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Master's Dissertation

# Understanding the Causes of Errors in the Tax Receivable Administration in Indonesia

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Graduate School of System Design and Management Keio University Major in System Design and Management

## SUMMARY OF MASTER'S DISSERTATION

Student Identification Number	81834589	Name	Muhammad Arif Mulya	
Title				
Understanding the Causes of Errors in the Tax Receivable Administration in Indonesia				

Abstract

Indonesia's Directorate General of Taxes has a business process for managing its tax receivable. Due to its poor management, tax receivable account is of special concern among other accounts in the Central Government Financial Report. The Audit Board demands tax receivable administration to result in more reliable (accurate, complete, and timely) accounting information. This phenomenon of an information system delivering unexpected results might be an example of failure in implementation. Interviews to several employees are done to identify the causes of errors. The employees who are currently holding or who have hold positions responsible for such task are interviewed to assess their understanding of the system and to let them assess the system itself. Findings suggest that poor visibility of the whole process and poor knowledge sharing pattern are the two main themes that cause the users to use the information system in the wrong way. These lead to the necessity to create the methods of raising employees' awareness and enhancing communications between them.

Keywords (5 words)

Business process, information system, accounting information system, implementation failure, tax administration

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## TABLE OF CONTENTS

Summary of M	Master's Dissertation	. 1
Acknowledge	ments	. 2
Table of Cont	ents	. 3
List of Tables		. 5
List of Figures	s	. 6
CHAPTER 1	INTRODUCTION	. 7
	1.1 Background	. 7
1.1.1	Tax Revenue and Tax Receivable	. 7
1.1.2	Purpose of Tax Receivable Administration	. 8
1.1.3	Problems in Tax Receivable Administration	. 9
	1.2 Purpose	10
	1.3 Literature Review	11
1.3.1	On Qualitative Research	11
1.3.2	On Business Process	13
1.3.3	On Information Systems	14
	1.4 Originality	18
	1.5 Thesis Structure	20
CHAPTER 2	TAX RECEIVABLE ADMINISTRATION	21
	2.1 Tax Administration	21
	2.2 Accounting Cycle at the Central Government	23
	2.3 Accounting Cycle of Tax Receivable	27
	2.4 Accounting Policy for Tax Receivable	30
CHAPTER 3	METHOD	36
	3.1 Approach	36
	3.2 Interview Design	38
	3.3 Interview Questions	39
	3.4 Research Process	42

CHAPTER 4		VISUALIZATION OF THE PROCESS AND CAUSE OF ERRO	ORS
		45	
	4.1	Unit of Analysis	45
	4.2	The Business Process	46
4.2.1	(	Dbjection	48
4.2.2	ŀ	Appeal	52
	4.3	The Accounting Process	56
	4.4	The Information System	58
	4.5	The Organization	59
	4.6	Existing Internal Control System	63
	4.7	Latest Problems Found by Audit Board	64
CHAPTER 5		FINDINGS FROM INTERVIEW	66
	5.1	Data Entry Problem	66
	5.2	State of Dispute Problem	69
	5.3	Balance Update Problem	72
	5.4	General Findings	73
CHAPTER 6		DISCUSSIONS	76
	6.1	On the System	76
	6.2	On the Users	76
	6.3	Validation	77
CHAPTER 7		CONCLUSION	80
References			82
Appendices			85
	1.	Appendix 1 Interview Protocol	85

## LIST OF TABLES

Table 1 Central Government's Current Assets at the End of FY 2018 (Directorate General
of Taxes 2019)
Table 2 Predictions from Theories of Resistance (Markus 1983)       15
Table 3 Causal Factors and Responses of Mandatory IT Use (Bhattacherjee, et al. 2018)
Table 4 Scientific Papers Used in This Study    17
Table 5 Legal Documents as Source Documents of Tax Receivable
Table 6 Interview Questions
Table 7 Employees Interviewed and Their Positions    43
Table 8 Differences Between Objection and Non-Objection Procedures         47
Table 9 Elements of Objection Process    49
Table 10 Objection and Non-Objection Decisions Issued in FY2018 and Their Possible
Outcomes (Directorate General of Taxes 2019)
Table 11 Elements of Appeal Process    53
Table 12 Court Rulings on Appeal and Lawsuit Issued in FY2018 (Directorate General
of Taxes 2019)
Table 13 Results of Audit on Internal Control System, FY2018    65
Table 14 Summary of Research Findings    75

## LIST OF FIGURES

Figure 1 Sources of Indonesia's State Revenue 2015-2018 (Directorate General of Taxes
2019)
Figure 2 Strengths and Weakneses of Strategies for Theorizing from Process Data
(Langley 1999) 12
Figure 3 Flow Model of Reengineering Process (Nakano, et al. 2005) 13
Figure 4 Class Diagram of Elements in Tax Administration
Figure 5 Example Journal Entries (Directorate General of Taxes 2017)
Figure 6 Accounting Cycle at the Central Government (Ministry of Finance, Republic of
Indonesia 2019)
Figure 7 Interrelationship Between Cash, Receivable, and Revenue Accounts
Figure 8 Overview of Tax Receivable Administration
Figure 9 Processes that Create and Modify the Tax Receivable Balance
Figure 10 Presentation of Taxation Receivables in Government's Balance
Figure 11 Errors Made in Recording Court Rulings Data
Figure 12 Unit of Analysis 46
Figure 13 Workflow of Adjustment Processes
Figure 14 Detailed Business Process Diagram for Objection 50
Figure 15 Detailed Business Process Diagram for Appeal
Figure 16 Management, Main, and Supporting Processes in DGT 57
Figure 17 Overlapping of Accounting Process and Main Processes in DGT 58
Figure 18 Modules in SIDJP for Tax Office
Figure 19 Organization Structure of DGT
Figure 20 Organization Structure of Regional Tax Office
Figure 21 Organization Structure of Tax Office
Figure 22 Translation of Court Ruling to Execution Letter
Figure 23 Reception of Objection Letter in Tax Office

## CHAPTER 1 INTRODUCTION

### 1.1 Background

#### 1.1.1 Tax Revenue and Tax Receivable

Taxation is a major source of state revenue for most countries, including Indonesia. Between 2015 and 2018, on average, 75% of Indonesia's state revenue (accrual-based) came from taxation, as shown in Figure 1 (Directorate General of Taxes 2019). Most of Indonesia's taxation revenue is administered by Directorate General of Taxes, while the rest is administered by Directorate General of Customs and Excise. Both directorates general are agencies of the Ministry of Finance (Audit Board of the Republic of Indonesia 2019).



Figure 1 Sources of Indonesia's State Revenue 2015-2018 (Directorate General of Taxes 2019)

Under accrual-based governmental accounting, tax revenue is recognized when a legal event that gives the government the right to collect tax occurs (official assessment regime) and when the taxpayers pay their tax without preceded by government's action (self-assessment regime). In double-entry bookkeeping system, tax revenue incurred by self-assessment regime is recorded in pairs with cash received, while tax revenue incurred by official assessment regime is recorded in pairs with tax receivable.

As an income statement account, revenue only affects financial reports in the current year. Receivable, on the other hand, will be carried over to the next fiscal years because it is a balance sheet account. An individual receivable is only eliminated once it has been paid in full. The longer it takes to settle, the longer the receivable will stay on the balance sheet. Tax receivable is likely to be settled in more than one fiscal year, because taxpayers are allowed to challenge the correctness of official assessment, and hence delay the settlement.

#### 1.1.2 Purpose of Tax Receivable Administration

As can be concluded from previous section, tax receivable arises as a product of official assessment by tax authority and is expected to be paid by taxpayers in cash. The process to make taxpayers pay the receivable is called collection. To maintain an adequate collection process, having quality accounting information is a prerequisite.

Accurate, complete, timely, and reliable tax receivable balance helps defining thorough collection strategy. Some of the questions that can be answered by this information are (1) which individual receivables need priority in collection, (2) which individual receivables must be excluded from collection for the time being, (3) which individual receivables are qualified for refund because they have been paid more than they should be, and (4) which collectability status should individual receivables be grouped into.

#### 1.1.3 Problems in Tax Receivable Administration

At the end of fiscal year 2018, taxation receivables administered by DGT represented 6.16% of all current assets on central government's balance report, as can be seen in Table 1. It was a significant portion held by a single government agency and consequently it received special attention from the Audit Board. In its audit reports for FY 2018 (Audit Board of the Republic of Indonesia 2019), the Audit Board mentioned that there were problems in DGT's tax receivable accounting which made the presentation of tax receivable balance could not be reasonably assured.

Breakdown of Current Assets	FY 2018 Balance		
Dicardown of Current Assets	Amount (in billion JPY)	%	
Cash & Cash Equivalent	1,313	40.79%	
Taxation Receivables (DGT)	198	6.16%	
Taxation Receivables (DGCE)	74	2.28%	
All other Receivables combined	527	16.37%	
All other Current Assets combined	1,107	34.39%	
Total Current Assets	3,220	100,00%	

Table 1 Central Government's Current Assets at the End of FY 2018 (Directorate<br/>General of Taxes 2019)

The Audit Board recommended DGT to improve its tax receivable administration along with the internal control system, but they did not address the actual causes of the failure. DGT has responded with formalizing the internal control system for tax receivable administration in 2017, but similar problems kept happening in FY 2018. This contradicting fact, of making recurring mistakes despite having a set of business processes and information systems in place, is worth an investigation.

### 1.2 Purpose

Directorate General of Taxes, as an agency responsible for administration of tax receivable is currently procuring a new information system to replace the existing one. The new information system, which is set to be developed from early 2021 and to be deployed starting from mid-2022, is estimated to cost in the scale of tens to hundreds of billion Japanese Yen, based on experience in other countries like Finland and New Zealand. With the high cost of investment in this new information system, it is naturally expected that the implementation will be successful and bring benefit to the overall tax administration. In accordance with that, now is the right time to assess the current problems in the information system, to come up with the issues preventing it to run as expected. If those issues can be addressed before the implementation of next generation information system, we can expect high chance of successful implementation and the procured information system will be worth the investment cost.

This study aims to understand why certain errors in tax receivable administration in Indonesia keep recurring, despite having a set of information system and business processes in place. Therefore, the research question is defined as "how and why the tax receivable administration in DGT does not deliver the expected level of accuracy, completeness, timeliness, and reliability for the presentation of tax receivable balance". The problem can be found in the system itself, which will result in recommendations to improve the system, or can be found in the human aspects, which will result in recommendations to improve the human resources.

### 1.3 Literature Review

To realize the purpose, the problem is approached from two perspectives: the business process and the information system, analyzed through the lens of qualitative research. Business process approach is chosen because tax receivable administration consists of business processes across different organizational units within DGT. The flow of accounting data and information is extracted from business process analysis conducted on procedures in Directorate General of Taxes. Information system approach is chosen because tax receivable administration involves the use of information system by the employees of Directorate General of Taxes. Resistance from users, in the form of non-use, misuse, and abuse, prevents the system from delivering its best performance.

#### 1.3.1 On Qualitative Research

This research is not intended to answer the question "what" or "how many," but rather "how and why" certain phenomenon happens. The desired output of conducting this research is a narrative that explains the phenomenon in question. Therefore, a framework for qualitative research is needed.

Langley (1999) argued that theorizing from process data possesses its own unique challenges, as opposed to theorizing from variance. First, "data" extracted from process are mainly composed of events, not variables which can be expressed mathematically. Second, there are multiple levels and units of analysis of process data, while the process itself cannot be clearly separated from other processes. Third, there are data that cannot be captured in concrete forms and classified accordingly, making it difficult to analyze and interpret. Lastly, process data might be too vast, creating hardships in determining which data are relevant and which are not.

Upon reviewing the literature, Langley (1999) identified seven strategies or patterns commonly used in understanding or theorizing from process data. Each strategy has its strengths and weaknesses, as shown in Figure 2.

Strategy	Accuracy	Simplicity	Generality
Narrative	High	Low	Low
Grounded Theory	$\uparrow$		
Temporal Bracketing			
Visual Mapping			
Synthetic Strategy			
Quantification		$\checkmark$	$\downarrow$
Computer Simulation	Low	High	High

Figure 2 Strengths and Weakneses of Strategies for Theorizing from Process Data (Langley 1999)

Walsham (1995) laid several critical reference points for authors aspiring in interpretive research. He began by putting philosophical basis of interpretive research and contrasting it with positivist approaches. Citing Van Maanen (1979), Walsham also warned that because interpretive researchers construct their understanding (called "second-order concepts") upon interviewees' interpretation (called "first-order concepts") of the actual phenomena, it is important to base the research on solid theory and to have insightful analysis. Without those two, it will be difficult to deliver the second-order concepts no matter how much data have been collected in the study.

