Administration Of E-Invoicing Value Added Tax (Comparative Study between Indonesia and Australia)

Supply Chain Integration (SCI) Fashion Products Made By SMEs In Response To Improve Performance Development Of Tourism In West Java

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Public-Private Partnership In Water Supply Of DKI Jakarta
Administration Of E-Invoicing Value Added Tax
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**ABSTRACT**

Technological changes in tax administration especially VAT have also changed the way tax authorities around the world implement e-invoice tax, one of which is Australia. The Ministry of Finance of the Directorate General of Tax (DGT) Indonesia responded to this in 2013 by creating a VAT administrative technology system called the Electronic Tax Invoice (e-Faktur). This study aims to determine the administration of Indonesian e-Faktur by looking at the Australian e-invoice as a benchmark and to find out the problems of e-Faktur in Indonesia after implementation. This research method is a qualitative method with techniques in the form of literature studies and in-depth interviews with informants. The results of this study are that the e-Faktur of the system in Indonesia is different from the understanding of the existing e-invoicing in the literature and the Australian state. Australian e-invoicing system neglects sending data in the form of digital data (PDF) and sending via email. E-Faktur was found to still have problems after its application such as access which was always problematic because of the network, the insecurity of VAT data, and the costs that still arise due to the application e-Faktur such as the still printing of documents and inefficiency. The conclusion from this study is that there are still fundamental differences between the administration of Indonesian and Australian e-invoice.

**Keywords:** Tax Administration; Taxation Technology; e-invoicing; e-Faktur

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INTRODUCTION

In early 1980s, the world had experienced an unprecedented revolution in technology. The revolution had resulted the various innovations in tax technology. The tax technology resulted had a significant impact on the transformation of tax administration and transform the viewpoint of implementation of tax reformation (Jenkins, 1996).

For tax administration, this transformation is useful because it does not offer a lower transaction cost only, but also enable to create the innovation in a tax policy (Myles, 2017).

Through the technology development, the government has got a new opportunity in changing the viewpoint in implementing a tax policy effectively. In addition, the government also has the opportunity to obtain more accurate tax information, design a better taxation system and make tax policies right on target.

Rai, Suyash and Rathin Roy (2017) inform that technology has the advantage in implement the tax policy in many ways. The advantages are as follows: 1) The payment from taxpayers to the government; 2) Public procurement, the government can increase the efficiency and the integrity of public procurement by relying on electronic system increasing transparency and competition; 3) Non-tax state revenue, the government can increase the efficiency of non-tax state revenue collecting by digital payment method. These methods can reduce costs related to cash handling and human resources to collect this revenue; 4) Tax collection, the government can increase the efficiency of tax collecting by digital method. Such as, inputing tax electronically can reduce collection costs and resources needed; 5) Intelligence in tax collection, access to real-time or near real-time information concerning a financial transaction can support to improve tax enforcement by the government; 6) E-Governance, the government can use digitalisation to improve governance efficiency. This includes better procedure digitalisation and information access for the citizens and residents. For example, land record digitalisation can support to manage land resources much better by making such information is available to the citizens online, and probably by improve the land records mutation procedures and land transactions.

For implementing an effective tax technology, it needs a voluntary compliance, the increasing of voluntary compliance is the key element of a tax reform towards the creation of a modern taxation system. By the creation of information and implementation of the technology in taxation, it can change the government’s way in collecting, processing and acting based on data (Verdier, 2017).

One of reflections of a modern taxation system implementation that informed by OECD (2019), said that currently, tax administration has changed to e-administration. This is marked with significant changes in tax services such as tax reporting, payment, and tax return that can do online. The digital contact channels (online, email and other digital contact services) has been dominating and number of people who administer their taxation using mobile phone applications continue to grow. The electronic data in the form of data from the third party and data produced internally can be combined in taxation administration function which play role as the improvement of tax service and compliance.

OECD (2019) has explained in outline the main function of currently modern taxation system, i.e (1) An integrated registration process for taxpayers; (2) Processing on tax returns and tax payments; (3) Service and support for the taxpayers for fulfilling their obligations; (4) A verification to confirm the information accuracy that has been reported; (5) An intervention to collect the payments and late returns; and (6) An access to conduct a tax dispute.
Figure 1 describes that for fulfilling a tax administration in modern area nowaday can work with the provision of services and education for the taxpayers consisting of proactive and reactive services, the creation of self-service, as well as a website-based services (a digital portal). Besides that, to enable running this process, a data manager should support it in order to view the compliance based on risks, data analyses, data managements, and technologies. When the tax administration is supported by the technology to manage data, the administration fulfilment process such as the usage of non-file checks.

**Figure 1. Core of Modern Taxation Administration**

![Diagram of Core of Modern Taxation Administration](image)

Source: OECD (2019)

The implementation of technology on conducting the tax administration process is not a new implementation thing in the world. A study case exercised by Njuguna Ndung’u (2017) explains about the digitalisation changes in Kenya, in his research he said that Kenya has transformed in the taxation administration since 2013. He said that the technology revolution occurred in the world has changed the way of the tax authority and the taxpayers in Kenya to still keep in touch. It enables the tax authority to obtain a taxpayer’s data immediately in real-time or at least in near real time. The obvious change in Kenya related to the technology in tax administration is the implementation of iTax system.

