

The Assessing the Effectiveness of Digital Media Used by the Directorate General of Taxes to Enhance Tax Literacy among Millennial Taxpayers

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ABSTRACT

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This study aims to analyze the effectiveness of digital media utilization by the Directorate General of Taxes (DGT) in enhancing tax literacy among millennial taxpayers. With the advancement of information technology and the growing dominance of millennials as a significant portion of the taxpayer base, the DGT is required to adopt more modern and adaptive communication strategies. This research employs a quantitative approach by distributing questionnaires to 150 millennial taxpayers who are active on social media and exposed to tax education content from the DGT. The findings indicate that the use of digital platforms such as Instagram, YouTube, and TikTok significantly improves millennials' understanding of their tax obligations, although the effectiveness is still influenced by the intensity and quality of the content delivered. These results suggest that the DGT needs to further optimize its digital communication strategies to ensure greater relevance and engagement among the millennial generation.

1. Introduction

1.1 Background

In today's digital era, the development of information and communication technology has changed the way government organizations, including the Directorate General of Taxes (DGT), carry out their functions. One of the major challenges faced by the DGT is to increase public awareness and understanding of tax obligations through increasing tax literacy. Tax literacy is an individual's ability to understand the basic concepts of taxation, regulations, and reporting processes needed in carrying out their obligations as a taxpayer. This understanding is very important because it is directly related to tax compliance and state revenue optimization.

Tax literacy is an important foundation in realizing sustainable tax compliance. Unfortunately, the level of tax literacy in Indonesia is still relatively low, especially among the younger generation and Micro, Small, and Medium Enterprises (MSMEs). Based on the results of a survey conducted by the Directorate General of Taxes in 2020, it is known that more than 60% of taxpayers still have difficulties in understanding their tax rights and obligations as a whole

(DGT, 2020). This low literacy has an impact on the low voluntary compliance of taxpayers and the high risk of errors in reporting and paying taxes.

In responding to this problem, the DGT has made various innovations, one of which is through the use of **digital media** as a means of education and communication with taxpayers. This transformation is carried out in line with the increasing internet penetration and the use of social media in Indonesia. Data from We Are Social (2023) shows that 77% of Indonesia's population is an active internet user, and more than 60% of them use social media every day. This figure reflects the great potential of digital media as a means of education that reaches wider and faster than conventional methods.

Through channels such as the official website, Instagram, YouTube, TikTok, to tax applications such as DGT Online and e-Bupot, the DGT actively conveys information about tax policies, tax return filling tutorials, the latest regulatory education, and tax awareness campaigns. This strategy is believed to be able to form tax awareness from an early age, especially among the millennial generation and Gen Z who are the dominant users of digital media.

1.2 Problem Statement

1. How effective is the use of digital media carried out by the Directorate General of Taxes in conveying tax information to taxpayers?
2. Is the digital media used by the DGT able to increase taxpayers' understanding and awareness of their tax rights and obligations?
3. What are the obstacles faced in the implementation of the tax information digitization strategy by the DGT, and how are the solutions?

1.3 Objectives and Scope

1. To evaluate the effectiveness of digital media used by the Directorate General of Taxes in conveying information to taxpayers.
2. To find out the influence of the use of digital media on increasing tax literacy among taxpayers.
3. To identify challenges in the use of digital media by the DGT and formulate recommendations for improvement.

2. Literature Review

Based on the results of the researcher's research, there are several studies that are relevant to the problems in this study. This review was taken from the results of previous research on similar topics.

First, Fahmi (2022) explained that the DGT officially utilizes social media (Instagram, Twitter, YouTube, podcasts) through the "Taxmin" team for tax education in accordance with PER-12/PJ/2021. Audiovisual and audio content is specifically crafted to be relevant to millennials—using short videos, light comedies, and podcasts to capture the attention of digital audiences. As a result, DGT content often trended on Twitter, proving the wide reach and appeal of the content.

Second, Sukma Sari (2023) noted that Indonesia's very large database of active users of digital media (191 million people in January 2022) opens up optimal opportunities for tax education. The use of vlogs, animations, and comic strips is seen as effective in facilitating the absorption of information and minimizing negative stigma against taxes. Theoretical support from Schwartz

(Lowe, R. K., & Schnotz, W. (Eds.) 2008) suggests that animation helps the audience's understanding and memory of the information conveyed.

