-RESEARCH ARTICLE-

TAXPAYERS' PERCEPTIONS OF A NEW DIGITAL TAX RETURN FEATURE: A CASE STUDY IN INDONESIA

Siti Nuryanah*

Tax, Public Finance, and Accounting Research Cluster,
Faculty of Economics and Business, Universitas Indonesia
Email: siti.nuryanah@ui.ac.id (**Corresponding Author**)
ORCID: https://orcid.org/0000-0002-5836-3870

Sylvia Veronica Narulita Purnama Siregar

Tax, Public Finance, and Accounting Research Cluster,
Faculty of Economics and Business, Universitas Indonesia
Email: sylvia.veronica@ui.ac.id
ORCID: https://orcid.org/0000-0001-7729-2249

Imam Arifin

Directorate General of Taxes, Ministry of Finance, Republic of Indonesia
Email: imam.arifin67@kemenkeu.go.id

Lury Sofyan
Directorate General of Taxes, Ministry of Finance, Republic of Indonesia
Email: lury.sofyan@gmail.com
ORCID: https://orcid.org/0000-0003-0027-9446

─Abstract─

Taxation serves as a crucial revenue stream for numerous nations, facilitating the financing of public expenditures. The imperative for digital transformation is underscored in enhancing the efficacy and equity of tax systems. This research delves into the perspectives of taxpayers regarding a novel digital tax return functionality, while also scrutinizing the determinants shaping technology acceptance. Indonesia is examined as a pertinent case study owing to its ongoing digitalization endeavours within its fundamental tax administrative framework. Employing a mixed-method

approach, this study offers an exhaustive descriptive analysis alongside employing an ordered logistic regression methodology utilizing survey data. The findings, indicating a 72.73% concurrence rate among taxpayers regarding their inclination to adopt the new digital tax return feature, signify a moderate level of technological acceptance. This moderate acceptance is buttressed by similarly moderate levels of agreement concerning taxpayers' perceived utility and ease of use of the digital tax return feature. Additionally, the outcomes unveil that taxpayer profiles, delineated as compliant taxpayers, state-owned enterprises, and multinational corporations, alongside perceptions of tax transparency, significantly influence the propensity to embrace new digital features. Such insights furnish tangible utility for tax authorities in formulating efficacious strategies for effectuating the digital transformation of core tax administrative systems, particularly concerning tax return applications.

Keywords: Digitization, Core Tax, Tax Administration, XBRL, Tax Reporting, Tax Compliance

INTRODUCTION

The advent of digital technology presents a dichotomous paradigm, encapsulating both advantages and vulnerabilities, as elucidated by scholars (Krieger, 2021; Sebola, 2020). The incapacity to adeptly navigate the sweeping transformations engendered by expeditious digitalization precipitates digital disruption. Consequently, the imperative of digital transformation transcends mere organizational survival within the digital milieu; it also encompasses seizing upon the manifold opportunities afforded by digital technology. These opportunities range from fostering innovation and enhancing operational efficiency to mitigating costs, thereby engendering heightened value for stakeholders.

Notwithstanding the substantial risks identified by the Organization for Economic Cooperation and Development (OECD, 2017), the integration of digital technology within tax administration systems augments tax compliance and unveils untapped fiscal potentials, thereby safeguarding tax revenues (Schwanke, 2016, 2017; Warren, 2018). This phenomenon is attributed to the capacity of digitalization to streamline tax intricacies and diminish compliance expenses (Budak et al., 2016; Green, 2017; Sawyer & James, 2018; Serikova et al., 2018; Veit, 2018).

Digitalization presents indisputable challenges, exacerbating the phenomenon of the 'digital divide', particularly impacting susceptible taxpayer demographics such as low-income individuals, the elderly, those lacking digital literacy, and individuals with disabilities (Bevacqua & Renolds, 2018; O'Sullivan & Walker, 2018), thereby impeding tax compliance efforts. Additionally, regulatory frameworks governing taxation often lag behind the rapid evolution of digital technology, fostering uncertainty

regarding disclosure standards, revenue growth projections (Bentley, 2018; Sebola, 2020), and exacerbating tax disparities attributable to detrimental tax competition (Bentley, 2018). Consequently, tax authorities frequently forfeit opportunities to levy taxes on potential taxable entities. Notably, tax authorities exhibit diverse digital responses, influencing their efficacy in tax collection within the burgeoning digital economy (Rogers, 2023; Strauss et al., 2021). Despite select nations boasting advanced digital tax ecosystems, many countries remain in the nascent stages of transitioning traditional tax return processes to digital platforms for specific tax categories (OECD, 2019; Strauss et al., 2021).

Indonesia, reliant heavily on tax revenues, confronts the digital imperative by integrating it into ongoing tax reforms. Notably, digitalization and sophisticated information technologies have become integral components of its fundamental tax administrative framework, notably augmenting transparency, and accountability mechanisms (DGT, 2023). Such initiatives are geared towards enhancing taxpayer compliance and fostering effective governance within the realm of tax administration. In 2022, the Indonesian Tax Authority (Directorate General of Taxes – DGT) unveiled a novel digital feature tailored for Corporate Taxpayers' Annual Tax Return submissions. The tax reporting format, channelled through the tax return system, adopts a standardized financial reporting format termed as the eXtensible Business Reporting Language (XBRL).

Extensive scholarly discourse delves into the potential and challenges of digitalization in tax administration, as evidenced by the voluminous literature(ESCAP, 2022; Gomera et al., 2021; Kolbenhayerová & Křížová, 2021; Ripol-Saragosi & Gomeleva, 2021; Saruji & Hamid, 2021). Many studies further scrutinize the diverse digital strategies employed by tax authorities, such as the deployment of digital tax applications like e-invoice and prefilled tax returns, and their resultant impact on mitigating tax compliance and administrative overheads (Hesami et al., 2024). However, within the Indonesian context, a paucity of scholarly attention is directed towards the strategic aspects of digital tax administration. Previous research primarily focuses on discrete digital tax applications, namely e-billing, e-filing, e-invoice, and e-withholding tax slips (Arianty, 2023; Hutagalung & Martani, 2022; Joshua & Rian, 2020; Kamil, 2024; Munawara, 2021; Ningrum & Hastuti, 2020; Perangin-angin et al., 2018; Pratiwi & Kholis, 2022; Putra et al., 2021; Putri & Nuryanah, 2023; Rahmawati et al., 2022; Silalahi, 2022; Yuliana, 2023).

