

Digital Transformation and Tax Compliance: A Literature Study on the Impact of E-Filing on the Taxation System

Fatikhah Romadhona^{1*}, Ana Farida Sahara², Yananto Mihadi Putra³

^{1,3} Universitas Mercu Buana, Jakarta, Indonesia

² Kantor Pelayanan Pajak Pratama Kebon Jeruk Satu, Jakarta, Indonesia

(*) Corresponden Author: fatikhahromadhona@gmail.com

Article Info:

Abstract

Keywords:

Digital Transformation;
e-Filing;
Taxpayer Compliance;
Tax System;

Digital transformation has become a global phenomenon that significantly impacts various sectors, including Indonesia's tax system. The implementation of the e-filing system allows taxpayers to report taxes online without having to visit tax offices, thereby accelerating, facilitating, and increasing transparency in the tax reporting process. This study examines the effect of e-filing on taxpayer compliance using compliance data and the number of registered taxpayers from 2021 to 2023. The results indicate that the compliance rate among e-filing users increased from 84.07% in 2021 to 86.97% in 2023. Beyond easing tax reporting obligations, the system also contributes to enhancing state revenue and expanding the taxpayer base. These findings confirm that digital transformation through e-filing is an effective solution for improving the efficiency of tax in Indonesia.

Article History:

Received : 19-05-2025

Revised : 28-05-2025

Accepted : 12-06-2025

Article DOI :

<https://doi.org/10.70550/pelita.v2i2.224>

How to cite : Romadhona, F., Sahara, A. F. ., & Putra, Y. M. (2025). Digital Transformation and Tax Compliance: A Literature Study on the Impact of E-Filing on the Taxation System. *Pelita : Jurnal Penelitian, Terapan Dan Aplikatif*, 2(2), 96-106. <https://doi.org/10.70550/pelita.v2i2.224>



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/). Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

Published under licence by Bacadulu.net Publisher.

INTRODUCTION

Digital transformation has become a global phenomenon that has brought significant changes across various sectors, including tax administration. Information and communication technology (ICT) enables the government to develop electronic tax systems aimed at improving efficiency, speed, and security in tax administration processes (Cahyani & Istikhoroh, 2021). One of the most important innovations is the implementation of e-filing, a system that allows taxpayers to submit their tax returns online without the need to visit the tax office in person (Ponto et al., 2022).

The implementation of e-filing has provided easier access for taxpayers in fulfilling their tax obligations, particularly in the digital era that demands speed and flexibility in public services. This system is designed to simplify the reporting process while also providing better transparency in tax administration (Mawaranty & Furqon, 2025). Such digitalization is also expected to support sustainable tax reform by reducing administrative burdens and minimizing the risk of human error in tax data processing (Indriana et al., 2023).

The involvement of digital technology in the taxation system is not only a matter of operational efficiency but also reflects a paradigm shift in the relationship between taxpayers and tax authorities. The digital approach offers the potential to strengthen a compliance culture and increase tax awareness through more interactive and informative mechanisms (Salsabila & Vendy, 2024). This is crucial considering that tax compliance is a key factor in increasing state revenue derived from taxation.

Despite offering various conveniences and advantages, the implementation of e-filing also presents several challenges, such as the need for adequate technological infrastructure, taxpayers' digital literacy, and public acceptance of digital culture (Nisa et al., 2024). These factors are important aspects influencing the success of digital transformation in the taxation system. Therefore, a comprehensive understanding of the background of tax digitalization, including the implementation of e-filing, is essential as a foundation for supporting adaptive and sustainable tax policy development. Effective digital transformation does not solely depend on technology but must also involve social and policy aspects to create a tax system that is transparent, accountable, and equitable (Sipahutar & Tina, 2024).

Based on concerns regarding the effectiveness of digital transformation in the taxation system, research on the outcomes of e-filing implementation in relation to taxpayer compliance has become highly important. The e-filing system integrates digital technology into the tax reporting process, which requires synergy among technological infrastructure, taxpayers' digital literacy education, as well as supportive policies and regulations. These factors greatly influence the success of e-filing implementation and the level of taxpayer compliance (Wicaksono et al., 2024).

This study focuses on examining various aspects that affect the effectiveness of e-filing in improving tax compliance, including:

- a. Digital transformation in the taxation system;
- b. Factors influencing taxpayer compliance in the utilization of e-filing (level of digital literacy and education);
- c. The influence of policies and regulations on taxpayer compliance in the utilization of e-filing.

