

# Factors Affecting Taxpayers' Satisfaction on BIR's eONETT System in Batangas Province: Inputs to Facilitating a BIR Taxpayer Learning Academy

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## Abstract

Following the continuous efforts of the Bureau of Internal Revenue (BIR) to operate in compliance with Republic Act No. 11032 or "Ease of Doing Business and Efficient Government Service Delivery Act of 2018", there is still an unavoidable record of taxpayer complaints received by the Bureau resulting to low taxpayers' satisfaction rate. This mixed-method study aimed to identify the factors affecting taxpayers' satisfaction with BIR's newly-introduced electronic One-Time Transaction (eONETT) system in the Batangas province. Questionnaires were successfully retrieved from 110 respondents composed of ONETT taxpayers under the jurisdiction of the Revenue District Office (RDO) 58 - West Batangas and RDO 59 - East Batangas. Findings revealed taxpayers' high evaluation of the factors resulting in high satisfaction in using the eONETT. Using multiple regression analysis, results revealed that the quality of information and the system both have significant effects on taxpayers' satisfaction with eONETT. Also, it was found that the quality of the system has the greatest contribution to taxpayers' satisfaction. These results were reinforced by qualitative findings that taxpayers are highly convinced that eONETT is convenient and useful, yet their suggestions mainly concern improvements in the quality of information and system including BIR updates dissemination and BIR services integration. Based on these results, a program design focusing on factors that improve satisfaction through the BIR Taxpayer Learning Academy is proposed. This output can be an effective tax socialization program to convey the quality of information and system.

*Keywords:* perceived ease of use, perceived usefulness, quality of information, quality of system, taxpayers' satisfaction

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## 1. Introduction

The 21st century continues to challenge the initiatives of every organization to innovate and address the trends of digitization. Today, almost all organizations have redesigned their strategies towards technological advancements to attain customer satisfaction and even exceed their level of expectations.

Governments around the world have utilized the benefits of Electronic-Government (E-Government) or digital government. E-Government is the utilization of information technologies by government agencies in the delivery of their functions to the public. The 2020 United Nations E-Government Survey revealed improved digital efforts of different countries across all regions, including the least developed, with a ratio of

22% increase in the number of countries that were advanced to the next stages of e-government development. Among the top countries in the 2020 UN E-Government Ranking are Denmark, Korea, and Estonia. These E-Government initiatives include the e-Taxation or the automation of tax administration and revenue assessment to enhance the approach of public service in promoting trust and satisfaction in the government (Haruna et al., 2021). More so, all governments rely on their tax collections as their source of funds for projects and public expenditures.

In the comparative analysis of tax administration in Asia and the Pacific based on survey data gathered by the Asian Development Bank (ADB), tax departments have prioritized developing strategies aiming to help taxpayers' voluntary compliance, increase their satisfaction and focus on digitization (ADB, 2020). In Asia, electronic filing of tax returns was intensified in countries like India, Kazakhstan, Malaysia, Mongolia, and Taipei (ADB, 2020). Based on the same study, the Philippines is among the four countries, including Cambodia, Japan, and China, that recorded consistent year-on-year growth in tax ratios from 2012-2016.

BIR, as one of the primary revenue-generating agencies under the Department of Finance of the Philippines, is not excluded from these organizations which are facing all these challenges. BIR's readiness in responding to unexpected events to protect the safety of all its stakeholders while ensuring the continuity of executing its essential functions was strongly manifested in its effort to digitalize the majority of its operations even before the pandemic started. Implementation of reliable technologies in government offices has resulted in improved efficiency and effectiveness in providing public service to the people (Axelrod, 2019).

Section 2 of the National Internal Revenue Code (NIRC) states that the BIR is authorized to evaluate and gather all national internal revenue taxes from Filipino taxpayers. As the government's lifeblood in providing funds to finance all the its projects, the BIR is expected to accumulate increasing revenue collections to sustain the country's support demands. In line with this, pursuant to Revenue Memorandum Order (RMO) No. 42-2022 dated September 23, 2022, the Bureau has developed a modified BIR Digital Transformation Roadmap consistent with its commitment to improving revenue collections through digitalization.

BIR has 124 Revenue District Offices nationwide. RDO 58 and RDO 59 are both under the jurisdiction of Revenue Region 9A – CABAMIRO (Cavite, Batangas, Mindoro, and Romblon). Accordingly, the whole Batangas province is under the mandate of RDO 58 and RDO 59. RDO 58 is composed of Batangas City and Calaca City and the Municipalities of Balayan, Bauan, Calatagan, Lemery, Lian, Lobo, Mabini, Nasugbu, San Luis, San Pacual, Taal, Tingloy, and Tuy. On the other hand, RDO 59 is comprised of the Cities of Lipa, Sto. Tomas and Tanauan and the Municipalities of Agoncillo, Alitagtag, Balete, Cuenca, Ibaan, Laurel, Malvar, Mataas na Kahoy, Padre Garcia, Rosario, San Jose, San Juan, San Nicolas, Sta. Teresita, Sto. Tomas, Talisay, Tanauan and Taysan.

In the first quarter of 2022, RDOs 58 and 59 started the roll-out of the eONETT system aligned with the BIR's Digital Transformation Roadmap that aims to achieve a completely modernized tax administration. The eONETT system is an online platform that allows taxpayers to file and process their one-time transactions anytime and anywhere. BIR also launched the eONETT system to serve as a tool for assessing and collecting ONETT taxes such as Capital Gains, Expanded Withholding, and Documentary Stamps. These transfer taxes cover transactions involving the sale of real properties. Taxpayers submit their application; upload supporting documents and generate ONETT Computation Sheet and Claim Slip online. BIR launched the system to reduce the manual processing of one-time transactions and to expedite ONETT through real-time monitoring of application status.

Following the continuous efforts of BIR to operate in compliance with Republic Act No. 11032 or the “Ease of Doing Business and Efficient Government Service Delivery Act of 2018”, there is still an unavoidable record of taxpayer complaints received by the Bureau. Based on the latest statistics report prepared by the Office of the President’s 8888 Citizen’s Complaint Center, a total of 676 taxpayers’ concerns were raised through the Hotline for the period January 2022 to June 2022 (The Manila Times, 2022). For BIR RDO 59 alone, 80% of the logged complaints from the taxpayers for the same period concern mainly the processing of ONETT transactions and TIN issuance.