Unfortunately, existing literature focusing solely on specific aspects of tax digitalization overlooks comprehensive analyses of its overall impact on tax administration and the potential complexities of digital technology adoption in taxation. This study addresses this gap by examining Indonesia's tax reform efforts, specifically its digital transformation in tax administration. Through a mixed-method approach including

descriptive analysis and ordered logistic regression, the study assesses taxpayers' perceptions of a new digital tax return feature based on XBRL and identifies factors influencing its adoption. By examining taxpayer behavior, the study aims to inform tax authorities in formulating effective strategies for digital transformation. The paper comprises an introduction, literature review, methodology section, and concludes with results and discussion.

LITERATURE REVIEW AND PROPOSITION/HYPOTHESIS DEVELOPMENT

Digitalization has profoundly reshaped human existence in recent decades. Organizations worldwide, spanning both public and private sectors, are embracing digital transformation not only to ensure survival but also to enhance engagement, services, and stakeholder value. Various theories, including the D&M IS success model DeLone and McLean (1992), DeLone and McLean (2003) and the technology acceptance model (TAM) (Davis, 1989), are prominent in examining factors influencing the success of technological transformation within organizations. These theories stand alongside others like the theory of planned behaviour, task-technology fit, social cognitive theory, and the unified theory of acceptance and use of technology (UTAUT).

The DM ISS Model (1992) delineates six interconnected factors pivotal to the efficacy of information system implementation: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. In its subsequent iteration (2003), the model incorporates service quality as a crucial determinant, reflecting the evolution of end-user computing. Consequently, information system organizations not only furnish information but also deliver services to support end-users and developers. The revised model (2003) refines the dimensions of "use" to encompass "intention to use" and "use," thereby emphasizing attitudes and behaviours. It posits that user satisfaction fosters an "intention to use," subsequently translating into actual utilization of the technology. Moreover, the updated model introduces the concept of "net benefits" to gauge the overall impact, encompassing both positive and negative repercussions of the implemented information system. In sum, the revised DM ISS model incorporates metrics for both "hardware" and "software" to gauge the success of information system implementation.

In contrast to the DM ISS model, the TAM Davis (1989) scrutinizes organizational technology adoption through user motivation, gauged by "perceived usefulness" (PU) and "perceived ease of use" (PEU), which in turn drive user engagement with the technology. TAM2 extends this by delineating the construct of PUs to include subjective norms, image, and job relevance, positing that users' acceptance or rejection of new technology is contingent upon their perception of its usefulness. TAM3 further

refines the construct of PEU by incorporating computer self-efficacy, computer anxiety, and computer playfulness, suggesting that the ease of using new technology facilitates users' adaptation to it.

Beyond the factors identified by the DM ISS and TAM, this study delves into literature on XBRL, as the new digital tax return feature is XBRL-based. Previous studies on XBRL highlight several challenging factors influencing its adoption. User characteristics, such as professional qualifications, experience, and training, are identified as significant (Ilias et al., 2020; Singh & Singh, 2022). Environmental, organizational, and innovation factors also pose challenges to XBRL implementation (Lakovic et al., 2019; Singh & Singh, 2022). Thus, robust support, commitment, and involvement of legal institutions and strategic alignments are deemed crucial for successful XBRL adoption (Chen, 2012; Ilias et al., 2020; Jackson & Allen, 2024; Mousa & Pinsker, 2020). Research indicates that XBRL adoption, facilitated through platforms like the Malaysian Business Reporting System (MBRS), elicits positive responses from practitioners (Ilias et al., 2020), echoing findings regarding the role of the Federal Deposit Insurance Corporation (FDIC) in implementing and developing Inline XBRL (Mousa & Pinsker, 2020).

In the context of Indonesia's tax return application undergoing digital transformation, this study utilizes the DM ISS model and TAM, alongside pertinent literature, to elucidate taxpayer acceptance of the new XBRL feature in tax returns. This research characterizes users of XBRL tax reporting as corporate taxpayers mandated to furnish tax-based financial statements, with the resulting information constituting XBRL-based financial reports submitted within annual tax return applications. Utilization of this digital XBRL feature is anticipated to impact the tax compliance behaviour of corporate taxpayers. Given its compulsory nature, enforced by tax authorities, user compliance with this tax reporting application is mandatory as per regulatory mandates. It is anticipated that the intention to adopt this technology is influenced not only by PU & PEU, as posited by TAM, but also by additional variables identified in the DM ISS model, including information quality, system quality, and service quality (services provided by authorities to assist end-users). Moreover, alongside variables from the DM ISS and TAM, this study examines other factors affecting intention to adopt the technology, drawing from XBRL literature (Abdolmohammadi et al., 2017; Chen, 2012; Hentati et al., 2021; Ilias et al., 2017; Ilias et al., 2020; Mousa & Pinsker, 2020; Rawashdeh & Selamat, 2013; Rawashdeh & Rawashdeh, 2021; Saragih & Ali, 2022; Saragih et al., 2021; Singh & Singh, 2022).