Third, Dewa et al. (e_JRA) found that although tax education content was less significant in influencing compliance, the use of digital platforms such as eFiling, eBilling, and DGT social media was proven to have a significant and positive impact on taxpayer compliance ($R^2 = 42.7\%$). The TAM (Technology Acceptance Model) model is a basic model that connects the perception of convenience and benefits of digital media with compliance intentions.

2.1 Related Work

Along with the development of information and communication technology, the Directorate General of Taxes (DGT) has begun to optimize the use of digital media to increase tax literacy among taxpayers. Digitizing tax administration through services such as e-Filing, e-Billing, and e-Faktur is considered to be able to improve reporting efficiency and taxpayer compliance, especially in the MSME sector (Susilawati et al., 2023; Maharani et al., 2023).

Research by Feri, A. R. P., & Hapsari, A. A. (2024) also shows that the use of the digital taxation system at KPP Pratama Kuala Tungkal provides convenience, although there are still technical obstacles such as system disruptions and limitations in users' digital literacy.

In addition to digitizing administration, the DGT is also actively conducting tax education through various social media platforms and digital content. Through programs such as the "Taxmin" team and educational video content on YouTube, Instagram, and podcasts, the DGT targets the millennial generation to better understand their tax rights and obligations (Fahmi, 2022).

Research by Sukma Sari (2023) states that media such as animation, vlogs, and educational comics have proven to be effective in conveying tax messages in a light and attractive way. Even during the pandemic, the implementation of webinars by the DGT also showed high effectiveness in increasing taxpayer participation and understanding of COVID-19 tax incentives, as long as it was supported by a good information system and material delivery (Sari & Santoso, 2021).

However, the effectiveness of the use of digital media by the DGT is inseparable from a number of challenges. Husaini, M. F., Afifudin, & Nandiroh, U. (2024) noted that there are still digital literacy barriers among elderly taxpayers, as well as technical obstacles such as system errors that can interfere with the reporting process. Priyono (2025) added that the DGT's digital transformation through the Coretax system requires continuous educational support in the form of practical guides, infographics, and mentoring services such as chatbots and WhatsApp bots.

Therefore, in order for digital media to be truly effective in improving tax literacy, synergy is needed between content quality, ease of access to technology, and comprehensive educational support.

2.2 Research Gap

The development of digital technology has encouraged the Directorate General of Taxes (DGT) to implement various digital media in an effort to increase taxpayers' tax literacy. Administrative digitalization such as e-Filing, e-Billing, as well as the use of social media, webinars, and educational content have had a positive impact on tax awareness and compliance (Susilawati et al., 2023; Sari & Santoso, 2021). However, there are several research gaps that need attention to deepen understanding of the effectiveness of DGT's digital media.

First, existing studies generally only assess the effectiveness of one or several digital media separately without conducting a comprehensive evaluation of the DGT's digital strategy. Fahmi (2022) and Priyono (2025) highlight the importance of a holistic approach that integrates various digital platforms and communication methods in order to achieve optimal tax literacy. Second,

there is a lack of research examining the influence of taxpayer demographic characteristics, such as age, education, and geographic location, on the effectiveness of digital media use. This is important so that the content and methods of education can be adjusted to the needs and abilities of each segment of taxpayers (Wibisono et al., 2024).

Furthermore, the gap in access to technology and digital literacy in remote areas is still a challenge that has not been explored in depth. Research by Afifudin, & Nandiroh, U. (2024) confirms that this disparity causes significant differences in taxpayers' ability to access and understand digital tax information. In addition, the user experience of digital taxation platforms such as the mPajak application or the Coretax system is still poorly researched, even though various complaints about technical difficulties and usability of the platform often appear in public forums (Priyono, 2025; public discussion on Reddit, 2024). Finally, the use of creative content and digital influencers as tax education media has still been minimally empirically researched, especially its impact on the behavior and literacy of young taxpayers (Sukma Sari, 2023; Agustina et al., 2024).