In a recent needs assessment conducted by the researcher, it was found that the dilemma in the inefficiencies and ineffectiveness of the existing policies and procedures of BIR results in a low rate of taxpayers’ satisfaction. Moreover, taxpayers are unaware and not well-knowledgeable of the available services of the BIR. Further, others do not know how to utilize the programs or systems available to the public in dealing with their tax transactions. To date, no available research has been conducted to establish necessary information as to the efficiency and effectiveness of the eONETT system of BIR. Thus, this research aims to bridge the gap by providing conclusions as to the factors that affect the taxpayers’ satisfaction in using the eONETT system and how these factors will be considered in improving the system. This study will provide preliminary feedback about the eONETT system.

BIR is geared towards the guiding principle of “*Service Excellence with Integrity and Professionalism*”. This study will focus on the Bureau’s main goal, which is attaining collection targets while improving taxpayers’ satisfaction. This study aims to evaluate the eONETT system of the Bureau, how the factors perceived ease of use, perceived usefulness, quality of information and quality of system affect taxpayers’ satisfaction on BIR’s eONETT system, and how the identification of the relationship of these variables will be utilized in designing and introducing a BIR Taxpayer Learning Academy to eliminate taxpayers’ complaints and increase their rate of satisfaction.

This research is geared towards Sustainable Development Goals (SDG) 8, 9 and 11. Goal 8 is Decent Work and Economic Growth which among its targets include enhancing economic efficiency by broadening, technological transformation, and revolution. With this research, economic growth will be increased as technological advancements will improve customer satisfaction which will eventually lead to increased funds for the government’s projects. Also, as the advanced procedures of the Bureau will be highly valuable as to its efficiency and effectiveness, businessmen will be encouraged to engage more in doing business resulting in a significant boost in the economic growth of the country. Further, Goal 9 is Industry, Innovation, and Infrastructure which involves the development of sustainable infrastructures through technological innovations. The Bureau will eye towards developing sustainable digital infrastructures through digitization and automation, promoting the Bureau as a modernized institution. Lastly, Goal 11 is Sustainable Cities and Communities with one of its focuses on aiding minimum established countries with all kinds of assistance. As this research aims in understanding factors that will encourage taxpayers’ satisfaction on BIR’s digital infrastructure, the success of the technological innovations will further result to a positive increase in the Bureau’s collections. The availability of these government funds will help the administration to allocate funds to the most in-need cities to be able to develop sustainable programs and projects that are beneficial to all Filipinos.

This study primarily aims to benefit the taxpayers in the province of Batangas under the jurisdiction of RDOs 58 and 59, with their satisfaction as the utmost priority of the Bureau. With the taxpayers as the end-customers of the BIR, the appropriate means to increase their satisfaction with the service delivered by the

Bureau will be identified in this study. Future priority programs and efforts of the Bureau will be in line with the results of this study. Furthermore, the proposed BIR Taxpayer Learning Academy, as the output of this study, will be an effective tax socialization program to increase their awareness in utilizing the various programs and services made available by the BIR to the taxpaying public. With the results of this study, BIR will be able to improve its eONETT system which will consequently help the taxpayers to complete their tax transactions easily. Taxpayers will benefit the most by being able to transact with a less bureaucratic, and a hassle-free BIR. This study can help the proponent's employer, the BIR, as a government institution to improve its efficiency and effectiveness in delivering quality public service and attaining taxpayers' satisfaction by utilizing its existing eONETT system. This study aims to aid in the Bureau's efforts in becoming a complaint-free agency and attaining a high satisfaction evaluation rate from the taxpayers. In addition, this study can help the researcher, being a Revenue Officer and a Public Servant, in ensuring providing quality and professional service to the ONETT taxpayers while maintaining integrity in all her assessments. This study will aid the ONETT officers in addressing the usual concerns of ONETT taxpayers that unfortunately lead to complaints. Lastly, this research can be used as a reference by all other BIR offices and other government entities in developing an effective technological infrastructure to gain a competitive edge in today's digital era and to sustain its responsibility of providing excellent quality service that will result in taxpayers' satisfaction.

### *1.1 Review of Related Literature*

#### *Perceived Ease of Use and Perceived Usefulness*

Previous studies have shown that there is a significant positive relationship between perceived ease of use as well as perceived usefulness and user satisfaction. Among other variables, perceived ease of use and perceived usefulness are the variables that indicate a strong and positive effect on user satisfaction (Amalia & Fahrudi, 2021). Customers' perceived ease of use and perceived usefulness positively affect user satisfaction when using e-government services (Sachan et al., 2018). In the context of e-wallets, perceived ease of use and perceived usefulness have also a considerable positive effect on customer satisfaction (Phuong et al., 2020).

Electronic government portals that require minimal effort from the citizens in doing their transactions consequently lead to citizen satisfaction (Baharon et al., 2017). Perceived ease of use that enhances user satisfaction means that the application has user-friendly features, and it is easily accessible anywhere and anytime (Ayunda et al., 2019). Perceived usefulness is the user's perception of the system's benefits that will lead to satisfaction (Olivia & Marchyta, 2022).

#### *Quality of Information and Quality of System*

Recent studies have equally shown the effect of the quality of information on taxpayers' satisfaction. When taxpayers readily obtain the information they need, they show positive behavior or satisfaction (Christanti, 2020). Even though individual taxpayers in India are aware of the e-filing procedures, the Income Tax Officers still address the need to provide information to those who are computer illiterate by explaining the system to make it easier to understand (Arora & Rajni, 2017). According to Wicaksono, Tjen, and Indriani (2021), the Directorate General of Taxes in India should improve its tax e-filing system and taxpayers recommend improvements in the quality of information focusing on e-filing guidelines and data security. The level of satisfaction among taxpayers varies depending on the quality of information and guidance provided by the Income Tax Department (Arora & Rajni, 2017).

The dimensions of the quality of system such as website availability, adaptability, and response time significantly impact taxpayers' satisfaction (Kumar & Lata, 2021). In a study using the context of e-campus,

the quality of system is positively related to user satisfaction (Rahim & Razak, 2021). Better quality of information system used will increase student satisfaction in using the academic information systems at Widyagama University (Kurniawan et al., 2021). According to Widiastuti et al. (2019), the quality of information and the quality of system together with service quality has a positive and significant influence on the satisfaction of BKD system at Malang State University. This is contrary to the results of the study that the quality of information and the quality of system has no significant effect on taxpayers' satisfaction (Maulinarhadi et al., 2021).