In alignment with Chen (2012) and Geron et al. (2023), the researchers conduct an analysis encompassing various variables to ascertain whether the adoption of XBRL for tax reporting fosters enhanced practices of good corporate governance (GCG), particularly in terms of transparency quality, and facilitates efficiency in preparing

requisite reports mandated by regulatory authorities. Within the Indonesian context, the variable of experience is subdivided into tax management, previous experience, and XBRL experience. Tax management is introduced to encapsulate the GCG practice of boards overseeing tax planning strategies (OECD, 2015), a pertinent consideration given the observed low tax compliance among Indonesian companies, as evidenced by the relatively modest tax-to-GDP ratio (Jakarta Post, 2018). Previous experience pertains to taxpayers' familiarity with the digital tax return system, given that the XBRL tax format will be integrated into the existing tax framework. Additionally, XBRL experience is scrutinized in this study, acknowledging that certain corporate taxpayers, notably listed companies, are mandated to furnish XBRL financial reports to both the Indonesia Stock Exchange (IDX) and the Financial Services Authority of Indonesia.

Drawing upon the literature, this study posits the following research proposition to ascertain the perceptions of taxpayers, serving as end-users, regarding the new digital feature of tax returns, which operates on the XBRL platform. In addition to gauging taxpayers' acceptance of this new technology, it is imperative to comprehend the characteristics of taxpayers and their comportment towards the novel technology. Consequently, this study endeavours to address its research question: What are the distinguishing traits of taxpayers who embrace this new digital technology? (Fischer et al., 1992) delineate taxpayer attitudes and perceptions, such as fairness within tax systems and peer influence, as influential factors shaping tax compliance behaviours, alongside variables including noncompliance opportunities (e.g., income level, source of income, and occupation) and tax systems/structures (e.g., complexity, likelihood of detection, penalties, and tax rates). Within the scope of this study, tax compliance behaviour encompasses the intention to utilize the new digital feature of the tax return system, mandated by tax regulations during tax return submissions. Hence, grounded in the tax compliance literature, this study hypothesizes a positive correlation between the "characteristics of good taxpayers" and the perceived intention to adopt the new digital feature of tax returns. By evaluating taxpayers' technological acceptance and scrutinizing their behaviours towards the novel technology, this study aims to proffer effective strategies for the successful implementation of the new technology.

DATA AND METHODOLOGY

Study Sample

To address the research inquiries, this study utilizes data obtained from online surveys. To mitigate potential sampling biases inherent in online surveys, collaboration is established with the research centre of the tax authority for survey dissemination. Recognizing the diverse regional profiles of corporate taxpayers across Indonesia, a stratified sampling approach is employed. Surveys are targeted towards specific categories of corporate taxpayers, including: 1) participants involved in the pilot test of XBRL for tax reporting conducted by the DGT in March 2022; 2) listed companies,

given their familiarity with XBRL for financial reporting purposes; and 3) other corporate taxpayers lacking exposure to XBRL reporting, registered within large taxpayer, special, and medium tax offices. The study mandates that respondents completing the online survey be individuals responsible for corporate taxes, specifically directors and staff of the tax division.

Questionnaire Design

Comprehensive questionnaires were devised primarily drawing from the foundational DM ISS Model and TAM. In the process of questionnaire development, several variables from both the DM ISS Model and TAM were adapted to align with the tax reporting framework of Indonesia. Furthermore, in the literature review section, modifications made to the models were elucidated, including the exclusion of variables such as computer anxiety and computer playfulness. This exclusion stemmed from the integration of digital transformation into the existing tax reporting system, now featuring XBRL-based financial reports as opposed to the previous PDF format. Consequently, it is presumed that respondents possess a general familiarity with the tax reporting system, barring the new digital feature: the XBRL tax report format. Variables pertaining to "actual use" and "net benefit" were omitted from examination as the digital XBRL tax report has yet to be implemented, rendering assessment of these variables premature.

To enhance respondents' comprehension of the new digital tax return feature and enhance the validity and reliability of taxpayers' responses, a brief video illustrating the preparation of a tax report in XBRL format was presented at the outset of the survey. Nonetheless, participants who engaged in the trial implementation of XBRL for tax reports in March 2022 were offered the option to skip the video, given their prior experience with submitting XBRL for tax reports.

This study gauges taxpayers' perceptions of the new digital tax return format using a 6-point Likert scale, wherein a score of 1 denotes "strongly disagree" and a score of 6 signifies "strongly agree." An aggregate agreement score was computed for analysis by dividing the total actual score on the Likert scale by the total potential score on the scale if all responses were rated as 6. Additionally, the study computed the mean score on the Likert scale to complement this assessment. Prior to distribution, the questionnaires underwent a pilot test to ascertain their validity and reliability. Pilot test participants included consultants specializing in XBRL for tax reporting and DGT staff involved in the XBRL project for tax reporting. A detailed questionnaire is provided in Tables 7-10 (refer to subsequent sections). In addition to these methods, several techniques were employed to ensure the reliability and validity of responses. Further reliability and validity tests were conducted upon collection of all responses, as elaborated in the results section.

RESULTS OF THE STUDY

Demographics of the Respondents

Table 1 illustrates the process of sample selection. Out of the initial 811 targeted corporate taxpayers, 569 respondents participated in the study, with only 220 successfully completing the survey, resulting in a response rate of 27.13%.

Table 1. Survey Distribution

Survey Respondents		
Respondents	**Rate**	**Total Number**
Participants of pilot test of tax report XBRL		46
Completed response (1)	43%	20
Not participants of pilot test of tax report XBRL		523
Completed response (2)	38%	200
Total completed responses ((1) + (2))		220
Targeted sample		811
Completed response rate		27.13%

Table 2 further delineates the demographic characteristics of the respondents, revealing a predominance of females (58.18%). Most respondents were aged below 45 years (approximately 80%) and held a high level of education (approximately 87%). It can be inferred that the respondents were seasoned professionals, given that the majority possessed a minimum of 5 years of work experience. Half of the respondents held staff positions, while approximately 34% occupied middle to high-level positions.

Table 3 outlines the characteristics of corporate taxpayers. Approximately 23% of participant companies maintain separate tax divisions, while roughly 7% utilize tax consultants for tax management. Most corporate taxpayers, about 72%, are not listed companies, while approximately 28% are listed, including 5 listed overseas. Approximately 60% of corporations are locally owned, with about 18% classified as multinational companies. The manufacturing industry comprises most participating companies. Only around 5% of companies are registered in small tax offices. These data suggest that participating corporate taxpayers generally operate at a medium to high level, indicating a robust tax management system, including the preparation of tax-based financial statements. In Indonesia, tax-based financial statements differ from accounting-based financial statements, necessitating fiscal adjustments for tax reporting purposes.

