN management. Goods users also need to be supported with adequate tools so that supervision and control of BMN can be carried out effectively and efficiently. Therefore, the focus of this study is to empirically prove the effect of the state-goods user asset management system (SIMAN-PB) on BMN administration as measured by the factors of system quality, quality of information produced, ease of use, user accessibility, and user competence.

II. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The model for assessing the success of an information system was developed by William H. DeLone and Ephraim R. McLean in 1992. This model is known as the Delone-Mclean Model for IS Success. According to Delone and Mclean (1992), the success of information systems can be measured through six components, namely system quality, information quality, use, user satisfaction, individual impact, and organizational impact. Implementation of successful application of an information system can be viewed from the qualitative characteristics of the information system. The qualitative character in question is the quality of the system output in the form of information produced, the benefits of using the resulting output, the user's response to the information system used, the influence of the information system on user intentions, and the impact on organizational performance.

System quality affects the effectiveness of the system itself (Delone and Mclean, 1992). Better system quality is expected to lead the user and usage satisfaction thus leading to positive individual impacts and increasing organizational productivity (Delone and Mclean, 2003). To assess system quality, indicators such as availability, system flexibility, response time, and integration can be used (Delone and Mclean, 2003). The quality of the system can be assessed through the accuracy and efficiency of the system in producing information and the benefits of system output for users. Good system quality can affect the level of system usage.

Another component of DeLone and McLean's model of information system success is information quality. Information quality measures the quality of the output of an information system (DeLone and McLean, 1992). Information quality has been shown to be related to the benefits of using the system (DeLone and McLean, 2003). Information quality is an important factor in contributing to user satisfaction (Delone and Mclean, 2016). Good information will improve decision making so that it will affect the work environment in terms of increasing staff morale and making work more attractive (Krisdiyantoro *et al.*, 2018). To assess the quality of information, indicators such as completeness, reliability, usability, and accuracy can be used. Researchers are strongly encouraged to include measures of information quality as an important dimension in measuring the success of information systems (DeLone and McLean, 2003).

In the literature (Remenyi *et al.*, 2007: 178) it is explained that the information technology function of an organization includes the development, implementation, and maintenance of various systems. Systems are intended to meet needs at all levels in the organization. Therefore, it is necessary to conduct an evaluation to assess the success of a system. In evaluating the success of a system, it is necessary to evaluate the performance of the system at the individual level and the aggregate level of individual performance as a measure of the success of a system. Especially in organizations where there is a high degree of decentralization of information technology functions, evaluation is not too focused on one part but more on users of information systems. Management needs an instrument to be able to measure the effectiveness of system functions in the organization being run. The goal is to determine the level of success of the achievement during using the information system.

User information satisfaction is generally recognized as an important indicator in measuring the effectiveness of an information system. Information user satisfaction is the result of a

comparison of user expectations or needs (user expectations) of an information system with the perceived performance of the system. A growing trend has led to the use of user satisfaction measures as a substitute for assessing the effectiveness of information systems. This is a holistic approach that allows companies to measure the effectiveness of information systems. Direct physical measurement can also be used as a component in assessing the effectiveness of a system. In complex conditions, simple techniques can no longer be used as measuring tools. Therefore, perceptions of performance are an important part of the process for measuring the effectiveness of the entire information system.

In many studies, the success of information systems is interpreted as user satisfaction (Arifin and Suryo, 2012). In general, the effectiveness of an information system can be measured by the model of Delone and Mclean (1992). However, in this study several variables to measure the effectiveness of information systems by Delone and Mclean are combined with variables in the literature by Remenyi *et al.* (2007) and review previous research. In this study, the independent variables are intended to measure the effect of SIMAN on BMN administration with predetermined factors. Meanwhile, the dependent variable is user satisfaction interpreted in the administration of BMN. Therefore, independent variables are obtained including system quality, quality of information produced, ease of use, user accessibility, and user competence.

2.1. System Quality and Administration of BMN

The quality of the system must remain a variable in measuring the success of an information system, even though the perceived variability has a smaller impact on the desired outcome (Delone and Mclean, 2016). System quality is related to measuring the quality of the information technology system (Rosadi, 2016). System quality has the most significant effect on user satisfaction (Stefanovic, 2016). However, it is slightly different from the results of the study by Subchan *et al.* (2012) and Al-Fraihat *et al.* (2020). System quality has a direct effect on user satisfaction, but not significant. Because, users assess the quality of the system as sufficiently available in terms of user needs for information (Subchan *et al.*, 2012). The quality of the system technically does not significantly affect its users because the system is still used regardless of its quality (Al-Fraihat *et al.*, 2020). The implementation of user satisfaction is focused on the perceived benefits of the quality of the system in the BMN administration process. Because of the differences in the research results that have been described, the system quality variable in Rahardiyanti and Abdurachman's (2012) study in assessing the effectiveness of SIMAK-BMN was used as a reference for the first research hypothesis.

H₁: The quality of the SIMAN application system affects the administration of BMN.

2.2. Quality of The Information Produced and Administration of BMN

Information quality measures the quality of the output from the information system. Information quality is a measure by which the information produced by the system is useful for users in completing work. The quality of information has an impact on usage (DeLone and McLean, 1992). Information quality has been shown to be related to the benefits of using the system (DeLone and McLean, 2003). Information quality is an important factor in contributing to user satisfaction (Delone and Mclean, 2016).