ITax system is a user-friendly service application for tax administration, which web-based activation, and safe. iTax also gives a full service in administering an integrated and automatic taxation. In iTax system possessed by Kenya, the taxpayers can register, save data, pay and view online status with account monitoring in real time. After that, the system will confirm a successful registration, electronic filling and tax payment in actual. To be able to use iTax system, firstly the taxpayers should register to get Personal Identification Number (PIN). After getting registered, the taxpayers’ accounts are made to create the core of iTax system which is connected comprehensively in regard to the taxpayers’ activities.

ITax system possessed by Kenya has been also integrated to the commercial banks in Kenya. This enables the taxpayers to make a payment by online mechanism, cash, and cheque. Moreover, this system can be accessed in realtime and directly connected to the ledger when making a payment to the bank.

In terms of tax payment to the entire government institutions, ministries and state government in Kenya, it should be conducted by a system called as G-pay possessed by the central bank. The connection of iTax and G-pay which is possessed by the central bank can be a process to be able to monitor all payments to each level of government departments.
Figure 2 describes that iTax system has the tax administration modules from the service related to the registration process, payment planning process, tax obligation fulfilment, monitoring and tax credits and refunds process.

**Figure 2. Tax Administration Module on iTax System**

![Tax Administration Module on iTax System](image)

Source: Ndung’u (2017)

*ITax implementation has given positive results. Figure 3 is a tax state revenue graphic after iTax system implementation occurred from 2013 until 2016. The graphic shows a quite amount of increasing in Value Added Tax (VAT) state revenue.*

**Figure 3. Tax State Revenue After iTax System Implementation in 2013-2016**

![Tax State Revenue After iTax System Implementation](image)

Source: Ndung’u (2017)

*Tax system implementation with technology also changes the viewpoint of the world in implementing the tax administration especially for VAT. Hutchison (1996) in his research explained that the technology implementation on VAT also impacted on European Union countries.*

*This VAT technology system has an integrated network connected with almost entire parts of European Union countries, explained that when a taxpayer domiciled in German makes a transaction by purchasing a goods from a taxpayer domiciled in France and its VAT is withheld by the taxpayer domiciled in France, then*
Information in the form of VAT data is directly connected/integrated with each tax authority systems of both countries. Figure 4 gives information about the integration VAT network.

**Figure 4. The Integration Value Added Network in European Union**

Source: Hutchison (1996)

The technology change in tax administration especially for VAT has also changed the viewpoint of tax authority all over the world to implement e-tax invoicing. EY (2018) in their publication explained that from total of 83 countries, only 5 countries that did not implement e-invoice and 9 countries that did not have a regulation of e-invoice implementation. One of them is Australia.

Australian Taxation Office (ATO) as the tax collector institution in Australia introduce e-Invoicing as the service system for implementation of their Goods and Sales Tax (GST). The procedure of e-Invoicing possessed by ATO can be transmitted and received **intersoftware network**. The meaning of intersoftware network is e-Invoicing can be transmitted directly if both software networks use the same standard. Then, if the software system between a purchaser and a supplier is different, ATO themselves will collaborate with the software industries to use the Pan European Public Procurement Online (PEPPOL) standard in creating an integrated internetwork e-Invoicing.

Tax invoice is an important document for a seller because it is a valid evidence that he/she has withheld VAT from his/her purchaser. Whilst for a purchaser, the presence of VAT invoice means that a Taxable Persons (PKPs) for VAT purposes can credit VAT should be paid. However, a VAT invoice could make a VAT overpayment if the VAT-In is greater than VAT-Out. On this VAT overpayment, the PKPs for VAT purposes can ask for VAT refund to the state.

According to data of Directorate General of Taxes along 2008-2013, there are 100 fictive tax invoice cases (currently called as tax invoice based on unreal transaction) where the state will get the potential loss amounting to 1.5 trillion IDR). Even, the tax violation through issuing the tax invoice based on unreal transaction has reached more than 50 percents of all tax violations which often occur. Possibly, that almost half of tax avoidance under the motive of VAT reporting by using fictive tax invoices. Therefore, in that moment Directorate General of Taxes (DGT) made a Special Task Force concerning to the handling of the tax invoice based in unreal transaction.
Data of DGT in 2009-2013 shows that increasing in tax state revenue from VAT and Luxury Sales Tax (LST) in 2009 is amounting to 193.07 trillion and in 2013 has reached 387.72 trillion. The increasing for amount of 194.65 trillion shows a very good increasing of taxpayers that the PKPs for VAT Purposes have awareness to do the tax obligation especially VAT (Figure 5).

**Figure 5. State Revenue in VAT Sector and LST 2009-2013**

![State Revenue in VAT Sector and LST 2009-2013](image)

Source: *Direktorat Jenderal Pajak* (2013)

However, increasing in VAT and LST state revenue is still not effective because great amounts of circulation and usage of tax invoice based on unreal transaction are still found. From data of DGT in 2009-2013 is concluded that the average percentage of tax invoice manipulation is 49.78% (Figure 6).

**Figure 6. Tax Invoice Manipulation Data**

![Tax Invoice Manipulation Data](image)

Source: *Direktorat Jenderal Pajak* (2013)

Mutiarin and Dwian (2018) described that an improvement aspect is the emphasis of innovations created in public sector i.e the government enables to give an effective, efficient and qualified, cheap as well as affordable public service suitable to the public needs.

Therefore, in handling the practice of using the tax invoices based on unreal transactions, as well as viewing the phenomena of e-invoice usage in other countries around the world, DGT Indonesia on behalf of the
Ministry of Finance has responded that matter in 2013 by creating the VAT administration technology system called as *e-Faktur* (electronic tax invoice).