### *Taxpayers' Satisfaction*

In an article written by Nandi (2017), taxpayers can now be identified as customers. Tax authorities nowadays are expected to deliver more than collecting high tax revenues, rather they are evaluated based on the quality of public service they have rendered and the satisfactory impression that the public has conveyed about them. Customer satisfaction is determined by two elements namely the performance offered and the expected service performance wherein when the performance offered is equal to or even exceeding the expected service performance, the customer is satisfied (Awalludin & Tamburaka, 2017). By providing satisfaction to customers rather than just providing service, a greater value in doing business is achieved (Artawan et al., 2020). Also, by providing satisfaction to customers through effective interpersonal communication, every tax service office successfully competes in providing the best service to taxpayers (Ginting et al., 2022). Customer satisfaction is significantly influenced by the introduction of innovation not only for consumer products and services but also in the performance of public service (Abadi et al., 2017). Satisfaction is the extent that users believe that their desires are fulfilled by the system (Dreheeb et al., 2015). Perceived ease of use, perceived benefits, quality of information, and quality of system positively affect taxpayers' satisfaction in submitting documents through the e-Filing system in Thailand (Poolsuk and Methavasaraphak, 2019).

## *1.2 Research Framework*

### *Conceptual Framework*

The framework detailing the various factors affecting taxpayers' satisfaction as proposed by Poolsuk and Methavasaraphak (2019) in their study serves as the model of this research. Such a model was designed to identify the factors which influence the taxpayers' satisfaction on the e-filing system in Thailand.

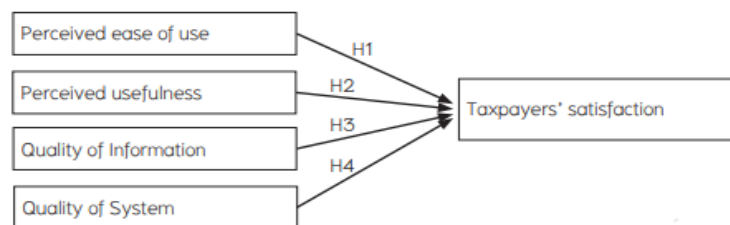


Figure 1. Conceptual Framework

Source: A Study of Factors Affecting to Taxpayers' Satisfaction of E-Filing System in Thailand (Poolsuk & Methavasaraphak, 2019)

The factors identified as independent variables in the research model of the study include perceived ease of use, perceived usefulness, quality of information, and quality of system as illustrated in Figure 1. Perceived ease of use is the belief of the user on how the system will be easy to operate. Perceived usefulness refers to the belief of the user in the system's ability to help him or her. Quality of information is the value of the

information that the system provides to the users. Quality of system is the reliability and responsiveness of the information system when used. On the other hand, the dependent variable which is the taxpayers' satisfaction is the fulfillment and positive perception of the user towards the information system.

### Operational Framework

While the study of Poolsuk and Methavasarithak (2019) was conducted in Thailand, this study will be conducted in the Philippines, specifically in BIR RDO 58 and RDO 59. This study is guided by the operational framework as illustrated in Figure 2.

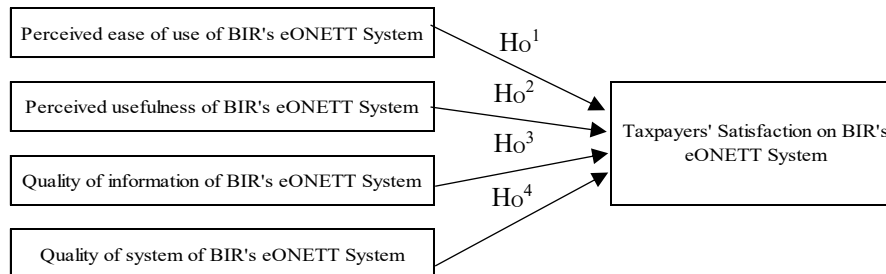


Figure 2. Operational Framework: Factors Affecting Taxpayers' Satisfaction on BIR's eONETT System in Batangas Province

In the study of Poolsuk and Methavasarithak (2019), perceived ease of use, perceived usefulness, quality of information, and quality of system affected the taxpayers' satisfaction on Thailand's tax e-filing system. The same variables were adopted in this study to determine the effect of the said factors on BIR taxpayers' satisfaction on the existing eONETT system in the province of Batangas, and how the identification of the relations among these variables will be considered in facilitating a BIR Taxpayer Learning Academy to eliminate taxpayers' complaints and increase their rate of satisfaction and positive feedbacks towards the Bureau's rendered services. Further, it will determine the factor that has the greatest contribution to taxpayers' satisfaction.

### 1.3 Objectives

In general, the purpose of this study is to determine the factors affecting taxpayers' satisfaction in using BIR's eONETT system in the province of Batangas. Further, this study specifically aims to:

1. measure the perceived ease of use, perceived usefulness, quality of information, and quality of system by taxpayers in utilizing the eONETT system;
2. assess the level of taxpayers' satisfaction in using BIR's eONETT system;
3. determine the effect of perceived ease of use, perceived usefulness, quality of information, and quality of system on taxpayers' satisfaction in using BIR's eONETT system; and,
4. propose a BIR Taxpayer Learning Academy and design its implementing policies and procedures while considering the factors affecting taxpayers' satisfaction identified in this research.

### 1.4 Hypotheses

To address the needs of the study, the following null hypotheses are tested:

$H_0^1$ : Perceived ease of use of BIR's eONETT system has no significant effect on taxpayers' satisfaction.

$H_0^2$ : Perceived usefulness of BIR's eONETT system has no significant effect on taxpayers' satisfaction.



Ho<sup>3</sup>: Quality of information of BIR's eONETT system has no significant effect on taxpayers' satisfaction.

Ho<sup>4</sup>: Quality of system of BIR's eONETT system has no significant effect on taxpayers' satisfaction.

## 2. Methodology

This research utilized a mixed method research design in a convergent approach that determined the significant effect of the variables such as perceived ease of use, perceived usefulness, quality of information, and quality of system to the taxpayers' satisfaction based on the data collected from the participants of this study. Both quantitative and qualitative data were collected simultaneously and analyzed separately. Through this method, qualitative findings can be corroborated with quantitative results (Demir & Pismek, 2018). In employing the two types of data, the strong point of one type of data can alleviate the limitations of the other type of data (George, 2022).