The information that the system is able to provide determines the level of effectiveness of using the system (Nasrudin, 2015). If the information produced through the system is very accurate, it will be useful for improving the quality of employee performance and the quality of the information presented (Antong and Usman, 2017). Information quality has a positive effect on user satisfaction so that the higher the level of quality of information produced, the level of satisfaction felt by users will increase (Livari, 2004). However, it is different from the results of research conducted by Arifin and Suryo (2012) and Rahardiyanti and Abdurachman (2012). The quality of the information produced is irrelevant as a measure of the effectiveness of using a system (Arifin and Suryo, 2012). Because users are staff levels and are not required to analyze the resulting information, they are less aware of the quality of the information (Rahardiyanti and Abdurachman,

2012). Therefore, the differences in the research results that have been described become a reference for the second research hypothesis.

H₂: *The quality of information produced by SIMAN affects the administration of BMN.*

2.3. Ease Of Use and Administration of BMN

Ease of use can be an indicator for assessing the effectiveness of SIMAK-BMN in the management of state property (Rahardiyanti and Abdurachman, 2012). Stapples and Seddon (2004) and Kassim *et al.* (2012) found that the convenience variable could be an indicator for evaluating the effectiveness of a system. If the system matches the needs of users and their capabilities, then it has a positive impact on performance (Steples and Seddon, 2004). Ease of use is one of the common measures to assess system usage (Kassim *et al.*, 2012). In the process of administrating BMN which is quite complex, adequate support from the tools used must be available (Nasrudin, 2015). Therefore, the ease of use factor can be used as a reference for the third hypothesis.

H₃: *Ease of using SIMAN affects the administration of BMN.*

2.4. User Accessibility and Administration of BMN

System access is one of the factors for evaluating the effectiveness of a system (Remenyi *et al.*, 2007). System access can be interpreted as accessibility. Measuring the effectiveness of a system in terms of accessibility variables can be assessed by indicators of perceptions of performance. These indicators can be described as follows: flexibility of the system to produce professional reports, user's understanding of the system, documentation to support use, and low percentage of hardware. and the system software is damaged (low percentage of hardware and software downtime). Network support (internet) is an indicator of the sophistication of information technology. The sophistication of information technology can affect the effectiveness of using a system (Putri and Srinandi, 2020). Referring to this statement, the researcher will review the effectiveness of SIMAN's use of the BMN administration process in terms of user accessibility. Therefore, the user accessibility factor is used as the basis for the fourth hypothesis.

H₄: *The accessibility of SIMAN users affects the administration of BMN.*

2.5. User Competence and Administration of BMN

The user competency factor can be an indicator to measure the effectiveness of the system used in the management of state property (Nasrudin, 2015). The effectiveness of implementing an information system will increase if it is supported by good individual or user performance (Kusumawati and Ayu, 2019). The higher the technical ability of information system users, the resulting performance quality will increase (Veriana and Budiartha, 2016). The ability of personal engineering will help users to create accurate reports, so that the higher the level of personal engineering skills, the effectiveness of using the system will increase (Putri and Srinandi, 2020). According to Remenyi (2007: 198), the technical competence available is a variable in assessing the effectiveness of a system on the factor of user expectations. These variables are measured using indicators of user training level (extent of user training), user understanding of the system, and high degree of technical competence. Therefore, the user competency factor is used as a reference for compiling the fifth research hypothesis.

H₅: *The competence of SIMAN users affects the administration of BMN.*

III. RESEARCH METHOD

3.1. Research Strategy

The approach used in this research is to use a quantitative approach, meaning that it emphasizes the analysis of numerical data (numbers) which is then analyzed using the appropriate statistical method (Hardani *et al.*, 2020: 238). Data were collected using valid and reliable measuring tools, quantified, and analyzed and the results were applied to the population (Duli, 2019: 18). Meanwhile, the data used in this study are primary data. Primary data in a study is obtained directly from the source by taking measurements, self-counting in the form of questionnaires, observations, interviews and others (Hardani *et al.*, 2020: 247). So it can be

concluded that by using a quantitative approach, the researcher conducted data analysis to test the hypothesis.

3.2. Population and Sample

3.2.1. Research Population

This research was conducted at one of the government work units which have vertical units that are scattered throughout Indonesia, namely the Directorate General of Customs and Excise. In the central agency there are 11 (eleven) echelon II units and 23 (twenty three) echelon II units scattered throughout Indonesia (PMK No.188/PMK.01/2016). The population used as the research object is the regional level power user accounting unit (UAKPB-W). Generally, users / operators of the SIMAN application are part of the UAKPB. The number of employees assigned to be part of the UAKPB for each work unit varies.

3.2.2. Research Samples

The sampling technique used was nonprobability sampling-total sampling. Total sampling is a sampling technique in which all members of the population are sampled (Sugiyono, 2018: 146). This means that the total population of 34 regional level work units (UAKPB-W) was used as the research sample. If each UAKPB-W has more than 1 (one) user / operator, the selected users / operators who have attended training or technical guidance for BMN management / administration are selected.

