NERACA KEUANGAN: Jurnal Ilmiah Akuntansi dan Keuangan
Universitas Ibn Khaldun Bogor, Indonesia
Vol. 20, No. 2, Agustus 2025, pp. 366~360
ISSN: 2654-7880, DOI: 10.32832/neraca
https://ejournal.uika-bogor.ac.id/index.php/neraca/index

The Effect of Digital Literacy on Students' Understanding of Professional Ethics in Accounting

Etty Harya Ningsi *, Langgeng Prayitno Utomo, Setia Budi Kurniawan, Retna Safriliana, Prihat Assih
Universitas Merdeka Malang
Jalan Terusan Dieng. 62-64 Klojen, Pisang Candi, Sukun, Malang City, East Java 65146, Indonesia

Article Info

Article history:

Received May 15, 2025
Revised May 27, 2025
Accepted June 23, 2025

Keywords:

Digital Literacy,
Understanding Professional Ethics,
Accounting Students

ABSTRACT

This study aims to examine the effect of digital literacy on students' understanding of professional ethics in the field of accounting. As technological advancements increasingly shape the accounting profession, the ability to use digital tools responsibly has become essential for future accountants. This research employs a quantitative approach using a survey method, with data collected from accounting students at Battuta University. The sample was selected using purposive sampling, and responses were analyzed using multiple linear regression analysis. The results indicate that digital literacy has a significant positive effect on students' understanding of professional ethics. Students with higher levels of digital competence tend to demonstrate greater awareness of ethical standards, particularly in the context of data integrity, digital communication, and responsible use of accounting software. The findings suggest the importance of integrating digital literacy development into accounting education curricula to strengthen ethical awareness in the digital era.

Corresponding Author:

Etty Harya Ningsi
Universitas Merdeka Malang
Email: ettysumadin@gmail.com

INTRODUCTION

The advancement of digital technology has significantly transformed professional practices across various fields, including accounting. Digitalization not only involves the automation of accounting processes through software applications but also affects how financial information is collected, processed, and reported. According to the World Economic Forum (2023), digital literacy is one of the essential skills required in the future workforce, including for professional accountants. This transformation demands that accounting students not only master theoretical concepts but also understand the ethical implications of using technology in accounting practices.

Amid this wave of digitalization, professional ethics in accounting has become increasingly important. Ethics serve as a guideline for fair, transparent, and accountable decision-making. However, the use of technology without a strong ethical foundation may lead to ethical violations, such as digital data manipulation, information misuse, and breaches of client privacy. A survey conducted by the Association of Certified Fraud Examiners (2022) revealed that 38% of ethical misconduct cases in accounting involved digital technology, particularly in the management of electronic data.

ISSN: 2654-8127

As future professional accountants, students must be equipped with a deep understanding of professional ethics in the digital context. However, several studies have shown a gap in ethical understanding among students. Research by Suyanto and Hartono (2021) revealed that although students possess theoretical knowledge of accounting ethics, they often struggle to apply it in complex digital situations. This raises concerns about the readiness of accounting graduates to face ethical challenges in the digital era.

Digital literacy refers to the ability to understand, use, evaluate, and manage digital information effectively and responsibly. It not only includes technical skills in operating accounting software but also encompasses critical awareness of the social and ethical implications of technology. In the context of accounting education, digital literacy may serve as a crucial factor in shaping students' ethical understanding of the profession they are preparing to enter.

Previous studies have shown a positive relationship between digital literacy and students' ethical behavior. Ahmed and Hussain (2020) found that students with high levels of digital literacy demonstrated greater ethical sensitivity in data-driven decision-making. Suyanto and Hartono (2021) revealed that although accounting students understand ethical concepts, they often struggle to apply them in digital contexts. Research by Putri and Wijayanti (2022) also indicated that digital literacy is positively correlated with the academic integrity of accounting students, particularly in the use of digital resources and accounting software. Zhou and Pan (2023) emphasized the importance of integrating digital literacy into business curricula to enhance students' ethical awareness in relation to data use and information systems. Meanwhile, Hasanah et al. (2021) found that students with strong digital competencies tend to have a more ethical understanding of privacy, data security, and responsible technology use. However, most of these studies were conducted abroad or did not specifically examine the influence of digital literacy on the understanding of professional ethics within the context of accounting education in Indonesia, highlighting the need for further quantitative and contextual research.

The research gap lies in the limited number of quantitative studies that directly examine the influence of digital literacy on students' understanding of professional ethics, particularly within Indonesian higher education institutions. Strengthening ethical understanding in accounting education is essential to ensure that graduates are not only technically competent but also morally responsible in their professional practices. This gap highlights the need for curriculum and policy development in higher education.