#### 1.3.2 On Business Process

Nakano et al. (2005) provided a holistic methodology for business process reengineering, which includes a standard flow model, visualization method, and evaluation algorithm. The flow model consists of five steps: goal setting, visualization, analysis, change plan, and verification, as shown in Figure 3.



Figure 3 Flow Model of Reengineering Process (Nakano, et al. 2005)

To overcome challenges in finding the problems and improving the process thereafter, Nakano et al. (Nakano, et al. 2005) suggested to visualize business process flow and cause-problem relationship in parallel, so that those two figures can improve each other simultaneously. The chosen figure model for visualization of process flow was Unified Modeling Language (UML) with Eriksson-Penker business extension, while the chosen figure model for visualization of cause-problem was reality tree from Theory of Constraint (TOC).

#### 1.3.3 On Information Systems

Markus (1983) provided a set of three theories as a framework to explain why certain implementation of information system failed. He argued that a system is resisted by its users either because of certain personal dimensions of the users, because of problems in the system itself, or because of the interaction between the system and its context of use.

In the first theory, changing the users, either by training them or replacing them with new users, will improve the acceptance. In the second theory, because the system has technical problems, fixing those problems will solve the resistance issue. The third theory can explain the phenomenon in which neither system nor user replacement will improve the acceptance. Markus applied all three theories to a case study of a financial information system at Golden Triangle Corporation (GTC). Those three theories are summarized in Table 2.

	People-Determined	System-Determined	Interaction Theory (Political Variant)
Nature/cause of resistance	Certain personal dimensions of the users	5	In the context of political struggle
Predictions (How to solve the resistance)	Change the people involved	Fix technical problems	Other (changing individual or fixing the system has little effect)

Table 2 Predictions from Theories of Resistance (Markus 1983)

There are many other competing theories trying to analyze the behavior of information system users. An example is Bhattacherjee, et al. (2018) who proposed seven causal factors and processes that drive specific information technology user responses and their evolution over time, based on coping theory. They argued that mandatory information technology use is a disruptive event, upon which the users will make appraisals and cope accordingly.

Users' primary appraisal is whether the information technology is an opportunity or a threat for them. Their secondary appraisal is whether they have high or low control over it. The idea was that users' response reflect their appraisals on the situation and that their response will change over time depending on the change in their initial appraisal. Those propositions are presented in Table 3.

Proposition	Primary Appraisal (on the IT)	Secondary Appraisal (on control)	Response
-------------	----------------------------------	-------------------------------------	----------

P1	Opportunity	High	Engaged
P2	Opportunity	Low	Compliant
P3	Threat	Low	Reluctant
P4	Threat	High	Deviant
P5	Opportunity	Low $\rightarrow$ High	Compliant → Engaged
P6	Threat → Opportunity	Low	Reluctant → Compliant
P7	Threat	High → Low	Deviant $\rightarrow$ Reluctant

Table 3 Causal Factors and Responses of Mandatory IT Use (Bhattacherjee, et al.2018)

Trkman and Trkman (Trkman and Trkman 2014) used another approach, the actor network theory. They argued that "measuring end-users' or managers' satisfaction is not necessarily a good proxy for the success of IS use". Over the time, an implementation of information system which was initially successful can have adverse effect if the actors' interest somehow deviates from the original organization's interest.

Beaudry et al. (Beaudry, et al. 2020) did a literature review on previous studies concerning acceptance and resistance user behaviors. They suggested that acceptanceresistance and conformity-nonconformity are on different dimensions. It is possible for users to accept the system while not conforming to the organization's intentions.

Scientific papers used in designing and developing this research is summarized in Table 4.

Title	Author(s) (Year)	Contribution to This Research
Interpretive Case Studies in IS Research: Nature and Method	Walsham, G. (1995)	<ul> <li>Comparison between interpretivism and positivism</li> <li>Interpretive studies rely on good theory &amp; insightful analysis</li> <li>Interviews are the primary data source</li> <li>How to generalize: concepts, theory, implications, or insight</li> <li>How to report the study: researcher's stance</li> </ul>
Strategies for Theorizing from Process Data	Langley, Ann (1999)	<ul> <li>Comparison between process theory and variance theory</li> <li>The characteristics of process data</li> <li>Strategies for constructing theory; e.g. "alternate template strategy"</li> </ul>
Power, Politics, and MIS Implementation	Markus, M. Lynne (1983)	<ul> <li>Alternate template to explain causes failure in IS implementation:</li> <li>User-determined theory: resistance is caused by the users' characteristics</li> <li>System-determined theory: resistance is caused by the system's characteristics</li> <li>Interaction theory: interaction between characteristics of the users &amp; the system</li> </ul>

Table 4 Scientific Papers Used in This Study

## 1.4 Originality

There are many studies that try to explain the failure of an information system. An example is Belhaj, Sukoharsono and Suyadi (2014) who studied oil companies in Libya through a descriptive qualitative method. They found that user competency played an important role to the success of management information system there.

Another example is Trkman and Trkman (2014), which is also mentioned in previous section. They conducted a case study on information system implementation in an educational organization. One of their findings was the interests of actors in information system contributes to its implementation success.

Javadi and Dastjerdia (2011) used a different approach, which was a descriptive quantitative study. They surveyed employees and managers in Isfahan Power Plant Management Corporation in Iran to measure the effect of management information system to employees and managers' resistance.

The last example is Bhattacherjee et al. (2018), which is again also quoted in previous section as a source of constructing this research's method. In writing their paper, Bhattacherjee et al. interviewed 42 physicians at a large community hospital over an 8-year period to understand how their responses to information system might have changed.

Each of studies cited above has different focus and setting, from mining companies, educational organization, power plan, to healthcare institution. Object of this study is a government agency which differs from those types of organization, in terms of working culture, how the organization is structured, business processes, and so on. Furthermore, the information system studied in those cited papers was viewed as a general information system used by every employee in the organization. On the other hand, the information system in this study, even though is used by all the employees, consists of various modules to assist a wide range of business processes. This study focuses only on the business processes which affect the tax receivable administration. Therefore, a different approach is needed to trace the use of information system in this study, in accordance with the research purpose and research question set in previous section.

This study utilizes business process analysis to find the area of tasks with high significant errors, based on previous audit results. A case study is then conducted to discover how and why the errors happened. The case study follows the template provided by three theories on users' resistance. The employees who are responsible for tasks identified on first step are asked to assess their understanding of the whole business process and to let them assess the information system.

## 1.5 Thesis Structure

The rest of this thesis is organized as the following. In Chapter 2, tax receivable administration is explained in detail to set the context. Chapter 3 clarifies the method of this research. In Chapter 4, the case study is described. Chapter 5 presents the findings from the case study while Chapter 6 discusses those findings further. Chapter 7 concludes the study with explanation of the limitation and what can be done in future research.

## CHAPTER 2 TAX RECEIVABLE ADMINISTRATION

## 2.1 Tax Administration

To have a solid understanding of how tax administration works, it can be traced back to sovereign right of a state to impose tax on its subjects. The concept of right-totax dictates that under the law, certain taxpayer must pay certain amount of tax, upon the occurrence of certain economic event. This abstract concept is manifested in an assessment which is performed by either the taxpayer or the tax authority.

In Indonesia, the economic events that may raise tax include when someone receives or earns income (e.g. Income Tax), when someone pays for goods or services (e.g. Value-Added Tax), and when someone possesses assets (e.g. Land and Building Tax). For Income Tax, the beneficiary of the income is the main taxpayer, although some employers are given mandate to collect the tax when they pay their employees' salary. For Value-Added Tax, the obligation to collect the tax is given to the enterprise (either an individual or a corporation) who transfers the goods or service, instead of the buyers. Individuals or corporations who is required to collect and/or pay taxes are collectively called taxpayers.

There are three building blocks that make each tax assessment unique and does not overlap with other tax assessment. First, when an assessment is conducted, the taxpayer must be identified, and this is done using the **taxpayer identification** number (TIN) assigned to every taxpayer when they are registered. Second, the economic events that raise the tax must be identified, and these are already prescribed in the taxation laws (the **tax kind**). For example, the economic events of earning an income is the domain of Income Tax. Third, the period in which the economic events happen must be identified (the **tax period**). For Income Tax and Land and Building Tax, the period is yearly. For other kind of taxes, the period is monthly. Each assessment concludes with the **tax amount** which still needs to be paid by the taxpayer or which entitles the taxpayer for a refund.

Assessment by taxpayers results in the form of **Tax Return**, while assessment by Tax Office results in the form of **Notice** of Tax Assessment/Collection. The validity of Tax Return is overridden by Notice, which in turn is overridden by **Objection Decision**, which in turn is overridden by **Court Ruling**.

Objection Decision is issued by the Regional Tax Office which supervises the Notice-issuing Tax Office. Both tax offices and regional tax offices are the organization units of Directorate General of Taxes. On the other hand, Tax Court is an independent administrative body outside the Directorate General of Taxes. In that sense, Objection is a partial justice procedure while Appeal is an impartial justice procedure.

The amount of tax assessed in the Notice, Decision, or Ruling document is an embodiment of the tax receivable or the tax payable concept. If a Notice, Decision, or Ruling document indicates that the taxpayer is still required to pay tax in addition to what they have paid previously, the document becomes the legal basis for collection of the corresponding tax receivable. The relationships among the elements in tax administration are presented in Figure 4.

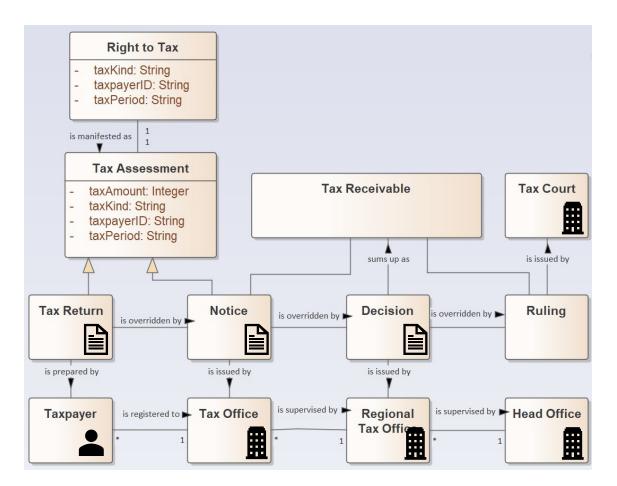


Figure 4 Class Diagram of Elements in Tax Administration

## 2.2 Accounting Cycle at the Central Government

Accounting is a process to identify, record, measure, classify, summarize financial transactions and events, and to present the report as well as interpret the results (Ministry of Finance, Republic of Indonesia 2019). Accounting runs as a cycle, which begins and end with the corresponding fiscal year. In Indonesia, those dates are January 1<sup>st</sup> and December 31<sup>st</sup>, respectively.

A financial **transaction** is an event which results in the recognition of revenue or expenditure, as well as rights or obligation of an accounting entity. An example of this is a sale event, which happens when a company sells goods and results in the company's recognition of revenue along with the rights to collect the payment. The reverse, a purchase event, is also a financial transaction because it results in the company's recognition of expenditure along with the obligation to fulfill the payment. In government accounting, such events also occur, although the most common form of financial events is not bilateral transactions, but rather the execution of law. For example, tax revenue does not result from sale or purchase event between government and the taxpayers. It results from what taxpayers have or do, which is taxable according to the law. As a more specific example, the event when a taxpayer acquires income is taxable under the Income Tax Act.

A transaction or event by itself does not have concrete form and is not easily distinguishable from other transaction or event. Therefore, a physical thing must be used as an indicator that a transaction has happened. In accounting in general, that physical thing is called **source document**. Looking back at the tax example from previous paragraph, the circumstances of the taxpayers must be assessed to determine whether certain taxable condition has been fulfilled. The result of such assessment is manifested in a legally binding document. If done by the taxpayers, the assessment results in a tax return and if done by the tax authority, the assessment results in a notice of tax assessment.

Based on its source documents, a transaction is then analyzed to determine which accounts in the general ledger are affected and by how much. In case of tax revenue, the transaction affects the revenue account and either one of cash account or receivable account. Again, using the tax example, both tax return and notice of tax assessment contain information about the taxpayer, the condition that raised the tax, and the amount of tax itself.

The debits and credits to each account are initially recorded as journal entries, ordered chronologically. A journal entry is a row in the **journal**, which holds the information about the affected account, the amount, and the effective date. In double-entry bookkeeping system, a transaction affects at least two accounts; one is debited, and one is credited. An example of journal entries is given in Figure 5. Two first entries in Figure 5 record the event of tax revenue from tax return (cash journal) while two last entries record the event of tax revenue from notice of tax assessment (accrual journal).