Data were obtained by distributing questionnaires to a sample set of respondents obtained from systematic sampling. Specifically, systematic sampling method was applied by selecting the participant in regular intervals of four from the queue. A guided survey was conducted by the researcher followed by a semi-structured interview guided by open-ended questions to obtain both quantitative and qualitative data. A semi-structured interview is a successful approach to exploring the respondents' opinions and experiences that will provide the researcher with extensive qualitative data that can validate the quantitative results (DeJonckheere & Vaughn, 2019).

A minimum sample of 108 male and female adult taxpayers who have processed their one-time transactions in RDO 58 - West Batangas, Batangas City, and RDO 59 - East Batangas, Lipa City was targeted for this study. The sample size was determined using the G\*Power as the statistical tool, with parameters including effect size at 0.15;  $\alpha$  error probability at 0.05; statistical power at 0.90; and number of predictors at 4. Respondents of this study were selected at regular intervals from the ONETT taxpayers who were queuing at the Releasing Section of the ONETT counter in RDO 58 and RDO 59.

A total of 128 respondents composed of ONETT taxpayers with transactions under the jurisdiction of RDOs 58 and 59 participated in answering the survey questionnaire. Out of the total 128 respondents, 18 were unable to answer the survey since they haven't used the eONETT system. Data shows that 64.84% of the respondents are female and 50% of them are married. Moreover, 50.78% of the respondents are in the 30 to 40 years old age group and 60.16% of them have attained Bachelor's Degree. Also, 42.97% of the respondents' income per month ranges from 10,001 to 20,000 Pesos. 45.31% of the respondents have learned about the eONETT system through the BIR itself, while 26.56% of them considered convenience as the most important factor for them choosing the eONETT system. This result aligned with the study of Poolsuk and Methavasarakphak (2019) when their respondents were asked the same question.

As the research instrument used was based on the study of Poolsuk and Methavasarakphak (2019), the translated English version of the instrument was utilized. However, a few modifications were effected to establish the questionnaire in the context of BIR's eONETT system, to use the locale's currency, and to address some grammar issues resulting from the translation of the original Thai instrument into the English version. Further, three items in Part II or the General information of the respondents were eliminated due to inapplicability in the context of the BIR as the subject organization of this study. The items in the General information that were excluded are "Have you ever made a mistake using the eONETT system?", "How do

*you cash your tax refund?” and “How do you receive a tax refund?”.* Also, items relating to the profile of the respondents and the four factors affecting taxpayers’ satisfaction were retained in the modified questionnaire.

The research instrument included two sections: first, 8 questions relating to screening and demographic background and general information about the respondents and second, 27 statements focusing on the factors affecting satisfaction and the taxpayers’ level of satisfaction on the eONETT system. The variables were measured with a 5-point Likert scale from strongly agree equivalent to 5 up to strongly disagree equivalent to 1. An open-ended question succeeding each set of questions for every variable was answered by the respondents. Table 1 shows the number of items per variable and their corresponding sequence.

Table 1. Questionnaire Specification

Section	Part	Coverage/Variable	No. of Items	Sequence of Items
1	I	Screening question	1	1
	II	General information of the respondents	7	2-8
2	III	Perceived ease of use	5	9-13
	IV	Perceived usefulness	5	14-18
	V	Quality of information	5	19-23
	VI	Quality of system	7	24-30
	VII	Taxpayers’ satisfaction	5	31-35

Additionally, Table 2 presents the ranges of interpretation for the mean results of items about the factors and the taxpayers’ satisfaction.

Table 2. Measurement Variables Specification

Variables	Mean Ranges	Interpretation
Perceived ease of use	1.00 – 1.49	Very low
Perceived usefulness	1.50 – 2.49	Low
Quality of information	2.50 – 3.49	Average
Quality of system	3.50 – 4.49	High
Taxpayers’ satisfaction	4.50 – 5.00	Very High

Consequently, pilot testing of the instrument was done on 30 respondents who were taxpayers in two offices located in the neighboring province of Cavite: RDO 54A - Trece Martires City, East Cavite, and RDO 54B – Kawit, West Cavite. Cronbach’s Alpha was used to test the reliability of the instrument as shown in Table 3. Results show that all variables had coefficients greater than 0.7, which as a generally acknowledged rule that illustrates an acceptable reliability rate (Ursachi et al., 2015).

Table 3. Reliability of the Instrument

Variables	Cronbach’s Alpha	No. of Items
Perceived ease of use	.765	5
Perceived usefulness	.828	5
Quality of information	.831	5
Quality of the system	.826	7
Taxpayers’ satisfaction	.873	5



In the course of completing this study, the following statistical tools were used: Cronbach's alpha coefficient to determine the reliability of the adapted items of the questionnaire; frequency and percentage distribution for the profiles of the respondents; mean scores to compute the average responses to each item referring to the variables; and multiple regression analysis to determine the effects of perceived ease of use, perceived usefulness, quality of information, and quality of system to taxpayers' satisfaction in one model. IBM SPSS was used to analyze quantitative data collected, and IBM SPSS Text Analytics Software was utilized to analyze qualitative data gathered from the participants' responses in the survey.

Following the study of Poolsuk and Methavasarakhak (2019), multiple linear regression analysis is the statistical tool used to analyze the quantitative data collected in this study. The primary goal of this study is to determine the effects of the variables perceived ease of use, perceived usefulness, quality of information, and quality of system on taxpayers' satisfaction in one model. A p-value of less than .05 will indicate a significant effect. Multiple linear regression analysis, other than providing a model significance with the four predictors, also provides the individual effect of each factor considering the effect of the other variables. This statistical tool makes it possible to identify which among these four has the greatest contribution to taxpayers' satisfaction by examining the standardized beta coefficients.

Qualitative data, on the other hand, was analyzed by the IBM SPSS Text Analytics Software's interpretation of the responses by the taxpayers. These responses summarized in an Excel format were analyzed by the software through noting alike words listed as 'extractions' and then the building of categories follows, which further resulted in the themes summarizing the responses of the participants.