3.3. Data and Data Collection Method

The type of data in this study is obtained by researchers directly through the data collection process using a questionnaire technique. Based on the time dimension, this study uses cross-sectional data (Rahardiyanti and Abdurachman, 2012; Rosadi *et al.*, 2016; Rukmiyati, 2016). That is, data is collected at a certain time which can describe the situation or activity at that time. Given the presence of respondents scattered across regional work units in Indonesia, the research data collection starts from the beginning of July to the end of July. The time period is determined for approximately one month to ensure that research data obtained through respondents can be collected on time.

Respondent's answers were measured using a modified Likert scale (Arifin and Suryo, 2012; Veriana and Budiartha, 2016). This means that the answer choices will only be rated on a scale of 1 to 4. For the highest score is 4 points and the lowest score is 1 point. This is done to anticipate the respondent's biased answers. Generally because, respondents doubt or do not understand (Arifin and Suryo, 2012). With the Likert scale, the variables to be measured are translated into variable indicators to compile instrument items which can be in the form of statements or questions (Sugiyono, 2018: 159). The scoring criteria for each item of the statement are as follows.

1: Strongly Disagree (STS)
2: Disagree (TS)
3: Agree (S)
4: Strongly Agree (SS)

The data source used in this research is primary data. The data collection method used is by distributing questionnaires to users / operators of the SIMAN application as respondents who have been determined in the study. Before the questionnaire was distributed, a preliminary test was conducted on 15 respondents who had experience serving in the management / company section of BMN. The preliminary test results become a reference for improving the questionnaire used. After the preliminary test, the questionnaire is sent to the respondent via WhatsApp media, which contains a questionnaire link in the form of a google form. This type of closed statement was used in the questionnaire. The questionnaire in this study was adopted from several previous studies and modified according to the needs of this study.

3.4. Operationalization of Variables

To analyze the data, research instruments or indicators that represent predetermined research variables are needed. These indicators were adopted from several previous studies and a review of the literature related to the objectives of this study. The indicators that have been determined can be described as follows.

Table 1. Operationalization of Variables

No	Variable	Indicator	References
1	System Quality	Availability	Delone and Mclean (1992; 2003), Roky and Meriouh (2015), Subchan, *et al.* (2012), Al-Fraihat *et all*. (2020)
		System Flexibility	Delone and Mclean (1992; 2003, Wahyuni (2011), Livari (2005), Saputro *et al.* (2015), Ikhyanuddin (2017), Remenyi *et al.* (2007)
		Time to Respond	Delone and Mclean (1992; 2003), Livari (2005), Wahyuni (2011), Roky and Meriouh (2015), Mardiana *et al.* (2015), Saputro *et al.* (2015), Ikhyanuddin (2017), Krisdiyantoro *et al.* (2018)
		Error Recovery	Livari (2005), Saputro *et al.* (2015)
		Convinience of Access	Livari (2005), Wahyuni (2011), Saputro *et al.* (2015)
		Languange	Livari (2005), Wahyuni (2011), Saputro *et al.* (2015)
		Navigation	Subchan, *et al.* (2012), Rosadi *et al.* (2016)
		Design	Subchan, *et al.* (2012)
2	Quality of The Information Produced	Completeness	Delone and Mclean (1992; 2003), Livari (2005), Wahyuni (2011), Saputro *et al.* (2015), Stefanovic (2016), Ikhyanuddin (2017)
		Precision	Livari (2005), Wahyuni (2011), Roky and Meriouh (2015), Saputro *et al.* (2015), Stefanovic (2016), Ikhyanuddin (2017), Krisdiyantoro *et al.* (2018)
		Reliability	Delone and Mclean (1992; 2003), Livari (2005), Wahyuni (2011), Roky and Meriouh (2015), Saputro *et al.* (2015), Stefanovic (2016)
		Currency	Livari (2005), Subchan, *et al.* (2012), Saputro *et al.* (2015), Rosadi *et al.* (2016), Stefanovic (2016), Ikhyanuddin (2017)

		Understandablilty	Subchan, *et al.* (2012), Rosadi *et al.* (2016), Al-Fraihat *et all.* (2020)
		Usefulness	Subchan, *et al.* (2012), Rosadi *et al.* (2016), Stefanovic (2016), Krisdiyantoro *et al.* (2018)
		Comprehensiveness	Subchan, *et al.* (2012), Rosadi *et al.* (2016), Krisdiyantoro *et al.* (2018)
		Timeliness	Subchan, *et al.* (2012), Krisdiyantoro *et al.* (2018)
3	Ease Of Use	User Friendly	Staples and Seddon (2004), Kassim *et al.* (2012)
		Easy to use	Staples and Seddon (2004), Kassim *et al.* (2012)
		Easy to get the system to do what the user's want	Staples Seddon (2004), Kassim *et al.* (2012)
		Model/ database development	Remenyi *et al.* (2007)
		Possitive attitude of information systems staff to users	Remenyi *et al.* (2007)
		Standardization of hardware	Remenyi *et al.* (2007)
		Documentation benefits	Remenyi *et al.* (2007)
4	User Accessibility	Flexibility of the system to produce professional reports	Remenyi *et al.* (2007)
		User's understanding of the system	Remenyi *et al.* (2007)
		Documentation to support training	Remenyi *et al.* (2007)
		Low percentage of system downtime	Remenyi *et al.* (2007)
		Network system	Remenyi *et al.* (2007); Putri and Srinandi (2020)
5	User Competence	Extent of user training	Remenyi *et al.* (2007); Putri and Srinandi (2020)
		User's understanding	Remenyi *et al.* (2007); Putri and Srinandi (2020)
		High degree of technical competence from support staff	Remenyi *et al.* (2007); Putri and Srinandi (2020)
		Identification of data	Putri and Srinandi (2020)