Date	Account	Description	Debit	Credit
2020/04/01	313121	Received from Other Entity	999	
	411xxx	Taxation Revenue xxx		999
2020/04/01	115xxx	Taxation Receivable xxx	999	
	411xxx	Taxation Revenue xxx		999
Figure 5 Example Journal Entries (Directorate General of Taxes 2017)				

If the amount of tax has been paid before the source document is issued, revenue account is credited, and cash account is debited. This kind of transaction is called cash transaction and recorded in **cash journal** and **cash ledger**. If the amount of tax has not been paid before the source document is issued, revenue account is credited, and receivable account is debited. This kind of transaction, which recognizes income or expense not yet received or paid in cash, is called accrual transaction and recorded in **accrual journal** and **accrual ledger**. Government accounting in Indonesia maintain these two kinds of transaction.

Journal entries which affect the same account are collected into a subledger. For instance, Taxation Revenue subledgers hold journal entries that modify Taxation Revenue accounts. All subledgers recorded by an accounting entity collectively makes up

the **general ledger**. In other words, general ledger is the central database of an accounting information system.

At the end of an accounting period (monthly, quarterly, biannually, or annually as required by stakeholders of an accounting entity), financial reports are prepared. The first step is to summarize the general ledger into a **trial balance**. As its name suggest, a trial balance consists of every account's ending balance. **Adjusting journal entries** (different from the adjustment process discussed in the following sections) are made to correct the reporting of unsettled transactions of income and expense. For example, when a rent expense that was incurred in April 2019 is found to actually cover the rent until March 2020, it is adjusted to reflect the expense in fiscal year 2019 (current accounting period) only.

Each accounting/reporting entity prepares its own **financial reports**. Those financial reports are then consolidated to make up a set of Central Government Financial Reports (CGFR). When consolidated, several elements of financial reports will be compensated against each other. For example, in Figure 5, Directorate General of Taxes recorded cash receipts in *Received from Other Entity* account because the cash paid by the taxpayer is received by a Treasury Office, not by a Tax Office. This account is compensated with *Paid to Other Entity* account (which was recorded by Treasury Office), leaving only Cash and Taxation Revenue accounts.

Ministries or agencies' (M/A) financial reports consist of Budget Realization Report (BRR), Balance (BAL), Operational Report (OR), Statement of Changes in Equity (SCE), and Notes to the Financial Reports (NFR). The Treasurer prepares two additional reports, Statement of Changes in Surplus Budget Balance (SCS) and Statement of Cash Flows (SCF). BRR and OR report the same things, the income and expenses, but from different perspectives. BRR is prepared from cash journal and ledger, while OR is prepared from accrual journal and ledger. Income and expenses from both BRR and OR correspond with assets and liabilities in the Balance. The complete accounting cycle at the central government, as explained in this section, can be illustrated in Figure 6.

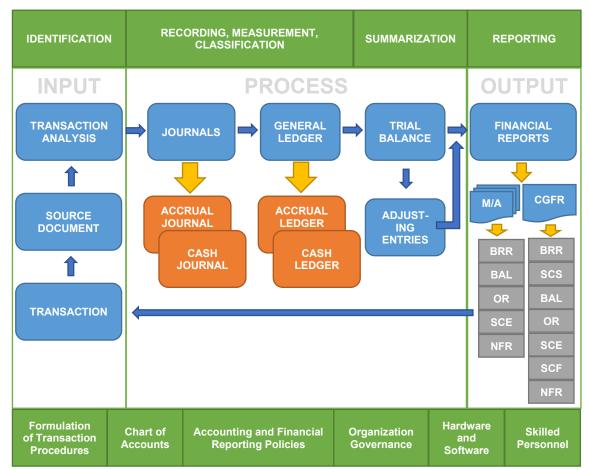


Figure 6 Accounting Cycle at the Central Government (Ministry of Finance, Republic of Indonesia 2019)

## 2.3 Accounting Cycle of Tax Receivable

As pointed out in previous section, tax receivable comes from the amount of tax assessed by tax authority. Because it takes time from the issuance of tax assessment notice until it is paid by the taxpayer, even only for one day, the tax amount is stored temporarily in the balance sheet as tax receivable. The amount of tax receivable decreases with payment by taxpayer or because of subsequent Objection or Appeal processes. That amount can also increase as a result of Objection or Appeal processes.

Example in Figure 7 illustrates the interrelationship between the three accounts, Cash, Tax Receivable, and Tax Revenue, during tax receivable administration. First, a Notice is issued, stating the tax amount as 100 and it becomes Tax Revenue. This amount has just been manifested in the form of Notice and is not immediately paid, so it is countered by an increase of 100 on Tax Receivable account, instead of Cash account.

At the next occasion, the Notice is paid partially at 50. Therefore, Cash is debited by 50 and Tax Receivable must be credited by the same amount. After paying that amount, taxpayer files an Objection and the decision eventually rules that the amount of tax for the Notice should have been 70. Adjustment is made to the accounting record by subtracting 30 from both Tax Receivable and Tax Revenue. Upon that decision, the taxpayer pay the rest of the tax amount by Cash 20. When all the accounts are summed up, Tax Receivable is zeroed while Cash and Tax Revenue each equals 70. When the value of an individual receivable has been zero, its accounting cycle ends.

	Cas	sh Tax Re	ceivable	Tax Re	evenue
Initial Balance	0	0			0
1. When Notice is issued		100			100
2. When Notice is paid partially	50		50		
3. When Objection Decision is issued			30	30	
4. When Notice is paid in full	20		20		
Final Balance	70	0			70

Figure 7 Interrelationship Between Cash, Receivable, and Revenue Accounts

In practice, there are many transactions that modify tax receivable balance, but they can be grouped into three class of transactions as shown in Figure 8. Adjustment is a collection of dispute resolution processes while Settlement is a collection of payment processes. Processes in Adjustment and Settlement category run simultaneously and independently of each other.

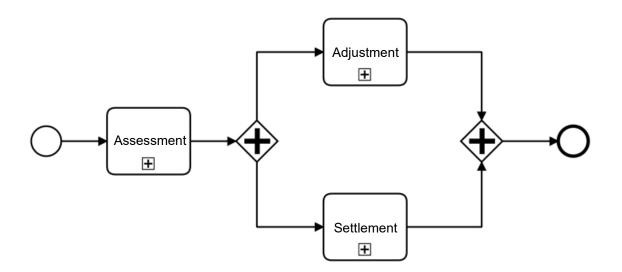


Figure 8 Overview of Tax Receivable Administration

In Indonesia, dispute between taxpayer and tax office must be resolved in regional tax office first, before proceeding to the Tax Court. Figure 9 gives a more detailed view of Assessment process (Tax Audit by tax office) and Adjustment processes (Objection Review by regional tax office and Appeal Trial by the Tax Court).

## 2.4 Accounting Policy for Tax Receivable

International Accounting Standards Board (IASB) defines accounting policies as "the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements" (International Accounting Standards Board 2018). The central government of Republic of Indonesia has set its own accounting policies to ensure that its financial report is able to present relevant, reliable, comparable, and understandable accounting information. Relevant information satisfies the needs of information users in decision making. Reliable information reflects faithful representation, favors substance over form, is free from bias, is verifiable, reflects conservatism, and covers all material aspects (Ministry of Finance, Republic of Indonesia 2019).

Central government's accounting policies include the policies for receivable accounting. Taxation receivable is a kind of receivable arising from taxation revenue which is still unpaid at the end of current fiscal year. Taxation receivables are administered by Directorate General of Taxes and Directorate General of Customs and Excise, in accordance to their respective taxation revenues. Because this thesis is focused on Directorate General of Taxes, from this point on, taxation will be called just "tax".

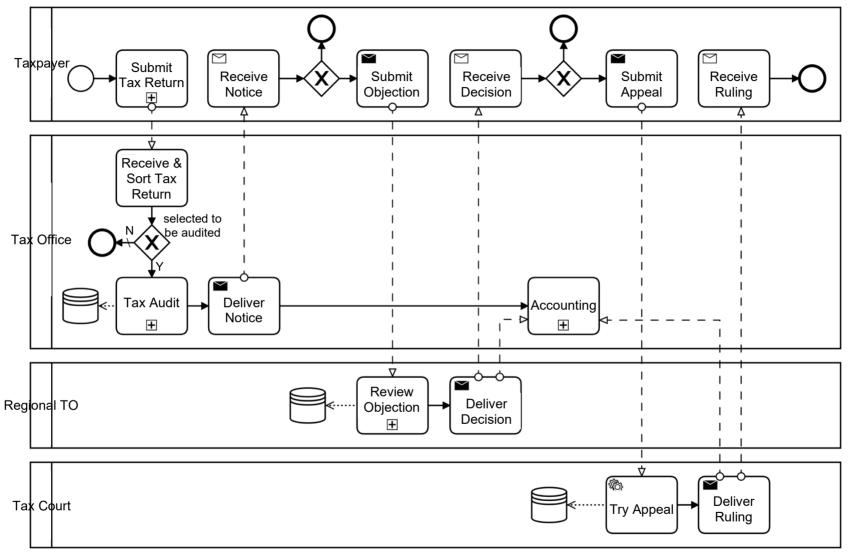


Figure 9 Processes that Create and Modify the Tax Receivable Balance

#### Recognition

Tax receivable is generally recognized at the same time with the recognition of tax revenue. Tax revenue and tax receivable are recognized based on the underlying legal document which states how much a taxpayer owes certain kind of tax. For DGT, those legal documents and their effective dates are shown in Table 5. Complex recognition, such as that of Notice of Tax Assessment, will be explained in next section along with its measurement.

No.	Legal Document	Results from	Recognized as Tax Receivable
1.	Notice of Tax Collection	Tax audit	At time of issuance
2.	Notice of Tax Assessment (Underpayment and Additional Underpayment)	Tax audit	
	For part of tax amount agreed by taxpayer during tax audit		At time of issuance
	For part of tax amount disagreed by taxpayer during tax audit		At the time limit of applying for Objection (only if the taxpayer does not apply for Objection)
3.	Correction Decision	Correction	At time of issuance (only if the decision increases the tax amount)
4.	Objection Decision	Objection	At the time limit of applying for Appeal (only if the taxpayer does not apply for Appeal)
5.	Execution Letter of Court Ruling	Appeal	At time of issuance (only if the ruling increases the tax amount)

Table 5 Legal Documents as Source Documents of Tax Receivable

#### Measurement

Tax receivable is measured at nominal value written on the underlying legal documents. The measurement is not only done at the time of issuance but also when there

is an adjustment to the underlying document. For example, Notice that results from tax audit can be adjusted by Objection Decision, should the taxpayer apply for Objection. In turn, Objection Decision can be adjusted by Court Ruling, should the taxpayer apply for Appeal.

During tax audit, the auditors communicate their audit findings to the taxpayer. Taxpayer has the option to fully agree, partially agree, or disagree with the findings. That agreement or disagreement is reflected in the issued Notice. Initially, only part of tax amount which is agreed by taxpayer will be recognized and measured as tax revenue/receivable. After the time limit of applying for Objection is passed, the state of dispute is checked. If taxpayer applied for Objection, tax receivable does not need to be adjusted until the Objection Decision is issued. If taxpayer did not apply for Objection, tax receivable is immediately re-measured, considering the part that was disagreed in tax audit.

After the Objection Decision is issued, unsatisfied taxpayer can raise the dispute by applying for Appeal. Therefore, the issuance of Objection Decision does not prompt for tax receivable to be re-measured until the time limit is passed. Appeal process is handled by the Tax Court, which is a judicial body independent of DGT. Upon receiving Appeal letter, the Tax Court notifies DGT that its Objection Decision is now entering the state of dispute. If no such notification is received until the time limit is passed, it is assumed that there is no dispute and Objection Decision comes into effect. As a consequence, tax receivable is measured again at this time.

Copies of Court Ruling are sent to both the taxpayer and DGT. To execute the ruling, DGT translates it into their own Execution Letter. This document is immediately effective when issued and prompts for tax receivable to be re-measured.

33

#### Presentation

Tax receivable is presented in the central government's financial report as a current asset. Tax receivables that were measured in foreign currency are translated into Rupiah using central bank's exchange rates on the date of reporting. Allowance for bad debt is presented as a separate account, decreasing the net tax receivable. The presentation of taxation receivable (DGT and DGCE combined) in government's balance is illustrated in Figure 10.