Table 2. Demographics of Respondents

Demography of Respondents	Total Number	In Percentage (%)
Gender		
Women	128	58.18
Men	92	41.82
Total	220	100
Age		
< 30 y.o.	52	23.64
30 - 45 y.o.	123	55.91
> 45 y.o.	45	20.45
Total	220	100
Education		
Senior High School	9	4.09
Diploma	20	9.09
Undergraduate	168	76.36
Postgraduate	23	10.45
Total	220	100
Working Experience		
< 5 years	50	22.73
>= 5 years	170	77.27
Total	220	100
Job Position		
CFO/ Financial directors	4	1.82
Director others	4	1.82
Accounting/Finance Manager	33	15
Tax Manager	36	16.36
Staff in Tax Division	113	51.36
Others	30	13.64
Total	220	100

Additionally, irrespective of the ERP system or accounting software adopted, approximately 44% of corporate taxpayers manually prepare their tax-basis financial reports, with 40% relying on spreadsheet-based applications. Despite 60% of respondents having access to an ERP system, only 15 companies employ ERP for preparing tax-based financial statements. The findings underscore a technological challenge encountered by companies in preparing tax-based financial statements, as their digital bookkeeping software either remains underutilized or lacks features tailored for tax reporting purposes. Hence, tax authorities must exercise caution regarding this technological issue, which could impede the seamless implementation of new digital

applications, as highlighted in prior research (O'Sullivan and Walker, 2018; Bevacqua & Renolds, 2018).

Table 3. Characteristics of Corporate Taxpayers

Tax Function in the Company	Total Number	In Percentage (%)
Separated in Tax Division	51	23.18%
Under Division of Accounting, Finance, and others	153	69.55%
Tax consultant/*outsourcing*	16	7.27%
Total	220	100
Listed in IDX No	158	71.82
Listed in IDX Yes	62	28.18
Total	220	100
Ownership (can choose more than one option)		
State-owned Enterprise	7	3.11
Multinational Corporation	41	18.22
Listed overseas	5	2.22
Domestic	134	60
Others	38	16.44
Total	225	100
Industry		
Conventional bank	4	1.82
Financing	4	1.82
Infrastructure	3	1.36
Insurance	7	3.18
Manufacture	72	32.73
Pension fund	1	0.45
Property	7	3.18
Securities	5	2.27
Service	37	16.82
Syariah	1	0.45
Trade	53	24.09
General (others)	26	11.82
	220	100
Tax Office		
LTO	15	6.82
Special	51	23.18
Medium	144	65.45
Small	10	4.55
Total	220	100

Table 4 corroborates the data provided in Table 3, indicating that 79% of participants

are classified as compliant taxpayers, signifying consistent adherence to tax obligations. This assertion is supported by the findings presented in Table 5, which reveal that most companies have remained free from tax litigation over the past 5 years, although 10 taxpayers reported experiencing more than 5 tax litigations. Concerning the accounting systems employed for preparing financial statements as the foundation for tax reporting, some corporate taxpayers still resort to manual preparation (10%), despite 30% utilizing enterprise resource planning (ERP) systems like SAP and Oracle. Notably, while ERP systems are typically deemed costly accounting software, 25% of corporations opt for more economically feasible alternatives.

Table 4. Compliant Taxpayers and Financial and Tax Reporting Preparation

My company is categorized as a Compliant Taxpayer based on the decision of the Director General of Taxes.	N	In Percentage (%)
Not	46	20.91
Yes	174	79.09
Total	220	100
Bookkeeping and Preparation of Company Financial Statements using:	**N**	**Percentage (%)**
Manual	22	10
Computer with spreadsheet-based application	36	16.36
A computer with a spreadsheet-based application with automation features	13	5.91
Accounting specific applications, such as Zahir, Accurate, MYOB	54	24.55
ERP like SAP or Oracle	66	30
Other	29	13.18
Total	220	100
Fiscal Reconciliation using:	**N**	**Percentage (%)**
Manual	96	43.64
Computer with spreadsheet-based application	88	40
A computer with a spreadsheet-based application with automation features	13	5.91
ERP like SAP or Oracle	15	6.82
Other	8	3.64
Total	220	100

Table 5. Tax Litigation

Tax Litigation	N	Percentage (%)
Never	149	67.73%
1-5 times	54	24.55%
6-10 times	7	3.18%
10 times or more	3	1.36%

Tax Litigation	N	Percentage (%)
Do not know	1	0.45%
Not clearly stated	6	2.73%
Total	**220**	**100%**

Descriptive Analysis

Reliability Test of the Variables

Table 6 exhibits the outcomes of reliability and validity assessments conducted on the variables employed in the questionnaires. Although a pilot study was conducted to ascertain face validity, the results of reliability tests indicate that the XBRL variable lacks reliability. Nevertheless, for qualitative analysis purposes, this study opts to examine this variable, considering its relevance based on construct validity, as it pertains to the foundation of the new digital feature of tax reports.

Table 6. Internal Consistency Results

Variable	Cronbach's Alpha	Composite Reliability	Reliability
CSE	0.792	0.869	Reliable
IQ	0.974	0.981	Reliable
IU	0.812	0.889	Reliable
PE	0.947	0.962	Reliable
PEU	0.992	0.993	Reliable
PU	0.986	0.988	Reliable
SQ	0.986	0.987	Reliable
SvQ	0.985	0.988	Reliable
XBRL	0.632	0.671	Not Reliable

Where: CSE: Computer self-efficacy; IQ: Information quality; IU: Intention to use; PE: Previous Experience; PEU: Perceived ease of use; PU: Perceived usefulness; SQ: Service quality; SvQ: Service quality; XBRL: XBRL Experience.