*E-Faktur* is a electronic-based service application determined and/or provided by DGT which has function for making tax invoice and as the substitution as well as improvement of *e-SPT* VAT system.

In term of increasing tax compliance. The research conducted by Wibowo (2017) has resulted in the conclusion that *e-Faktur* is sufficient in terms of increasing the tax compliance level at Primary Tax Office (*KPP Pratama*) Jakarta Gambir Tiga, as well as research conducted by Husnurosyidah and Suhadi (2017) at *Baitul Maal Wattamwil* (BMT) financial institutions throughout Kudus district.

*E-Faktur* as an application has assisted DGT see and monitor the PKPs for VAT Purposes in making tax invoices, so tax invoice manipulation can be overcome. *E-Faktur* that have the prefix "e" has the same meaning in term of e-invoicing used by Australia. It means and refers to the electronic meaning itself where the mechanism for this *e-Faktur* is the exchange of tax data electronically rather than creating data digitally (PDF) and still using other media to report tax invoices to the counterparty (email). This *e-Faktur* should be able to reduce costs related to the tax administration especially VAT to be more effective and efficient.

Learning from Australia that has implemented e-Invoicing that is connected between software networks without involving sending digital documents (PDF, e-mail) is the objective of this research. This is for finding out the administration of Indonesian *e-Faktur* by viewing Australia's e-invoices as benchmarks and for finding out the problems of *e-Faktur* in Indonesia after implementation.

**LITERATURE REVIEW**

1. **E-Invoice (**E-Faktur**)

Europa Union in Directive 2014/55/EU article 2 described about electronic invoice as follows:

“Electronic invoice means an invoice that has been issued, transmitted and received in structured electronic format which allows for its automatic and electronic processing”.

As stated above that electronic invoice is invoices that have been issued, sent and received in a structured electronic format that allows electronic and automated processing.

Boer, et al (2008) described that e-invoice is the process of making invoices through electronic channels and it is considered a solution to eliminate weaknesses from the process of making paper invoices.

The meaning of “Delivering invoices by electronic means, i.e. transmitting or making invoices available to recipients and storing using electronic equipment for processing (including digital compression) and data storage, and using cables, radio transmissions, optical technology and with other electromagnetic”, so there are no documents paper involved.
The advantages of electronic invoice can be used maximally when the creation, the delivery, the receipt and the processing of tax invoice is fully automated. In this case, only machine-readable invoices can be processed automatically and digitally by the recipient.

A structured electronic invoice contains supplier data in a machine-readable format, which can be automatically imported into the purchaser’s Account Payable (AP) system with no need to input it manually. There are at least 2 main functions that must be needed for the usage of electronic invoices, 1) e-invoices need to be made with the correct structure; 2) e-invoices need to be transferred from the seller’s system to the purchaser’s system.

Directive 2014/55/EU article 6 stated that the core elements of an electronic tax invoice as follows:

1) Process and Invoice identifiers
2) The invoice period
3) Seller information
4) Buyer information
5) Payee information
6) Sellers tax representative information.
7) Contract reference
8) Delivery details
9) Payment instructions;
10) Allowance or charge information;
11) Invoice line item information;
12) Invoice totals
13) VAT breakdown.

2. E-Invoicing Terminology
Boer, et al (2018) described that there are some terminologies that is usually used by the practitioners nowadays to understand about e-invoicing

1) **E-invoicing is Electronic Bill Presentment and Payment (EBPP)** whose orientation is to consumers as bill payers whose delivery and payment via the internet. Another terminology of EBPP is IBPP (Internet Bill Presentment and Payment), EBP (Electronic Bill Presentment), and OBPP (Online Bill Presentment and Payment).

2) **Electronic Invoice Presentment and Payment (EIPP)** originally comes from B2B transaction and described the process through which companies present invoices and arrange payments via the Internet.

3) **E-invoice and E-Invoicing** both of these terminologies are used as a general terminology and is also used specifically in the context of newer generations of electronic invoices and invoices based on XML (Extensible Mark-Up Language) data formats that involve the paperless end-to-end process at any stage.

4) **EDI (Electronic Data Interchange):** electronic data transfers from computer to computer using an agreed structured format that can be generated and read by a computer and processed automatically.

5) **ERP (Enterprise Resource Planning):** a system that contains many tools and software for creating accounts and managing invoices as part of a broader company process.
6) **Electronic Statement Presentation (ESP):** referring to the electronic presentation of various other commercial documents, besides making invoices, making such accounts in accounting reports, purchase orders, shipping notifications, etc. can also be done using it.

3. **Ease of Administration Principle**

A good tax collection should meet the principles or principles that must be considered in the tax collection system. Haula Rosdiana and Edi Slamet Irianto explained that there are three important principles in taxation which are the basis of a good taxation system. They are, Productivity Principle, Equality Principle, and Ease of Administration Principle.

![Figure 7. Three Important Principles of a Good Taxation](image)

Source: Rosdiana, Haula & Edi Slamet (2012)

Ease of administration principle has 4 (four) indicators, as follows:

1) **Certainty Principle**

This principle states that a good tax must have certainty, both certainty for the tax authorities and for all taxpayers and the whole community. In this case we cited the statement of Prof. Haula Rosdiana and Edi Slamet Rianto:

“Tax laws and regulations must be comprehensive to the taxpayer, they must be unambiguous and certain, both to the taxpayer and to the tax administrator”.

