



The Effectiveness of the Tax Payment System Using E-Billing (Case Study of the Bogor Pratama Tax Service Office)

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Abstract. This paper discusses the effectiveness of the tax payment system using E-Billing. E-Billing is a tax payment method electronically using a billing code. The research locus was conducted at KPP Pratama Bogor, West Java, Indonesia. To assess the effectiveness of taxation applications as an electronic payment system, ten variables were taken from several previous studies related to system effectiveness, namely the variables Data Security, Time, Accuracy, Process, Relevance, Constraints, Flexibility, System Reliability, System Quality, System Accuracy. The research approach used is quantitative, using a questionnaire research instrument. Questionnaires were distributed to 50 samples of taxpayers using purposive sampling. From the results of data collection, it was found that only 48 questionnaires were filled in entirely and validly. Data processing results show that, in general, the application of E-Billing taxes as an electronic payment system is very effective. Of the ten variables measured, there were only two variables, namely the constrained variable and the data security variable, which obtained the results of the effective criteria. In comparison, the other eight variables were included in the very effective criteria.

Keywords: Tax Administration, E-Billing, System, Effectiveness.

1 Introduction

1.1 Background

Tax collection in Indonesia refers to the self-assessment system, the self-assessment system is a tax collection system carried out by individual or corporate taxpayers by giving authority, trust, and responsibility to taxpayers to calculate, calculate, pay, and report their own tax obligations. must pay. Compulsory according to the law on general provisions and tax procedures Number 28 of 2009 taxes are individuals or entities that make tax payments, tax collectors and tax collectors, who have tax rights and obligations in accordance with the provisions of tax laws and regulations. Several factors can affect taxpayer compliance in carrying out their tax obligations, namely the modern tax administration system, tax socialization and tax understanding.

Currently, in Indonesia, the tax administration of taxpayers can pay and deposit taxes in two ways, namely manually and tax modernization (online). If the taxpayer chooses the manual method, then the taxpayer must fill out a form provided by the taxpayer but if he chooses tax modernization, the taxpayer can deposit and report taxes online. Reporting of tax payable through manual SPT is still considered to have weaknesses, especially for taxpayers who make large transactions, they must attach a large number of documents to the Tax Service Office (KPP).

Services are facilities provided to taxpayers in tax administration so that taxpayers obtain convenience in carrying out their tax obligations in carrying out tax obligations. The supervisory function is carried out, among others, through inspection, investigation and tax collection action. Counseling is a function carried out by the tax administration to educate the public so that they gain an adequate understanding of taxation. (Source: Tax.com)

The system of using tax technology for services is expected to help facilitate taxpayer services in fulfilling their obligations to pay and report taxes in accordance with applicable regulations. The electronic tax service system stipulated by the 2 Directorate General of Taxes to make it easier for taxpayers to pay and report tax obligations includes E-Billing, E-Billing and e-SPT. E-Billing according to the Directorate General of Taxes is a method of paying taxes electronically by utilizing the E-Billing code. Using E-Billing a tax payment system that is easier, faster and more accurate in payment transactions. The electronic tax payment system (E-Billing system) has been implemented since April 12 2013, in accordance with the Decree General of Taxes Number KEP-359/PJ/2013 concerning Taxpayers in the Context of Trial Implementation of the Electronic Tax Payment System (E-Billing) at Tax Service Offices in the State Module System (Andrian et al, 2013 in Pratami et al, 2017).

Based on Article 1 paragraph (5) Per Director General of Taxes No. PER-05/PJ/2017, the DGT E-Billing application is part of the DGT E-Billing system. DGT E-Billing application is a web-based application that can be used to issue billing codes and can be accessed via the internet or intranet network. Initially, the DGT E-Billing application could be accessed via sse.pajak.go.id. but starting January 1, 2020 the independent service for creating a billing code through the DGT Online E-Billing menu.

1.2 Problem Statement

The application of the E-Billing system at KPP Pratama Bogor is expected to make it easier for taxpayers to get billing codes in the tax payment process and can be accessed anywhere and anytime, save time and minimize errors, avoid errors in recording transactions that are done manually. In practice implementing the E-Billing system, taxpayers still have difficulty paying taxes because it is still difficult to adapt to using E-Billing, besides that they often experience problems in applying the E-Billing system due to limited internet networks and possible server downtime. Based on these problems,

the authors are interested in discussing more about the effectiveness of the tax payment system using E-Billing (At the Bogor Pratama Tax Service Office).