Taxpayers' Knowledge about XBRL

Table 7 delineates respondents' familiarity with XBRL, given that the new digital tax reporting feature is founded on XBRL. This investigation reveals that although 28.18% of corporate taxpayers, as presented in Table 1, are listed companies mandated to furnish financial reports in XBRL format, only 8.63% demonstrate acquaintance with the term XBRL. This underscores the concept of "substance over form" inherent in the XBRL format: despite the submission of financial statements in XBRL format to the Stock Exchange, listed companies may lack awareness of the term XBRL itself. Similar observations were made concerning XBRL for financial reports; notwithstanding the fact that 28% of corporate taxpayers are listed companies, merely 15.45% of them engage in preparing XBRL for financial reports.

The findings highlight respondents' confusion regarding the term XBRL, as supported by the discovery that 90.45% of respondents have not previously participated in XBRL workshops or trainings, despite their keen interest in acquiring knowledge about XBRL. As depicted in Table 7, these findings underscore the principle of substance over form, suggesting that the specific terminology or nomenclature of XBRL holds less significance compared to taxpayers' comprehension of the process of preparing financial statements in accordance with the tax format. This implies that the Indonesian tax regulatory body should adopt an engaging terminology for the new digital tax format to incentivize taxpayer acceptance of this novel digital technology. Presently, the tax authority employs the acronym SILK for the new digital tax return format. SILK SPT, in the local language (Bahasa), translates to Standardisasi Informasi Laporan Keuangan Surat Pemberitahuan, or in English: Standardized Information of Financial Statements - Tax Return Form.

Table 7. XBRL Knowledge

Indicators	N	In Percentage (%)
Have you ever heard of XBRL		
No, I have never heard of it	145	65.91
Yes, I have heard of it, but do not truly know the concept of XBRL	56	25.45
Yes, I have a basic understanding of XBRL	16	7.27
Yes, I am fully aware of XBRL	3	1.36
Total	220	100
Does your company use XBRL for financial reporting?		
No	186	84.55
Yes	34	15.45
Total	220	100
Have you ever participated in an XBRL workshop/seminar/training prior to the implementation of the SILK SPT pilot?		
Not	199	90.45
Yes	21	9.55
Total	220	100
Are you planning to determine and gain more knowledge about XBRL in the near future?		
No, I'm not interested	6	2.73
No, that is irrelevant to me	2	0.91
Yes, I might find out about XBRL	130	59.09
Yes, I will find out about XBRL	82	37.27
	220	100

Previous Technology Experience and the Computer Self-Efficacy of Taxpayers

Table 8 presents findings concerning taxpayers' perceptions regarding whether experience with XBRL financial reporting facilitates the preparation of XBRL-based tax reporting. The agreement score, nearly 66.74% or equivalent to 4 on the Likert scale, indicates moderate consensus among taxpayers, suggesting that familiarity with XBRL for financial reporting aids in the preparation of XBRL-based tax reporting.

Table 8. Previous Experience, Computer Self-Efficacy, and Subjective Norms

Indicators	Agreement Level	Likert Scale Average
XBRL Experience		
Experience using XBRL for financial reporting will make it easy for me to use XBRL-based tax reporting.	68.1	4.09
The experience of participating in the implementation of the SILK SPT pilot in early 2022 has made me confident in using the XBRL-based tax reporting	62.5	3.75
Experience with the current SPT application makes me confident in using XBRL-based tax reporting.	69.62	4.18
Average	**66.74**	**4.01**
Computer Self-Efficacy		
I have previous experience with similar software packages to do the same job	71.82	4.31
Someone shows me how to use the system/software	70.83	4.25
I depend on the built-in help facilities attached to the system/software	65.23	3.91
Independent or not needing other people to tell me what to do	61.06	3.66
Average	**67.24**	**4.03**
Previous Experience		
Ensure tax transparency	77.65	4.66
Ensuring data misuse does not occur	75.76	4.55
Ensure that there is no misinterpretation of the information conveyed	74.32	4.46
I am satisfied with the current tax reporting application	78.11	4.69
Average	**76.46**	**4.59**
Subjective Norm		
When it was available, the use of XBRL-based tax reporting by other taxpayers/companies in the same industry as my company, influenced my company's decision to also submit tax returns using XBRL-based tax reporting.	69.47	4.17
Using XBRL-based tax reporting will increase my company's reputation.	71.14	4.27
Average	**70.31**	**4.22**

Additionally, respondents' computer self-efficacy was found to be moderate, at 67.24% or 4 on the Likert scale. Respondents exhibited positive attitudes toward their experience with both current and previous tax reporting systems, attributing tax system attributes such as tax transparency, data responsibility, and information validity and reliability. The favourable perceptions of taxpayers, with a 76.46% agreement rate, signify that taxpayer trust in the tax system facilitates the introduction of new digital features by the tax authority. However, this result contradicts taxpayers' belief that the adoption of new digital features will enhance corporate image, as indicated by a lower agreement level and Likert scale rating compared to positive perceptions of the current tax system, standing at only 71.14%. The study further reveals that taxpayers' behaviour is subject to moderate consensus, and their decision to adopt this new digital technology for tax returns will be influenced by fellow taxpayers. The moderate agreement level suggests that the tax authority should consider employing a peer benchmark strategy to introduce the new digital format for tax returns.

Taxpayers' Perceptions of System Quality, Information Quality, and Service Quality of the New Digital Feature of Tax Return Application.

Table 9 delineates the respondents' perceptions of the new digital tax return format. Overall, taxpayers' perceptions of system quality, information quality, and service quality exhibit moderate agreement, with average values ranging from 71% to 75%. Notably, the system quality of the new digital tax return format registers the lowest score. This is primarily attributed to the difficulty in completing the tax return based on XBRL, which garners an agreement rate of only 70.38%. Other aspects of system quality, with approximately 70% agreement, pertain to the clarity of tab functions, instructions, and error messages within the application for preparing the XBRL tax return form. These findings underscore the necessity for enhancements in these specific areas of the new digital tax return application.