Current assets				
(miscellaneous current assets)		XXX		
Short-term receivables				
(miscellaneous short-term receivables)	XXX			
Taxation Receivables	XXX			
Allowance for Bad Debt	XXX			
Total short-term receivables (net)		XXX		
Total current assets			XXX	
Fixed assets			XXX	
Other assets			XXX	
Total assets				XXX
Liabilities			XXX	
Equity			XXX	

Figure 10 Presentation of Taxation Receivables in Government's Balance

Disclosure

Other information needs to be disclosed in accordance with tax receivable includes accounting policy that was used, details of the receivables grouped by their collectability, schedule of bad debt allowance, and the receivables' state of dispute.

## CHAPTER 3 METHOD

## 3.1 Approach

Due to its nature, it is not feasible to approach the problem directly. First, the errors in tax receivable accounting will only be discovered after an audit is conducted. For the reporting period of current fiscal year, this means that the data will be available roughly in July the following year. At that time, the employees related to a specific error may have been transferred to another organizational unit. Even if they are still serving the same position as previous year and can be contacted, they might simply forget about the concrete causes of that specific error. Moreover, if confronted with specific and concrete errors that they have made, they can be defensive and deny their mistakes, which will be counterproductive to this research.

Another source of difficulty is the distribution of the errors. For example, according to an internal document from 2017, it was discovered that 12,365 of 27,071 (about 46%) of Court Rulings data that were received between 2011 and 2016 had not been recorded correctly in the information system, as shown in Figure 11. Those errors were made in 293 of all 341 tax offices. It means that picking any random tax office as an example will result in 85% chance of finding at least one error. However, the number of cases in just one tax office may not be significant because the cases are distributed almost evenly to another hundreds of tax offices nation-wide.

Considering those factors above, the strategy developed for this research is by marking several tasks in Adjustment processes which are indicated by audit results for fiscal year 2018 as source of errors. On the assumption that the errors are spread widely, any officer responsible for those tasks is likely to have ever encountered at least an error during their services. They are then interviewed to get insights of what they thought, felt, and experienced about their jobs and how they manage to overcome the challenges.

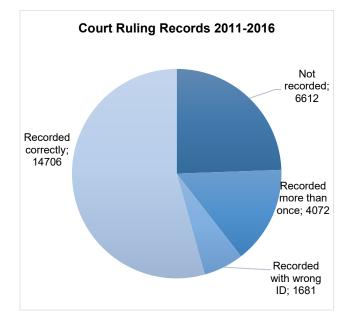


Figure 11 Errors Made in Recording Court Rulings Data

The employees' responses are then analyzed, summarized, and categorized to discover the patterns that result in accounting errors being made. Error-making factors that happen occasionally, for example if the employees forget to do some task or are simply tired are treated differently from error-making factors that happen systematically, such as if a certain user experience is judged as not user friendly by two or more respondents. However, there can be chances where employees are tired and fail to do some tasks because of having too much work at the same time. In that case, the errormaking factors are considered as systematic.

### 3.2 Interview Design

As emphasized by Walsham (1995), researchers in interpretive case study must clarify their position in the research. The author of this thesis holds the view of interpretivism epistemology; hence this study is not intended to derive laws or similar results, but rather to present the reconstructed reality from the lens of the author. In ontology, the author holds the view of internal realism, in which reality is view as a shared cognitive construction among subjects.

With regard to the subjects in this research, the author is an insider of DGT, which means the author has extended access, such as methods to identify potential interviewees, methods to contact them, and sufficient level of knowledge of the fields. However, at the same time the author is also an outside observer, in a sense that the author does not have a direct and personal stake in the interviewees' responses. This combination contributes to the wider and deeper perspective when doing the interviews.

Responses from each interviewee are cross-checked or confirmed with responses from employees who have direct relationship with them. For example, because Objection Division inputs the Objection data which are then used by Collection Section, the interviewees who represent those two organization units are asked about the same process, but from their respective points of view. This way, stronger basis for drawing conclusion is reached, and this is one advantage of using case study as a method, as pointed out by Yin (2009).

### 3.3 Interview Questions

As suggested by Yin (2009), case study is chosen as the method for this research because the research question is of "how and why" type, and the problem is not bound by a specific time or place. To be able to deliver the answer to the research question, a sensemaking strategy called "alternate templates strategy" (Langley 1999) is utilized. With this strategy, a set of interrelated explanations of "how and why" is prepared and validated against the case study.

The selected template is from Markus (1983), in which it is hypothesized that either the system, the users, the combination of the system and the users, or none of them is responsible for the failure of the system's implementation. By using this way, it is easier to approach the problem and arrange the interview questions systematically. In general, the questions shall (1) examine the users' capability to operate the system, (2) let the users evaluate the system according to their standards, and (3) inquire other factors that may interrupt the correct use of the system.

In addition to the big template, the interview questions shall also consider other factors such as the employees' view of the system as opportunity or threat and how they perceive their control over it (Bhattacherjee, et al. 2018). Another factor to consider is subsequent adoption of the information system (Trkman and Trkman 2014), such as how the employees learn to operate the system from secondary source of information.

Supporting data and information used in this study come from the analysis of laws and regulations, official reports from DGT and the Audit Board, internal documents and correspondences, and interviews with several officers in various positions. Laws and regulations are analyzed to determine the ideal condition to be achieved. Official reports and documents are used to identify the location of potential problems. Interviews are used to confirm the actual problems that prevent the ideal condition. In line with three theories provided by Markus (1983), the interviews are done in a semistructured open-ended way.

Using the framework explained in the previous paragraphs, the interview questions are prepared as shown in Table 6. Most of the questions are open-ended questions. Questions with yes or no answers are followed by the request for the interviewees to explain the reasoning or situations behind such answers.

No.	Question	Assessed Factors
1.	Please explain about your current/former job.	
	a. What are your daily jobs, in general?	Workload and
		priority
	b. Are you knowledgeable in all the tasks you are	Competency
	responsible for? Why do you think so?	
	c. What is your guidance in performing your jobs?	Behavior and
		resources
	d. Who does help you in understanding your job?	Resources and
		employees'
		relationship
	e. What are the indicators that you have succeeded or	Priority and focus
	failed in your jobs?	
	f. When you are assigned a particular task for the first	Behavior and
	time, what or whom do you consult to finish the task	resources
	effectively and efficiently?	
2.	When you hear "tax receivable," what comes to your	
	mind?	

	Question	Assessed Factors
	a. The relationship between your jobs and tax receivable.	Knowledge and
	Whether it exists or not, please explain.	priority
	b. Organizational units that affect or are affected by your	Knowledge and
	unit's performance (in accordance with tax	organizations'
	receivable). Who acts as data/information creator and	relationship
	user?	
	c. The importance of tax receivable (especially the	Knowledge, priority,
	balance) for you, either professionally or personally.	and motivation
	Are you motivated to contribute in presenting the	
	correct tax receivable balance?	
	d. If you have/had ever received complaints, questions,	Organizations'
	or demands from other organizational unit due to your	relationship and
	tax receivable-related jobs, please explain.	performance
	e. Are you aware of organization's guides or policies on	Knowledge and
	your tax receivable-related jobs, other than specific	behavior
	guides or policies governing your organizational unit?	
3.	Please explain the business process you are responsible	
	for and the information system you use.	
	a. What are the inputs and outputs of your business	Knowledge
	process?	
	b. What modules of the information system do you use?	Knowledge
	c. If you have/had ever experienced troubles in using	System's quality
	information systems for your tax receivable-related	
	jobs, please explain.	
	d. What features are incomplete, or you perceive as	System's quality
	weaknesses of the system?	
	e. How do you think the system helps your jobs?	System's quality

Table 6 Interview Questions

## 3.4 Research Process

To get the insight of what actually happened in tax receivable administration, several interviews are conducted with officers who are currently serving (or have ever served) positions with risk of errors. Interviews are conducted in non-judgmental manner, focusing on their experiences, feelings, and personal background.

Based on the audit report (Audit Board of the Republic of Indonesia 2019) and business process analysis (Figure 9), several positions are identified to have high risk of errors. In Tax Offices (TO), they are Service Section which receives Objection letter, Consulting Section which records court rulings, and Collection Section which compiles all the accounting information to create the tax receivable balance. Objection Division in Regional Tax Offices (RTO) is responsible for issuing objection decisions and related data entry. In total, nine employees, who are currently serving or have served fifteen positions related to accounting process of tax receivable, are interviewed, as shown in Table 7.

		Positions Served			
Interviewees	Service (TO)	Objection (RTO)	Consulting (TO)	Collection (TO)	
Employee A			0		
Employee B			0	•	
Employee C	•	0			
Employee D	•		•		

		Position	ns Served	
Interviewees	Service (TO)	Objection	Consulting	Collection
	Service (10)	(RTO)	(TO)	(TO)
Employee E	•	0	•	
Employee F	•			
Employee G				0
Employee H	0			
Employee I			0	
$\bigcirc = \mathbf{c}$	urrently serving		$\bullet$ = has served in	n the past

Table 7 Employees Interviewed and Their Positions

Interviews are conducted between April and July 2020. Interviewees are selected from among former colleagues of the author who are currently serving positions related to tax receivable administration or have served those positions in the last five years. Snowballing method is occasionally used, in which the interviewees are asked to nominate the candidates for next interviews. However, the interviewees are not told about with whom the actual interviews are eventually conducted.

All interviewees are working or have worked in tax offices under the supervision of the same regional tax office, with the exception of Employees F and H. This is by design, so that their voices can complement the opinions of other interviewees, who may not experience what they experience, due to different environments. Another consideration is that if interviewees from different environments agree about the same issue, then it is safe to assume that the issue happens in the organization in general, not limited to certain offices only. Interviews are conducted mainly by phone and recorded for further analysis. Follow ups to some interviewees are done by text, usually to iterate the questions or as a cross feeding from other interviews. For example, when interviewee number 2 informs something that needs to be cross checked with interviewee number 1. Interviews generally follow the interview protocols (Appendix 1) but some questions are added or left out depending on the situation where the interview occurs.

After all of interviews with employees are conducted, another set of interviews are done with managers, whom the interviewed employees are responsible to. In total there are three managers interviewed, each from Counselling Section, Collection Section, and Objection Division. They are only asked with one big question: what they think as the root cause of the errors happening in accounting process of tax receivable. They are told about the previous interviews, but they are not told about who the interviewed employees are what their responses are like. The responses from managers are used to verify the responses from employees.

# CHAPTER 4 VISUALIZATION OF THE PROCESS AND CAUSE OF ERRORS

### 4.1 Unit of Analysis

A business is an open system, meaning that it may be impractical to separate a business from its context (Eriksson and Penker 2000). There are times when a business system overlaps with other business system. However, it must be clarified, which aspects of tax receivable administration are the subject of this research and which are not.

Tax receivable administration as a whole consists of the accounting itself and the management part where the accounting information is used for further decision making. Tax receivable is managed with the purpose of extracting cash from the account, in a timely manner. Tax receivable accounting is a process to recognize, measure, record, summarize, and present the accounting information of tax receivable.

Recognition and measurement are governed by an accounting policy set by the Ministry of Finance as explained in detail in Chapter 2, so they are outside the scope of this study. Therefore, the unit of analysis in this case study (marked as green boxes in Figure 12) is the tasks of recording and summarizing tax receivable, which enable the presentation of tax receivable accounting information in the Central Government Financial Report. Those tasks are run as supporting processes, by DGT's employees in various organizational unit, side-by-side with a set of core business processes, utilizing a set of information systems, and governed by an internal control system.

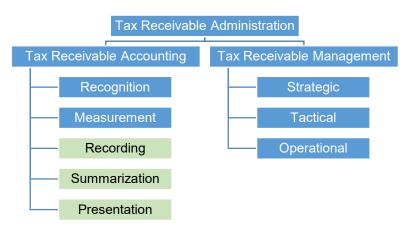


Figure 12 Unit of Analysis

### 4.2 The Business Process

The Adjustment processes can be shorter if the taxpayer chooses non-Objection resolution. Otherwise, the processes will take longer time to reach resolution, and therefore are more prone to errors. This typical flow is shown in Figure 13, as a simplified view of Figure 9. It is up to the Taxpayer whether they want to raise the dispute to Appeal level or to stop upon receiving Objection Decision. As a comparison, in fiscal year 2018, there were 12,418 Objection Decisions issued. Within the same period, the Tax Court only received 7,772 applications of Appeal (Directorate General of Taxes 2019). Those numbers do not correspond directly because there is a time delay between issuance of Objection Decision and submission of Appeal but based on that data it can be estimated that more than half of Objection cases will end up in the Tax Court.



Figure 13 Workflow of Adjustment Processes

In practice, there are two kinds of objection (with small o): the Objection (with capital O) procedure and the non-Objection procedures. "Non-Objection" may not make sense at first, but it is the official term, and it actually refers to the dispute resolution outside the Objection procedure. The differences between those two procedures are shown in Table 8.