		Access of data	Putri and Srinandi (2020)
		Intepretation of data	Putri and Srinandi (2020)
6	Administration of BMN	Bookkeeping	PMK Nomor 181/PMK.06/2016
		Complete	Saragih (2017)
		Inventory	PMK Nomor 181/PMK.06/2016
		Accuracy of data	Saragih (2017)
		Reporting	Peraturan Menteri Keuangan Nomor 181/PMK.06/2016
		Timelineness	Saragih (2017)

System quality is a variable that is measured from indicators that reflect the system itself in the form of a combination of hardware and software and the performance of the system. There are 8 indicators used to reflect these variables. This indicator was adapted from Delone and Mclean (1992, 2003) (availability, flexibility system, time to respond), Livari (2005) (error recovery, convenience of access, language), and Subchan *et al.* (2012) (navigation, design). Respondents' perceptions of these indicators are measured on a 1-4 Likert scale. According to the respondent's perception, the higher the score for the system quality variable means that the respondent agrees that a good quality level of the SIMAN application system will support the performance of the BMN administration so that the BMN administration process can run efficiently and effectively. Conversely, the lower the score means that respondents do not agree that the quality of the system supports performance in the administration of BMN.

Information quality refers to the output of the information system. There are 8 indicators used to reflect these variables. This indicator was adapted from Livari (2015) (completeness, precision, reliability, currency, understandability) and Subchan *et al.* (2012) (usability, completeness, timeliness). Respondent's perceptions of these indicators are measured on a 1-4 Likert scale. According to respondent's perceptions, the higher the score for the quality of the resulting information variable means that the respondents agree that the resulting information output can be used to support the BMN administration process optimally. Conversely, the lower the score means that the resulting information output cannot support the performance of the BMN administration process.

Ease of use refers to the level of ease of operation of the system. This variable is measured by 7 indicators adapted from Staples and Seddon (2004) (user friendly, easy to use, easy to get the system to do what the user wants) and Remenyi *et al.* (2007) (model / database development, possitive attitude of information systems staff to users, standardization of hardware, documentation benefits). Respondent's perceptions are measured with a 1-4 Likert scale. According to respondent's perceptions, the higher the score for the ease of use variable means that the level of ease of operation of the system can be said to be relatively easy and useful in supporting performance in BMN administration. Conversely, if the score is low it means that the operation of the system is quite difficult and the benefits of using SIMAN cannot support performance in BMN administration.

User accessibility is measured through indicators of perceptions of performance. There are 5 indicators to reflect the user accessibility variables. These indicators, among others, were adapted from Remenyi *et al.* (2007) namely flexibility of the system to produce professional reports, user understanding system (user's understanding of the system), documentation to support use (documentation to support training), and a low percentage of system downtime. Then, the

sophistication of information technology supported by the internet network (network system) was adapted from Putri and Srinandi (2020). Respondent's perceptions are measured with a 1-4 Likert scale. According to respondent's perceptions, the higher the score for the user accessibility variable means that user access in utilizing the system can be said to be relatively good so that the benefits of using SIMAN in BMN administration can be more optimal. On the other hand, if the score is low, it means that user access in utilizing the system can be said to be relatively poor so that the benefits of using SIMAN are not running optimally to support BMN administration.

User competence plays a role in the effectiveness of implementing an information system used. There are 6 indicators to reflect user competency variables. This indicator was adapted from Remenyi *et al.* (2007), namely indicators of the level of user training (extent of user training), user understanding of the system (user understanding of the system), and a high degree of technical competence. Then, the indicators for data identification, data access, and data interpretation were adapted from Putri and Srinandi (2020). Respondent's perceptions are measured with a 1-4 Likert scale. According to respondent's perceptions, the higher the score for the user competency variable means that personal technique skills in using SIMAN will support performance in the presentation of BMN reports. Conversely, if the score is low, it means that the personal technical ability of SIMAN users cannot support the performance of the BMN report presentation in accordance with the provisions of reporting time, completeness and accuracy of data.

BMN administration is a series of activities which include bookkeeping, inventory and reporting of BMN. In this study, to reflect on the company variable BMN was measured by 6 indicators. This indicator was adapted from the Minister of Finance Regulation Number 181 / PMK.06 / 2016 concerning Administration of State Property (bookkeeping, inventory, reporting) and Saragih (2017) (complete, data accuracy, on time). Respondent's perceptions are measured with a 1-4 Likert scale. According to the respondent's perception, the higher the score for the BMN administration variable means that the respondent agrees that the use of SIMAN will increase the performance of the BMN administration process so that BMN management can run more optimally, efficiently, and effectively. Conversely, if the score is low, it means that the use of SIMAN does not support the performance of the BMN administration process.

3.5. Data Analysis Method

In this study, to analyze the effect of SIMAN on BMN administration, data analysis techniques were used in the form of multiple linear regression. To obtain a description of the effect of SIMAN on the administration of BMN, a descriptive statistical test was carried out. In descriptive statistics, the information presented is in the form of tabulated data from the results of filling out questionnaires by respondents. The data displayed is data from the average (mean), standard deviation, maximum value, minimum value, and the amount of research data.

