An Analysis of the Process of Converting Paper Documents into Electronic Documents in the Tax Administration System in Indonesia

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Abstract. Tax is a mandatory levy imposed on citizens as well as a source of revenue in Indonesia. In order to increase the potential for taxation in Indonesia, the Directorate General of Taxes (DGT) is implementing tax reforms to enhance services and simplify the process for the public to pay taxes by converting paper documents into electronic-documents, such as implementing e-registration, e-billing, e-tax invoices, e-SPT, and e-bupot. Therefore, the aim of this study is to determine the underlying factors behind the tax digitalization and its transition process in Indonesia. This study used a qualitative method which involved conducting in-depth interviews and obtaining supporting data from the DGT. The results of this study indicated that the underlying factors behind the tax digitalization is to increase efficiency and effectiveness while also pursuing technological developments in increasingly advanced times. During the implementation of this e-document, it was discovered that there was an increase and decrease in the use of paper and electronic documents, as well as tax revenues from individual and corporate taxpayers, between 2017 and 2021. This may be caused by factors originating from the validity of electronic documents as well as other factors unrelated to the validity of electronic documents.

Keywords: Taxes · Tax Administration Reform · E-documents · Taxpayers

1 Introduction

Taxes play a significant role as the cornerstone of the country’s economic development. As a result, it is important that the government and the community collaborate together to pay this tax in order to maximize tax revenue [1]. Taxes are a source of state revenue which, in practice, does not receive direct remuneration. Therefore, the country has a responsibility to fulfill the needs of the community in accordance with applicable regulations by providing reciprocity for public compliance in paying taxes. According to Sri Mulyani, the Minister of Finance of the Republic of Indonesia, the total tax revenue figure reached Rp 322.46 trillion in the first quarter of 2022, which is equal to a percentage of 25.49% of the reference budgeted APBN. Comparing this result to the previous year, in which tax growth was 41.36% year-over-year (yoy), indicates a very high growth figure [2]. Several factors contributed to this increase in tax revenue, including the low base
effect, the ongoing economic recovery, an increase in imports, and the implementation of the Voluntary Disclosure Program (PPS) [3]. Given the crucial role that taxes play in a country’s development, tax reform is required to improve regulations, tax bases, and government efforts to keep up with technological developments. It is believed that tax reform can improve taxpayer compliance by streamlining and simplifying administrative process.

The implementation of tax digitalization to e-registration, e-billing, and e-tax invoice has begun in 2013 and has been introduced to the public. Then, starting on July 1, 2014, certain PKP which were deemed ready started to receive e-tax invoice in stages. Then, on July 1, 2015, it started to be applied nationally. Furthermore, another form of tax digitalization is e-bupot, which was first used in August 2022. E-bupot is an application made accessible by the DGT for the purpose of making a withholding tax slip and/or reporting a periodic income tax return (SPT PPh) Article 23 and/or 26. E-bupot is performed on electronic documents [4]. The purpose of digitalizing the withholding tax slip is to save taxpayers time because they will not need to queue up to make a withholding tax slip or report a tax return; instead, they may do so from anywhere at any time using a simple, real-time method. The official DGT system ensures the safety of the withholding tax slip, and e-bupot issuing utilizes an electronic signature so that a wet signature is not required [5].

The convenience provided by tax digitalization is directly proportional to the figures of tax revenues obtained from non-oil and gas income tax (PPh), sales tax on luxury goods (PPnBM), land and building tax (PBB), value added tax (PPN/VAT), and other taxes, as well as oil and gas income tax, over the past five years. In 2017, taxes were successful in generating Rp 1,339.8 trillion in revenue. Then it was reported that in 2018, the revenue figure from the tax sector increased by Rp 31.5 trillion, or the equivalent of Rp 1,521.4 trillion, and that this figure increased again in 2019 by Rp 23.9 trillion, to Rp 1,545.3 trillion. However, unfortunately, this figure has dropped to Rp 1,072.1 trillion as a result of the pandemic which impacted Indonesia in 2020. However, this tax revenue figure increased by 41.36% year over year (yoy) in the first quarter of 2022, reaching Rp 322.46 trillion.