Aspect	Objection Procedure	Non-Objection Procedures	
Time limit to apply	3 months after Notice is	No time limit (can be applied	
the procedure	delivered to the Taxpayer	at any time)	
Number of	One	Two (the second application is	
applications that can		made after decision for the	
be made		first application has been	
		issued)	
The status of Notice	Suspended (uncollectible); the	Unaffected (collection process	
while waiting for	amount written in the Notice	can be proceeded); the amount	
decision	is excluded from Tax	written in the Notice is	
	Receivable	included in Tax Receivable	
Time limit of	12 months after procedure is	6 months after procedure is	
decision issuance	applied	applied	
How to raise dispute	Applying for Appeal in the	Applying for Lawsuit in the	
to the next level	Tax Court	Tax Court (this is a general	
		procedure for any decision	
		issued by tax officer)	

Table 8 Differences Between Objection and Non-Objection Procedures

From the perspective of Tax Receivable administration, the most important characteristic that differs Objection procedure from Non-Objection procedures is the effect of the procedure to the Notice. If a Notice is applied for Objection, its amount should be excluded from Tax Receivable balance until a Decision is issued. If a Notice is applied for Non-Objection, its amount is still included when calculating Tax Receivable balance. Therefore, there must be adequate check to ensure whether a Notice has been applied for Objection or Non-Objection. If, for instance, a Notice is applied for the Objection procedure, but the front officer who receives the application incorrectly marks the application as Non-Objection procedure, there will be error in Tax Receivable balance.

Non-Objection procedures consist of Correction (Article 16 of Basic Law of Taxation), Deduction of Principal (Article 19 of special law governing Land and Building Tax), as well as Deduction or Annulment of Administrative Penalties, Deduction or Cancellation of Notice of Tax Assessment, Deduction or Cancellation of Notice of Tax Audit Results (Article 36 paragraph 1 section a, b, c, and d, respectively, of Basic Law of Taxation).

### 4.2.1 Objection

Objection is mandated by the Basic Law of Taxation in Indonesia, Article 25. It is intended to solve the dispute between taxpayers and tax offices, without involving the court. The filed Objections are handled by Regional Tax Offices across Indonesia, depending on the Tax Office where the taxpayer is registered. However, because Regional Tax Offices do not maintain a function to receive submission directly from the taxpayers, the Objection letter shall be submitted to the administrative Tax Office.

At the Tax Office, taxpayers can have a consultation before deciding to file the Objection. The officers in Tax Offices do not have the authority to reject incomplete submission but they will help check whether the submitted documents are complete or not. This is to save the taxpayers' time, because they only have three months to submit Objection, after receiving the disagreed Notice. If the submission is returned by the Regional Tax Office, after passing through several desks, the taxpayer can still file another Objection, but the time limit is not reset. If the Objection is returned with Return Letter at the third month since the disagreed Notice is received, the taxpayer loses his/her right to file an Objection for that Notice.

While waiting for Decision to be issued, taxpayer is allowed to change his/her mind and revoke the Objection letter. As long as the Final Meeting has not been arranged, the revocation will always be approved, and a Revocation Approval Letter is issued. An Objection which has been approved for revocation cannot be submitted anymore, regardless of the three-month time limit. If the process is continued, Decision Letter is issued, and it will be the basis for next process, either the taxpayer agrees with the decision or raise the dispute to Appeal. Copies of Decision Letter are delivered to both taxpayer and the Tax Office. Elements of Objection process are shown in Table 1 while the complete business process diagram of Objection is shown in Figure 14.

Input	<ul><li>Objection Letter</li><li>Revocation Letter</li></ul>
Process	<ul> <li>Examination of Formal Aspects</li> <li>Examination of Material Aspects</li> <li>Revocation Approval</li> <li>Final Meeting/Discussion</li> <li>Decision Issuance</li> </ul>
Output	<ul> <li>Return Letter</li> <li>Revocation Approval Letter</li> <li>Decision Letter</li> </ul>

Table 9 Elements of Objection Process

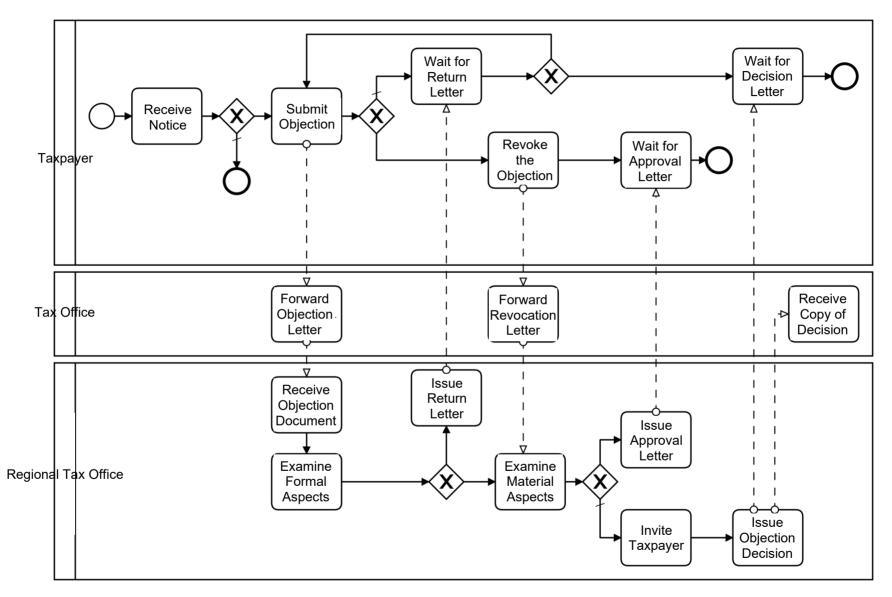


Figure 14 Detailed Business Process Diagram for Objection

To illustrate the volume of Objection and Non-Objection cases and their effect to the Tax Receivable balance, the decisions that were made in fiscal year 2018 is presented in Table 10 (Directorate General of Taxes 2019). The possible outcomes are the effect of the decision to the Tax Receivable balance, depending on the type of decision (grants in full, grants in part, rejects, or adds), based on the underlying laws.

Of all the procedures in this list, only Objection Decision and Correction Decision can add the amount of Tax Receivable. Correction Decision is in principle neutral, because there is actually no dispute between the taxpayer and the tax office. Correction procedure only reverts the Notice, that was issued incorrectly, to the correct state. The correct amount can be higher than, lower than, or the same as the issued Notice. All other procedures can deduct the amount of Tax Receivable if the decision grants the taxpayer's request or have no effect if the decision rejects the taxpayer's requests.

Type of Procedure	Number of Decisions Issued in FY2018	Possible Outcomes
Objection procedure:		
- Objection (Art. 25)	12,418	Add, deduct, none
Non-Objection procedures:		
- Correction (Art. 16)	671	Add, deduct, none
- Deduction of Principal (Land and Building Tax only)	590	Deduct, none
- Deduction or Annulment of Administrative Penalties (Art. 36 par. 1 sect. a)	108,057	Deduct, none
- Deduction or Cancellation of Notice of Tax Assessment (Art. 36 par. 1 sect. b)	3,002	Deduct, none

	Number of	
Trues of Droop have	Decisions	Possible
Type of Procedure	Issued in	Outcomes
	FY2018	
- Deduction or Cancellation of Notice of Tax	27,646	Deduct, none
Collection (Art. 36 par. 1 sect. c)		
- Cancellation of Tax Audit Results (Art. 36 par. 1	110	Deduct, none
sect. d)		
Sum	152,494	

Table 10 Objection and Non-Objection Decisions Issued in FY2018 and Their PossibleOutcomes (Directorate General of Taxes 2019)

In this research, the Objection procedures is given more emphasis due to the characteristics presented in Table 8. However, because both Objection and Non-Objection procedures can affect the Tax Receivable balance, as presented in in Table 10, this research also takes into account the errors that are made when administering Non-Objection procedures. Moreover, the employees who are responsible for Objection procedure are also responsible for Non-Objection procedures. From Taxpayers' perspective, Objection and Non-Objection are mutually exclusive channels to voice their disagreement, with slight variations between procedures. From this point onward, if Objection is mentioned alone, it means both Objection and Non-Objection.

#### 4.2.2 Appeal

Appeal is different from Objection in certain kind of aspects. First, there is no return procedure. All Appeal letters will be tried in court and all decisions will be made in the form of Court Rulings. Second, Regional Tax Office which issued of Decision Letter is requested by Tax Court to prepare an explanation or refutation before the trials begin.

Trials are conducted in the capital Jakarta (where the Court resides) and the city of Yogyakarta and Surabaya (two out-of-court trial sites currently available). Trials are attended by the appealing taxpayer and by the representatives of Director General of Taxes. The representatives are appointed from employees in Head Office or Regional Tax Offices in Yogyakarta and Surabaya.

The ruling is declared by the judges in an open court, but it is not mandatary for the taxpayer and the representatives of Director General of Taxes to attend this final meeting. Copies of the rulings will be delivered to both parties at a later time. Elements of Appeal process are shown in Table 11 while the complete business process diagram for Appeal is shown in Figure 15.

Input	<ul><li> Appeal Letter</li><li> Revocation Letter</li></ul>
Process	<ul><li>Trials</li><li>Declaration of Ruling</li></ul>
Output	Court Ruling
	Table 11 Flamouts of Annael Process

Table 11 Elements of Appeal Process

The product of Appeal—the Court Rulings—are external documents to the Directorate General of Taxes. Therefore, unlike data from Objection procedures which are readily available in the information system, data from Court Rulings must be translated to the format recognized by tax administration and input to the system. The responsibility to do those tasks lies in the Counselling Section in Tax Offices, upon receiving the copies of Court Rulings.

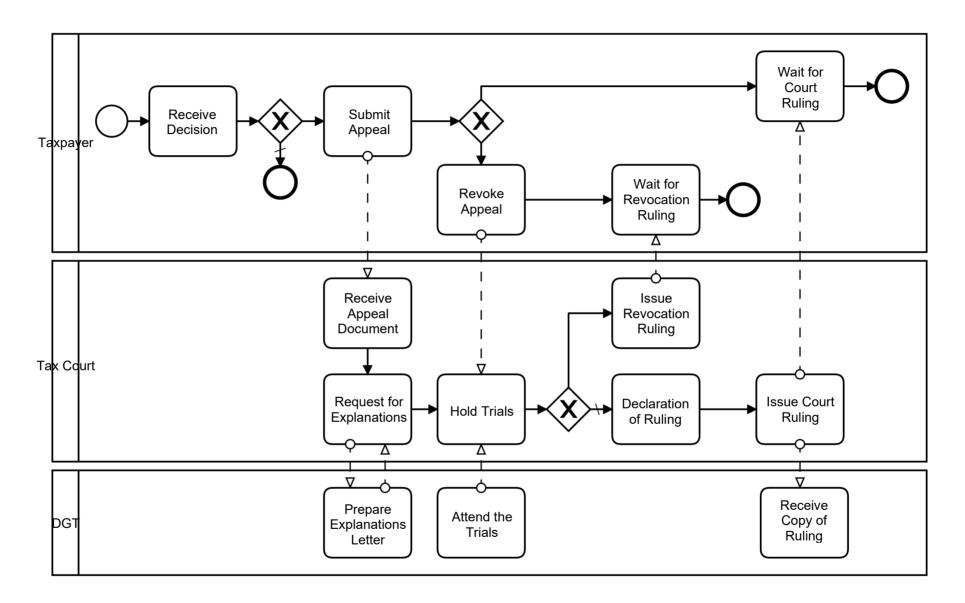


Figure 15 Detailed Business Process Diagram for Appeal

To illustrate the volume of cases in the Tax Court, the number of Court Rulings received by Directorate General of Taxes in fiscal year 2018 is presented in Table 12. The effect of a Court Ruling to Tax Receivable balance cannot always be inferred directly from the type of verdict. For example, a Court Ruling with verdict of "Granted in full" means that all of the claims by the taxpayer is granted by the Tax Court. Taxpayer's claims can range from deciding the amount of tax to nullifying Directorate General of Taxes' decision. Therefore, a thorough examination must be conducted upon receiving Tax Court's Ruling to determine the effect to Tax Receivable balance. This task is the responsibility of Counselling Section in a Tax Office.