Therefore, further research is urgently needed to fill the gap using more comprehensive methods, including a thorough evaluation of various digital media, an analysis of taxpayer segmentation based on demographic characteristics, a study of digital inclusion in remote areas, an evaluation of the UX of tax platforms, as well as the measurement of the effectiveness of creative content and collaboration with influencers. This kind of research will make a significant contribution to the development of a more effective and inclusive digital tax education strategy.

3. Methodology

3.1 Data Collection

The data source in this study was obtained through the distribution of questionnaires to active taxpayers, both individual and corporate taxpayers, who have access to the official digital media of the Directorate General of Taxes (DGT). The questionnaire was distributed online using digital platforms such as Google Form, with the aim of reaching respondents more broadly, efficiently, and in accordance with the context of research focusing on the effectiveness of digital media. Respondents were selected purposively, namely those who had accessed tax information through DGT's digital media, such as official websites, social media (Instagram, YouTube, TikTok), tax applications (M-Pajak), and DGT's official emails. With this method, the primary data collected reflects the perception and level of tax literacy from direct users of DGT digital media, so it is relevant and valid to be analyzed to assess the effectiveness of the digital communication strategy implemented by the tax authorities. The distribution of the questionnaire was carried out over a certain period to ensure that the number of respondents was sufficient and reflected the diversity of demographic characteristics and existing tax status.

3.2 Technical Analysis

The data analysis technique used in this study is based on a descriptive quantitative approach, where data from questionnaires that have been disseminated are analyzed using descriptive statistics such as frequency, percentage, and average scores to describe respondents' perceptions of the effectiveness of the Directorate General of Taxes' digital media in improving tax literacy.

Each item in the questionnaire that uses the Likert scale is analyzed to determine the tendency of respondents' answers, so that conclusions can be drawn about the level of understanding, ease of access, and usefulness of tax digital content.

In addition, to ensure the reliability of the instrument, validity and reliability tests are carried

out, and if possible, it can be followed with a simple correlation or regression analysis to determine the relationship between the intensity of digital media use and the level of taxpayers' tax literacy.

3.3 Validation

To validate the results and ensure the reliability of the data in this study, two main approaches were used, namely the validity test and the reliability test of the questionnaire instrument used.

First, a validity test is carried out to ensure that each statement item in the questionnaire is really able to measure the construct or variable in question, namely the effectiveness of digital media and tax literacy. This test is done by calculating the correlation between each item's score and the item-total correlation using software such as SPSS. An item is declared valid if the correlation value of r -calculated is greater than the r -table at a certain level of significance (e.g. $\alpha = 0.05$).

Second, to ensure the consistency of respondents' answers, a reliability test was carried out using Cronbach's Alpha method, which measures the extent to which items in one variable provide consistent results. The questionnaire instrument is considered reliable if Cronbach's Alpha value ≥ 0.70 , indicating that the questions have a good level of internal consistency. Through these two tests, the quality of the data obtained can be ensured to be valid and reliable, making it worthy of further analysis and use in drawing research conclusions.

4. Results and Discussion

From the results of data collection with a structured questionnaire distributed using google form, 50 respondents were obtained. This obtained data has been pre-verified to discard invalid data that will affect the results of the analysis of the research data. The profile of the respondents in this study was observed to give an idea of what the sample of this study was like. Respondents were categorized based on several groups based on the respondents' gender, age, occupation, education and domicile.

4.1 Key Findings

The results of data analysis from 50 respondents, the majority showed a positive response to the tax education content delivered by the Directorate General of Taxes (DGT) through digital media. The highest average score was found in the statement that respondents felt helped by videos or online tutorials provided by the DGT (3.92), and they knew tax information from digital media managed by the DGT (3.76). Respondents also expressed confidence in the information submitted by the DGT digitally (3.76) and felt that digital media was effective in increasing their understanding of tax benefits (3.72). However, the aspect that needs to be improved is the convenience of users to ask questions or learn taxes digitally compared to offline, which has the lowest average score (3.40). These findings show that in general the DGT's digital media is quite effective, but increased interaction and personal approach may be able to maximize its impact.

4.2 Interpretation of Results

Based on the results of the survey that has been collected, the effectiveness of the use of digital media by the Directorate General of Taxes (DGT) in improving taxpayers' tax literacy shows complex dynamics but has great potential. The data shows that most of the respondents have accessed tax information through digital media managed by the DGT. The DGT website (pajak.go.id) and Instagram emerged as the main platforms that were used most frequently, reflecting that formal information channels and visual social media are the dominant choice of the

public in seeking tax information. The DGT's success in utilizing these digital channels shows that there is an adjustment to the information consumption behavior of digital-native people who prioritize speed, visualization, and accessibility in obtaining tax education.