### *Ethical Considerations*

In line with RA No. 10173, popularly known as the "Data Privacy Act of 2012", the profile and information of the respondents will be kept confidential. The survey was preceded by an informed consent form that each participant was required to fill out. The consent form provides such information as the purpose of the study, the details of the questionnaire, and the time required to accomplish the survey. The researcher took full responsibility in explaining to the respondents the details and the purpose of the study, and the dissemination and use of its results. The respondents were also given the freedom to withdraw from the study at any point should they have wished to do so. The researcher obtained approval from the management after the presentation of the survey questionnaire.

## **3. Results and Discussion**

### *3.1 Measurement of taxpayers' perceived ease, perceived usefulness, quality of information, and quality of system and assessment of the level of taxpayers' satisfaction in utilizing the eONETT system*

Table 4 presents the measurement of factors affecting taxpayers' satisfaction in utilizing the eONETT system and the assessment of the level of the taxpayers' satisfaction in using the eONETT system. It was revealed that taxpayers' perceived ease of use, perceived usefulness, quality of information, and quality of system in utilizing the eONETT are high. Among all these variables, perceived ease of use has the highest composite mean of 4.42 while quality of information has the lowest composite mean of 4.33. On the other hand, the variables generally have low standard deviation ranging from 0.44 to 0.49 which means that all the indicators have minimal dispersed ratings from the respondents. This implied that the taxpayers highly perceive the ease of use of the eONETT system. Taxpayers agreed that the eONETT system is very easy to

use in dealing with their one-time transactions in BIR. These results agree with the study of Phuong et al., (2020) when users of e-wallets in Vietnam find the electronic system very easy to use because it requires minimum effort from them, and such perceived ease of use illustrated its considerable effect on their satisfaction on the e-wallet system. On the contrary, they agreed that the eONETT system's quality of information has the least rating for them among these variables. The taxpayers' responses implied that they least agree, compared to that of the other factors, that the value of the information that the system provides to the users about the eONETT, including instructions on how to use the system, is completely delivered by the BIR. As to taxpayers' satisfaction, results revealed that the taxpayers are highly satisfied with the BIR's eONETT system as reflected in the composite mean of 4.40. Responses have a low standard deviation of 0.49 which indicates that the constructs have a low variance from the mean.

Table 4. Composite Means with Interpretations and Standard Deviations of the Variables

Factors	Mean	Interpretation	Standard Deviation
Perceived ease of use	4.42	High	0.47
Perceived usefulness	4.40	High	0.49
Quality of information	4.33	High	0.44
Quality of system	4.36	High	0.48
Taxpayers' satisfaction	4.40	High	0.49

### 3.2 The effect of perceived ease of use, perceived usefulness, quality of information, and quality of system on taxpayers' satisfaction in using BIR's eONETT system

Table 5 presents the results measuring the effect of perceived ease of use, perceived usefulness, quality of information and quality of system on taxpayers' satisfaction in using the eONETT system. It was found that the quality of information and quality of system were found to significantly affect taxpayers' satisfaction in using the eONETT system (with *p-values* of .011 and .000 respectively) while perceived ease of use and perceived usefulness were not significant (with *p-values* of 0.079 and 0.268 respectively). Standardized coefficients indicate the contribution of perceived ease of use, perceived usefulness, quality of information, and quality of system to taxpayers' satisfaction. Based on the results, the quality of system with a *Beta* of .529 indicates that it is the greatest contributor to the taxpayers' satisfaction. More so, the positive standardized coefficients or *Beta* indicated that the independent variables have a direct effect on the dependent variable. For instance, the more it is perceived with a good quality of system, the higher will be the taxpayers' satisfaction. Overall, the  $R^2 = .736$  indicates that 73.6% of taxpayers' satisfaction in using BIR's eONETT system can be attributed to changes in the variables perceived ease of use, perceived usefulness, quality of information and quality of system. The *F-value* of 73.274 and *p-value* of .000 which is less than .05 indicates that the model as a whole is significant. The results of this study supported the findings of Poolsuk and Methavasaraphak (2019) wherein the quality of information and the quality of system were found as significant predictors of taxpayers' satisfaction with Thailand's electronic filing system. The same study also resulted in the quality of system as the highest contributor to taxpayers' satisfaction with a *Beta* coefficient of 0.38. However, in the same study, it was found that both perceived ease of use and perceived usefulness were significant factors affecting taxpayers' satisfaction which is not aligned with the results of this study having such factors with no significant effect on taxpayers' satisfaction in using the BIR's eONETT system. Previous studies by Amalia & Fahrudi (2021), Sachan et al. (2018), and Phuong et al. (2020) indicated a significant positive relationship between perceived ease of use, perceived usefulness, and user satisfaction in the context of other e-services such as e-government and e-wallet, which are also contrary to the results of this study. The results of this

study are in contrary to the results of the study by Maulinarhadi et al., (2021) that quality of information and quality of system has no significant effect on taxpayers' satisfaction.

Table 5. Effect of Perceived Ease of Use, Perceived Usefulness, Quality of Information, and Quality of System in Taxpayers' Satisfaction in Using the eONETT System

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Interpretation
	B	Std. Error	Beta			
(Constant)	.040	.266		.151	.880	
Perceived ease of use	.147	.083	.142	1.773	.079	Not Significant
Perceived usefulness	.085	.077	.086	1.114	.268	Not Significant
Quality of information	.225	.087	.204	2.597	.011*	Significant
Quality of system	.541	.081	.529	6.667	.000*	Significant
R <sup>2</sup> = .736		F-value 73.274		p-value = .000*		

Dependent Variable: Taxpayers' satisfaction

With the study implementing a mixed method research design in a convergent approach, qualitative data were also simultaneously gathered from the participants with their responses to the open-ended questions relating to each factor perceived ease of use, perceived usefulness, quality of information, and quality of system. With the transcript of responses in Excel format, the software used in the analysis of the qualitative data was able to identify themes supported by selected responses of the taxpayers. To further discuss these findings, details are presented in the succeeding paragraphs with chosen notable statements cited from the actual answers of the respondents during the semi-structured interviews.