This principle of certainty includes certainty about who should be taxed, what is taxed, as well as the amount of tax that must be paid and how much tax payable must be paid. Certainty is not only related to certainty about who is the subject of taxation, the object of taxation, and the basis for taxation and the amount of tax rates but also regarding procedures for fulfilling tax obligations including procedures for payment of reporting and implementation of taxation rights.

The principle of certainty is also the most basic thing in a taxation system, because an uncertainty will increase the dispute between taxpayers and tax authorities.

2) **Efficiency Principle**

This principle has 2 (two) dimensions, which are viewed from the dimensions of the tax authorities and the dimensions of the taxpayer. Tax collection carried out by the tax authorities is called to be efficient if the cost of tax collection carried out by the tax authorities is smaller than the amount of tax revenue collected. And,
for taxpayers efficiency can be achieved if the costs incurred by taxpayers to meet their tax obligations can be reduced to a minimum. In other words, tax collection can be called to be efficient if the cost of taxation is lower.

Rosdiana, Haula and Edi Slamet Irianto (2014) explained that the cost of taxation is the costs that must be incurred by the taxpayers, which can be measured either in monetary value or that cannot be measured in monetary value related to the process of implementing its tax obligations and rights. There are 3 (three) parts of cost of taxation, including:

a. Fiscal Cost  
Costs that can be measured by the value of money that must be disbursed / charged by taxpayers related to the implementation of their tax rights and obligations. The costs of printing and procurement of tax forms are included in the fiscal costs, such as papers, ink, photocopies, printed Tax Payment Slips and tax invoices and so forth.

b. Time Cost  
Represent the cost in the form of time required by the taxpayers to carry out their tax rights and obligations, for example:

- How many time does it take to fill in tax forms.
- How many time does it take to complete and submit a Tax Return (SPT).

c. Psychological Cost  
This cost is a psychological cost of taxpayers in fulfilling their taxation rights and obligations. These costs are costs that arise as stress due to the pressure to immediately fulfill the tax obligations.

3) Convenience Principle  
Convenience Principle is a principle the principle states that the right time to collect taxes should be in a pleasant and easy condition for taxpayers. For example, tax systems that rarely experience problems, systems that have high data security and confidentiality, and systems that can be used anytime and anywhere.

4) Simplicity Principle  
The principle that focuses on carrying out taxation rights and obligations, at least the government makes tax regulations that pay attention to easiness and simplicity, generally the simple rules become clearer, definite and certainly taxpayers are easy to understand them. For example: the tax system must be a user interface, easy to use, and only an internet connection is required.

RESEARCH METHODS

1. Research Approaches  
Research approach used is post-positivism approach. In a research using the post-positivism approach known that a knowledge is formed by data, evidence and logical considerations, in this case an appropriate method used by us is the qualitative method. This research method is a method to explore and understand the meaning of individuals or groups related to social or human problems (Creswell & Creswell, 2018).
2. Type of Research
The type of research conducted by us classifies into the descriptive analytical research group. Analytical descriptive research is to examine the status of a group of people, an object, a set of conditions, a system of thought, or a class of events in the present. The type of this research has an objective to make a description, figure or description in a systematic, factual, and accurate manner about the facts, properties and relationships between the phenomena under investigation. This type of descriptive research is also called as the normative survey because in this method, a researcher may compare certain phenomena so that they are a comparative study. So, by using this descriptive research, it can also investigate the position (status) of phenomena or factors and view the relationship between one factor and another. Therefore, this type of descriptive research can also be called as a status study. (Nazir, 2017).

3. Data Collection Technique
3.1. Literature Study
Literature study will be conducted in this research is by reading journals, books, articles, and news related to the VAT e-Faktur administration which is available in Indonesia as well as Australia.

3.2. Field Study
Field study conducted in this research is by an in-depth interview with a key informant. According to Nasution (2003) in an interview, a researcher should obviously conduct an interaction with the respondents and face a reality of the possibility of differences in views of the interviewees with the interviewer. The informants involved are users of the e-Faktur itself.

RESULTS AND DISCUSSIONS

1. Indonesian E-Faktur
E-Faktur was created from a series of ongoing processes. This process occurs from period to period, so as to produce an electronic media special for VAT which until now is still considered quite good. At least there is some history of the application of VAT technology in Indonesia, which are as follows:

1) In 2002
VAT technology in Indonesia first operated in 2002, DGT through regulations as stipulated in KEP-315/PJ./2002 requires some tax offices for PMA (Foreign Investment), PMB (Publicly Listed Company), and Badora (Foreign Company and People) to conduct reporting trials through a gateway which is a delivery system for a Periodic VAT Return and a Periodic Luxury Sales Tax Return online. At that time, an electronic media of e-SPT 1195 was introduced which had to be used by the Taxable Entrepreneur for VAT Purposes in creating electronic forms of Periodic VAT Return and administering reported VAT data. This electronic media has the disadvantage of not accommodating the Taxable Entrepreneur for VAT Purposes to make a Tax Invoice. So that this year a Tax Invoice is still made by the Taxable Entrepreneur for VAT Purposes as long as a standard Tax Invoice format specified by DGT is applied.