However, when it comes to the quality of information delivery, respondents' responses show significant variations. While many gave high scores (4–5) for the ease of understanding of the content and the appeal of visual design, a number of other respondents gave low scores (1–2), especially in terms of language that is considered still technical and visualization that is not sufficiently evocative. This indicates that while the DGT is technically present on the right platform, the success of public communication depends on how the content is packaged—not just delivered. The simplicity of language, the use of visual metaphors, and grounded storytelling will play an important role in creating a deep understanding among the general public, including the younger generation who are the vital targets of tax literacy in the future.

Furthermore, an important indicator of the success of digital media as a means of tax education is reflected in changes in respondents' attitudes. Most of them stated that they felt more aware of the importance of paying taxes after following DGT content online, and felt helped by the explanations available through video tutorials, social media, or infographics. This reinforces the view that digital content not only enhances passive knowledge, but is also able to activate critical awareness and build a positive perception of taxes as a shared responsibility in the life of the state. Tax literacy in this context is no longer limited to technical knowledge, but includes the formation of compliance attitudes and values.

However, one of the main weaknesses revealed is in the aspect of interactivity. Many respondents complained about the low level of response of the DGT to comments or questions on social media, which is considered to weaken the relationship between institutions and the community. In a digital age characterized by two-way communication and instant expectations, audiences tend to expect an interaction experience that is not only one-way and rigid, but responsive, communicative, and personalized. Therefore, the effectiveness of DGT's digital media is not enough only to be measured by the frequency of uploads or how complete the information is presented, but also by the quality of the relationships and responses built with the public.

Various suggestions from respondents also enrich strategic recommendations that can be taken by the DGT. Starting from improving visual quality through infographics and short videos, collaborations with tax influencers, creating content that is packaged in a popular style (educomics, podcasts, interactive quizzes), to a more careful segmentation approach to age groups and professions. All of this is an important reflection that digital-based tax literacy is not just an information project, but a strategic communication process that is collaborative and adaptive.

Thus, it can be concluded that the use of digital media by the DGT has been on the right track in terms of distribution and platform existence, but still leaves major challenges in terms of content quality, interactive dialogue, and a more humanistic approach. The effectiveness of tax education through digital media depends on a combination of relevant content strategies and communicative delivery styles, in order to be able to touch the public not only as a passive audience, but also as an active partner in building a tax-conscious culture in Indonesia.

5. Discussion

The survey results show that the majority of respondents have been exposed to tax content from the DGT through digital media, with the dominance of platforms such as Instagram and the DGT Website. This indicates that the DGT's information distribution strategy has reached a wide audience, especially the younger generation and private workers. However, effectiveness depends not only on reach, but also on the quality of content and interactivity.

Most respondents gave high scores on content understanding and tax awareness after accessing DGT digital media. This shows that digital media plays a role in forming a positive attitude towards tax obligations. However, low scores on the responsiveness aspect of DGT and content diversity indicate that there is room for improvement in terms of two-way communication and content innovation.

5.1 Comparison with Prior Research

The findings obtained from this survey provide a fairly rich picture of the effectiveness of the use of digital media by the DGT in improving tax literacy. However, to strengthen the validity and broaden the scope of the analysis, it is important to compare these results with the findings of previous studies that have had a similar focus. That way, we can see whether the patterns found are consistent, different, or even show new dynamics in the context of digital-based tax education.

Research by Agusetiawati et al. (2024) found that tax education and digital literacy significantly affect taxpayer compliance. This is in line with the findings, where increased tax awareness and understanding emerged after exposure to DGT's digital content. However, the study also emphasizes the importance of easy-to-use e-filing systems, which have not been touched much in the survey.

Meanwhile, a study by Syadat et al. (2023) shows that the use of Instagram by the DGT is not yet fully effective because the content is less interesting and not widely known by the millennial generation. This reinforces the finding that even though the platform has been used, the quality and attractiveness of the content is still a major challenge.