Technical Constraints and Taxpayer Compliance in the Utilization of E-Filing

The utilization of the e-filing system in tax reporting offers convenience and efficiency; however, various technical constraints continue to affect the level of usage and taxpayer compliance. Factors such as limited technological infrastructure, uneven internet network quality, availability of supporting devices, and data security issues have become major obstacles in optimizing the function of e-filing (Mawaranty & Furqon, 2025). These barriers result in not all taxpayers being able to access and utilize the electronic system optimally.

Such technical constraints directly contribute to the level of taxpayer compliance in submitting the Annual Tax Return. Studies indicate that these obstacles lead to delays or inaccuracies in reporting, which in turn affect administrative compliance (Sipahutar & Tina, 2024). For instance, “the implementation of electronic tax reporting facilitates the reporting process; however, unresolved technical issues remain a significant inhibiting factor for taxpayer compliance” (Sipahutar & Tina, 2024).

In addition, the importance of education and socialization to improve taxpayers’ digital literacy has also become a major concern. This educational effort aims to enable taxpayers to overcome existing technical constraints so that the utilization of e-filing can be more optimal (Septidiany, 2024). With proper handling of technical issues, e-filing can function maximally as a medium that supports tax compliance through the ease of electronic reporting (Indriana et al., 2023).

Overall, the literature emphasizes that although e-filing has brought significant digital transformation to the taxation system, the strengthening of infrastructure, data security, as well as the enhancement of literacy and education are key factors in reducing technical constraints and improving taxpayer compliance (Widianti, 2025).

Objectives and Benefits

This literature study aims to examine and analyze various aspects related to the utilization of the e-filing system in the digital transformation of taxation, with a focus on technical constraints and their impact on taxpayer compliance. In addition, this study also seeks to evaluate the role of policies, regulations, and educational efforts in supporting the optimization of e-filing as an effective tax reporting medium in the digital era.

The benefit of this discussion is to provide comprehensive insights regarding the constraints and supporting factors in the implementation of e-filing, which can serve as a reference for policymakers and tax practitioners in designing more efficient and inclusive system development strategies. Furthermore, this article is expected to increase awareness of the importance of digital literacy and effective socialization in supporting taxpayer compliance through the utilization of digital technology.

LITERATURE REVIEW

Digital Transformation in the Taxation System

Digital transformation has become the main direction of tax administration reform in many countries, including Indonesia. The utilization of information and communication technology (ICT) in taxation mechanisms, such as e-filing, represents an innovation designed to enhance the convenience and efficiency of tax reporting. E-filing enables taxpayers to submit their Annual Tax Return (Surat Pemberitahuan Tahunan/SPT) online, thereby reducing dependence on manual processes and saving time (Judijanto, 2025).

However, the success of this digital transformation does not solely depend on the availability of technology, but also on the readiness of infrastructure, the quality of internet networks, and adequate data security. Various studies indicate that the implementation of e-filing still faces a number of technical constraints that may hinder the optimization of this system (Cahyani & Istikhoroh, 2021). In addition, taxpayers’ digital literacy is a crucial factor to ensure that the technology can be utilized effectively;

therefore, the government is required to provide intensive education and socialization programs.

Overall, digital transformation in taxation is expected to increase transparency, accelerate administrative processes, and reduce the potential for human errors that often occur in manual reporting. Consequently, this theoretical framework positions digital transformation as the main foundation for understanding the dynamics of taxpayer compliance in the digital era.

Factors Influencing Taxpayer Compliance in the Utilization of E-Filing (Digital Literacy and Education Level)

Taxpayer compliance in using e-filing is influenced by various complex factors, both technical and non-technical. From a technical perspective, the availability of reliable infrastructure, ease of system access, and information security are key variables that determine the convenience of using e-filing (Sipahutar & Tina, 2024). Furthermore, taxpayers' perceptions of data security and system reliability also affect their trust in using this digital platform (Widianti, 2025).

Sociodemographic factors such as age, level of education, and experience in using digital technology also play a role in the level of compliance. Adequate digital literacy supports taxpayers in understanding the procedures for using e-filing and minimizes errors in reporting (Sipahutar & Tina, 2024). Effective education and socialization by the authorities are therefore essential to overcome comprehension barriers and increase taxpayers' motivation to utilize e-filing consistently.

The combination of these factors demonstrates that tax compliance does not solely depend on the availability of digital systems, but also on the aspect of human capital that supports adaptation to new technology.