The previous explanation given suggests that Indonesian taxes is continually working to implement tax administration improvements in the direction of digitalization. Furthermore, the figures on tax revenues from 2017 to 2021 show that the numbers are continue to increase. Therefore, the purpose of this study is to examine the process for converting paper documents into electronic ones in the tax administration system in Indonesia and use several model including the IS Success Model [6, 7] and Maturity Models [8]. It can also be analyzed using a literature review, such as the Digital Government Literature Review [9–14] and the IS success literature review [15, 16].

2 Theory

Building a system requires meticulous planning and preparation, particularly when the government is digitalizing its administrative processes. In order to analyze the process of digitalization of tax administration, which formerly used paper documents but has converted to electronic documents, a number of model approaches are utilized, and they are listed as follows:
• IS Success Model [6, 7].
• Maturity Models [8].

In addition, a literature review approach can be used to analyze the digitalization of tax administration and is explained as follows:

• Based on Digital Government Literature Review [9–13]. The indicator used is Technological Aspect – Ease of Use [14] and Individual Aspect – Commitment and Motivation [10].
• Based on IS Success Literature [15, 16], with the indicator used are: Technological Aspect – Information Quality [15]; Technological Aspect – Service Quality; and Contextual Aspect – Technological Trends Worldwide [16].

3 Previous Research

The current electronic documents used by the Indonesian tax system include e-tax invoice, e-registration, e-bupot, e-filing, e-billing, electronic deposit letters (SSE), e-SPT (Annual Tax Return), and e-tax invoice web. This study [17] aimed to find out how the use of e-filing, e-billing, and e-tax invoice affected the taxpayer’s degree of compliance with their obligations. The conclusion drawn is that e-document have been proven to make it more straightforward for taxpayers to submit their SPT online, anytime, and anywhere and facilitates online tax payment for taxpayers while enhancing tax transaction security. Furthermore, the use of QR codes on e-tax invoice decrease the risk of invoices being misused.

According to the study’s findings, e-tax invoice and e-registration have a significant impact. However, the use of e-billing and e-filing is actually inversely correlated with this. E-registration and e-tax invoice were utilized significantly because of their better practices in the system of tax administration. Moreover, because many taxpayers found the e-billing system to be overly complicated [18].

Provide information on the impact that e-filing, e-billing, and e-tax invoice systems had on corporate taxpayer compliance at KPP Pratama Kediri. The results of this study then demonstrated that e-filing, e-tax invoice, and e-billing all significantly affect taxpayer compliance. This is due to the fact that it has been proven that the three systems facilitate convenience, lessen administrative burdens, and ensure taxpayer security [19].

4 Methods

This study used a qualitative method. The data collection was conducted using in-depth interviews and direct observation, with data originating from the DGT Sub Directorate of Tax Data and Information, to determine the total number of taxpayers using paper and electronic documents in the last five years (2017–2021). The results of the study were presented using a descriptive method in order to provide a clear picture of the conversion from paper documents to e-documents. The research subjects used in this study were informants from the Directorate General of Taxes, the Sub Directorate of Potential, Compliance, and Revenue with the initials AK, and the Fiscal Policy Agency (BKF) with the initials JK and AM. This study focused on the digitalization of tax administration, which is the process of converting paper documents into electronic documents.
The researcher conducted the stages of data analysis on the data which had been previously acquired. To sort out representative data in answering the research questions, the data from the interviews were transcribed into conversations between the researchers and the interviewees and then recorded back in the research notes. Furthermore, triangulation was used to validate the data by comparing documents, photos, news articles, and interview results. The data were then interpreted by descriptively interpreting the previously processed data and drawing conclusions from the data [20].

5 Findings

The Indonesian tax system began utilizing e-registration, e-billing, and e-tax invoice in 2013. In addition, research by Putri [17] reported that on July 1, 2014, Indonesia started implementing e-tax invoice in phases and specifically for certain PKP. The use of e-tax invoice was then expanded further, first to PKP in Java and Bali Island on July 1, 2015, and finally implemented nationally on July 1, 2016. Meanwhile, official e-billing was implemented concurrently on January 1, 2016. According to AK (personal communication, August 10, 2022), this depends on taxpayer preparedness, and it is impossible if these reforms are implemented concurrently.

According to data obtained from the DGT, the number of taxpayers using e-filing, e-SPT, and manual documents has fluctuated significantly between 2017 and 2021. In addition, data regarding tax revenue from 2017 to 2021 (1st semester) can be explained. The data are intended for both individual and corporate taxpayers.