Relating to the perceived ease of use of the eONETT system, most of the taxpayers considered internet connection and document scanning the most challenging experience they encountered in using the system. As respondent #50 mentioned both, *"It requires internet connection and good scanner."* This was agreed upon by respondents #4 and #16 that said, *"Since this is a web-based application having stable internet connection is a must..."* and *"Navigation of the system especially when filling up information and uploading and scanning of documents (if multiple properties)."* Since the eONETT system is a web-based system, the internet connection must be stable so that it will be easy to navigate the system while taxpayers are submitting their applications. More so, the checklist of documentary requirements for ONETT is quite a number, so indeed taxpayers should be able to scan all these documents clearly and completely to avoid delays in processing their applications. These experiences of the taxpayers confirm previous studies by Clarin and Baluyos (2022) that poor internet connection is among the challenges encountered in the context of online distance learning implementation and by Basar et al. (2021) that a stable internet connection is valuable for an effective online learning context. In the article written by Crawford (2021), internet access is a very important concern to successfully expand digital transformation in all aspects around the world.

Next, the taxpayers were able to share how the eONETT system helped them in processing their one-time transactions in the BIR by saving time as a result of faster computation of taxes and the convenience it brings since there is no longer a need to visit the office. Respondent #1 said, *"I was able to manage my time well as I am a working student, I can process my client's paper online without the need to go to the BIR many*

times.” This is confirmed by respondent #22 who replied, *“It helps me to manage my time easily and also less hassle in traveling from my house to the assigned BIR district.”* Respondent #89 also said, *“I was able to pay on time and avoid penalties due to available computation upon application.”* Long lines in the BIR are normal scenarios in its day-to-day operations. Considering the limited personnel and physical facilities that BIR RDO 58 and RDO 59 have, it is quite a challenge to deliver efficient and effective public service in this situation. Indeed, an eONETT system that is online is highly appreciated by taxpayers because it helps them in many positive ways including but not limited to no waiting time in long lines, no recurring visits, and no late payments. The results of the study by Bansah and Agyei (2020) supported these statements which showed that perceived convenience has a positive correlation with the system’s perceived usefulness and perceived effectiveness. Also, in the study of Susanto and Aljoza (2015), results confirmed that saving time was identified as a dimension of the perceived usefulness of e-government service.

Taxpayers were able to learn to navigate the eONETT system through the available User Manual and BIR website. Respondent #3 said, *“I learned about using and navigating the eOnett system through the taxpayer’s user guide which can be viewed online.”* However, the responses of the taxpayer implied that the instructions in those resources were not sufficient to provide quality information about the system. Respondent #43 said *“Sariling sikap na ibrowse ang system, mejo limited ang nasa manual. (I browsed the system on my own, there is limited information in the manual.)”* Again, such resulted in the quality of information having the lowest mean among all factors as evaluated by the taxpayers. A complete, comprehensive, and updated source of quality information about the system is very crucial to aid the taxpayers in successfully maximizing the benefits of the eONETT system. In the study by Wicaksono, Tjen, and Indriani (2021), the results illustrate that the tax e-filing system in India should be improved with taxpayers’ recommendations in the quality of information focusing on e-filing guidelines and data security.

Regarding the quality of the system, taxpayers are mostly interested in the availability of the system in terms of accessibility and readily available information, easy submission of documents, and avoidance of penalties. Various respondents identified as #6, #15, #31, #18, and #104, respectively mentioned *“Accessibility and no working hours gap.”*, *“Self-computation of taxes & zonal valuation were readily available.”*, *“Submitting all the documents easily compared to manual submission.”*, *“The automatic computation of Capital Gains and Doc Stamp is very helpful. I was able to avoid penalties.”*, and *“I have idea of the taxes due. There’s no reason for me to pay late and incur penalties.”* eONETT has been newly implemented by the Bureau for only a year, it is indeed expected that the system is still subject to a lot of reviews, improvements, and re-runs. Despite the good results of this study unveiling the system’s strengths, taxpayers’ concerns include security and integration with other BIR processes. Shankar and Datta (2020) indicated in their study that system availability, efficiency, and reliability are prominent measures of electronic service quality.

Lastly, taxpayers would want to use the eONETT system again and recommend it to others due to its convenience, ease of use, and saving time. Respondent #16 said, *“It is very convenient since I don’t need to go personally to offices which are most of the time crowded and with long lines/queues.”* This is agreed by respondent #12 who said, *“It’s convenient to me because it’s less hassle, you don’t need to fall in line and wait for your turn to have computation; anytime and anywhere you can process your transaction.”* Respondent #23 would recommend it to others because *“... for their efficiency. It is less hassle than going to the BIR office because you can save money and time by using it.”* Respondent #42 answered, *“It is better to file online than to waste time in the traffic & queueing. Moreover, computations can still be submitted after office hours.”* Respondent #47 experienced *“It’s faster. I can have the ECAR in a few days after payment.”* Taxpayers’

satisfaction with the current eONETT system is an indicator of the BIR's success in implementing the system. It can help the BIR further improve its collections while delivering efficient quality public service. In the study of Xu et al. (2015), it was found that satisfaction with mobile applications and users' continued intention in the application are direct antecedents of the users' intention to recommend the application to others.

When asked about the recommendations or suggestions they can give to improve the eONETT system, several taxpayers mentioned system improvements and additional seminars. Respondent #13 said, *"I think it would be better if the system will have prompts/notifications thru email or other modes whenever a taxpayer complies with certain documents & other notes for compliance so they can act more timely."* Respondent #44 mentioned *"Integrated TIN verification system and there should be more information on the process of approving and printing eCAR in the system (not all information is stated in the manual)."* Lastly, Respondent #95 suggested: *"Sana may ongoing seminars para sa updating ng aming knowledge sa system at para mas maexplore din namin ang aming options sa system. (Hopefully, there are ongoing seminars for updating our knowledge about the system and we can learn how to explore our options in using the system.)"* The results of the study showed taxpayers' satisfaction in using the eONETT system. However, the level of this satisfaction can still be improved with the above suggestions focusing on improving the quality of the information and the quality of the system to achieve a higher rating of satisfaction from taxpayers. These are supported by the study conducted by Widiastuti et al. (2019) with results showing that the quality of information and the quality of system together with service quality have positive and significant influence on the satisfaction of BKD system at Malang State University. However, the results of the study by Maulinarhadi et al., (2021) is contrary to these findings which found that the quality of information and the quality of system has no significant effect on taxpayers' satisfaction.