The classical assumption test is carried out before regression analysis. The classical assumption test consists of normality, multicollinearity, and heteroscedasticity tests. The test results are the basis for providing an overview of the suitability of the data collected with the research problems and hypotheses. The results of regression analysis are also used to support the hypothesis and conclusions. The regression analysis data processing technique in this study uses the help of the SPSS (Statistical Product and Service Solutions) application program. The regression analysis model is shown by the following equation.

$$\text{Administration of BMN} = \alpha + \beta 1 \, KS + \beta 2 \, KID + \beta 3 \, KPN + \beta 4 \, AP + \beta 5 \, KP + e \qquad (1)$$

Information:
α	=	Constant
β_1-β_5	=	Regression coefficient
KS	=	System Quality
KID	=	Quality of Information Produced

KPN = Ease of Use
AP = User Accessibility
KP = User Competence
e = error

To determine the feasibility of the items in the statement list on the questionnaire, validity and reliability tests were carried out so that the research data was valid, reliable, and objective (Hardani et. Al., 2020: 198). Valid shows the degree of accuracy between the data that actually occurs on the object and the data that can be reported by researchers (Sugiyono, 2018: 3). One way to test this validity is item-total correlation, which is correlating the scores of a questionnaire item with the total (Juliandi *et al.*, 2016). Meanwhile, the concept of reliability is the extent to which the results of a measurement can be trusted (Juliandi *et al.*, 2016). If the data is reliable, it tends to be valid (Sugiyono, 2018: 3).

The validity test was carried out using the Pearson product moment which was processed through SPSS 25. The statement items are said to be valid if they meet the testing criteria. The test criteria are if r count is more than r table (r count> r table) with α = 0.05, the measuring instrument is declared valid (Sugiyono, 2013: 173). Conversely, if r count is less than r table (r count <r table) then the measuring instrument is invalid (Sabario and Hendry, 2017). Meanwhile, the reliability test is carried out to measure a questionnaire which is an indicator of a variable (Hamta *et al.*, 2019). Questionnaire statement items are declared reliable if the alpha coefficient (Cronbach's alpha) is more than 0.60 (Ghozali, 2013: 90; Priyatno, 2014: 64). There are also those who interpret that if the alpha coefficient is 0.50 to 0.70 then the reliability is in the moderate category. However, if the alpha coefficient is less than 0.50 then the reliability is low. If the alpha coefficient is low, it is possible that one or more items are not reliable (Wahyuni, 2014).

To find out the residuals of the regression models that are made normally distributed or do not need to do a normality test (Juliandi *et al.*, 2016). If the coefficient of Asymp. Sig. (2-tailed) more than 0.05, it can be said that the data is normally distributed. A good regression model is to have normal or near normal data distribution (Sabario and Hendry, 2017). Meanwhile, to determine the correlation between independent variables in the regression model used, a multicollinearity test is needed. The multicollinearity indicator can be seen from the tolerance value and variance inflation factor (VIF) (Veriana and Budhiarta, 2017). If the tolerance value is more than 10% and VIF is less than 10, it is said that there is no multicollinearity (Rukmiyati, 2016). Furthermore, a good regression model is one that does not occur heteroscedasticity (Ghozali, 2016: 134). The heteroscedasticity test is intended to determine the variance inequality from the residuals of one observation to another in a regression model. If none of the independent variables have a significant effect on the absolute residual value or the significance value (Sig.) Above 0.05, it does not contain any heteroscedasticity symptoms.

Multiple linear regression analysis is used to determine the dependence of one dependent variable on only one independent variable with or without a moderator variable and to determine the dependence of one dependent variable on the independent variables (Veriana and Budhiarta, 2017). The coefficient of determination (R2) is used to measure how far the model's ability to explain the independent variables (Ghozali, 2016: 95). The coefficient of determination is between zero and one. If a small coefficient of determination is obtained, it means that the ability of the independent variables in explaining the variation of the dependent variable is very limited. Meanwhile, a value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable (Ghozali, 2016: 95). The results of the Anova test or F test (F test) are used to show the feasibility of the model used in the study. In the case that the value of the F test with a significance of less than 0.05 and F count greater than F table (F count> F table), then the model in the research carried out can be said to be feasible. The results of the t test are used to determine the effect of each independent variable individually on the dependent variable. The t test is done by comparing the probability value with the significance

level and t count with the t table. If the probability value <0.05 and t count> t table, the hypothesis is supported. Conversely, if the probability value> 0.05 and t count <t table, the hypothesis is not supported. Therefore, multiple linear regression analysis can be used to draw conclusions on the hypothesis testing proposed in this study.

IV. RESULTS AND DISCUSSION
4.1. Description of Research Object
As an analytical tool in research, researchers used descriptive statistical methods and regression analysis. Data collection was carried out using a questionnaire distribution technique (questionnaire). The questionnaire is submitted to respondents online via google form by distributing the questionnaire link. The questionnaire link is distributed through WhatsApp personally and the help of colleagues to distribute questionnaire links according to the target respondents who are scattered in regional level units of the Directorate General of Customs and Excise in Indonesia.