The information quality yielded by the new digital tax return application attains the highest level of agreement, averaging at 74.22%. Respondents express a moderate level of agreement at 75%, indicating that the new digital tax return application enhances the consistency and comparability of tax information. The reliability and accuracy of the information generated by the new digital tax return application garner an agreement level of approximately 73%. Moreover, the survey indicates that respondents perceive service quality in general moderately (with an average of 72.89%), implying that the service quality offered by the tax authority regarding the new digital tax return application is deemed satisfactory.

Table 9. Perceptions of System Quality, Information Quality, and Service Quality

Indicators	Agreement Level	Likert Scale Average
System Quality (SQ)		
The SILK SPT application will guarantee that data misuse does not occur.	71.59	4.3
The function of tabs/buttons in the SILK SPT application can be understood.	70.83	4.25
The instructions for making the SILK SPT form on the application will be clear and understandable.	70.83	4.25
The SILK SPT form can be easily downloaded from the application.	72.27	4.34
Instructions for mapping financial statement accounts into the SILK SPT form will be clear and understandable.	70.76	4.25
The SILK SPT form can be filled easily.	70.38	4.22
The SILK SPT form will have a feature to prevent wrong data input.	72.2	4.33
The SILK SPT form that has been filled in can be easily uploaded to the application.	72.2	4.33
Validation of SILK SPT form report data on the application will be processed easily.	71.59	4.3
Error messages that appear on the application will be understandable for action.	70.45	4.23
Prepopulated SPT will be completed easily.	71.74	4.3
The interaction/stages for using SILK SPT in general will be easy.	70.98	4.26
Average	**71.32**	**4.28**
Information Quality (IQ)		
Generate correct information on prepopulated tax return form.	72.12	4.33
Generate reliable information output for tax reporting.	73.86	4.43
Improving the consistency of tax information between years.	75.38	4.52
Increase the comparability of tax information between years.	75.53	4.53
Average	**74.22**	**4.45**
Service Quality (SvQ)		
SILK SPT consulting services will be sufficient.	72.12	4.33
SILK SPT socialization will be sufficient.	73.48	4.41
SILK SPT workshop/training will be sufficient.	73.18	4.39
The guideline/manual for filling out the SILK SPT form will be clear and understandable.	73.03	4.38
The overall SPT SILK infrastructure will be sufficient.	72.65	4.36
Average	**72.89**	**4.37**

Taxpayers' Perceptions of the Ease of Use and Usefulness of The New Digital Feature of Tax Return Application.

Table 10 illustrates the moderate level of agreement (72%) among corporate taxpayers regarding the usability of the new digital tax return format based on XBRL. Ease of use indicators gauge taxpayers' perceptions of whether the new digital tax return feature based on XBRL is user-friendly in preparing tax-based financial reports intended for submission to the tax return system. The lowest level of agreement, at 70.53%, pertains to completing the XBRL-based tax return form, whereas the highest agreement scores, at 73.56% and 73.71%, are associated with accessing the form and downloading it from the tax return system, respectively.

The perceived usefulness of the new digital tax return format is moderate, with a 74% agreement score, indicating its utility for fulfilling tax obligations. While reducing tax reporting costs receives the lowest score at 72.05%, increasing tax transparency obtains the highest score at 76.82%. The agreement score for tax litigation is 72.42%, slightly lower than other usefulness characteristics like time savings, efficiency, and effectiveness of the tax reporting process, which score above 73%. These findings suggest that taxpayers perceive the benefit of the new digital tax return format in increasing tax transparency more favourably than in reducing tax risk (tax litigation). This indicates that taxpayers may perceive other factors as more significant in tax disputes, such as disagreements about tax regulations and their implementation, as indicated in previous studies (Mandasari & Nuryanah, 2023; Sari & Nuryanah, 2023).

Taxpayers' Intention to Use of the New Digital Feature of Tax Return Application.

Table 11 displays taxpayers' intention to utilize the new digital tax return feature based on XBRL, achieving a 72.73% agreement level. This aligns with their moderate agreement on the feature's characteristics, as previously discussed. Taxpayers perceive the XBRL-based tax return feature as relatively easy to use for preparing tax-based financial reports required by the tax return application. They also find it useful for fulfilling tax return obligations. Given their moderate agreement across usability and utility aspects, taxpayers are inclined to adopt this new digital tax return feature to some extent. These findings suggest that to enhance technology acceptance, based on the DM ISS and TAM models, efforts should focus on improving ease of use, particularly by enhancing system and service quality. Additionally, enhancing perceived usefulness requires improving information quality and modifying users' subjective norms.

Table 10. Perceptions of Ease of Use and Usefulness

Indicators	Agreement Level	Likert Scale Average
Perceived Ease of Use (PEU)		
Learning SILK SPT for tax reporting will be easy.	72.2	4.33
It will be very easy to become skilled at using SILK SPT for tax reporting.	72.12	4.33
Accessing the SILK SPT form in general applications will be easy.	73.56	4.41
Downloading the SILK SPT form from the application is generally easy.	73.71	4.42
Mapping financial statement accounts into the SPT SILK form is generally easy.	72.05	4.32
Filling out the SILK SPT Financial Report form in general will be easy.	72.12	4.33
Filling out the SILK SPT Fiscal Correction form in general will be easy.	70.53	4.23
Filling out the Profit and Loss Detailed SPT SILK form in general will be easy.	71.36	4.28
Uploading the completed SILK SPT form to the application is generally easy.	71.97	4.32
Validating the SILK SPT form that has been uploaded to the application will generally be easy.	71.36	4.28
Completing a prepopulated tax return is generally easy.	71.21	4.27
Average	**72.02**	**4.32**
Makes it easy to fill out SPT for tax reporting.	73.86	4.43
Allows for faster completion of tax reporting tasks.	73.33	4.4
Improving the efficiency of the tax reporting process.	73.64	4.42
Improving the effectiveness of the tax reporting process.	73.71	4.42
Simplify the tax reporting process.	72.95	4.38
Reduced tax reporting costs.	72.05	4.32
Useful for the tax reporting process.	75.23	4.51
Increase tax transparency.	76.82	4.61
Reducing the risk of misuse of the information submitted.	75.61	4.54
Reducing the risk of misinterpretation of the information conveyed.	74.85	4.49
Reducing the risk of tax disputes/litigation.	72.42	4.35
Average	**74.04**	**4.44**