This study aims to empirically examine the effect of digital literacy on accounting students' understanding of professional ethics at Battuta University. Using a quantitative approach and survey method, this research seeks to contribute to the literature by addressing the existing research gap and providing concrete evidence of the importance of integrating digital literacy into ethics education in accounting. The findings are expected to serve as a foundation for improving teaching strategies in accounting and technology-related subjects.

Theoretically, this study contributes to the development of knowledge regarding the relationship between digital competence and ethical awareness in professional education. Practically, the findings may inform policymakers, educators, and higher education institutions in designing more adaptive accounting curricula that address the challenges of digital transformation while reinforcing ethical foundations for future professional accountants.

THEORETICAL BASIC AND HYPOTHESES DEVELOPMENT

1. Theory of Planned Behavior (Ajzen, 1991)

The Theory of Planned Behavior (TPB) posits that an individual's behavior is guided by behavioral intentions, which are influenced by attitudes, subjective norms, and perceived behavioral control. In the context of accounting education, students with higher digital literacy may form more positive attitudes and a greater sense of control in applying ethical standards when using digital tools, thereby promoting ethical decision-making behavior.

2. Digital Literacy Framework (Eshet-Alkalai, 2004)

This framework conceptualizes digital literacy as a combination of technical, cognitive, and ethical skills required for effective and responsible technology use. Students who are digitally literate

are more likely to be aware of ethical issues related to data privacy, software manipulation, and digital transparency, especially in the context of accounting practices.

3. Kohlberg's Moral Development Theory (1970)

According to Kohlberg, moral reasoning evolves through stages from pre-conventional to post-conventional. Exposure to ethical dilemmas in digital environments, combined with strong digital literacy may support students' development toward higher stages of moral reasoning, enabling them to better assess and act upon ethical issues in digital accounting practices.

4. Digital Citizenship Theory (Ribble, 2011)

This theory emphasizes responsible behavior in the digital world through knowledge of digital law, ethics, and rights. Students who are digitally literate are more likely to act as responsible digital citizens and uphold ethical principles when handling accounting data and technology.

5. Technological Pedagogical Content Knowledge (TPACK) Model (Mishra & Koehler, 2006)

This model integrates content knowledge, pedagogy, and technology to ensure effective learning. In accounting education, integrating ethical instruction with digital skill development can enhance students' ability to apply ethical principles when working with accounting technologies.

Based on the theoretical foundations discussed and the review of recent empirical studies, this research develops the following hypothesis:

H_1: There is a significant positive effect of digital literacy on accounting students' understanding of professional

This hypothesis assumes that increased digital literacy, which includes knowledge of technological tools, ethical use of technology, and the ability to manage digital information responsibly, will lead students to become more aware of ethical principles such as integrity, objectivity, and professional responsibility. Students with higher levels of digital literacy are expected to recognize ethical dilemmas arising from the use of technology and respond to them in ways that align with professional ethical standards.

The development of this hypothesis is supported by contemporary studies, such as Chai, Lim, & Tan (2022), who found that critical thinking skills in the digital world are positively correlated with ethical sensitivity in students. Similarly, research by Zhou & Pan (2023) concluded that integrating digital literacy into accounting curricula significantly contributes to strengthening professional ethical values among students.

RESEARCH METHOD

1. Research Design

This study employs a quantitative approach with a survey method to examine the effect of digital literacy on accounting students' understanding of professional ethics. This design was chosen to enable the collection of measurable data from a specific population and to allow for statistical analysis to test the proposed hypothesis.

2. Population and Sample

The population in this study consists of accounting students at Battuta University who have completed courses related to accounting ethics and information systems. The sampling technique used is purposive sampling, with the following criteria:

- Registered as an active undergraduate accounting student,
- Has completed at least one course related to ethics or accounting technology,
- Has experience using accounting software or other digital tools.

The sample size was determined based on the minimum recommendation for regression analysis, which is 5–10 respondents per independent variable. In this study, the final sample consisted of 65 students.

ISSN: 2654-8127

3. Data Collection Technique

Primary data were collected through structured questionnaires distributed both online and offline. The questionnaire consists of three main sections:

- Demographic information (age, gender, academic year),
- Digital literacy scale (adapted from Eshet-Alkalai, 2004),
- Professional ethics understanding scale (adapted from validated accounting ethics instruments). Each item was measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

4. Variables and Operational Definitions

- Independent Variable: Digital Literacy
  Operationally defined as students' ability to understand, evaluate, and responsibly use digital tools, particularly in the context of accounting practices.
- Dependent Variable: Understanding of Professional Ethics
  Defined as the level of student comprehension of ethical principles such as integrity, objectivity, confidentiality, and professional behavior in the use of accounting technologies.