Respondents are determined according to research criteria that can represent existing conditions. The criteria for respondents are employees who are assigned to the regional level Property User Authority Accounting Unit (UAKPB-W). In the event, in UAKPB-W there are more than 1 (one) SIMAN-PB operator, then those who have been selected are those who have attended training and technical guidance for the management and / or administration of BMN. The sampling technique used a total sampling technique. This means that the entire population is used as the research sample. Therefore, in this study, 34 respondents were obtained.

4.2. Data Description
The results of the questionnaires that have been filled in by the respondents were analyzed using the SPSS Statistic 25 program. From the distribution of the questionnaires it can be concluded that the respondents are in the age range between 19 and 32 years. Total male respondents were 26 people and female respondents were 8 people. Meanwhile, 28 people who have experience serving in the administration and / or management of BMN for more than 12 months. There were 20 respondents who had attended training and technical guidance on the administration and / or management of BMN. Meanwhile, there were 14 respondents who had not attended training and technical guidance on the administration and / or management of BMN. The questionnaires were distributed online to save time, effort and cost. This is because the target respondents are spread across units at the regional level in Indonesia.

The results of the descriptive statistical analysis as a whole show that the average respondent agrees with the variables used to assess the level of utilization of the SIMAN application on the performance of the BMN administration. The SIMAN application is considered to have provided features or option functions to update data online and change available data according to job requirements. The time needed to access information through the system is relatively short. Users also think that the application is comfortable to use. The response displayed by the system can be understood by the user and has consistency in the appearance of the navigation and the design of the layout of the available interfaces (option functions) is well structured so that it is comfortable to use.

The SIMAN application is considered to be able to provide complete user needs related to BMN data. The benefits of BMN data produced through the SIMAN application are in accordance with user expectations. SIMAN application is easy to use so the BMN administration process can run smoothly. SIMAN application also provides output according to user needs. The application development model can also be understood by users. The availability of assistance from the system provider staff makes it easier for users to learn and operate the SIMAN application. The available hardware has been standardized and supports system operation so that users do not experience obstacles when using SIMAN.

The SIMAN application can produce output in the form of reports according to user needs. The SIMAN application also supports users on an ongoing basis so that the available BMN data can continue to be used as a reference for the BMN administration process in the future. An online network for accessing the SIMAN application is also available. Users also find it easy to identify the data presented via the SIMAN application. Users also do not experience obstacles in accessing and interpreting the available data. Therefore, the SIMAN application is needed to support performance in BMN administration, both from the bookkeeping, inventory, and reporting stages.

The results of descriptive statistical analysis also show that the respondents think that the SIMAN application has not provided (automatic) repair facilities in the event of a system failure (for example: failure to upload data). The information obtained through the SIMAN application does not fully match the actual data according to facts in the field (for example: the location of the goods). The features in the SIMAN application are quite complex (not simple) and take time to understand. The SIMAN application experiences frequent interruptions / downtime so that the benefits of its use are not optimal.

4.3. Instrument Testing

The results of the validity test for each statement in this study indicate that the entire item or instrument used is valid. Because, each item or instrument meets the testing criteria, namely r count more than r table (r count> r table) with α = 0.05. The results of the reliability test on each variable in the study showed that the alpha value for each variable was positive and was greater than 0.60. So, it can be concluded that every respondent has provided answers consistently.

4.4. Statistical Testing

4.4.1. Classical Assumption Test Results

The results of the classical assumption test for each item of statement show that overall the research data has met the requirements of the classical assumptions so that regression testing can be continued. This is shown through the normality test that has been fulfilled with the Asymp Sig value. more than 0.05 (0.200> 0.05). That is, the data is normally distributed. Then, there was no multicollinearity symptom which was stated by the Tolerance and VIF values for each variable that met the requirements. Where each variable obtained a Tolerance value> 0.10 and VIF <10. Thus with the symptom of heteroscedasticity, it was proven that there was no symptom of heterocedacity through the results of the Sig value. each variable is more than 0.05.

4.4.2. Regression Test Results

The results of the Anova test or F test (F test) show that the significance value (Sig.) Is 0.000 and the F count is 22.312. This value indicates that F count is greater than F table (2.56) and the significance value is smaller than 0.05. This means that the regression model above is suitable to be used as a measurement model in research.

From the regression test, the coefficient of determination was 0.764. This figure shows that the independent variables used to measure the effect of SIMAN on BMN administration in this study, namely system quality, quality of information produced, ease of use, user accessibility, and user competence are able to explain the effect of 76.4%. While the remaining 23.6% is explained by other variables outside the equation model in the study.

The regression test results also show the influence between the variables in the study. The regression test results show that there are 3 (three) variables that have a correlation coefficient (Sig.) Greater than 0.05 and t count less than t table (2.048). These variables include system quality, ease of use, and user accessibility. Where the correlation coefficient for each variable is 0.473, 0.956, and 0.796. This means that these variables do not have a significant effect on BMN administration. Meanwhile, the other 2 (two) variables, namely the quality of the information produced and the user's competence have a correlation coefficient (0.004) smaller than 0.05 and t arithmetic greater than t table (2.048). This means that each of these variables has a significant effect on the administration of BMN.

4.5 Hypothesis Test

H₁: The quality of the SIMAN application system affects the administration of BMN

The quality of the SIMAN application system has no effect on BMN administration. Because, the significance value of the system quality variable is greater than 0.05 (0.473> 0.05) and the calculated t value is smaller than t table (0.727 <2.048). Therefore, the first hypothesis in the study is not supported.