The Influence of Policy and Regulation on Taxpayer Compliance in the Utilization of E-Filing

Policy and regulation play a central role in supporting the utilization of the e-filing system and the level of taxpayer compliance. Clear and consistent regulations provide a legal framework that fosters trust and offers legal certainty for taxpayers to use digital systems (Wicaksono et al., 2024). The government must also ensure that these regulations are able to accommodate technological developments and the dynamic needs of taxation in the digital era.

In addition, the enforcement of sanctions for violations of tax obligations becomes an important instrument to create a deterrent effect and encourage compliance. Studies show that sanctions accompanied by educational policies and improvements in digital services can enhance the effectiveness of supervision and tax compliance (Widianti, 2025). The integration between fiscal policy and information technology is capable of forming a strong digital ecosystem in tax administration.

An adaptive policy framework must also include the protection of data security and taxpayer privacy rights in order to increase the sense of security when using e-filing, thereby strengthening taxpayers' trust and participation in the digital system. This aspect becomes a key element in determining the success of sustainable digital transformation in taxation.

METHODS

This study applies a literature review method aimed at examining various academic studies and articles that discuss the effectiveness of the e-filing system in improving tax reporting compliance in Indonesia.

Data Collection Technique

Data were collected through a systematic search and selection of literature using several academic databases and digital libraries that provide access to scientific journals. The search was conducted using specific keywords such as “e-filing effectiveness,” “digital tax compliance,” and “digital transformation in taxation.” The selection process was based on the relevance of the content to the research topic, the quality of the publication, and the recency of the publication period to ensure that the analysis covers valid and up-to-date data and information.

Data Analysis Technique

The collected data were analyzed using a qualitative approach through a narrative synthesis technique. This process included identification, evaluation, and interpretation of research findings from the reviewed literature with the aim of identifying patterns, similarities, and differences related to the influence of e-filing utilization on taxpayer compliance. The synthesis was also conducted to analyze various supporting factors and challenges in the implementation of the e-filing system based on empirical evidence and theoretical studies, so that relevant recommendations could be formulated for the development of digital taxation policies and practices.

Table 1. Government Revenue

Year of Tax Return Received	State Revenue
2021	1.314.84 triliun
2022	1.849.09 triliun
2023	1.916.34 triliun

Source: Kemenkeu.go.id

Table 2. Total Number of Registered Taxpayers

Year of Tax Return Received	Amount (NPWP)	Amount (NIK)
2021	66.351.573Jt	272.229.372Jt
2022	70.291.585Jt	275.344.166Jt
2023	73.961.818Jt	279.118.866Jt

Source: Pajak.go.id and Dukcapil.kemendagri.go.id

Table 3. Taxpayer Compliance Level in Indonesia

Year of Tax Return Received	WP E-Filing	WP SPT Manual	Compliance Ratio
2021	18,37Jt	1.496.75Jt	84,07%
2022	17,66Jt	1.650.632Jt	86,80%
2023	17,94Jt	1.334.617Jt	86,97%

Source: Pajak.go.id

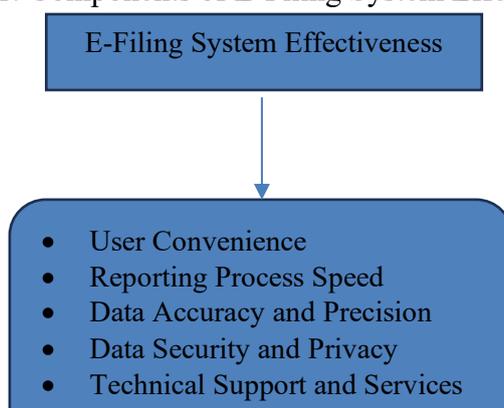
RESULT AND DISCUSSION

Based on table 3, there was a significant increase in state revenue from 2021 to 2023. Government revenue through the taxation system rose from IDR 1,314.84 trillion in 2021 to IDR 1,916.34 trillion in 2023. This indicates that the digitalization of the taxation system, particularly the implementation of e-filing, has made a positive contribution to improving the effectiveness of tax collection. The continuous increase in revenue can be interpreted as an indication of the success of digital transformation in simplifying tax reporting processes, which in turn impacts the growth of state income.

Data in table 1 show an increasing trend in the number of registered taxpayers, both based on NPWP and NIK. The number of NPWP holders increased from 66.35 million in 2021 to nearly 74 million in 2023, while the number of taxpayers registered using NIK also grew. This indicates that a digitally based tax registration and administration system helps expand taxpayer coverage in a more integrated manner.