	Number of Rulings Received by DGT		
Verdict	Appeal-related	Lawsuit- related	Sum
Rejected	872	498	1,370
Granted in part	1,094	43	1,137
Granted in full	2,162	600	2,762
Cancelled	3	73	76
Removed from List of Disputes	48	19	67
Unacceptable	351	260	611
Added	10	1	11
Sum	4,540	1,494	6,034

 Table 12 Court Rulings on Appeal and Lawsuit Issued in FY2018 (Directorate General of Taxes 2019)

Another thing worth noting is the number of cases resolved compared to the number of cases submitted in each period. In fiscal year 2018, 7,722 Appeals and 1,885 Lawsuits were filed to the Tax Court. In the same period, Tax Court could only close

4,540 cases of Appeal and 1,494 cases of Lawsuit. This kind of backlog happens almost every fiscal year and causes dispute in Tax Court to take longer and longer to resolve. From the perspective of Tax Receivable administration, this means that in each year there will be more Notices waiting to be settled and more Tax Receivable to be administered, compared to previous year.

### 4.3 The Accounting Process

For the purpose of modeling, processes are categorized as management processes, main processes, and supporting processes (von Rosing, Von Scheel and Scheer 2014). Management processes are part of accountability view and are used to design and implement activities. Main processes deliver the intended output of the organization. Supporting processes do not directly deliver the output but their existence is necessary for the main processes to run.

Borrowing the categories by von Rosing, Von Scheel and Scheer (2014), management, main, and supporting processes of Directorate General of Taxes can be illustrated as in Figure 16. Like other accounting process in any organization, tax receivable accounting is a supporting process to the management processes (e.g. strategy, planning, and budgeting) and to the main processes (e.g. tax audit, objection, appeal, and collection).

<ul> <li>Regulations</li> <li>Potential, Compliance, and Revenue</li> <li>Internal Compliance and Apparatus Transformation</li> <li>Business Process</li> </ul>
Transformation
<ul> <li>Main Processes</li> <li>Audit and Collection</li> <li>Law Enforcement</li> <li>Extensification and Valuation</li> <li>Objection and Appeal</li> </ul>
<ul> <li>Dissemination, Service, and Public Relation</li> <li>Data and Information</li> <li>Information and Communication Technology</li> <li>Intelligence</li> <li>General Affairs (Accounting, Infrastructure, etc.)</li> </ul>

Figure 16 Management, Main, and Supporting Processes in DGT

The accounting process itself overlaps with core processes in Directorate General of Taxes, such as tax audit, objection, and appeal, as can be seen in Figure 17. Each of tax audit, objection, and appeal process crosses with accounting process. The activities in accounting process are done simultaneously with those main processes. At the end of each tax audit, objection, and appeal process, data and information are supplied to the accounting information system. In the end, those accumulated data and information form the tax receivable balance.

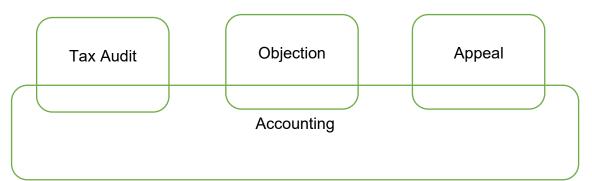


Figure 17 Overlapping of Accounting Process and Main Processes in DGT

### 4.4 The Information System

The primary information system used by DGT is called SIDJP (information system of the DGT). It is a collection of modules used for various core business processes in DGT. Users are given different access to modules and data in SIDJP, according to their job titles.

For example, Objection Reviewers in regional tax office have access to Objection modules but they cannot see the results of Appeal. Court Rulings are sent directly from the Tax Court to the corresponding tax office. Court Rulings are analyzed by Account Representatives there and the data are input to SIDJP. On the other hand, Account Representatives cannot easily access Objection data in SIDJP, even if the data are related to Court Rulings that they are handling.

The modules in SIDJP reflect the core business processes in DGT, as well as organizational structure in Tax Office. Some of the modules are shown in Figure 18. Different section in Tax Office uses different module. Employees in the same section are given different access right to the same module. For example, in Service Module there is a set of menus to handle letters reception in front office. These menus can be accessed only by the officers of Service Section who are assigned at the reception desks. Other employees who are not assigned at the desks cannot have access to these menus, even if they belong to the same organizational unit, the Service Section.

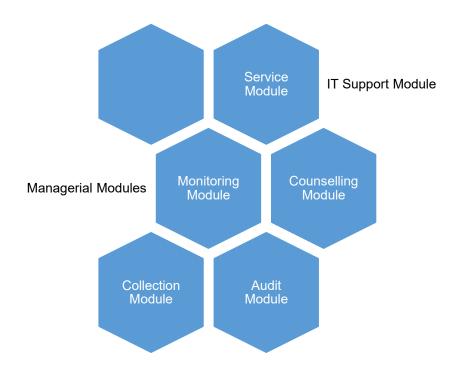


Figure 18 Modules in SIDJP for Tax Office

## 4.5 The Organization

Directorate Generate of Taxes, as an agency of Ministry of Finance, currently consists of a Head Office, 34 Regional Tax Offices, and 352 Tax Offices (Directorate General of Taxes 2019). There are also several branch tax offices and technical units, but they are not tasked with Tax Receivable accounting. The structure is presented in Figure 19.

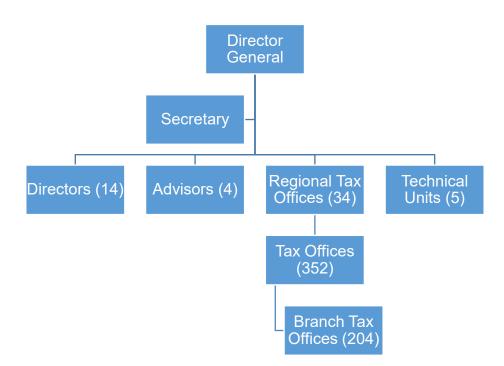


Figure 19 Organization Structure of DGT

The Head Office, which handles strategic-level issues such as formulation of policies and technical standardization, analysis, development, and administrative supports, is headed by a Director General. In his/her day-to-day jobs, Director General is assisted by a Secretary, 14 Directors, and 4 Advisors.

Secretary is responsible to coordinate task implementation and guide, as well as to provide administrative support to other organization units. Directors are responsible to formulate and implement policies and technical standardization within their scope of work. Advisors are responsible to review and examine tax issues within their scope of work and to provide expert solutions. The scope of work of Secretary, Directors, and Advisors are roughly represented in Figure 16. Secretary and Directors lead Secretariat and Directorates, respectively.

Even though the focus of Head Office is formulation of policies and technical standardization, some of the Directorates are also responsible for daily operations, but on

a national-level issues. For example, Director of Audit and Collection can conduct tax audit on certain high-profile taxpayers, overriding the authority of Tax Offices. Another case of daily operations run by Directorates in Head Office is when a certain function is not yet delegated to Regional Tax Offices or Tax Offices. An example of this is the field of international taxation.

Each Regional Tax Offices is headed by a Head of Regional Tax Office, who reports directly to the Director General. Unlike Secretary and Directors, who work on nation-wide issues within their scope of work, Head of Regional Tax Offices are responsible for all scope of work within their territory. Of 34 Regional Tax Offices, 32 have non-overlapping territories, each of which coincides with one or more provinces in local government level. The other 2 Regional Tax Offices have nation-wide territory, to manage prominent taxpayers from all regions. The structure of a typical Regional Tax Office, which consists of six divisions is presented in Figure 20.

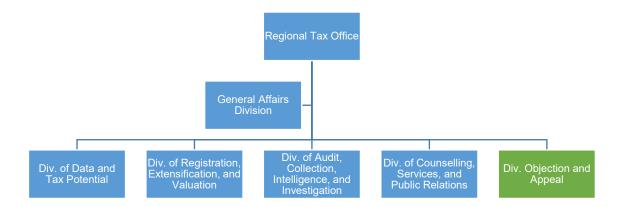


Figure 20 Organization Structure of Regional Tax Office

Like Head Office, in addition to coordinate and supervise the work of Tax Offices, Regional Tax Offices also handles functions not yet delegated to Tax Offices. For example, dispute settlement procedures of Objection and Non-Objection. Division of Objection and Appeal (marked as green box in the figure) runs a function that modify Tax Receivable balance.

The territory within a Regional Tax Office is in turn divided among Tax Offices under its supervision. Some special Tax Offices occupy the whole territory of their parent Regional Tax Offices, which overlaps with the territories of regular Tax Offices.

The Tax Offices, which are headed by Heads of Tax Offices, are the first and foremost points of contact between taxpayers and Directorate General of Taxes. For common taxpayers, most of their taxation issues are solved in Tax Offices. The structure of a typical Tax Office, which consists of ten sections, is presented in Figure 21.

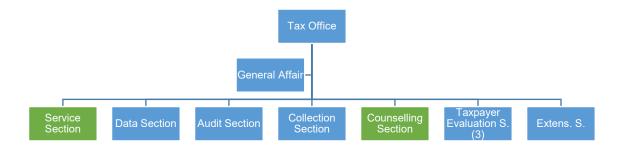


Figure 21 Organization Structure of Tax Office

In Tax Offices, there are two sections whose busines processes affect the Tax Receivable balance. First, the Service Section is responsible for receiving the application of Objection and Non-Objection procedures. Second, the Counselling Section is responsible for analyzing Court Rulings received from the Tax Court to determine the current state and amount of Tax Receivable borne by a Notice. Those two sections are marked as green boxes in the figure.

### 4.6 Existing Internal Control System

Current internal control system for tax receivable administration was first formalized on January 31, 2017 with the Director General's circular letter number SE-03/PJ/2017. That circular letter was quickly replaced with circular letter number SE-38/PJ/2017, dated November 27, 2017 (Directorate General of Taxes 2017).

The internal control system is meant to guide tax receivable administration in DGT to be able to present accurate, complete, timely, and reliable tax receivable balance. The internal control system consists of rules to be followed by both the employees and the information system.

The internal control system regulates the business processes in tax audit (for issuance of Notices), Objection and non-Objection (for issuance of Decisions), Appeal and Lawsuit (for issuance of Execution Letters of Court Rulings), and various payment/settlement processes.

As an additional information, this is the only internal control system currently established in Directorate General of Taxes. Other business processes are governed only by standard operating procedures set for each organization unit. If there is a business process that needs detailed explanations, a circular letter is issued. Depending on the context, the circular letter for certain business process can span multiple organization units.

### 4.7 Latest Problems Found by Audit Board

In its FY 2018 audit report on Central Government's internal control system (Audit Board of the Republic of Indonesia 2019), the Audit Board found several mistakes, that can be summarized as the following.

- a. Disagreement of the data between source documents (Notice, Decision, Ruling), SIDJP, and receivable worksheet. This indicates human error, such as when transferring data from physical documents to digital form, or vice versa.
- b. Notices still in dispute are already recognized as tax receivable, which can make collection process to be done earlier than it should be. This indicates that tax receivable balance was not updated to reflect current state of dispute.

The complete results of audit on internal control system for FY2018 is presented in Table 13.

No.	Issues	Number of affected records	Understatement (in JPY)	Overstatement (in JPY)
	General taxes-related issues			
1	Notices not included in Central Government Financial Reports	228	4,570,568	-
2	Payment received did not cancel out the corresponding tax receivable	6,223	-	289,186,260
3	Tax receivable worksheet disagreed with DGT's information system	8	387,805,075	423,967,944
4	Notices already recognized as tax receivable while still being disputed by the taxpayers	13	-	464,965,074
5	Tax receivable worksheet disagreed with source documents	41	63,592,275	1,856,186,087
	Property Tax-related issues			

No.	Issues	Number of affected records	Understatement (in JPY)	Overstatement (in JPY)
6	Decisions from Objection and other procedures not found in tax revenue worksheet	36	-	81,573,578
7	Payment received did not cancel out the corresponding tax receivable	96	-	20,549,375

Table 13 Results of Audit on Internal Control System, FY2018

## CHAPTER 5 FINDINGS FROM INTERVIEW

Prior to conducting interviews, the author studied the regulations and circular letters governing the business processes related to accounting process of Tax Receivable, as well as the circular letter governing the internal control system. Based on the issues identified in previous chapter, the fourth group of interview questions (Appendix 1) are focused on several tasks with high risk of errors. This chapter is divided into three subchapters on those specific tasks and one subchapter to present the findings in general.

### 5.1 Data Entry Problem

Data entry problems happen when incorrect tax receivable data (such as the taxpayer's ID or the amount of tax) is input to the system. Service Section and Objection Division are among the organizational units in Directorate General of Taxes which handle data entry related to tax receivable.