6 Discussion

6.1 The Use of Paper Documents and Electronic Documents by Taxpayers (2017–2021)

One strategy used by DGT to increase Indonesian taxpayers’ compliance rate is the conversion of paper documents into electronic ones. Since 2017–2021, there has either been an increase or decrease in taxpayer compliance, and during that time, a large number of taxpayers have used electronic documents. The results shown in the graphs in the figure below are based on data acquired from DGT generally and do not include any information on the status of taxpayers, including individual and corporate taxpayers as well as old and new taxpayers.

The Number of Taxpayers Using Paper Documents. As seen in Fig. 1, the number of taxpayers using paper documents has increased from last year to this year. The increase in the use of paper documents is certainly an indicator that the implementation of electronic documents.

The Number of Taxpayers Using Electronic Documents. Figure 1 shows that between 2017 and 2021, there was a periodic decrease in the number of taxpayers who used electronic documents, specifically e-filing.

The Number of Taxpayers Using e-SPT. As shown in the figure above, the number of taxpayers using the e-SPT appears to fluctuate, although the increase in the last year (2021) was less significant than in 2017.
6.2 Tax Revenue During the Implementation of Digitalization of Tax Administration (2017–2021)

Tax revenue continues to fluctuate significantly. There are both increases and decreases throughout a certain period of time. The results presented in the Fig. 2 below are based on data from the DGT for the period of 2017–2021 generally, without any information regarding the status of taxpayers (new taxpayers/old taxpayers).

**Tax Revenue from Individual Taxpayers.** The figures derived from individual taxpayers’ tax revenues are observed to fluctuate between 2017 and 2021. This is evident in the graph, which began in 2017.

**Tax Revenue from Corporate Taxpayers.** The amount of corporate taxpayers’ tax revenues has tended to decrease during the past five years (2017–2021). This decrease
can be seen from the graph, which has decreased drastically, especially from 2019 to 2021.

6.3 The Process of Converting Paper Documents into Electronic Documents

Several models and literature reviews were used to analyze the process of digitalization of tax administration, which originally used paper documents to become electronic documents, including:

**IS Success Model [6]**. From a technological perspective, the quality of the information and the quality of the services can be used as an indicator of the development of a digital administration system. Errors can be minimized with the help of good-quality information. This is due to the fact that the use of the e-system in this electronic document can improve the effectiveness of controlling for DGT employees, which is, of course, supported by a code of ethics which has been defined by the DGT [21]. The existence of good service quality can have a significant positive impact on the taxpayer’s level of compliance, both directly and indirectly.

**Maturity Models [8]**. This model shows that the goal of converting paper documents into electronic ones is to improve the quality of Indonesia’s current taxation data. This is in line with the opinion of AK (2022), which stated that errors in calculating tax imposition can be minimized with the development of this e-document system. This is due to the fact that although the tax imposition will be automatically calculated and considered formally correct, it must be reexamined for material correctness (AK, personal communication, August 10, 2022).

**Based on Digital Government Literature Review [9]**. The indicator used is technology. The index used to determine system development or digitalization of tax administration can be seen in several aspects, including:

- **Technological Aspects – Ease of Use**. Along with the convenience provided by the electronic system, DGT supports conversion to this document by providing a helpdesk or e-filing center in an effort to reach out to all parties and simplify the tax administration process (AK, personal communication, August 10, 2022). A help desk or e-filing center can help taxpayers who are still unsure or having difficulty using online tax services. Taxpayers who use this e-document can benefit from a number of conveniences, such as the elimination of the need to go to the KPP, the ability to report taxes fast because they are done online, a high degree of accuracy in tax reports, and an easier and simpler process [22].

- **Individual Aspect – Commitment and Motivation**. DGT is committed to making tax services more accessible through digitalization. DGT makes an effort to stay updated with technological developments in order to accomplish this commitment. DGT has implemented a number of reforms to provide services which may both make things easier for taxpayers and give them a sense of justice [23].

**Based on IS Success Literature Review [15]**. The indicators used to determine the background of the implementation of the digitalization of tax administration in Indonesia include:
Technology Aspect – Information Quality. The conversion from paper to electronic documents aims to improve the quality of current tax information. This is in line with AK’s opinion, which stated that errors in calculating tax imposition can be minimized with the establishment of this e-document system (personal communication, August 10, 2022). In addition, according to another research [24], the existence of technology in taxation is capable of producing tax information which is relevant and accurate.