H₂: The quality of information produced by SIMAN affects BMN administration.

The quality of information produced by the SIMAN application affects the administration of BMN. Because, the significance value of the resulting information quality variable is smaller than 0.05 (0.004 <0.05) and the calculated t value is greater than t table (3.176> 2.048). Therefore, the second hypothesis in research is supported.

H₃: The ease of using SIMAN affects the administration of BMN.

Ease of use has no effect on BMN administration. Because, the significance value of the ease of use variable is greater than 0.05 (0.956> 0.05) and the calculated t value is smaller than the t table (0.056 <2.048). Therefore, the third hypothesis in research is not supported.

H₄: Accessibility of SIMAN users affects the administration of BMN.

User accessibility has no effect on BMN administration. Because, the significance value of the user accessibility variable is greater than 0.05 (0.796> 0.05) and the calculated t value is smaller than t table (0.260 <2.048). Therefore, the fourth hypothesis in research is not supported.

H₅: The competence of SIMAN users affects the administration of BMN.

User competence affects BMN administration. Because, the significance value of the user competency variable is smaller than 0.05 (0.004 <0.05) and the calculated t value is greater than t table (3.104> 2.048). Therefore, the fifth hypothesis in research is supported.

4.6. Discussion

4.6.1. First Hypothesis Testing Results

The results of testing the first hypothesis indicate that the quality of the SIMAN application system has no effect on BMN administration. Users think that the SIMAN application has met the minimum needs of users to support performance in BMN administration. The SIMAN application has provided features or option functions to update data online and change available data according to job requirements. The time needed to access information through the system is relatively short. Users also think that the application is comfortable to use. The response displayed by the system can be understood by the user and has consistency in the appearance of the navigation and the design of the layout of the available interfaces (option functions) is well structured so that it is comfortable to use. From the indicators used to support the variables, it is known that the SIMAN application has not been able to provide (automatic) repair facilities in the event of a system failure (for example: data upload failure). The SIMAN application will still be used regardless of the quality level.

The results of this study are not in line with the research of Delone and Mclean (1992, 2003, 2016) and Stefanovic (2016) which state that system quality affects the level of use. However, the results of this study are in line with research conducted by Rahardiyanti and Abdurachman (2012), Subchan *et al.* (2012), and Al-Fraihat *et al.* (2020) which shows that the quality of the system does not affect its use. The measure of the success of a system will vary according to the type and purpose. The indicators used to assess the quality of the system do not necessarily apply universally (Delone and Mclean, 2016).

4.6.2. Second Hypothesis Testing Results

The results of testing the second hypothesis indicate that the quality of information produced by the SIMAN application has an effect on BMN administration. This means that the level of quality of information produced through the SIMAN application affects performance of BMN administration. SIMAN application is able to provide complete user needs related to BMN data. The BMN data obtained through the SIMAN application is reliable, up to date, and easy to

understand. The benefit from the results of BMN data produced through SIMAN has met user expectations. From the indicators used to support the variables, it is known that the information obtained through the SIMAN application does not fully match the actual data (for example: the location of goods). However, the information output produced is quite complete, reliable, up to date, and easy to understand. Users also think that the output of information produced through the SIMAN application can be used to support the administration process of BMN in a more optimal, efficient and effective manner.

The results of this study are not in line with the research of Rahardiyanti and Abdurachman (2012) and Arifin and Suryo (2012) which state that the quality of information produced by the system is irrelevant as a measure of its effectiveness. However, the results of this study are in line with research conducted by Delone and Mclean (1992, 2003, 2016), Livari (2004), Nasrudin (2015), and Antong and Usman (2017) which state that the quality of information can determine the level of individual impact. users and beneficial for improving the quality of user performance. Information quality is an important factor in contributing to user satisfaction and a measure of system success (Delone and Mclean, 2016).

4.6.3. Third Hypothesis Testing Results

The results of testing the third hypothesis indicate that the ease of use of the SIMAN application has no effect on BMN administration. Users think that using the SIMAN application requires a relatively long time to learn. Because, the available features are quite complex (not simple). The availability of support from the system provider staff makes it easier for users to learn and operate the SIMAN application. In addition, the SIMAN application also provides output according to user needs. The application development model can also be understood by users. The available hardware has been standardized and supports the operation of the system so that users do not experience bottlenecks.

The results of this study are not in line with the research of Rahardiyanti and Abdurachman (2012), Stapples and Seddon (2004) and Kassim *et al.* (2012) which states that the ease of use variable can be an indicator for evaluating the effectiveness of a system in supporting performance. The complexity of the BMN administration process requires adequate support from the availability of tools used so that the capabilities of users and systems need to be increased intensively. If the system matches the needs of users and their capabilities, it will have a positive impact on performance and are beneficial for task achievement (Steples and Seddon, 2004).

4.6.4. Fourth Hypothesis Testing Results

The results of testing the fourth hypothesis indicate that user accessibility has no effect on BMN administration. Users assess that the access provided by the system is available properly. SIMAN application is able to produce output in the form of reports according to user needs. The SIMAN application supports users on an ongoing basis so that the available BMN data can continue to be used as a reference for the BMN administration process in the future. An online network that provides access to the SIMAN application is also available. Thus, the fulfillment of BMN data reporting obligations can be done more efficiently. From the indicators used to support the variables, it is known that the SIMAN application experiences frequent interruptions / downtime so that the benefits of its use are not optimal. There needs to be a relatively stable online network to support the utilization of the SIMAN application. BMN administration can still be carried out and run according to the applicable regulations regardless of these limitations.