Table 11. Perceptions of Intention to Use

Intention to Use (IU)	Agreement Level	Likert Scale Average
When SILK SPT is available for tax reporting, my company will voluntarily use SILK SPT for tax reporting.	72.73	4.36
My company will submit tax reports using SILK SPT with further assistance from external parties such as a tax consultant or PJAP (Tax Application Service Provider).	64.77	3.89
I recommend other taxpayers to use SILK SPT for tax reporting	65	3.9
Application of SILK SPT encourages my company to have reliable tax management.	74.55	4.47

Based on these findings, there is a potential increase in the confidence of the tax authority, as taxpayers, the primary stakeholders in the tax ecosystem, exhibit openness towards adopting the new digital technology. This is evidenced by Table 12, where most taxpayers (87%) agree that the grace period for implementing this new digital tax return feature should be three years or less before it becomes mandatory. Additionally, Table 11 indicates that taxpayers prefer self-preparation of XBRL-based tax returns over hiring tax consultants or utilizing tax application service providers. However, the study also reveals that while taxpayers acknowledge the encouragement for reliable tax management brought by XBRL-based tax returns, their inclination to recommend this new digital feature to others is comparatively lower, standing at only 65%.

Table 121. Grace Period

Grace Period	N	Percentage (%)
1	67	30.45
2	84	38.18
3	41	18.64
4	5	2.27
5	16	7.27
7	1	0.45
10	1	0.45
No answered	5	2.27
Total	220	100

Ordered Logistic Regression Results

Understanding the taxpayers' characteristics is crucial for the successful implementation of the new digital tax return feature. The ordered logistic regression analysis presented in the subsequent tables elucidates the taxpayers' attributes associated with their inclination to

utilize the XBRL feature for tax reporting. In this analysis, respondents were categorized based on their involvement in the pilot implementation of XBRL for tax reporting by DGT. Multicollinearity tests affirm the model's integrity, with neither the VIF exceeding 10 nor the correlation value surpassing 0.7. Table 13 indicates that compliant taxpayers, state-owned enterprises, and/or multinational companies exhibit a higher propensity to adopt the XBRL feature for tax reporting compared to other taxpayer categories. Furthermore, the results suggest that an escalation in taxpayers' agreement regarding perceived tax transparency enhances the likelihood of their utilization of XBRL-based tax reporting.

Table 13. Ordered Logistic Regression Results (1)

Variable	Coef.	Odds	Expected Sign	t value	p value	Conclusion
XBRL4	0.284	1.328	+	1.13	0.129	Not Supported
SN1	0.172	1.188	+	12.57	0.000***	Supported
SN4	-0.002	0.998	+/-	-0.68	0.248	Not Supported
DMG6	-0.173	0.841	+	-0.87	0.193	Not Supported
DMG7	0.666	1.946	+	6.58	0.000***	Supported
PU8	1.805	6.08	+	16.91	0.000***	Supported
Obs		220				
Pseudo r-squared		0.169				
Prob > chi2		-				

Notes:
*** denotes significant at the 1%;
Standard errors were processed using clustered vce – vce (cluster).
Where:
XBRL4: Experience of Using XBRL for financial reporting = 1; no = 0
SN1: Categorized as a compliant taxpayer = 1; no = 0
SN4: Frequency experiencing tax litigation in the last five years.
DMG6: Taxpayer listed on the Indonesia Stock Exchange = 1; not listed = 0
DMG7: If the taxpayer is State-owned enterprise and/or MNC = 1; others = 0
PU8: Perceived tax transparency (Likert Scale).

Focusing solely on executive respondents, Table 14 illustrates distinct findings, indicating that only the category of compliant taxpayers displays a propensity to adopt the XBRL feature for tax returns compared to other taxpayer categories. Consistent with the outcomes observed across all respondents, executive respondents' data also suggest that an augmentation in taxpayers' agreement regarding perceived tax transparency heightens the likelihood of their utilization of XBRL for tax reporting. The outcomes further suggest that a heightened frequency of tax management evaluation amplifies taxpayers' inclination to utilize the new digital tax return feature. However, the findings indicate an inefficacy in board monitoring, as an increased frequency of discussions on tax management during board meetings is likely to diminish taxpayers' intention to use the XBRL feature for tax returns. This underscores the necessity for further research to ascertain the board of directors' hesitancy toward the new digital tax return feature.

Table 14. Ordered Logistic Regression Results (2)

Variable	Coef.	Odds	Expected Sign	T Value	T Value	Conclusion
XBRL4	-0.41	0.664	+	-0.76	0.223	Not Supported
SN1	0.906	2.475	+	14.91	0.000***	Supported
SN4	0.022	1.022	+/-	0.59	0.279	Not Supported
DMG6	-0.442	0.643	+	-0.86	0.196	Not Supported
DMG7	-0.209	0.811	+	-0.75	0.226	Not Supported
PU8	2.359	10.577	+	16.69	0.000***	Supported
TX1	0.027	1.027	+	0.25	0.400	Not Supported
TX2	0.075	1.078	+	5.20	0.000***	Supported
TX3	-0.029	0.971	+	-37.29	0.000***	Supported but different sign
Obs		78				
Pseudo r-squared		0.2587				
Prob > chi2		-				

Notes: *** denotes significant at the 1%.
Standard errors were processed using clustered vce – vce (cluster).
Where:
XBRL4: Using XBRL for financial reporting = 1; no = 0
SN1: Categorized as a compliant taxpayer = 1; no = 0
SN4: Frequency experiencing tax litigation in the last five years.
DMG6: Taxpayer listed on the Indonesia Stock Exchange = 1; not listed = 0
DMG7: If the taxpayer is State-owned enterprise and/or MNC = 1; others = 0
PU8: Perceived tax transparency (Likert Scale).
TX1: Establishment of tax management (Likert Scale)
TX2: Frequency of tax management per year.
TX3: Frequency of board discussion on tax management per year.