Interviewed officers confirmed that most of the data exchange between organizational units are now done automatically and electronically. There is almost no need to input the same data more than once, so the risk of human errors in data entry is already minimized. Nonetheless, Employee E and H in separate interviews admitted that there are outputs of the information system, in the form of physical documents, that are not used in their offices because the documents do not satisfy the legal or other organizational requirements. Instead, they print the documents themselves. They do this very carefully in order not to produce different versions of data. However, there is still a risk of human error and they are aware of it. Another task which still requires manual data entry is when translating Court Rulings (external documents) to Execution Letters (internal documents). Data from Court Ruling must be adjusted to suitable format in the SIDJP by Counselling Section in Tax Offices. The data entry is done after the paperwork finishes, as shown in detail in Figure 22.

Employees D and I admitted that in 2017 they received instruction from Regional Tax Offices to complete or correct data entry of Court Rulings from 2011-2016 which previously were not input or input incorrectly. They did not understand the reason why those data had not been input correctly; they just did what was instructed. For the Court Rulings received by them afterwards, they input the data directly after finishing the paperwork.

Employee I, who has recently been transferred to other Tax Office, added that in her new office she has not yet received Court Rulings. She barely remembers the procedure to input Court Ruling data. This indicates that there is a possibility that an employee in Counselling Section in a certain Tax Office never gets Court Ruling and will be given the task to process Court Rulings later for the first time. That time may come long after their initial assignment in Counselling Section, so continuous training is needed not only for new employees but also as a refreshment for employees who have been in the position for quite some time.

Employee A, who previously serves as accountant for his old office and now is assigned in Counselling Section confidently answered the same questions. He knows exactly how to handle both Objection Decisions and Court Rulings because he understands the flow of data within the information system. He knows if data that he provides in Counselling Section will end up as Tax Receivable balance the he is used to.

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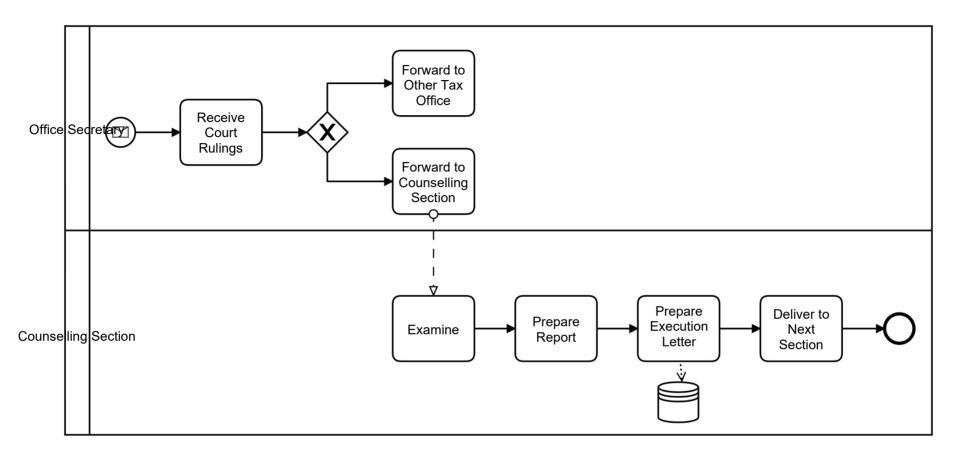


Figure 22 Translation of Court Ruling to Execution Letter

The case with Employee A indicates that the tour of duty is useful in some situation, as a substitution of direct training. Experience from working in related organization units can contribute to faster and smoother adaptation when being assigned to a new office.

### 5.2 State of Dispute Problem

When an Objection letter is submitted, the tax receivable enters the state of being disputed. Under the Basic Law of Taxation, Objection process should suspend the collection process. Collection Section receives the information of a dispute if officers in Service Section correctly chooses the Objection category when receiving taxpayer's Objection letter. This is a relatively simple task, as shown in Figure 23, but Objection is only one of the many categories of taxpayer's letters. Junior employees who serve in Service Section may have difficulty in understanding the differences.

Among other interviews, an interview with Employee C who has served different but related positions in different offices is perhaps the most insightful. Her points of view from different positions shape her knowledge of the whole business processes very differently. In turn, her understanding of the system was what made her work closer to the intended results.

She previously worked in Service Section in a Tax Office and part of her jobs was to receive letters submitted by taxpayers. At that time, she did not know the difference between Objection and Non-Objection procedures. From her point of view, her sole responsibility was to receive the letters and then forward them to the Regional Tax Office.

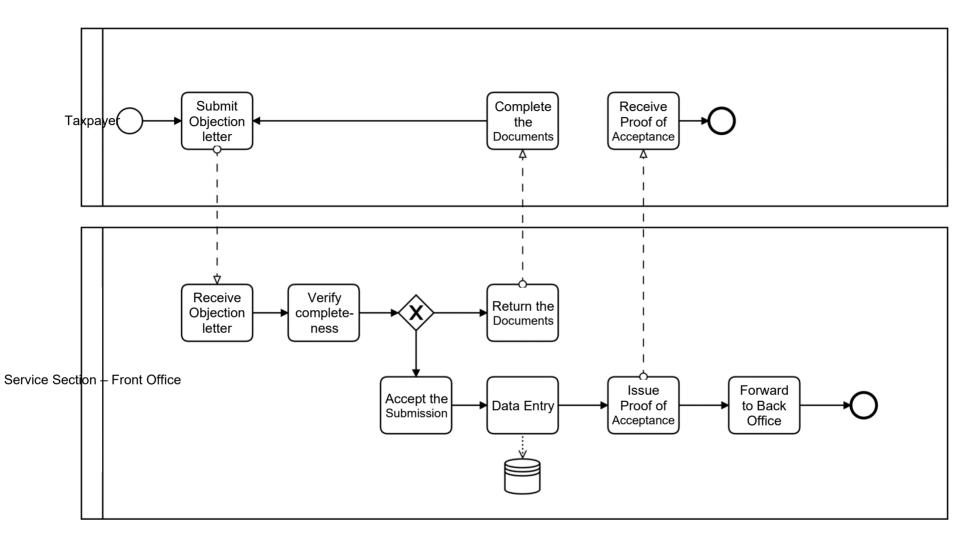


Figure 23 Reception of Objection Letter in Tax Office

Employee A admitted that she was never enrolled in a specific training to operate the information system. She learned it by doing, under guidance by her seniors. Sometimes an Objection letter was input as miscellaneous letter and she was confused why her colleague in Regional Tax Office insisted her to correct the mistakes. From her point of view, the difference of letter grouping was not a big problem.

After being transferred to Objection Division in Regional Tax Office, she began to see the big picture of the whole processes. Part of her current jobs is to monitor and evaluate the entry process by Service Section in Tax Offices under her supervision. She now realizes that there are various dispute resolution procedures in Regional Tax Office, that each procedure brings different consequences, and that a simple job such as receiving taxpayers' letter can have impact to the accounting workflow. Because she is now supervising the work of ten Tax Offices, she also finds new types of cases which she never found in her original Tax Office.

The case of Employee C not only underlines the benefit of tour of duty but also the importance of mutual understanding among employees who actually work in the same line of production (in this case the creation Tax Receivable balance). Because not all of the employees will follow the same career path, there should be a method to exchange knowledge and information among them. The goal is to make them understand each other's roles in Tax Receivable administration, even if they have never worked in all different organization units.

Employee H told a different story regarding her roles in Service Section. She has never been transferred to other section since her first assignment at that section. Therefore, she understands her jobs very much. She is even able to guess if the taxpayer submits incorrect request. For example, the situation of the taxpayer is best handled by procedure of Non-Objection in accordance with Article 36 paragraph 1 section a, but because the taxpayer is not familiar with the procedures, he submits the application for Article 36 paragraph 1 section c. In such case, Employee H usually suggests the taxpayer to correct their submission first. In her opinion, this will not only save the taxpayer the time to settle the dispute but also save her and her office in terms of rework at a later time.

The case of Employee H suggests that the longer duration of service in an organization unit, the higher experience the employees will get. This of course contradicts cases with other employees which suggest the importance of tour of duty, but this opens up another discussion: to which extend should an employee stay in the same position?

### 5.3 Balance Update Problem

All of transactions data that affect the tax receivable balance are recorded in SIDJP by officers from various organizational units, according to their jobs' responsibilities. By the way the SIDJP is designed, those transactions data must be aggregated to calculate the most up-to-date tax receivable balance for each individual Notice. The officers in Collection Section are responsible for this task.

Two separate interviews were conducted with two different officers. They serve as Collection officers in the same office but in different time frame. Employee B, a senior officer, has held various positions before. He noted that there was a minor update to the system, regarding balance adjustment of tax receivables. He learned this fact from an event for fellow Collection officers, during his term. When asked about when should the balance be updated, he suggested that it should be done at least every week, if not daily. Employee G, a junior officer also admitted that she never received special training to operate SIDJP. She learned it from the officer whom she replaced (not Employee B), who is still in the same city but different office. When asked with the same question as Employee B, she answered that she only updates the balance if physical document (Notice, Decision, or Ruling) is received.

According to the internal control system, balance updating must be done daily (Directorate General of Taxes 2017). Employee B's understanding is aligned with this rule, but his understanding failed to reach his juniors two-generation or three-generation below.

### 5.4 General Findings

Of all the interviewed employees, some have acquired formal training related to their jobs before being assigned to the post, some have acquired formal training after being assigned to the post, and some have never been given formal training at all. None of the interviewees admitted that they have received specific training in operating the information system.

All of the interviewees agreed that operating the information system is not difficult as long as they are taught by senior employees who have experience in using the same function before. In the case where they cannot find such senior employees, they will ask their peer in other offices or their supervisors. As the last resort if they cannot find capable peers or supervisors, they will experiment by themselves using the documentation manuals, if available. Problems arise if a case happens for the first time (Employee I) or if the senior/former employees fail to transfer their knowledge (Employee G). Another variation of the problem faced by Employee G and I is even though an employee knows how to do certain task, it does not mean that he/she also knows when or why they should perform that task.

Regarding the internal control system, none of the interviewees were aware of its existence. Most of them relied on the work customary set by their predecessors, or even better if they just read the standard operating procedures. Employee D admitted that she knew the regulations and circular letters governing business processes in her section, but she only read them at a glance. She mentioned two reasons for her reluctance: because the documents are too long and because not all of the cases explained in the documents will come to her immediately. The most efficient approach for her is to just learn by doing the case. In other words, when a type of case is assigned to her for the first time, she knows which documents to look at.

Concerning the information system itself, most interviewees agree that it is quite sufficient for their work. Employee E and H only complaint about non-conformance of certain output of the system, but not the whole system. In addition, Employee H raised her concern on the inability of the system to process documents in batch. For example, if a taxpayer submits 12 applications at the same time (this is also a common case in other offices, confirmed by other interviewees), the front officer must input the same data over and over again, and only differ in certain columns. Sometimes she was exhausted, and she worried if she made a mistake after processing hundreds of documents.

Summary of those research findings in this chapter are presented in Table 14.

	System-related Factors	Users-related Factors
Problems	<ul> <li>Unintuitive user interfaces (e.g. update balance needs to be done daily, but the system does not tell users about this)</li> <li>Some outputs of the system do not conform the requirements from the users</li> </ul>	<ul> <li>Poor visibility of the whole business process, especially for new employees who lack experience in other units of organization</li> <li>Inconsistent transfer of knowledge between generations of employees in an office</li> <li>Informal ways of communication and coordination among employees from different units, even though they share related accounting functions</li> </ul>
Recommendati ons	• Involve actual users, as well as related departments (legal, accounting, tax laws and regulation, etc.), when designing the system	<ul> <li>Train the users to operate the system, preferably in non-conventional training format</li> <li>Ask the commitment of local managers to ensure the users (employees) complete the training before</li> <li>Make cross-organizational coordination and communication to be mandatory, to promote the visibility of whole tax receivable accounting process</li> </ul>

Table 14 Summary of Research Findings

# CHAPTER 6 DISCUSSIONS

### 6.1 On the System

Because SIDJP is a set of various modules, it will require separate study to assess its quality. This study only reveals personal and subjective views of several employees, in accordance with their roles in tax receivable accounting. The finding suggests that, in some part, the system is not intuitive enough. For example, balance updating activity only requires several mouse clicks, but how can Employee G know when is the right time to do so? The system does not tell her, so she needs guidance from a capable senior.

#### 6.2 On the Users

This study also reveals other factors that contribute to the resistance of employees to use the information system correctly. Resistance here does not only mean refusal to use but also misuse. From the examples of Employee C and G, they may have good intention to work correctly, but they lack a credible source of information. For Employee C, accounting process was well beyond her reach at that time. It does not mean that she did not care, but she did not know or feel the needs of a separate and distant officers.