Based on the description of the background described above regarding the analysis of the effectiveness of the E-Billing system in tax services at the Bogor Pratama Tax Service Office, the problems developed in this study are formulated in the following questions; (1) How is the application of E-Billing at the KPP Pratama Bogor office?, (2) How Effective is the E-Billing System at the Bogor Pratama Tax Service Office? The objectives of this paper include; (1) Describe the application of E-Billing at the Bogor Pratama Tax Service Office, (2) Measuring the effectiveness of the E-Billing system at the Bogor Pratama Tax Service Office.

The author limits writing to this final work to avoid any deviations or widening the problem. This is so that the writing of this Final Paper is more focused and makes it easier to discuss so that the writing objectives that the author wants to convey are achieved. In this final work assignment, the authors limit the sample data to KPP Pratama Bogor Taxpayers who use the E-Billing system based on data obtained in the 2017 to 2022 Tax Years.

2 Methodology

2.1 Data & Sampling

The research method used is the Quantitative Method. The data collection method used in this study is to use a questionnaire method which is distributed to taxpayers who use e-billing to make tax payments. Questionnaires were distributed to respondents online using the Google Form application. The questionnaire contains statements according to research indicators and is measured using a Likert measurement scale of 1 to 5 with the following score levels; (1) Strongly Disagree, (2) Disagree, (3) Doubt, (4) Agree, (5) Strongly Agree. To measure effectiveness, it can be assessed by the following variables or factors, namely:

1. Data Security a system that has the ability to maintain data security so that other parties such as hackers do not access the data that we have.
2. Time because the faster the system can complete a job, it means the faster the user of the system gets the results. In addition, the shorter the time needed to process data, the smaller the cost. The speed and accuracy of the system is very necessary. The role of the time variable, especially in data processing, is taken into consideration in this regard and this variable also plays a role in other matters related to system users.
3. Accuracy is the level of accuracy in data analysis which is needed because the better the level of accuracy, the more accurate the results of the analysis or the smaller the error and the better the quality of the information. Information quality is a measure of output information system. Output quality includes accuracy, precision, timeliness, and reliability of the information provided

4. Process is a sequence of interrelated implementations or events that together transform inputs into outputs
5. Relevant, in relation to the system or device used must be in accordance with the needs of agencies and other parties who will use the information generated by the system/device
6. Constraints are factors or circumstances that limit, hinder, or prevent the achievement of objectives
7. Flexibility, ease in obtaining information
8. System Reliability, the reliability of a system such as resilience;
9. System quality is the ability or system performance in providing information according to user needs (DeLone and McLean, 1992).
10. System accuracy of a measurement is the degree of closeness of a quantity measurement to its actual value.

The sampling method in this study was a purposive sampling technique, namely by removing taxpayers with 1770 SS tax returns from a population of > 1000 taxpayers with 3 types of SPT so that 2 types of SPT were taken, namely 1770 and 1770 S, so that the samples taken were 47 taxpayers. The types of data used in this study are primary and secondary data. Primary data includes the results of interviews and answers to questionnaires from respondents at the Bogor Pratama Tax Service Office. Secondary data includes proof of payment using e-billing, general description, organizational structure.

2.2 Locus & Instrument

This research was conducted at the Bogor Pratama Tax Office located on Jl. Ir. H. Juanda No.64, RT.01/RW.13, Paledang, Bogor Tengah District, Bogor City, West Java 16122. The application of the E-Billing System at the Bogor Primary Tax Service Office is the object of research in this study. Research Period The period selected for this study is from 2017 to 2022. Respondents in this study are taxpayers who are registered at the Bogor Primary Tax Service Office.

The Bogor Pratama Tax Service Office is a vertical agency of the Directorate General of Taxes which is under and directly responsible to the head of the Regional Office of the Directorate General of Taxes West Java III. In carrying out its duties and functions KPP Pratama Bogor is financed by the APBN with the aim of obtaining APBN revenues from tax revenues. In the context of accountability for performance achievement and implementation of a government agency's budget, as well as to realize good governance within the Ministry of Finance, each agency within the Ministry of Finance is required to make a performance report as stipulated in Minister of Finance Regulation Number 239/PMK.09/ 2016 concerning Evaluation of the Implementation of Government Agencies Performance Accountability Systems within the Ministry of Finance.

The questionnaire contains statements according to research indicators and is measured using a Likert measurement scale of 1 to 5 with the following score levels; (1) Strongly

Disagree, (2) Disagree, (3) Doubt, (4) Agree, (5) Strongly Agree. To calculate how much the value of the range of scores and interval values is by the formula:

$$\text{Range Score} = a-b \quad (1)$$

$$\text{Value Interval} = a-b/5 \quad (2)$$

After getting the interval then it is given a value with the following criteria:

Table 1. Criteria.