Table 6 presents the side-by-side joint display analysis of both the quantitative and qualitative data simultaneously gathered in this study. The side-by-side joint display was utilized in this mixed-method research with a convergent design in the analysis and merging of the results (Guetterman, 2019). The same analysis was used in the studies of Razali et al. (2019) that used the convergent parallel design mixed method in assessing the usage of multi-touch hand gestures toward fine motor skills among pre-school children.

Table 6. Side-by-side Joint Display Analysis on Factors Affecting Taxpayers' Satisfaction in Using the eONETT System

QUANTITATIVE RESULTS	QUALITATIVE FINDINGS	INTERPRETATION
<u>Perceived ease of use</u> High (M = 4.42) Not significant (P-value = 0.079)	<i>What are the challenges/difficulties that you have encountered in using the eONETT system?</i> <b>Internet connection, Document scanning</b>	Taxpayers' perceived ease of use of the system is challenged by the availability of stable internet connection in the Batangas province. Taxpayers who have used the eONETT have slow internet connection in their areas. Also, taxpayers find it difficult to scan documents since eONETT is a web-based application which requires the scanned documents for uploading in the system be saved in a laptop or desktop due to non-availability of a mobile application.
<u>Perceived usefulness</u> High (M = 4.40) Not significant	<i>How did the eONETT system help you in processing your one-time transactions in the</i>	Taxpayers agree that eONETT saves time and reduces travel expenses. eONETT system is very convenient since it helped them complete



(P-value = 0.268) <i>PU5: eONETT system saves time and reduces travel expenses.</i>	<i>Bureau?</i> <b>Less time, No need for an onsite visit, Faster computation of taxes, Convenience</b>	requirements easily, avoid recurring visits to BIR, pay taxes on time, avoid penalties, save transportation costs, and claim the Certificate Authorizing Registration earlier than manual processing.
<b><u>Quality of information</u></b> High (M = 4.33) Significant (P-value = 0.011)	<i>How did you learn using and navigating the eONETT system? What sources were available for you to understand the mechanics of the eONETT system?</i> <b>User Manual, BIR Website</b>	Despite the taxpayers learning about the eONETT from the BIR itself, the user manual and website providing information about the eONETT is not enough to aid them with sufficient, clear, understandable, and updated eONETT application guidelines, rules, and regulations.
<b><u>Quality of system</u></b> High (M = 4.36) Significant (P-value = 0.000) Has the greatest contribution on Taxpayers' Satisfaction (Beta=.529) <i>QS1: The eONETT system is reliable.</i>	<i>What features of the eONETT system do you find most interesting? In your opinion, how can the system help you in processing your transactions?</i> <b>Availability of the system, Early submission of documents, Avoidance of penalties</b>	High quality of the system is achieved with the eONETT's reliability. The availability of the system online anytime as a web-based application as well as the availability of computation sheets as soon as successful application is entered into the eONETT system makes the taxpayers satisfied. These features help them avoid penalties and submit documents easier compared to manual applications.
<b><u>Taxpayers' satisfaction</u></b> High (M = 4.40) <i>TS2: The eONETT system is very useful. (M=4.51)</i> <i>TS3: There is high quality of information available about the eONETT system. (M=4.33)</i>	<i>What would make you want to process your next one-time transactions in BIR using the eONETT system?</i> <b>Convenience, Ease of use, Faster release of Certificate Authorizing Registration (CAR)</b> <i>What suggestions/ recommendations can you give to improve the eONETT system?</i> <b>System improvements, Additional seminars</b> <i>Why would you encourage others to use the eONETT system?</i> <b>Convenience, Ease of use, Saves time</b>	eONETT system's usefulness makes the taxpayers satisfied in using it. They would prefer to process their ONETT transactions using the eONETT system because it is very convenient, easy to use, and CAR is released faster than manual processing. These are the same reasons why they would recommend the eONETT system to other taxpayers. However, taxpayers primarily recommend improvements in the system such as providing update notifications, ensuring cyber security, integrating other processes in the system such as TIN verification, payment processing, and CAR submission to the Register of Deeds. Also, taxpayers suggest that BIR should organize more seminars with system hands-on modules and a more detailed User Manual to improve the eONETT's quality of information.

### 3.3 CAPSTONE Project Implementation Plan

While conducting this study, the researcher encountered non-eONETT users and understood the reasons why they haven't used the system. The majority of the respondents' answer in Section 1 of the Questionnaire or the Screening Section is that they are not aware of the eONETT system. Respondent #118 answered "I am

not familiar with the eONETT. No one has mentioned or introduced the system to me.” Key results of this study also indicate that the quality of information and the quality of system both have a positive effect on taxpayers’ satisfaction in utilizing the eONETT system. More so, these factors are the top two contributors to taxpayers’ satisfaction.

To address these findings, the researcher is proposing a new program intervention for the organization. This intervention is called “BIR Taxpayer Learning Academy” or “BIR TLA”. It is identified as one of the Bureau's main tax socialization programs that will engage prospective taxpayer registrants, new taxpayers, and existing taxpayers in different tax knowledge and awareness sessions that will help in promoting superior service and quality of information, improving the quality of eONETT system and eliminating taxpayer complaints, and increasing taxpayer satisfaction rate. It will also be one of the BIR’s feedback mechanisms to gather taxpayers’ experiences, inputs, and evaluation of the eONETT system. These taxpayers’ feedback will be used to improve the quality of the eONETT system. A Revenue Issuance will be signed by the Commissioner and will be published. Such issuance will contain the definition of the project, the methodologies of implementing the project, and the time frame for accomplishing the project’s objectives. The Committee of such a program will be headed by the Revenue District Officer, Assistant Revenue District Officer, and one Revenue Officer from each of the sections including the Assessment Section (where the researcher belongs), Client Service Section, ONETT Section, Collection Section, and Administrative Section.

BIR TLA will be the know-all program of the Bureau that will readily disseminate updates, answer queries, address concerns, and accept suggestions from the taxpayers. The initial project to be launched under the BIR TLA will be the “eONETT Kiosk” that will be located in the waiting area of the ONETT taxpayers. Taxpayers waiting in line will be encouraged by the kiosk officers to use the eONETT system by educating them about the system and helping them process their transactions at the same time. Taxpayers will be motivated by the perks that they will exclusively enjoy when they join and complete the BIR TLA. Included in these perks are exclusive access to newsletters on updates relating to BIR revenue issuances, systems and procedures, as well as a designated ONETT officer to assist them directly on their ONETT concerns. Through the BIR TLA, systems improvement will be launched including enabling of notifications system, integrating of other payment systems and TIN verification system, and developing a mobile application. Also, one of the main outputs of the BIR TLA is the revised eONETT User Manual which is more comprehensive and understandable for the taxpayers. The User Manual will already include discussions on the improved eONETT system in consideration of the results of this study, including the new notifications system, new payment systems, and the integrated TIN verification system.