Therefore, this study suggests that there must be a permanent method of communication between employees across different organizational units if they work on closely related functions. Increased communication between them is expected to increase the visibility of the whole business processes. Training for operating the information system is urgently needed, especially for a specific and detailed por tricky part of the system. Different job positions will require different training. Conventional training method may not be favorable because it is costly and time-consuming. E-learning method is ideal to impart a small amount of information at a time (e.g. when minor updates to the information system are added). Strong commitment from local managers is required for this method to succeed, because the employees will need a dedicated time to complete the e-learning process.

#### 6.3 Validation

To validate the findings, additional interviews were conducted. This time it is with employees in the rank of manager or supervisor in affected sections or divisions. Interviewees in this case are aware of previous interviews. They are just not told about the interviewees and the results. They are asked with one big question: what they think to be the root cause of errors in Tax Receivable administration, despite having a set of business processes and information system in place. Similar to previous interviews, interviewees in these interviews are asked separately and none of them are told who the other interviewees are.

Manager 1, who is Head of Counselling Section highlights the evolution of the information over time. It is true that in the past the information system was not as complete as today. The case where Counselling Section did not record the Court Rulings or recorded them incorrectly was partially due to this fact. At that time, the menu to record those data was not working correctly or was not clearly understood by the officers.

Manager 2, who is Head of Objection and Appeal Section, notes other problem in the information system which is incomplete implementation of some features. For example, Objection and Non-Objection procedures for Land and Building Tax are still implemented separately from other major taxes. This results in inconsistent data records. Data from procedures for Land and Building Tax must be input manually at a later time. If the officers do not understand how to do that, or simply forget (because the number of cases is lower than other major cases), the integrity of Tax Receivable data is compromised.

Manager 3, who is Head of Collection Section (from different office) mentioned the working culture to be one of the reasons. He even asked, rhetorically, how many of Directorate General of Taxes' employees consult the standard operating procedures when working, let alone the internal control system. He also mentioned that the existing formal training rarely touches the standard operating procedures.

Manager 2, from her point of view, signaled the same concern with Manager 3. She mentioned an example where Objection Decisions issued by her division are not processed in the Collection Section, or even not forwarded to the Collection Section by the Office Secretary. In these cases, either officers in Collection Section or the Office Secretary in Tax Office do not practice their own standard operating procedures.

In addition to her concern on the standard operating procedures, Manager 2 also expressed the good and bad legacy in certain Tax Offices. She noted that from ten Tax Offices that she supervises, the Tax Office which made mistakes tends to make the same mistakes over and over again. On the other hand, the Tax Office which performed good in the past tends to always perform good in the future. This holds true even with the everchanging employees and managers. She suggested to introduce good intervention to underperforming Tax Offices, so that current employees can pass good legacy to their successors.

When asked for suggestions, Manager 1 mentioned the benefit of incorporating the internal control system to the information system. The explanation is as the following: it may take longer time to internalize internal control system to the users. So instead of training them, we can force them to obey the internal control system by locking some of the interfaces if the employees have not performed certain tasks.

When clarified with Manager 1's opinion, Manager 2 responded that this is actually has been implemented in certain area in Tax Receivable administration. For example, the Objection and Non-Objection cases in her division will not be closed unless the Objection Reviewers have inputted the date of Decisions delivery. This is in line with the Basic Law of Taxation which stipulates that any legal document issued by Directorate General of Taxes are effective on the date of delivery of the said document. In principal, Manager 2 agreed with the idea of Manager 1. However, she also noted that there may be the case where the system analysts or developers misunderstand the regulations. Therefore, she also suggested to gradually internalize the standard operating procedures to the employees in the field, so they can take actions if some implementation of information system violates the regulations or internal control system.

With these interviews, the findings in previous chapter are confirmed. There are few limitations to current information system that can be addressed in the next generation information system. There are also roles of working culture that prevent the effective and efficient use of current information system, namely the customary-based culture and lack of awareness/communication among different organization units.

# CHAPTER 7 CONCLUSION

- This study is a preliminary effort to understanding the reason behind the low quality (less timely and less accurate) of accounting information produced by tax receivable administration. As Walsham (Walsham 1995) pointed out, although social science does describe how a certain mechanism work, it does not attempt to explain the phenomenon in a predictive manner. Rather, it explains the tendency of particular phenomenon happening in specific settings.
- 2. In this research, those specific settings are the Indonesia's Directorate General of Taxes, as an organization—with its employees, business processes, and infrastructures—that handles accounting function of tax receivables. To some extent, this study can be generalized for similar settings, which is a big organization with separate and distant units, running their own different but related functions, which at some points exchange data and information between them.
- 3. This research concludes that the implementation of the system in DGT tends to fail in area where the employees have poor visibility of the whole business process. By not understanding the works of next unit in related functions, the employees who work in front tend to overlook the consequences of their jobs. They do not realize the requirements of the next unit. The author suggests that the initiative to coordinate employees from different organization units which share the same function (such as accounting process of Tax Receivable) must come from Head Office. Current initiative from local employees or managers are quite successful,

but there is no guarantee that other offices will follow the pattern, if not mandated by Head Office.

- 4. This research also concludes that for the information system to deliver the best result, the working culture needs to be changed from customary-based to documents-based. The documents (e.g. standard operating procedures, internal control system, user manuals) must be prepared in the most concise form because the employees do not have time or interest to read lengthy documents. With concise documentation, the transfer of knowledge between generations of employees can also be done smoothly.
- 5. Issues in number 3 and 4 must be solved first, while waiting for the new information system to be developed and deployed. If not, Directorate General of Taxes will likely to repeat the same failure with current information system. However enhanced an information system is, if the users resist to use it in intended manners, there will be mistakes made in its use.
- 6. Because the generalizability of interpretive case study is limited, future research can be directed towards empirical study on the relationship between visibility of business process and the ability of employees to fit in the system well. In the fields of design research, future research can pick up where this research left off by using the results to redesign or reengineer either the business process or the information system.

### REFERENCES

- Markus, M. Lynne. 1983. "Power, Politics, and MIS Implementation". *Communications* of the ACM 26 (6) 430–444.
- Audit Board of the Republic of Indonesia. 2019. "Audit Report on Internal Controls System". *Audit Reports on Central Government Financial Reports for Fiscal Year* 2018.
- Yin, Robert K. 2009. Case Study Research: Design and Methods. 4th ed. Thousand Oaks: Sage.
- Beaudry, A., I. Vaghefi, F. Bagayogo, and L. Lapointe. 2020. "Impact of IT User Behavior: Observations through a New Lens". Communications of the Association for Information Systems 33–64.

Directorate General of Taxes. 2019. "Yearly Report for FY2018".

- Nakano, M., F. Kubota, S. Sato, C. Roser, and M. Araki. 2005. "Holistic Methodology for Business Process Reengineering". *International Conference on Changeable, Agile, Reconfigurable and Virtual Production.*
- Trkman, M., and P. Trkman. 2014. "Actors' Misaligned Interests to Explain the Low Impact of an Information System - A Case Study". International Journal of Information Management 296-307.
- Belhaj, Faisel Mohamed Taher, Eko Ganis Sukoharsono, and Imam Suyadi. 2014. "The Need for User Competency on the Success of Management Information System Implementation in Oil Companies in Libya". *IOSR Journal of Business and Management* 71-78.

- Ministry of Finance, Republic of Indonesia. 2019. "Minister of Finance's Regulation No. 225/PMK.05/2019 on Central Government Accounting Policies".
- Directorate General of Taxes. 2017. "Director General's Circular No. SE-38/PJ/2017 on Internal Control System for Tax Receivable Accounting".
- Ministry of Finance, Republic of Indonesia. 2019. "Minister of Finance's Regulation No. 212/PMK.05/2019 on Governmental Accounting Journals at the Central Government".
- International Accounting Standards Board. 2018. "IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors".
- Langley, Ann. 1999. "Strategies for Theorizing from Process Data". Academy of Management Review 24 (4): 691-710.
- Walsham, G. 1995. "Interpretive Case Studies in IS Research: Nature and Method". European Journal of Information Systems 4: 74-81.
- Bhattacherjee, Anol, Christopher J. Davis, Amy J. Connolly, and Neset Hikmet. 2018. "User Response to Mandatory IT Use: A Coping Theory Perspective". *European Journal of Information Systems 27 (4)*: 395-414.
- Van Maanen, John. 1979. "The Fact of Fiction in Organizational Ethnography". *Administrative Science Quarterly 24 (4)*: 539-550.
- Eriksson, Hans-Erik, and Magnus Penker. 2000. Business Modeling with UML: Business Patterns at Work. Danvers: John Wiley & Sons, Inc.
- von Rosing, Mark, Henrik Von Scheel, and August-Wilhelm Scheer. 2014. *The Complete Business Process Handbook: Body of Knowledge from Process Modeling to BPM*. San Francisco: Morgan Kaufmann Publishers Inc.

- Javadi, Mohammad Hossein Moshref, and Mahboubeh Delshad Dastjerdia. 2011. "Evaluation Effect of MIS Implementation on Personnel Resistance Causes in Isfahan Power Plant Management Corporation in Iran". *Procedia Computer Science* 1296-1303.
- Directorate General of Taxes. 2017. "Director General's Circular No. PER-21/PJ/2017 on Revenue and Expenditure Accounting for Financial Reporting in Directorate General of Taxes".

# **APPENDICES**

# 1. Appendix 1

### Interview Protocol

(individual interview might be conducted in slightly different wordings)

Understanding the Causes of Errors in the Tax Receivable Administration in Indonesia

Please allow me to introduce myself first. My name is Muhammad Arif Mulya, a student at Keio University's Graduate School of System Design and Management. I am conducting a research on the theme of business process and information system. The case in this study is tax receivable administration in Indonesia's Directorate General of Taxes.

In this interview, you will be asked to explain your daily jobs, as reflected in your job descriptions, in relation with tax receivable administration. The researcher intends to explore what you know, what you experience, and what you feel when doing the jobs. All respondents in this interview are selected based on the job position they are currently serving or has served in the past. However, none of your or your organization's action in the past was taken into account in the selection.

There are no right, or wrong, or intended answers to the questions I am about to ask, so please just answer them using your knowledge, experience, or feelings. If you are unsure or forget about certain things, please say so. Your identity and your answers are to be kept confidential to the parties outside the research team, including but not limited to your supervisor(s) in the office. In final written report, you will only be addressed as "employee A at office X" or similar identifier, only as a mean to differentiate you from other respondents. This conversation is paper-noted and might be tape-recorded, to allow for natural flow of our discussion and for further analysis. If you agree, shall we continue?

- 1. Please explain briefly about yourself.
  - a. Your educational background. Mention the level and major you took after high school up to before taking your current/former position.
  - b. Training you have been given, including e-learning, as long as the material was standardized.
  - c. Jobs that you have/had held before taking your current/former position.
- 2. Please explain about your current/former job.
  - a. What are your daily jobs, in general?
  - b. Are you knowledgeable in all the tasks you are responsible for? (Explanation: there are times when an organizational unit never handled a particular task because the cases simply did not exist there, especially in offices in smaller cities.)
  - c. What is your guidance in performing your jobs? (Example: standard operating procedures or circular letters.)
  - d. Who does help you in understanding your job? (Example: your team members or your supervisor.)
  - e. What are the indicators that you have succeeded or failed in your jobs? (Both organization-wide key performance indicators and local managers' policy)
  - f. When you are assigned a particular task for the first time, what or whom do you consult to finish the task effectively and efficiently?

- 3. When you hear "tax receivable," what comes to your mind?
  - a. The relationship between your jobs and tax receivable. Whether it exists or not, please explain.
  - b. Organizational units that affect or are affected by your unit's performance (in accordance with tax receivable). Who acts as data/information creator and user?
  - c. The importance of tax receivable (especially the balance) for you, either professionally or personally. Are you motivated to contribute in presenting the correct tax receivable balance?
  - d. If you have/had ever received complaints, questions, or demands from other organizational unit due to your tax receivable-related jobs, please explain.
  - e. If you have/had ever experienced troubles in using information systems for your tax receivable-related jobs, please explain.
  - f. Are you aware of organization's guides or policies on your tax receivable-related jobs, other than specific guides or policies governing your organizational unit?
- 4. (Specific questions regarding business process and information system used in each job title. Differs from one respondent to another.)
- 5. Suggestions and inputs.
  - a. Retrospectively speaking, what is the single most important factor contributing to your job's performance? (Choices include education, training, supervisor and team members.)

- b. Retrospectively speaking, what is the single most important knowledge or skill do you wish you had before taking your current/former position (in accordance with tax receivable administration)?
- c. If you can change only one aspect of tax receivable-related jobs, what is it? (Choices include training, process and system.