No	Description	Interval Value
1	Very Effective	> 4.2-5
2	Effective	> 3.4-4.2
3	Effective Enough	> 2.6-3.4
4	Less Effective	> 1.8-2.6
5	Ineffective	> 1-1.8

3 Literature Review

3.1 Effectiveness

Effectiveness is a measurement in achieving a target, objective or purpose that has been planned before. This is the same as what was stated by Saxena (in Indrawijaya 2010: 176) stating that effectiveness is a measure that states how far the target (quality, quantity, time) has been achieved. The greater the target achieved, the higher the level of effectiveness. This concept is more focused on output orientation. The problem of using inputs is not an issue in this concept. In general, government organizations (which are not looking for profit) are oriented towards achieving effectiveness.

Gibson (in Tika 2012: 129-130) suggests the effectiveness criteria consist of five elements, namely as follows:

1. Production, production as a criterion of effectiveness refers to the size of the organization's main output. Production measures include profits, sales, market share, documents processed, partners served and so on. This measure is directly related to what is consumed by the customers and partners of the organization concerned.
2. Efficiency. Efficiency as an effectiveness criterion refers to a measure of the use of scarce resources by an organization. Efficiency is the ratio between output and input. Efficiency measures consist of profit and capital, cost per unit, waste, repetition time, cost per person, and so on. Efficiency is measured based on the ratio between output and cost or time used.
3. Satisfaction, Satisfaction refers to the success of the organization in meeting the needs of its member employees. Satisfaction measures include employee attitudes, employee turnover, absenteeism, inaction, complaints, well-being, and so on.

4. Adaptability refers to the organization's response to external and internal changes. External changes such as competition, wants, customers, product quality and so on are adaptations to the environment.
5. Survival. Survival refers to the responsibility of the organization/company in increasing its capacity and potential for growth.

3.2 Billing System (E-Billing)

Overview of the Billing System According to the Regulation of the Directorate of Taxes Number PER-26/PJ/2014 Article 1 paragraph 1, E-Billing is part of an electronic receipt system that is administered by the Biller of the Directorate General of Taxes and implements a Billing System. Billing System is an electronic payment method using a Billing code. billing code is an identification code for a type of tax payment or deposit to be made by a taxpayer consisting of 15 digits. The billing code is valid within 1 month from issuance and after that it is automatically deleted from the system and cannot be used again. At the beginning of the emergence of a new billing system implemented by all KPPs in Indonesia on January 1, 2016, it did not run successfully. Fewer taxpayers who pay taxes use e-billing, because taxpayers are used to using manual tax payments using a tax deposit slip (SSP).

Currently, taxpayers can more easily fulfill their tax obligations by utilizing electronic facilities that have been provided by the Directorate General of Taxes. One such facility is an electronic payment system (Billing system). The electronic tax payment system is part of the electronic State Revenue system administered by the Biller Directorate General of Taxes and implements a Billing System. Billing System is an electronic payment method using a Billing Code.

Taxpayers can make tax payments/deposits with an electronic tax payment system. Tax payments/deposits include all types of taxes, except: Taxes in the context of imports for which payments are administered by the Biller of the Directorate General of Customs and Excise; and Tax, the method of payment of which is specifically regulated. The tax payments/deposits include payments in Rupiah and United States Dollars. Payments in United States Dollars can only be made for Income Tax Article 25, Income Tax Article 29 and Final Income Tax which are self-paid by Taxpayers who obtain permission to keep bookkeeping in English and in United States Dollars. Electronic tax payment/deposit transactions are carried out through Perception Banks/Posts using the Billing Code. Billing Code is an identification code issued through the Billing System for a type of payment or deposit to be made by the Taxpayer.

4 Result

The total population of taxpayers in Bogor Pratama Tax Office is more than 1000 taxpayers. After evaluating the population, it can be determined that 50 taxpayers can be used as samples in this study. The results of the answers of the 47 respondents who

were assessed were: (1) Data Security, (2) Time, (3) Accuracy, (4) Process, (5) Relevance, (6) Constraints, (7) Flexibility, (8) System Reliability, (9) System Quality, (10) System Accuracy.

Table 2. Calculation of Data Security Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	197
3	Average	4.19
5	Criteria	Effective

Table 2 explains the data security variables stored in the E-Billing application regarding taxpayer data with a score of 197. This is because the E-Billing system has been given a code for each payment so that the data contained in the system will not leak. In all aspects of data security, the average data value is 4.19 so that data security is included in the Effective Criteria.

Table 3. Calculation of Time Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	220
3	Average	4.68
5	Criteria	Very Effective

Table 3 explains the time variable that the speed of charging using the E-Billing system saves time by obtaining an overall score of 220. This means that taxpayers benefit from this E-Billing system because they can be done anywhere and do not need to come to the office to report and payment. With an overall average of 4.68, this time variable is included in the Very Effective Criteria.