The robustness tests, presented in Tables 15 and 16, demonstrate that altering the variable for experiencing tax litigation to a dummy variable renders this variable significant. However, for the model involving supervisory-level respondents, the results remain insignificant.

Table 15. Ordered Logistic Regression Results (3)

Variable	Coef.	Odds	Expected Sign	T Value	P Value	Conclusion
XBRL4	0.249	1.283	+	0.98	0.164	Not Supported
SN1	0.146	1.157	+	12.70	0.000***	Supported
SN4	-0.275	0.759	+/-	-6.85	0.000***	Supported
DMG6	-0.124	0.884	+	-0.58	0.282	Not Supported
DMG7	0.763	2.146	+	7.61	0.000***	Supported
PU8	1.803	6.065	+	17.94	0.000***	Supported
Obs		220				
Pseudo r-squared		0.1702				
Prob > chi2		-				

Notes: *** denotes significant at the 1%;

Standard errors were processed using clustered vce – vce (cluster).
Where:
XBRL4: Using XBRL for financial reporting = 1; no = 0
SN1: Categorized as a compliant taxpayer = 1; no = 0
SN4: Experiencing tax litigation in the last five years = 1; never = 0
DMG6: Taxpayer listed on the Indonesia Stock Exchange = 1; not listed = 0
DMG7: If the taxpayer is State-owned enterprise and/or MNC = 1; others = 0
PU8: Perceived tax transparency (Likert Scale).

Table16. Ordered Logistic Regression Results (4)

Variable	Coef.	Odds	Expected Sign	T Value	P Value	Conclusion
XBRL4	-0.412	0.662	+	-0.71	0.239	Not Supported
SN1	0.912	2.489	+	15.19	0.000***	Supported
SN4	0.152	1.165	+/-	0.91	0.181	Not Supported
DMG6	-0.442	0.643	+	-0.88	0.190	Not Supported
DMG7	-0.216	0.806	+	-0.68	0.248	Not Supported
PU8	2.364	10.636	+	16.85	0.000***	Supported
TX1	0.031	1.032	+	0.31	0.380	Not Supported
TX2	0.077	1.08	+	3.71	0.000***	Supported
TX3	-0.031	0.97	+	-8.33	0.000***	Supported but different sign
Obs		78				
Pseudo r-squared		0.2587				
Prob > chi2		-				

Notes:
*** denotes significant at the 1%.
Standard errors were processed using clustered vce – vce (cluster).
Where:
XBRL4: Using XBRL for financial reporting = 1; no = 0
SN1: Categorized as a compliant taxpayer = 1; no = 0
SN4: Frequency experiencing tax litigation in the last five years.
DMG6: Taxpayer listed on the Indonesia Stock Exchange = 1; not listed = 0
DMG7: If the taxpayer is State-owned enterprise and/or MNC = 1; others = 0
PU8: Perceived tax transparency (Likert Scale).
TX1: Establishment of tax management (Likert Scale)
TX2: Frequency of tax management per year.
TX3: Frequency of board discussion on tax management per year.

CONCLUSION, IMPLICATIONS, AND SUGGESTIONS FOR FUTURE STUDIES

Digital transformation has become imperative for organizations worldwide, including tax regulatory bodies. One facet of this digital shift within the tax system involves enhancing the digital infrastructure of tax return applications. Presently, in Indonesia, tax basis financial reports submitted to tax authorities exist in digital PDF formats, uploaded into the system upon taxpayers' submission of tax returns. However, deficiencies persist in this digital reporting format, as these reports necessitate further processing for tax

compliance analysis. The XBRL potentially offers advantages for tax reporting by enhancing the quality of input data in the tax administration system. Drawing on the foundational theories of information and technology acceptance, namely the DM ISS Model and the TAM, this study investigates taxpayers' perceptions of the forthcoming implementation of XBRL-based tax reporting, a new digital feature in tax reporting.

Employing a mixed-method approach, this study unveils a moderate level of agreement among taxpayers regarding various variables, including computer self-efficacy, system quality, information quality, and service quality. Similarly, moderate agreement is observed concerning perceived ease of use and usefulness. These levels of agreement contribute to a moderate acceptance of taxpayers towards the new digital tax reporting feature based on XBRL. Quantitative analysis supports existing tax compliance literature, indicating that compliant taxpayers, state-owned enterprises, and multinational corporations are more inclined to adopt the new digital tax return feature. Additionally, the study highlights that robust governance practices, such as frequent tax management evaluations, enhance the likelihood of taxpayers embracing the new digital tax return feature.

This study offers practical implications for devising effective strategies to implement XBRL for tax reporting. Given the moderate level of agreement among taxpayers regarding the acceptance of the new digital tax return feature, it is recommended that the tax authority enhances this acceptance by continuously enhancing the quality of the technology to make it more user-friendly and beneficial for tax reporting purposes. Drawing from the DM ISS and TAM models, enhancing system and service quality can improve the perceived ease of use, while improving information quality and adjusting user subjective norms can enhance technological usefulness. Additionally, the study suggests the establishment of a champion team by the tax authority, comprising compliant taxpayers, state-owned enterprises, and multinational corporations, to serve as role models for implementing XBRL-based tax reporting. Moreover, it is crucial for the tax authority to continually improve tax transparency, as higher perceived tax transparency correlates with greater willingness among taxpayers to adopt the new digital tax return feature. Although this study adopts a comprehensive mixed-method approach, further research avenues remain unexplored, including the utilization of advanced quantitative models like structural equation modelling and expanding the respondent pool to encompass additional stakeholders in the tax ecosystem, such as tax consultants and internal staff of tax authority institutions, to gauge their readiness for this new digital tax reporting feature.

DISCLAIMER

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