Table 2 illustrates the level of taxpayer compliance in submitting SPT reports, both through e-filing and manual methods. The compliance ratio using e-filing increased from 84.07% in 2021 to 86.97% in 2023. This confirms that the e-filing system contributes to facilitating taxpayer compliance in a more practical, faster, and more transparent way compared to manual methods.

Figure 1. Components of E-Filing System Effectiveness



Source: Processed by the researcher

Effectiveness of the E-Filing System

From the available data, the adoption rate of e-filing is relatively high and stable, with the number of e-filing SPT submissions ranging between 17–18 million annually during the 2021–2023 period. State revenue from the taxation sector also increased significantly from IDR 1,314.84 trillion in 2021 to IDR 1,916.34 trillion in 2023. This increase demonstrates that the implementation of e-filing as part of digital transformation in taxation has made a real contribution to improving the effectiveness of tax collection (Rosyid et al., 2024). Faster, more transparent, and easily accessible processes for taxpayers are the main factors behind this improvement.

Furthermore, data show that the number of registered taxpayers continued to grow from 66.35 million in 2021 to nearly 74 million in 2023, indicating that the digital system helps expand the taxpayer base and simplify tax administration. Based on existing

literature, the system facilitates taxpayers in submitting Annual Tax Returns electronically without the need to visit tax offices (Sipahutar & Tina, 2024). The main advantages include faster reporting processes, reduced data input errors, and increased transparency in tax administration (Cahyani & Istikhoroh, 2021). Digital systems such as e-filing are also able to improve tax data management and minimize reporting inaccuracies (Indriana et al., 2023).

Nevertheless, the effectiveness of this system still needs to be supported by improvements in technological infrastructure and the enhancement of taxpayers' digital literacy so that the coverage and quality of reporting can be further optimized.

Tax Compliance through the E-Filing System

The level of taxpayer compliance using e-filing increased from 84.07% in 2021 to 86.97% in 2023. This positive trend confirms that ease of access, practicality, and transparency in reporting through e-filing significantly influence taxpayer compliance. Compared to manual reporting methods, e-filing not only simplifies the tax reporting process but also provides a more convenient experience for taxpayers. In addition, the system reduces concerns about reporting errors and encourages more disciplined compliance in fulfilling tax obligations (Rahmawati et al., 2022).

Literature studies indicate that the use of digital systems increases taxpayer trust due to data security assurance and process transparency (Cahyani & Istikhoroh, 2021). Automatic reporting reminders and data validation features in e-filing reduce the risk of late and inaccurate submissions (Wicaksono et al., 2024). Other studies add that the combination of digitalization, taxpayer education, and clear administrative sanctions strengthens reporting discipline (Nisa et al., 2024).

However, challenges remain, particularly the uneven distribution of digital literacy, which must become a focus of improvement so that the system can function optimally in supporting a culture of tax compliance.

Relationship with Tax Accounting and Tax Planning

The implementation of the e-filing system has a close correlation with tax accounting, which serves as the basis for recording and reporting the tax obligations of an entity. With the presence of e-filing, the tax reporting process becomes more structured, transparent, and efficient. Tax accounting requires accurate and timely data to prepare tax reports, and e-filing provides a platform that supports this through validation features and automatic reminders. This not only minimizes the risk of reporting errors but also accelerates the reporting and monitoring processes carried out by tax authorities (Ullah et al., 2023). Thus, the use of e-filing supports integrity and transparency in tax accounting, which in turn enhances compliance and orderly tax administration.

From the perspective of tax planning, the e-filing system provides strategic benefits for taxpayers in planning their tax obligations more effectively and efficiently. Through easy access and transparent data, taxpayers can quickly analyze and adjust their tax plans, including utilizing incentives and the latest tax policies. E-filing offers flexibility in document management and reporting, enabling more proactive decision-making in legally minimizing tax burdens. In addition, the system accelerates administrative processes so that tax planning can be carried out dynamically in accordance with changes in tax regulations without significant technical difficulties. Therefore, e-filing becomes

an important tool for optimizing tax planning that is conducive to the financial management of companies or individuals.

CONCLUSION

The implementation of the e-filing system in Indonesian taxation has brought significant changes to the effectiveness and efficiency of tax administration. This system not only facilitates taxpayers in fulfilling their tax reporting obligations but also contributes to a measurable increase in compliance over recent years. With easier access and digitally integrated processes, tax reporting has become faster, more accurate, and more reliable.