Table 4. Calculation of Accuracy Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	202
3	Average	4.30
5	Criteria	Very Effective

Table 4 explains the accuracy variable, good results are obtained for the accuracy of the system in filling in data that must be reported by taxpayers obtaining an overall score of 202, so that errors that may occur are low. With an overall average of 4.30, this accuracy variable is included in the Very Effective Criteria.

Table 5. Calculation of Process Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	199
3	Average	4.23
5	Criteria	Very Effective

Table 5 explains the process variables in which the use of E-Billing is easy to understand by obtaining an overall score of 199. This means that Taxpayers benefit from the E-Billing system because they can be done anywhere and do not need to come to the office for reporting and payment. With an overall average of 4.68, this process variable is included in the Very Effective Criteria.

Table 6. Calculation of Relevance Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	211
3	Average	4.49
5	Criteria	Very Effective

Table 6 explains the relevance variables in this case, namely making it easier for taxpayers to carry out their tax obligations, getting an overall score of 211, which can be said to be very relevant to date. With an overall average of 4.49, this relevance variable is included in the Very Effective Criteria.

Table 7. Calculation of Constraints Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	179
3	Average	3.81
5	Criteria	Effective

Table 7 explains the constraint variables, in terms of E-Billing being free from errors (errors) getting an overall score of 179, it means that errors in the E-Billing application can still occur at any time. With an overall average of 3.81, this constraint variable is included in the Effective Criteria.

Table 8. Calculation of Flexibility Variables.

No	Description	Value
1	Number of Respondents (n)	47

2	Total Score	203
3	Average	4.41
5	Criteria	Very Effective

Table 8 explains the flexibility variable, that is, in terms of E-Billing, it can be known through electronic media, an overall score of 203 is obtained, so it is very flexible to get information about this E-Billing. With an overall average of 4.41, this flexibility variable is included in the Very Effective Criteria.

Table 9. Calculation of System Reliability Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	208
3	Average	4.43
5	Criteria	Very Effective

Table 9 explains the system reliability variable, in this case whether the E-Billing system fulfills the taxpayer's obligations in carrying out filling and reporting obligations, obtaining an overall score of 208, so that it can be said that the E-Billing system is reliable in meeting the taxpayer's needs until At the moment. With an overall average of 4.43, this system reliability variable is included in the Very Effective Criteria.

Table 10. Calculation of System Quality Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	207
3	Average	4.40
5	Criteria	Very Effective

Table 10 explains the system quality variable, in this case the quality of the E-Billing system is in accordance with the expectations of the taxpayer obtaining an overall score of 207, so it can be said that it has a good system quality. With an overall average of 4.40, the variable quality of this system is included in the Very Effective Criteria.

Table 11. Calculation of System Accuracy Variables.

No	Description	Value
1	Number of Respondents (n)	47
2	Total Score	214
3	Average	4.55
5	Criteria	Very Effective

Table 11 explains the System Accuracy variable, in this case, E-Billing provides accurate information, obtaining an overall score of 202, so that errors that may occur related to information are low. With an overall average of 4.55, the variable accuracy of this system is included in the Very Effective Criteria.

Table 12. Overall Variable Calculation.

No	Description	Value									
1	Variable	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
2	Total Score	197	220	202	199	211	179	203	208	207	214
3	Average	4.19	4.68	4.30	4.23	4.49	3.81	4.41	4.43	4.40	4.55
4	Criteria	E	VE	VE	VE	VE	E	VE	VE	VE	VE
Overall Average = 4.35											
Overall Criteria = Very Effective											

Table 12 shows an overall average variable value of 4.35 which is included in the very effective criteria. So it can be conclude that the effectiveness of the tax payment system using E-Billing (At the Bogor Pratama Tax Service Office) has been effective.

5 Conclusion

Application of E-Billing at the Bogor Primary Tax Service Office starting from the implementation of how to register e-billing, creating billing codes and how to deposit tax payments using e-billing at the Bogor Pratama Tax Service Office, it is quite good. Results from research on the effectiveness of paying taxes using the E-Billing system with an overall assessment of 10 variables namely Data Security, Time, Accuracy, Process, Relevance, Constraints, Flexibility, System Reliability, System Quality, System Accuracy is included in the very effective criteria. From the research results, the level of effectiveness of E-Billing is included in the Very Effective criteria.

However, of the 10 variables, there are 2 variables, namely the Constraint Variable and the data security variable with the statement "The E-Billing System is free from errors (error)" and "The taxpayer data contained in the e-billing system is guaranteed to be safe" get the criterion results Effective. To support the E-Billing application to be free of errors or errors, it is necessary to check and repair it regularly. For efforts to protect data security, in order to avoid misuse or leakage of data by irresponsible parties, it is necessary to check data security, and improve system security on a regular basis.

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