Technological Aspect – Service Quality. The urgency of converting paper documents into electronic documents is to improve effectiveness and efficiency (AK, personal communication, August 10, 2022). This is in line with the argument presented by Santioso et al. [25], who explain that one of the methods used to improve the effectiveness and efficiency of tax services is the digitalization of tax administration. Therefore, the goal of the digitalization of tax documents is to improve the quality of services provided to taxpayers.

Contextual Aspects – Technological Trends Worldwide I. One of the reasons for the digitalization of tax administration is as a form of adjustment to existing technological developments. According to recent study [26], DGT may have a chance to develop tax administration reforms as a result of the accelerated development of digital technology in the economy. As a result, the DGT continues to implement various digital changes to improve the quality of service and increase the effectiveness of monitoring taxpayer compliance.

In general, the implementation of converting paper documents into electronic documents is performed in stages by conducting pilot testing such as selecting particular taxpayers first, starting with taxpayers who have a “big” role, then progressing down to the middle and primary levels (AK, personal communication, August 10, 2022). This is due to the fact that the taxpayer, whose context is a big corporation, certainly had an excellent information and technology system and was considered capable of implementing the tax digitalization policy (AK, personal communication, August 10, 2022).

However, not all electronic document conversion was carried out in stages. There is also a conversion from paper documents into electronic documents which was carried out simultaneously or directly throughout Indonesia, such as the implementation of e-billing, which was officially enforced on January 1, 2016. According to AK (personal communication, August 10, 2022), this depends on the readiness of the taxpayer.

The urgency of converting paper documents into electronic documents is to improve effectiveness and efficiency (AK, personal communication, August 10, 2022). Furthermore, the goal of the digitalization of tax administration is to increase state revenue. This is because easier administration will result in higher compliance, which will lead to higher tax revenue (JK and AM, personal communication, September 10, 2022). This is in accordance with the argument presented by Ermanis et al. [27], who argued that the digitalization of tax administration will increase tax revenue optimization as a result of an effective administration system.

When using paper documents, DGT needs a warehouse to store these physical documents (AK, personal communication, August 10, 2022). This electronic document system is used to further simplify the storage of taxpayer documents because it is believed that, as time goes on, the DGT will accumulate an increasing number of documents which will be difficult to store. The length of the taxation process using paper documents can
be seen in Regulation of Minister of Finance (PMK) Number 181/PMK.03/2007 [28] regarding the Form and Content of Tax Returns, as well as Procedures for Collection, Filling, Signing, and Submission of Tax Returns. In Article 5 of the PMK, it is explained that SPT in the form of hardcopy or paper forms can be taken directly at the place determined by the DGT.

In addition to the process of receiving and processing SPT data conducted by the KPP, the length of time for processing taxpayer data can also be seen from the activities conducted by the KPDDP (Taxation Data and Document Processing Office). Among its activities is scanning taxpayer documents, which are then converted into Optical Character Recognition (OCR), which takes a lot of time and even for months (AK, personal communication, August 10, 2022). This opinion is in line with one of the KPDDP functions stated in Article 3 of PMK No. 172/PMK.01/2012 [29] concerning Organization and Working Procedures of KPDDP. Therefore, the conversion of paper documents into electronic documents is a catch-up form of technological development and the progression of time.

6.4 The Use of Paper Documents and Electronic Documents by Taxpayers (2017–2021)

The DGT is making an effort to increase Indonesian taxpayer compliance by converting paper documents into electronic ones. Taxpayer compliance has fluctuated between 2017 and 2021, a period in which electronic documents were frequently employed by taxpayers.

Taxpayers Using Paper Documents (Manual). In 2017–2018, the number of taxpayers who used paper documents started to decline. However, there was a considerable increase in taxpayers using paper documents from 2019 to 2021. This may be a result of obstacles to the use of electronic documents which were experienced by taxpayers, such as a still-limited understanding of the digital taxation system among the Indonesian populace, a limited internet network, a limited regional access range. It is considered that the introduction of digitalization is still insufficient if it is not accompanied by an adequate system. For example, because of the restrictive service system, many taxpayers have trouble reaching the DGT contact center. Taxpayers must wait days for the DGT to respond to their inquiries [30].