The success of the project will be measured by the Client Feedback Survey that is available within the BIR premises and is summarized and reported to the National Office pursuant to existing revenue regulations. More so, key performance indicators of the Bureau as measured on a semestral basis through the Office Performance Commitment and Review Form will also gauge the success of the project. And lastly, the success of the project will be gauged by the increase in the voluntary compliance of the taxpayers further resulting in increased tax collections surpassing targets set at the start of the year.

#### **4. Conclusion and Recommendations**

This research primarily aimed to assess the factors that significantly affect taxpayers’ satisfaction in utilizing the BIR's eONETT system in Batangas Province. The respondents of this study included taxpayers who are processing one-time transactions in RDOs 58 and 59 using the eONETT system. The majority of



them are female, married, with an age bracket from 30 to 40 years old, and have attained a Bachelor's Degree earning a monthly income of 10,001 to 20,000 Pesos.

This research has bridged the gap that no available research has been conducted to evaluate the eONETT system. The results of this study provided preliminary feedback about the eONETT system. On one hand, results revealed that the perceived ease of use and perceived usefulness of BIR's eONETT system have no significant effect on taxpayers' satisfaction, thus the study failed to reject  $H_o^1$  and  $H_o^2$ . On the other hand, results disclosed that the quality of information and quality of system of BIR's eONETT system have a significant effect on taxpayers' satisfaction in utilizing the system, hence,  $H_o^3$  and  $H_o^4$  were rejected. Also, it was found that the quality of system has the greatest contribution to taxpayers' satisfaction.

Therefore, the quality of information evident in the sufficiency of instructions, understandability of the User Manual, and the accuracy and reliability of available information about the eONETT system in addition to the quality of the system depicted in the system's reliability, accuracy, and user-friendly features should be given priority by the BIR to attain taxpayers' satisfaction in utilizing the eONETT system. In line with this, the introduction of a BIR Taxpayer Learning Academy or BIR TLA has been proposed to improve the quality of information and quality of system of the BIR's eONETT system. Through the BIR TLA as the know-all program of the Bureau, projects will include intensive tax socialization, revised eONETT user manual, launching of eONETT Kiosk, improved eONETT system featuring enabled notifications system, additional payment systems, integrated TIN verification system, and the new eONETT mobile application.

For further studies, it is recommended that other factors such as cyber security which also can contribute to taxpayers' satisfaction in using the eONETT system can be studied. It is also recommended to conduct a similar study further exploring the possible reasons for limited eONETT users despite a high number of ONETT transactions in the Bureau. Third, this study is limited to respondents in the Batangas province. It is therefore recommended that future studies should investigate a larger locale considering other BIR RDOs in other provinces of the Philippines which are already using the eONETT system.

The implementation of the eONETT system is one of BIR's many efforts in achieving its commitment to improving revenue collections through digitalization aligned with its BIR Digital Transformation Roadmap. The program helps the Bureau in upholding its mission of *"collecting taxes through just enforcement of tax laws for nation-building and the upliftment of the lives of Filipinos."* Hopefully, the results of this study will help the BIR to address the inefficiencies and ineffectiveness of the existing processes and procedures relating to the eONETT system to result in a higher rate of taxpayers' satisfaction. With the CAPSTONE project suggested through this study, it is aimed that taxpayers will become more aware and well-knowledgeable of the available services of the BIR and that they will be helped by the improved eONETT system. The BIR Taxpayer Learning Academy will educate taxpayers on how to utilize the BIR's available programs and systems in dealing with their tax transactions specifically through the eONETT kiosk, and will introduce developments in the eONETT system such as integration of a notifications system, additional payments system, TIN verification process, and the new eONETT mobile application.

## Acknowledgments

*"For I know the plans I have for you, declares the LORD, plans to prosper you and not to harm you, to give you a future and a hope." -Jeremiah 29:11*

Praise and thanksgiving to the One above, God Almighty, for His constant blessings of wisdom and knowledge to finish writing this paper and of faith and perseverance to push through despite the many challenges along the way while conducting this research.

Sincerest appreciation and heartfelt gratitude to the following instruments of God's love who have significantly contributed to the successful completion of this research study:

Dr. Joseph Angelou I. Ng, the author's Research Adviser, for all the advice, patience, trust, and encouragement that greatly helped the author in the success of this research study;

Dr. Sheila E. Maloles, the Research Teacher-In-Charge, for all the guidance and research writing skills imparted that were very helpful in the author's writing journey;

Dr. Lanie M. Santos, the Graduate Programs Chair and GProS Adviser, for all her support and words of enlightenment that help the author to persevere harder;

Dr. Jasmin D. De Silva, Dr. Jaylen C. Fampo, and Mr. Vincent Remo, the members of the thesis panel; for all the understanding and sharing of their ideas and advice to improve this study;

BIR RR9A CaBaMiro headed by Regional Director Greg M. Buhain, for the approval of the conduct of this research study and RDOs 54A, 54B and 58 headed by their respective Revenue District Officers for the assistance in the conduct of the survey in their respective offices;

BIR RDO 59 East Batangas headed by Revenue District Officers Stimson P. Cureg, Estrella L. Manalo and Michael Remir H. Macatangay, CAS Mayeth C. Rada, Group Supervisors Marilyn B. Buendicho and Annalyn L. Gonzales, co-Revenue Officers, for the unwavering support, words of encouragement and profound understanding that helped the author accomplish the MBA program despite all hardships and challenges;

BIR Taxpayers, for voluntarily participating in the survey;

MBA 20-01, GPRoS family, friends, and relatives, that showed support in all matters;

My dearest husband and son, Gen Jarret and Gabriel Axell Jared, for all the love, support, sacrifices, understanding, patience, help, and hugs that gave me comfort in all of the times that I almost gave up, I love you both so much;

And to my parents, Daddy Armando and Mommy Lolita, thank you for everything, I miss and love you two so much, and I hope I made you proud.

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