The continuous growth of tax revenue each year indicates that the use of the e-filing system has made a positive contribution to state revenue. The expansion of the taxpayer base also reflects that this digital transformation is able to reach a wider range of taxpayers and encourage them to comply more consistently with their tax obligations. This demonstrates an effective synergy between technology and tax regulations in supporting national tax administration.

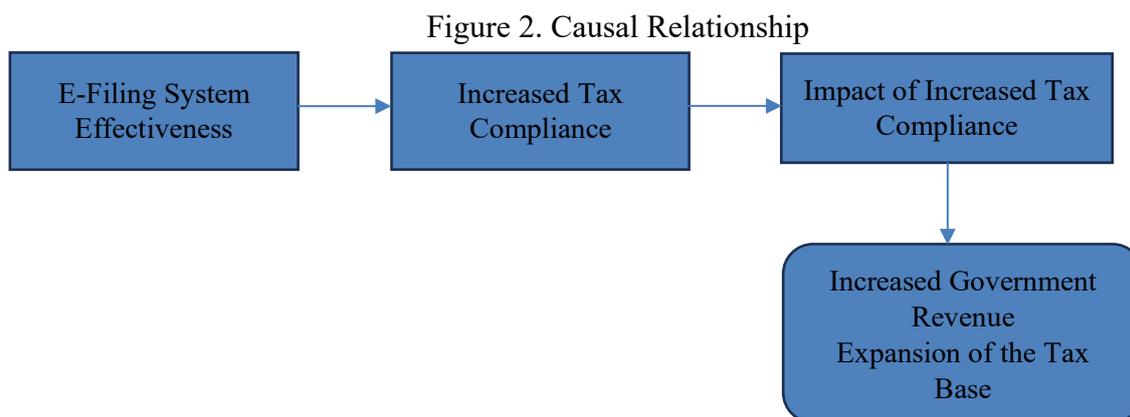
Adequate regulations and continuous education for taxpayers are essential factors in ensuring the successful implementation of this system. The sustainability and optimization of the benefits of e-filing largely depend on how the government and related institutions can continuously improve technical support and enhance taxpayers' knowledge. Therefore, the e-filing system is not merely an administrative tool but has become an integral part of digital transformation in Indonesian taxation.

Furthermore, the implementation of the e-filing system enhances the effectiveness of tax reporting and compliance while strengthening tax accounting through accurate and transparent record-keeping. In addition, this system supports tax planning by providing real-time data that assist strategic decision-making for optimal and regulation-compliant tax management, thereby creating efficient and sustainable tax administration.

Overall, the e-filing system represents an innovation that has a substantial impact on improving taxpayer compliance and state revenue while reinforcing the foundation of a modern and transparent tax management system. In the future, further development of this system is expected to ensure the sustainability of its benefits and to deliver services that are increasingly responsive to the needs of both society and the government.

Implications and Limitations

The e-filing system has made a significant contribution to accelerating digital transformation in Indonesia's taxation system. Through its convenience and speed in reporting, this system has been able to improve taxpayer compliance while simultaneously expanding the state revenue base. This development also has a positive impact on the efficiency of tax administration. The implementation of the system, supported by adequate regulations and continuous taxpayer education, is a crucial factor to ensure that the benefits of e-filing can be optimally and sustainably realized. Thus, e-filing has become one of the key pillars of tax reform that supports long-term fiscal development.



Source: Processed by the researcher

Despite offering many advantages, the e-filing system still faces several limitations that need to be addressed. Dependence on adequate technological infrastructure and stable internet connectivity remains an essential prerequisite for the system to operate smoothly and be accessible to all taxpayers. In reality, disparities in digital literacy and limited technological skills among certain groups of taxpayers have resulted in suboptimal utilization of the system. In addition, data security issues represent a critical concern, as potential information breaches could undermine user trust. Equally important are operational technical problems and the quality of supporting services, which, if not properly managed, may lead to disruptions and reduce system reliability. All these limitations constitute challenges that must be overcome to ensure the successful and comprehensive implementation of e-filing.