5. Data Analysis Technique

The collected data were analyzed using multiple linear regression analysis with the help of SPSS software. The analysis stages included:

- Classical Assumption Tests
  Normality: Kolmogorov-Smirnov or Shapiro-Wilk test (Sig > 0.05)
  Multicollinearity: VIF < 10, Tolerance > 0.1
  Heteroscedasticity: Glejser test (Sig > 0.05)
- Regression analysis to examine the effect of digital literacy on professional ethics understanding.

Data panels regression model analysis, with the equation model:

$$Y = \alpha + \beta_1 X_1 + \varepsilon$$

Information:

Y = Understanding of Professional Ethics
α = Constant value
β 1 = Regression coefficient
X 1 = Digital Literacy
ε = Error

The level of significance (α) used was 0.05, indicating that a p-value less than 0.05 denotes a statistically significant effect.

RESULT

Multiple Linear Regression Analysis

The following are the results of processing multiple linear regression data.

Table 1. Results of Multiple Linear Regression Analysis

Coefficients[a]

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
Constant	.619	2.961		.209	.835
Digital Literacy (X_1)	.258	.036	.595	7.099	.000

a. Dependent Variable: Understanding Professional Ethics

Source: Research Data, 2025

From the table above, the multiple linear regression equation can be written as follows:

Y = 0.691 + 0.258X1

The constant value of 0.619 means that when the independent variable, digital literacy (X), is equal to 0, the dependent variable, understanding of professional ethics (Y), is 0.619. Assuming other variables remain constant, an increase in digital literacy leads to an increase in the understanding of professional ethics by 0.258.

Coefficient of Determination (R2)

The coefficient of determination is used to assess the strength of the relationship between variable X and variable Y. If the R value approaches 0, it indicates a weaker influence of the independent variable on the dependent variable. Conversely, if the R value approaches 1, it indicates a stronger influence of the independent variable on the dependent variable.

Table 2. Results of the Coefficient of Determination (R2) Model Summary

Model	R	R-Squared	Adjusted R Square	Std. Error of the Estimate
1	.595[a]	.354	.347	3.451

Predictors: (Constant), digital literacy

Source: Research Data, 2025

Based on the table above, the determination test shows that the R^2 value is 0.354, which means that the influence of the digital literacy variable (X) on the professional ethics understanding variable (Y) is 35.4%.

DISCUSSION

The results of the multiple linear regression analysis indicate that digital literacy has a positive and significant effect on accounting students' understanding of professional ethics at Battuta University. This is evidenced by a regression coefficient value of 0.258 and a significance level (p-value) of 0.000 ($p < 0.05$), implying that for every one-unit increase in digital literacy, there is a corresponding increase of 0.258 units in the understanding of professional ethics, assuming other variables remain constant.

The coefficient of determination (R^2) is 0.354, indicating that 35.4% of the variation in students' understanding of professional ethics can be explained by digital literacy. The remaining 64.6% is influenced by other factors not examined in this study. An R^2 value of 0.354 suggests that the regression model has a moderate ability to explain the relationship between digital literacy and the understanding of professional ethics.

These findings align with previous research demonstrating that digital literacy significantly contributes to the understanding of professional ethics. For instance, a study by Amin Hou et al.

ISSN: 2654-8127

(2024) found that digital literacy in accounting positively and significantly affects students' accounting knowledge, including their comprehension of ethical principles in accounting practices.

In the context of higher education in Indonesia, this study underscores the importance of integrating digital literacy into accounting education curricula to enhance ethical awareness in the digital era. By doing so, educational institutions can better prepare students to face ethical dilemmas increasingly influenced by digital technologies.

Theoretically, this study supports the Digital Literacy Framework (Eshet-Alkalai, 2004) and the Theory of Planned Behavior (Ajzen, 1991), which suggest that knowledge and behavioral intentions related to ethical standards are influenced by students' confidence and ability in using digital tools.

Practically, these findings can inform policymakers, educators, and higher education institutions in designing more adaptive accounting curricula that address the challenges of digital transformation while reinforcing ethical foundations for future professional accountants.

Therefore, enhancing digital literacy not only improves the technical competencies of accounting students but also strengthens their understanding of professional ethical principles, which are crucial for responsible accounting practices in the digital era.

CONCLUSION

This study has demonstrated that digital literacy significantly influences accounting students' understanding of professional ethics. The findings indicate that students with higher digital literacy levels are better equipped to navigate ethical challenges in the digital accounting landscape.

However, the study's scope was limited to accounting students at Battuta University, which may affect the generalizability of the results. Additionally, the research focused solely on digital literacy, without considering other factors that might influence ethical understanding, such as cultural background or prior ethical training.

The implications of this research suggest that integrating digital literacy into accounting curricula can enhance students' ethical competencies, preparing them for the evolving demands of the accounting profession in the digital era. Future research could expand on these findings by exploring additional variables that impact ethical understanding and by including a more diverse student population to increase the generalizability of the results.