Taxpayers Using Electronic Documents (e-Filing). From 2017 to 2021, the number of taxpayers who used e-filing continued to decrease. This was the result of the early 2020 COVID-19 pandemic outbreak. In addition to the COVID-19 pandemic’s impact, the decline in e-filing users is also attributable to intensive socialization.

Taxpayers Using e-SPT. The number of taxpayers using e-SPT has decreased from 2017 to 2018. The decrease in the use of e-SPT is due to the fact that a large number of taxpayers still struggle with correctly inputting document data and using e-SPT.
6.5 Tax Revenue During the Implementation of the Digitalization of Tax Administration (2017–2021)

The amount of taxes revenue continues to fluctuate significantly. Over a given time period, there are both increases and decreases. The results presented in the graphs below are based on data from the DGT for 2017–2021 in general; there are no specifics regarding the status of the taxpayers (new taxpayers or old taxpayers) included.

**Tax Revenues from Individual Taxpayers.** Tax revenues originating from individual taxpayers have fluctuated between 2017 and the first semester of 2021. The data reflect a growth in 2017 and 2018 as a result of individual taxpayers’ awareness of their obligations to support the country’s development and advancement. However, the coronavirus pandemic and economic difficulties caused these revenue estimates to rapidly decline in 2020–2021, which decreased taxpayers’ willingness to report their obligations.

**Tax Revenues from Corporate Taxpayers.** The amount of tax revenue generated by the monitored agencies decreased significantly between 2019 and 2021. This could be overcome by implementing a policy of reporting time relaxation and increasing performance from the DGT vertical unit to build communication in order to increase taxpayer formal compliance [31].

According to the discussion above, there has been a decrease and increase in the use of electronic documents and the tax revenues between 2017 and 2021. This may be caused by factors connected to the implementation of the use of electronic documents as well as other factors unrelated to that. The decline in the use of electronic documents and tax revenues was caused by several conditions related to the implementation of the use of electronic documents, including the Indonesian people’s lack of understanding of the digital taxation system, a limited internet network, a limited regional access range, and the large number of new taxpayers who were not accompanied by the introduction of digitalization of the taxation system so that these taxpayers still use manual documents (AK, personal communication, August 10, 2022). In addition, there are other factors which are not related to the implementation of the use of electronic documents, such as the COVID-19 pandemic which occurred some time ago, which has decreased the willingness of taxpayers to report their obligations [32]. Meanwhile, the increase in the use of electronic documents and tax revenues was caused by several conditions related to the implementation of the use of electronic documents, including the realization by taxpayers of the simplicity of the tax administration system and the potential time, cost, and effort savings (AK, personal communication, August 10, 2022). Apart from that, there are other factors which are unrelated to the implementation of the use of electronic documents, such as an increase in citizen awareness of state development [33].

7 Conclusion

Users of administrative digitalization for tax reporting and revenue have increased or decreased between 2017 and 2021. This decrease was caused by a number of factors relating to the implementation of electronic documents, such as the Indonesian people’s lack of understanding of the digital taxation system, a limited internet network, and
regional access range. There are additional reasons as well, such as the current COVID-19 pandemic, which has decreased taxpayers’ willingness to report their obligations but is unrelated to the implementation of electronic documents. Meanwhile, this increase was caused by several conditions related to the implementation of electronic documents, such as the large number of new taxpayers who were not balanced by the introduction of digitalization in the tax system, so that these taxpayers still used manual documents. Furthermore, there are other factors which are unrelated to the legitimacy of electronic documents, such as citizens’ increasing awareness of the country’s development.

The researcher can provide suggestions for taxpayers based on the results of this study, including the need to increase awareness of or concern about paying taxes. This is due to the government’s efforts to provide a variety of services which make it easier for taxpayers to pay the taxes which have been imposed. Moreover, taxpayers must be aware that by completing tax payments, our country’s activities can run properly and development can proceed as intended. In the meantime, it is suggested for DGT to increase socialization of the newly-launched policies, particularly in terms of the digitalization of tax administration. This is due to the fact that carefully made policies will appear useless if people’s knowledge about them is still lacking. It is important to consider social demographics in the development of administrative digitalization in order to effectively reach all societal groups.

References


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