In this Decree (KEP), an online submission of a Periodic VAT Return and a Periodic Luxury Sales Tax Return is submitted with the following notifications:
• The Taxable Entrepreneur for VAT Purposes who became the trial participants filled up e-SPT 1195;
• The completely fulfilled e-SPT 1195 data were delivered to the DGT through the Delivery System Gateway of Periodic VAT Return and Luxury Sales Tax Return online (GSO 1195) by using a user ID and password given;
• When a Periodic VAT Return and a Periodic Luxury Sales Tax Return sent via GSO 1195 have been received by the DGT database, GSO 1195 will automatically issue a Minutes of Meeting of the delivery of a Periodic VAT Return and a Periodic Luxury Sales Tax Return that contains the Data Deposit Number (NPD) in real time;
• The Taxable Entrepreneur for VAT Purposes print out First Page of Tax Return (1195 and 1195 BM) sign it on;
• The Taxable Entrepreneur for VAT Purposes submit the First Page of Tax Return with the attachments as follows:
  ➢ The Minutes of Meeting of the Periodic VAT Return and the Periodic Luxury Tax Return Online which has been signed;
  ➢ The original copy of Tax Payment Slip - sheet 3 (three) of Periodic VAT Payment in case of Periodic VAT Return is underpaid and the Tax Payment Slip of Luxury Sales Tax Payment Slip in case of the Taxable Entrepreneur for VAT Purposes has made a submission transaction on taxable luxury goods;
  ➢ Other documents required as the mandatory attached documents on the Periodic VAT Return and the Luxury Sales Tax Return which has been transmitted online.

To the Tax Office where the Taxable Entrepreneur for VAT Purposes is registered. The document delivery can be directly submitted or sent via registered postage.

2) In 2003 until 2005
In this period of time, Tax Invoice was still not able to be made by using an electronic media, the Tax Invoice was made by a Taxable Entrepreneur for VAT Purposes as long as a specified Tax Invoice format standard was applied. In 2004, under Decree of DGT No. 88 /PJ./2004 the electronic application was implemented, the Decree explained that the submission of the VAT Tax Return can be done electronically through an Application Service Provider (ASP), which procedures for submission are described in KEP-05 / PJ. / 2005.

In this year, the definition of e-SPT was explained in regulation No. PER-145 / PJ / 2005, which stated that e-SPT was a Tax Return in electronic forms on an electronic media. In this period the VAT e-SPT transformed from e-SPT 1195 previously to e-SPT 1106.

3) In 2006 until 2010
In the period of these years, Tax Invoice was still unable to be made using an electronic media, Tax Invoice was made by a Taxable Entrepreneur for VAT Purposes as long as the Tax Invoice format standard specified by the DGT was implemented. In 2006 under Decree of DGT No.146/PJ/2006 there was a change in the VAT Return form which had an impact on the change in VAT e-SPT from 1106 to 1107. Reporting on the Periodic VAT e-SPT in the period of these years can also be done through an online system called e-Filing.
During this year also Decree no. PER-44 / PJ / 2010 was issued, the Decree was stipulated on 6 October 6 2010 informs us that there are transforms regarding the form, content, and procedure for filling and submitting the VAT Returns which come into force for the January 2011 tax period. The Decree also transformed the form from 1107 to 1111 form, so that the existing e-SPT must underwent an update to e-SPT 1111. The image below is a figure that shows a small portion of the appearance of VAT e-SPT 1111.

Source: Direktorat Jenderal Pajak (2011)

4) In 2011 – Present

During these years the e-Faktur system began to hold for all PKPs for VAT Purposes, the enforcement began on 1 July 2015 is the result of innovation sparked by DGT in an effort to revamp the VAT administration system. The objective of implementing e-Faktur is to provide convenience to a Taxable Entrepreneur for VAT Purposes when creating the Tax Invoices, and to increase DGT supervision on the issuance of Tax Invoices from unreal transactions by using and utilising technology safely.

The first phase of the e-Faktur implementation roadmap was carried out in July 2014, but at that time it was limited to only 100 specific the PKPs for VAT Purposes who registered or confirmed in the Tax Office covered by the DGT Regional Office of the Large Taxpayers, Special DGT of Jakarta, and Medium Tax Office in Jakarta. The implementation roadmap was continued on 1 July 2015 for all PKPs for VAT Purposes who registered within the the Tax Offices of Java and Bali area, the number of PKPs for VAT Purposes in Java and Bali who created the Tax Invoices as of June 30 2015 was 139,595 PKPs for VAT Purposes or 54.94% of the total PKPs for VAT Purposes who registered in Java and Bali. Based on the socialisation conducted by DGT, the mandatory target of e-Faktur will be applied to all PKPs for VAT Purposes in Indonesia which will be achieved by DGT on 1 July 2016.

With e-Faktur, the mechanisms of the tax invoice replacement, reprinting and cancellation of Tax Invoices have transformed from an administrative side to be simpler than before. If previously for reprinting tax invoices that were damaged / lost, an application must be submitted and must go through a series of studies, for now the PKPs for VAT Purposes are sufficient to reprint only via e-Faktur. It is because the transaction data of PKPs for VAT Purposes are already contained in the database of the e-Faktur system. The simplification of the process can also be felt when cancellation of a Tax Invoice occurs which previously had to send letters and copies which can certainly spend significant time.
Figure 9 following here is the front face of e-Faktur system used by the PKPs for VAT Purposes.

![Figure 9. VAT e-Faktur](image)

Source: Direktorat Jenderal Pajak (2016)

2. Australian E-Invoicing

Australia is a country that also applies e-invoicing for making Tax Invoices. e-Invoicing used by Australia are made with specified standards and which have the name of the Pan-European Public Procurement On-Line (PEPPOL) system.

PEPPOL itself is a system for doing cross-border purchases and sales of countries in the world. This system is governed by the existence of multilateral agreements around the world owned and maintained is the OpenPEPPOL association.