5.2 Limitations

Considering the findings and how they align with or differ from previous studies, it is also important to recognize that each study has certain scopes and constraints that can affect the overall interpretation of the data. Therefore, before drawing broader conclusions, the following section will outline some of the limitations of this study that need to be considered critically. Here are some limitations in the study:

1. Limitations Respondents, the survey is dominated by productive age groups and active social media users. This can lead to a bias towards positive perceptions of digital media, while elderly groups or people with limited digital access are underrepresented.
2. The limitations of the platform, the focus of respondents on popular platforms such as Instagram and the DGT website make the evaluation of other platforms such as TikTok, YouTube, or WA Channel less in-depth.
3. In terms of responsiveness, many respondents assessed that the DGT was less responsive in digital media. However, the survey did not delve further into the expected form of interaction (e.g., live chat, comment replies, or discussion forums).
4. Not Measuring Long-Term Impact, this survey is cross-sectional, so it has not been able to measure whether increasing tax literacy through digital media has an impact on real compliance in the long term.

5.3 Future Research

Based on the results of the questionnaire that has been collected, there are several opportunities that can be used as directions for further research:

1. First, although the majority of respondents showed increased tax awareness after exposure to DGT digital content, further research could explore the relationship between digital literacy and actual compliance levels in tax reporting.

2. Second, the results show that platforms such as Instagram and the DGT Website are often used, but the aspects of interactivity and responsiveness are still rated low. Therefore, further studies can be focused on analyzing the effectiveness of two-way communication and its influence on taxpayer trust and engagement.
3. Third, the lack of representation from the elderly group or people with low digital literacy opens up space to examine the gap in access and understanding of digital-based taxation in more depth.
4. Finally, considering that many respondents provided input related to content format preferences (infographics, short videos, edumomics, and collaborations with influencers), the next direction can explore the influence of format and visual approach on the internalization of tax values, especially among the younger generation.

Thus, further research can not only reinforce previous results, but also broaden understanding of inclusive and sustainable tax education strategies.

6. Conclusion

Based on the results of the survey and discussions that have been conducted, it can be concluded that the use of digital media by the Directorate General of Taxes (DGT) shows strong potential in increasing tax literacy among the public, especially the younger generation and productive age groups. Exposure to tax content through platforms such as Instagram and the DGT Website has succeeded in building taxpayers' understanding and awareness of the importance of paying taxes. However, the effectiveness of the DGT's digital strategy still faces challenges in terms of content quality, diversity of delivery formats, and low interactivity and response from the DGT to the audience.

Comparison with previous studies shows that the findings are consistent with national research trends related to digital tax education, but also confirm that aspects of system ease and content attractiveness are still obstacles to implementation. In addition, a number of limitations in this study, such as the demographic bias of respondents and limitations in the scope of the platform, need to be considered so as not to overgeneralize the results.

Therefore, the next direction of research can be focused on filling these gaps with a more inclusive and in-depth approach, including exploring the long-term impact of digital literacy on tax compliance and examining the effectiveness of tax communication based on two-way interactions. With the strengthening of the content side, visual approach, and the preparation of communication strategies that are adaptive to the characteristics of the audience, DGT digital media has great potential as a sustainable educational instrument in building a tax-conscious culture in Indonesia.

7. Recommendation

1. Developing More Specific and Measurable Research Variables

Researchers are then advised to expand or deepen research variables, for example by separating the types of digital media (social media, websites, applications) and tax literacy aspects (knowledge, awareness, compliance). This approach will provide more detailed and comprehensive results on the effectiveness of each DGT communication channel.

2. Using a Mixed Methods Approach

To gain a deeper understanding, researchers are advised to combine quantitative methods with qualitative approaches, such as interviews with taxpayers or DGT employees. This will enrich the analysis and explain the reasons behind the effectiveness or ineffectiveness of digital media in a more narrative and contextual way.

3. Expanding Respondent Reach and Segmentation

Future research can increase the number and diversity of respondents, covering various geographic areas, education levels, and types of taxpayers (individuals, entities, MSMEs). That way, the results of the research become more representative and can be used as a reference in the formulation of broader data-based policies.

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Hopefully the results of this research can make a positive contribution to the development of digital-based tax education in Indonesia and become a foothold for future researches.

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