REFERENCES

- Cahyani, S. N., & Istikhoroh, S. (2021). Studi Literatur tentang Efektifitas Sistem E-Filling untuk Meningkatkan Kepatuhan Wajib Pajak. *Journal of Sustainability Business Research*, 2(1), 2746–8607. www.pajak.go.id
- Indriana, Y., Jatnika, I., & Suryadi, D. (2023). Pengaruh Penerapan E-Registration, E-Filing dan E-Billing Terhadap Efisiensi Pelaporan Wajib Pajak Orang Pribadi di Masa Pandemi COVID-19. *Jurnal Akuntansi Inovatif*, 1(1), 8–16. <https://doi.org/10.59330/jai.v1i1.2>
- Judijanto, L. (2025). Pengaruh Teknologi E-Filing terhadap Tingkat Kepatuhan Wajib Pajak di Era Digital. *Jurnal Akuntansi dan Keuangan West Science*, 4(01), 33–39. <https://doi.org/10.58812/jakws.v4i01.1940>
- Mawaranty, T. D. S., & Furqon, I. K. (2025). Optimalisasi e-Filing sebagai Solusi Modern untuk Meningkatkan Kepatuhan Wajib Pajak di Indonesia. *Jurnal Ekonomi dan Bisnis*, 17(1), 77–85. <https://doi.org/10.55049/jeb.v17i1.398>
- Nisa, F.K., Salsabila, A., & R, N. D. (2024). Systematic Literature Review: Analisis Penerapan E-Filling System dan Sanksi Pajak terhadap Kepatuhan Pelaporan SPT

- Tahunan Wajib Pajak Orang Pribadi (WPOP). *Inisiatif: Jurnal Ekonomi, Akuntansi dan Manajemen*, 3(4), 42–54. <https://doi.org/10.30640/inisiatif.v3i4.2898>
- Ponto, R. T., Karamoy, H., & Kindangen, W. (2022). Efektivitas Penggunaan E-Filing dalam Pelaporan SPT Tahunan Wajib Pajak Orang Pribadi di Kota Manado Effectiveness Of Using E-Filing in Reporting Annual SPT Taxpayer Personal in Manado City. *Jurnal LPPM Bidang EkoSosBudKum*, 5(2), 407–414.
- Rahmawati, A. A., Khasanah, U., & Kuntadi, C. (2022). Literature Review Pengaruh Penerapan E-Filing dan Sanksi Pajak Terhadap Kepatuhan Pelaporan Spt Tahunan Wajib Pajak Orang Pribadi. *Jurnal Ilmu Multidisplin*, 1(1), 225–233. <https://doi.org/10.38035/jim.v1i1.33>
- Rosyid, A. M., Pangesti, I., Hasanah, N., & Mastutik, S. (2024). Pengaruh Digitalisasi Terhadap Kepatuhan dan Penerapan Hukum Pajak di Indonesia. *Mendapo: Journal of Administrative Law*, 5(3), 265–280. <https://doi.org/10.22437/mendapo.v5i3.32242>
- Salsabila, V. (2024). Analisis Perbandingan Penerapan E-Form dan E-Filing dalam Pelaporan Surat Pemberitahuan Tahunan pada Kantor Konsultan Pajak. *Economic Reviews Journal*, 3(4), 1301–1310. <https://doi.org/10.56709/mrj.v3i4.435>
- Septidiany, R. (2024). Peran Teknologi Informasi dalam Peningkatan Kepatuhan Pajak: Analisis Implementasi Sistem Pelaporan Elektronik. *Jurnal Cahaya Mandalika*, 3(3), 1780–1789. <https://ojs.cahayamandalika.com/index.php/jcm/article/view/2955>
- Sipahutar, T. T. U., & Tina, A. (2024). Efektivitas E-System dalam Meningkatkan Kepatuhan Pajak: Tinjauan Literatur terhadap Transformasi Digital dalam Sistem Perpajakan. *Journal of Audit and Tax Synergy*, 1(1), 62–70.
- Ullah, H. A., Sair, S. A., & Nisar, S. (2023). Study of E-Filing Acceptance among Taxpayers: Evidence from Emerging Economy. *Contemporary Issues in Social Sciences and Management Practices*, 4(4), 148–159. <https://doi.org/10.61503/cissmp.v2i4.89>
- Wicaksono, A., Sharfina, D., & Syarifah, N. S. (2024). Faktor-Faktor yang Mempengaruhi Ketidakpatuhan Masyarakat dalam Melaporkan SPT Tahunan Wajib Pajak Orang Pribadi (Literature Riview). *Inisiatif: Jurnal Ekonomi, Akuntansi Dan Manajemen*, 3(2), 395–405. <https://doi.org/10.30640/inisiatif.v3i2.2389>
- Widianti, E. (2025). Peran Sanksi Pajak dalam Membentuk Perilaku Wajib Pajak pada UMKM : Studi Literatur Review. 2(4), 19–26.