3. Indonesian e-Faktur Implementation Scheme.

E-Faktur is an electronic-based application created by DGT used by the PKPs for VAT Purposes as a facility to create the Tax Invoices as well as Periodic VAT Return. E-Faktur has a way of working with figure 10 below.

![Figure 10. Indonesian e-Faktur Implementation Scheme](image)

Source: Direktorat Jenderal Pajak (2014)

4. Australian e-Invoicing Implementation Scheme

Australian e-Invoicing system works for which the seller and purchaser systems should have an accounting system already registered with the system PEPPOL (could use ERP or cloud-based accounting system). When the seller’s system creates a tax invoice, the sales accounting system will send electronic invoices to the seller’s system, the seller’s PEPPOL system will conduct inspection and verification of tax invoices based on the company’s PEPPOL ID through the address database of the company. If it has been successfully verified,
the seller's system will send Tax Invoice data to the purchaser's PEPPOL system to send to a purchaser's accounting system (Figure 11 and Figure 12).

Figure 11. e-Invoice Scheme in Australian PEPPOL system

Source: Infocomm Media Development Authority (2020)

Figure 12. e-Invoice Filling and Transmission Scheme of purchaser and seller via Australian PEPPOL system

Source: Infocomm Media Development Authority (2020)

5. The Advantages of Indonesian e-Faktur

In the progress of creating a system, it cannot be instantly said that the system functions properly. A good system is a system that has passed a trial and error series, as well as e-Faktur, e-Faktur as an application has assisted DGT in maintaining VAT's reception from high demand on the usage of Tax Invoices from unreal transactions. However, e-Faktur is created not only to protect VAT reception, there are still a lot of things to do regarding specially VAT administration.

In addition to having some advantages, E-Faktur also have disadvantages. Some advantages that felt by the Taxable Entrepreneur for VAT Purposes, such as 1) a physical signature was replaced by electronic signatures; 2) Tax Invoices should not be printed, so they reduce the cost of paper usage, the cost related to printing, and the cost of document saving; 3) e-Faktur application can also make a VAT Return, so the Taxable Entrepreneur for VAT Purposes of Seller party will not need doing this, and 4) for Tax Invoices' numbering that previously should come to the Tax Office, now it can be made directly by the official tax site and therefore reduce the time to come to the Tax Office and get queue; 5) the Taxable Entrepreneur for VAT Purposes is
protected against abuse of Tax Invoices from unreal transactions, because e-Faktur produces Tax Invoices that are equipped with a QR Code saver that its authenticity can be seen via a QR Code Scanner app.

For DGT, e-Faktur is easy to use in 1) controlling through validation process of VAT Out and VAT In; 2) making easier for services due to the immediate process of inspecting, reporting, and assigning serial numbers of Tax Invoices; and 3) this electronic-based system will minimise abuse of Tax Invoice created by companies not yet confirmed as the PKPs for VAT Purposes, so the potential loss of state will be very small.

For the environment, e-Faktur is easy to use by not using papers, which comes from the woods. By using woods which generally come from the trees, the ecosystem of environment gets better. The global warming level can be minimised because of the trees.

6. The Advantages of Australian e-Invoicing
Australian Taxation Office (2020) states that e-Invoicing has numerous advantages for the Taxable Persons for VAT Purposes, the digital service companies (ASP), and consultants by giving the easiness and the automatisation of exchange and process of Tax Invoices.

1) Advantage for the Taxable Persons for VAT Purposes
   • Cost saving
     It is estimated that in making paper tax invoices requires AUD 30 and AUD 27 for invoices in emailed PDF format. Conversely, it only spends AUD 10 in processing invoices in e-invoices, mainly due to the time saved when working on them manually.

     Figure 13 and 14 explain that there is a shared transaction saving (between delivering and receiving Tax Invoices) around AUD 20 each time the e-Invoice replaces the paper tax invoice and only less when replacing the PDF invoice.

     **Figure 13. Cost of e-Invoice applying in Australia**

     ![Image](source: Australian Government (2019))

     **Figure 14. Shared Transaction Savings of e-Invoice applying in Australia.**

     ![Image](source: Australian Government (2019))
• **Time Saving and Failure Minimisation**

E-Invoice can assist the Taxable Persons for VAT Purposes to save time by need not to re-input an invoice or scan of an invoice, perform the correction or search for any missing VAT data. Data will be more accurate and complete when data moves from system to system.

The general e-Invoice standards ensure a consistent exchange of invoice information and important data is input accurately before the invoice can be sent.

E-Invoice reduces a manual handling and decreases a number of systems used. No data relocking means fewer errors and reducing the possibility of lost Tax Invoices in transit.

Although in some companies still apply a manual cross-checking before paying invoices, the time saved in administration should give the Taxable Persons for VAT Purposes an opportunity to focus on developing businesses.

• **Reliable and Safe**

E-Invoice network provides the safer and the more secure channels than email. Because electronic invoices are received directly to the accounting system of the Taxable Persons for VAT Purposes and sent through an electronic invoice framework through the approved and authenticated Taxable Persons for VAT Purposes, the fraudulent invoice risks or combined quite lesser. The only parties that will view electronic invoices are the software providers, purchasers, and suppliers. ATO will not go through or view e-Invoice.

• **Accreditation**

An e-Invoice accreditation in Australia requires a service provider to conduct an appropriate validation check and implement the integrity actions, such as checking (ABN) to ensure if they are active and valid to use in e-Invoice environment. Validating the ABN could give you a greater assurance about the sender’s identity and improving protection against a fraud abuse of the ABN of corporate.