The results of this study are not in line with the research of Remenyi *et al.* (2007) and Putri and Srinandi (2020) which state that a system is said to be effective in use by users when measured in terms of system access through system flexibility in producing reports that are good, understanding of system users is at an adequate level, documentation to support usage is available, and the low percentage of system hardware and software experiencing damage and adequate network (internet) support. This study shows that the accessibility variable does not affect the performance of the BMN administration process.

4.6.5. Fifth Hypothesis Testing Results

The results of testing the fifth hypothesis indicate that user competence has an effect on BMN administration. This means that the level of competence of SIMAN application users affects the performance in administering BMN. Users think that personal engineering skills will help users to optimize the benefits of using the SIMAN application. The ease of identifying the data presented can support the smooth use of the SIMAN application. Users also do not experience obstacles in accessing and interpreting the available data. Thus, user competence really supports the smooth running of the BMN administration currently using the SIMAN application. From the indicators used to support the variables, it is known that technical educational background does not determine the optimal use of the SIMAN application. However, improving user experience will increase the user's understanding capacity and the level of optimization of the SIMAN application usage. Therefore, the performance of the BMN administration process can be implemented more efficiently and effectively.

This is in line with the research of Nasrudin (2015), Veriana and Budiartha (2016), Kusumawati and Ayu (2019), and Putri and Srinandi (2020) which state that the effectiveness of implementing a system will increase if it is supported by good and higher individual performance. the technical ability of system users, the resulting performance quality will increase. Increasing the quality of user competencies needs to be supported by continuous training so that user understanding will be better (Remenyi *et al.*, 2007).

V. CONCLUSION, IMPLICATION, AND RESEARCH LIMITATION
5.1. Conclusion

This study aims to prove empirically the effect of SIMAN-PB on BMN administration as measured by the variables of system quality, quality of information produced, ease of use, user accessibility, and user competence. The sample in this study were SIMAN employees / operators at the regional level unit of the Directorate General of Customs and Excise in Indonesia, both those who had or had not attended training in the administration and / or management of BMN. Based on the results of statistical testing using regression, the following conclusions were obtained.

1. The quality of the SIMAN system does not affect the administration of BMN. Users think that the SIMAN application has met the minimum needs of users to support performance in BMN administration. Because, the SIMAN application will still be used regardless of the quality level. From the indicators used to support the variables, it is known that the application has not been able to provide (automatic) repair facilities in the event of a system failure (for example: failed data upload).
2. The ease of use of SIMAN has no effect on the administration of BMN. Users think that using the SIMAN application requires a relatively long time to learn. Because, the features available are quite complex (not simple). The availability of support from the system provider staff makes it easy for users to learn and operate the SIMAN application. Therefore, the BMN administration process can still be carried out using the SIMAN application.
3. Accessibility of SIMAN users has no effect on BMN administration. Users assess that the access provided by the system is available properly. There needs to be a relatively stable online network to support the utilization of the SIMAN application. Because, the SIMAN application sometimes experiences problems / downtime so that the benefits of using SIMAN are not optimal. BMN administration can still be carried out and run according to the applicable regulations regardless of these limitations.
4. The quality of information produced by SIMAN affects the administration of BMN. The user assesses that the resulting information output can be used to support the BMN administration process in a more optimal, efficient and effective manner.
5. The competence of SIMAN users affects the administration of BMN. Users assess personal engineering skills will help users to optimize the benefits of using SIMAN. Technical education

background does not determine the optimal use of SIMAN. However, with increasing user experience, the level of user understanding capacity and usage optimization will get better. Therefore, the performance of the BMN administration process can be implemented more efficiently and effectively.

6. The factors in the study which consisted of system quality, quality of information produced, ease of use, user accessibility, and user competence were able to explain their effect on BMN administration by 76.4%. That is, the independent variables in this study are sufficiently able to explain the relationship of their effects on the dependent variable.

5.2. Research Implication

Based on the discussion and conclusions above, some suggestions or input can be made for the related agency units as follows.

1. Training and technical guidance need to be carried out intensively, especially for employees who have not followed formal technical guidance or who have recently served in the administration and / or management of BMN. If user understanding increases, the level of competence and quality of user (operator) performance will get better. In addition, with a better understanding of users the BMN administration process can be carried out optimally, efficiently, and effectively.

2. The quality of the SIMAN application needs to be improved both in terms of support for system features (software) and available networks. This is because there are still problems with downtime / downtime and a system failure (for example, failing to upload data). This has an impact on the use of the SIMAN application that cannot run optimally.

5.3. Research Limitation

In this study there are still limitations as follows.

1. The research sample is limited to SIMAN application users / operators at the regional level unit of the Directorate General of Customs and Excise. Therefore, the results of this study cannot be generalized to all Ministries / Government Agencies in Indonesia. For further research, the coverage of respondents can be expanded by involving regional level units in other agencies so that the sample used is more diverse.

2 Future research can use factors other than the five factors in this study. For example, the quality of service and the net impacts of the systems used in the administration process.

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