REFERENCES

[1] Ahmed, A., & Hussain, M. (2020). Digital literacy and ethical sensitivity in data-driven decision-making: An empirical study. Journal of Business Ethics and Information Systems, 15(2), 45–60.

[2] Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211.

[3] Association of Certified Fraud Examiners (ACFE). (2022). Occupational Fraud 2022: A Report to the Nations. Diakses dari https://legacy.acfe.com/rtm2022/documents/ACFE-2022-Report-to-Members.pdf

[4] Chai, C. S., Lim, C. P., & Tan, C. M. (2022). Digital education tools for critical thinking development. Procedia Computer Science, 192, 104–111.

[5] Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. Journal of Educational Multimedia and Hypermedia, 13(1), 93–106.

[6] Hasanah, U., Pratama, R., & Dewi, L. S. (2021). Digital competency and ethical awareness among accounting students: A study on privacy and data security. Indonesian Journal of Accounting Education, 9(1), 12–25.

[7] Hou, A., Sanjaya, M., Amelia, R., & Chaniago, S. (2024). The impact of digital accounting literacy and learning resilience on accounting knowledge among accounting students at IT&B Campus, Medan. Journal of Finance Integration and Business Independence, 1(1), 1–10.

[8] Kohlberg, L. (1981). The philosophy of moral development: Moral stages and the idea of justice. Harper & Row.

[9] Kurniawan, S. B., & Nendya, M. A. (2022). Analysis of the Effect of Profitability, Company Growth, and Liquidity on Capital Structure: A Case Study of Indonesia. International Journal of Research in Social Science and Humanities (IJRSS) ISSN: 2582-6220, DOI: 10.47505/IJRSS, 3(2), 26-33.

[10] Lubis, I. T., Ningsi, E. H., Manurung, L., & Widodo, S. (2024). Digital Financial Management of MSMEs: The Impact of Financial Literacy and Financial Technology. Atestasi: Jurnal Ilmiah Akuntansi, 7(2), 1164-1172.

[11] Manurung, L., & Ningsi, E. H. (2023). The Influence of Financial Performance and Profit Management on Company Value. Neraca Keuangan: Jurnal Ilmiah Akuntansi dan Keuangan, 18(2), 101-114.
[12] Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. Teachers College Record, 108(6), 1017–1054.
[13] Ningsi, E. H., Manurung, L., Ardillah, Y., & Ramadhani, S. (2022). Good Corporate Governance Model on Corporate Financial Performance in the Era of the Digital Revolution on the Indonesia Stock Exchange. Journal of Economics, Finance and Management Studies, 5(08), 2182-2190.
[14] Ningsi, E. H., Manurung, L., Lubis, I. T., & Widodo, S. (2024). Integration Green Accounting and Firm Value on Financial Performance. Atestasi: Jurnal Ilmiah Akuntansi, 7(2), 1043-1053.
[15] Putri, A. D., & Wijayanti, S. (2022). The relationship between digital literacy and academic integrity among accounting students. Journal of Educational Technology and Ethics, 14(3), 78–89.
[16] Ribble, M., & Bailey, G. (2007). Digital citizenship in schools: Nine elements all students should know. International Society for Technology in Education.
[17] Safriliana, R., Cahyaningsih, D. S., & Parawiyati, P. (2021). Use of Accurate V3 software as an introduction to accounting skills in "Merdeka Belajar Kampus Merdeka" Program. Jurnal Penelitian, 18(2), 55-71.
[18] Suyanto, T., & Hartono, R. (2021). Challenges in applying accounting ethics in the digital era: A study on Indonesian accounting students. Asian Journal of Accounting Research, 6(1), 33–47.
[19] Swalaganata, G., Andarwati, M. A., Assih, P., Putra, F. A. I. A., & Bramasta, Y. (2024). SignSync AI: Perancangan Aplikasi Mobile untuk membantu mahasiswa disabilitas dalam melakukan pembelajaran dengan menerapkan AI dan AR. REMIK: Riset dan E-Jurnal Manajemen Informatika Komputer, 8(4), 1052-1060.
[20] Utomo, L. P. (2019). [P] The Role of Information Technology and Employee Ability on The Effectiveness of Accounting Information Systems. EKSIS Jurnal Ekonomi dan Bisnis, 14(2), 79-84.
[21] World Economic Forum. (2023). The Future of Jobs Report 2023. Diakses dari https://www.weforum.org/publications/the-future-of-jobs-report-2023/in-full/4-skills-outlook/
[22] Zhou, Y., & Pan, W. (2023). Integrating digital literacy into business curricula: Enhancing ethical awareness in data use and information systems. International Journal of Business Education, 18(4), 101–115.