• **A quicker payment time**

Australia supports small businesses by offering time for better payments. Since 1 January 2020, Australian tax consultants have begun to pay electronic bills in five days and pay interest on a delay in payments. It applies on a contract of up to $1 million where purchasers and sellers use the PPOL e-Invoice system.

• **One program connects to many Taxable Entrepreneur for VAT Purposes**

ATO has an approach to to commit to e-Invoice that companies being Taxable Persons for VAT Purposes can open their networks and trade with many counterparties, regardless of the software they use. It also ensures that all businesses, in all sectors, can access and benefit from electronic invoicing, and trade each other at the same level regardless of the size and financial software. Whether it is a private business or a public organisation, electronic invoicing is your gateway to fast, secure and unlimited trading.
• Environmentally friendly

By creating e-Invoice, an environmentally friendly program can be realised, because it eliminates paper and requires less energy, resources, and physical space. By not using paper, a Taxable Entrepreneur for VAT Purposes can save material costs, and has reduced the environmental impact of fewer shipments, paper and printing. A Taxable Entrepreneur for VAT Purposes also needs not to worry about invoices being lost when delivered or archived at the office, with e-Invoice, invoices stored in the system.

2) The Advantage for ASP

The adoption of e-Invoices creates new opportunities for ASP. These opportunities allow ASPs to be more innovative to create broad scope to create digital-based services and present the same ability to implement the system.

ASP can also include e-Invoicing systems as sales products, ASP can expand the basis of Taxable Persons for VAT purpose by offering digital solutions to create e-Invoices that can be operated regionally and globally.

3) The Advantage for consultants

Consultants (including accountants) play an important role as trusted advisors for small and medium sized businesses and are the advice sources for running a business. E-invoicing is an opportunity for consultants to make different service offerings by providing cutting-edge advice and pushing clients toward the future digital.

E-Invoices do not require e-mail and will not affect the consultant’s workload. In fact, automation will provide efficiency and increase business productivity of consultants.

The usage of e-Invoicing will also provide an opportunity to direct the consultant’s focus to client services - for example, helping clients improve bookkeeping, fulfill their reporting obligations, and increase cash flow. Ultimately, you will assist them to meet their business goals more efficiently.

7. Electronic Data Interchange (EDI) on Australian e-Invoice as a distinctioner with Indonesian e-Faktur.

In current technological era, there are quite drastic changes in administrative data. If the public receives data through printed documents, after that it is transformed to digital (PDF, Word, Excel, etc.), then to data in the form of electronic.

Digital data and electronic data have striking differences. These differences can be distinguished through the implementation scheme of e-Invoices that create digital data and electronic data (Figure 15).

The theory explained that the terminology of e-Invoices in the world are divided into several types, one of them is Electronic Data Interchange (EDI), which is an electronic data exchange without involving data required to print or to send as softcopy (PDF, Word, Excel). In EDI implementation, sending data via email no longer needs to be done. Because in EDI, a data exchange is done electronically directly between the purchaser and seller system. Therefore, in EDI, costs associated to creating the Tax Invoices and errors caused can be minimised.
Figure 15. The Difference between a Digital and Electronic Data

Source: Electronic Data Interchange Basics (2020)

Figure 15 consists of 2 different parts of the figure. In figure 15 part 2, it is explained that in order to be able to utilise the document (in this case a Tax Invoice). Tax invoices should first be created by the Taxable Entrepreneur for VAT Purposes through its invoice system, after that the documents are created by printing or in digital form. If the document is in printed form, then the delivery is done by post or facsimile and if it is in digital then characterised by email to the customers, then the customers will re-input the documents into the system.

However, in EDI (Figure 15 part 2) they were eliminated, that the inhibiting processes were eliminated by making it concise by connecting the system with each system of Taxable Entrepreneur for VAT Purposes.

Figure 15 part 1 is actually almost the same as the implementation scheme of e-Faktur implemented in Indonesia (see Figure 11). A lengthy process from creating a tax invoice until it is actually credited by the customer.

Whereas if you look at Figure 15 part 2, this system is almost the same as the PEPPOL system owned by Australia (see Figure 12) where the taxpayers are sufficiently connected only between the seller’s PEPPOL system with the purchaser’s PEPPOL system.

8. The Condition of Indonesian e-Faktur after implementation reviewed in ease of administration principle.

1. Certainty
   - Uncertainty of guarantee on VAT data
     Because this e-Faktur was created using technology, the taxation data created by this system is in digital. Problems arising from digital-based taxation data including data lost due to digital viruses and data theft.
     Based on interviews with several interviewees who use e-Faktur, there has never been a case about e-Faktur data theft. However, the problem occurred is when the data is infected that causes a data malusage. Some interviewees said that this data was really able to obtain by requesting back to the Regional Office of Taxes. However, the data obtained only contained data about information about
VAT Out Invoices created by the Taxable Entrepreneur for VAT Purposes, but data that contained information about VAT In Invoices should be re-inputted by the Taxable Entrepreneur for VAT Purposes. The loss of Tax Invoice information and compilation data is asked to request back only VAT Out Invoices information causing the Taxable Entrepreneur for VAT Purposes to have to re-enter input tax invoices which means the Taxable Entrepreneur for VAT Purposes should take time to input or scan VAT Out Invoices.

- **Uncertainty due to frequently troublesome network access.**

Aside from the advantages of e-Faktur, there are problems felt by the PKPs for VAT Purposes while using it. When the PKPs for VAT Purposes issued the Tax Invoices, it could not be separated from the connection to the DGT server which often experiences interference (server down). This is reasonable because in its operation, e-Faktur should be connected via the internet to the DGT server. Otherwise, electronic Tax Invoice cannot be created. Figure 16 explains that the DGT server downtime level did not experience improvement from 2016 - 2019 as seen between the target and the realisation.

![Figure 16. Downtime Level of DGT ICT System](image)


The problem of the termination of DGT ICT services has a significant impact on PKPs, the PKPs for VAT Purposes which has a very small sales volume of Taxable Goods / Taxable Services which is not a problem, but this problem will be different from the PKP for VAT Purposes that has a very large sales volume, this problem will make the company tend to be unproductive and time consuming (time cost) in company activities.

This has led to the fact that this technology only exists but cannot be fully used, so it seems only as a complement (Sukarno, 2017).

2. **Efficiency**

- **Fiscal Cost**

Creating a Tax Invoice by e-Faktur actually is a must that must be done by a PKPs for VAT Purposes. Indirectly, this is actually a form of forced compliance, because there is no other way allowed by a PKPs for VAT Purposes to create a Tax Invoice other than using applications made by DGT in this case e-Faktur.
First time when e-Faktur was launched, it was said that the Tax Invoice made by this e-Faktur was not required to print, but based on the statement of the interviewees who on average use this application every day stated the opposite. That, on average, the counterparties of the transaction still asked for the printed Tax Invoices, and only a small portion of the counterparties require in digital form (PDF).

Accordingly, in this case the actual e-Faktur still creates costs that are almost the same as the costs incurred when making the manual Tax Invoices.

Costs related to printed Tax Invoices which involve the usage of paper and printing ink costs, costs related to delivery of printed Tax Invoices, i.e by sending it using expedition services.

Tax Invoices are also printed because there are still several tax auditors who request the physical Tax Invoices. However, there are also those who say that the request on the physical Tax Invoices is usually related to the Standard Operational Procedure (SOP) of their respective companies.

- Time Cost

E-Faktur that have an electronic prefix should no longer require an extra work time to make a digital Tax Invoice (PDF), because in accordance with the meaning of e-Faktur itself that there is an electronic exchange directly (realtime) using a network between software system networks.

One of the interviewees wished that this e-Faktur could be done in realtime between networks, so that the time for processing this invoice could be reduced.

Digitally formed invoices (PDF) take time to send. It was said that for companies that do not do a lot of transactions, it is not a problem but for retail companies that do a lot of transactions, sending via email is time consuming. What's more, mistakenly sending via e-mail to counterparties may occur.

Other inefficiencies regarding the VAT administration, especially tax invoices, was said by the interviewee that users should do double work to make invoices, such as making and printing the invoices specially for tax purpose, then also making and printing the commercial invoices specially for company purpose.

- Psychological Cost

Since the operation of e-Faktur requires an internet network, but the network for access is often down, it made users tend to experience increased emotions.

The emergence of excessive emotion was explained by the interviewees that in busy times e-Faktur cannot be accessed, but on the other hand the work should also be done immediately because of the insistence of superiors who want the work immediately completed.

The pressures from customers who need Tax Invoices and pressures from superiors to do other work is done to make users tend to experience stress in the office environment.
3. Convenience
The condition of e-Faktur from the convenience perspective, currently e-Faktur can be considered lack in comfort level. The inconvenience was explained by the resource person who said that the existing e-Faktur system also could not be done yet anytime and anywhere.

Due to e-Faktur system evenly is still operated with a personal computer device that only owned by the company, then creating invoices with e-Faktur cannot be done anywhere. Therefore, e-Faktur can only run and uses at the office.

The interviewee explained that if the conditions were not possible beyond the ability (force majeure) such as the spread of the virus, which requires the users to work from home, this e-Faktur could not be carried out, because the system could only be accessed at the office and not at home.

4. Simplicity
E-Faktur used by PKPs for VAT Purposes currently has a user interface that makes it very easy for all taxpayers. The existing e-Faktur has a display that some taxpayers have already understood, because it is only related to VAT Out and VAT In. Besides that, in terms of its implementation, a lot of meaningful problem are not found according to the interview results with several PKP for VAT Purposes.

One of the interviewees stated about the inefficiency regarding e-Faktur. It is said that creating these invoices should be done twice, such as in making invoices, which by printing a tax invoice and also printing the company commercial tax invoices.

CONCLUSIONS
There is a fundamental difference between Indonesian e-Faktur administration system and Australian e-Invoicing administration system as a benchmark. If Indonesian e-Faktur still involves the data exchange in the form of tax invoices in physical and digital form (PDF), it is different from Australia which does not involve it, because the electronic data interchange has been implemented.

Transformations in tax administration by using technology should be welcomed by users and tax collection agencies. In this case taxation agencies should prepare carefully not only from the system formation, but also on the infrastructure that supports the system.

E-Faktur that currently exists even still has some problems that are far enough said to meet aspects of ease of administration. Such as data security issues, network access to e-Faktur, costs incurred in connection with the implementation of e-Faktur, inefficiencies due to double processings, and inefficiencies that cannot be used anytime and anywhere.

Continued improvement on e-Faktur is necessary, by observing the problem conditions of the PKPs. Because literally e-Faktur even now is still far from being called as "electronic" which should meet the elements of convenience.
REFERENCES


