

## The Digital Frontier of Accounting: Unraveling The Impact of Digital Literacy and Technology Adoption

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### Abstract

This study aims to examine the relationship between digital literacy, information and technology literacy in relation to digitalization in accounting and how the technology adoption mediates these relationships. Through quantitative approach, questionnaires were distributed to the auditors of the public accounting firms in Semarang City using non-probability sampling method. In this study, multiple regression analysis is used to predict partially or simultaneously the effect of independent variables on the dependent variable. The statistical results show that digital literacy, information and technology literacy have a positive and significant relationship with digitalization in the accounting profession. In contrast, digital literacy has no effect on the technology adoption, while the technology adoption has a positive and significant effect on digitalization in the accounting profession.

**Keywords:** Digital Literacy, Information and Technology Literacy, Technology Adoption, Accounting Profession

## Batas Digital Akuntansi: Mengungkap Dampak Literasi Digital dan Adopsi Teknologi

### Abstrak

Penelitian ini bertujuan untuk menguji hubungan literasi digital, literasi informasi dan teknologi dalam kaitannya dengan digitalisasi akuntansi dan bagaimana adopsi teknologi memediasi hubungan tersebut. Melalui pendekatan kuantitatif, kuesioner disebarkan kepada auditor Kantor Akuntan Publik di Kota Semarang dengan menggunakan metode non-probability sampling. Dalam penelitian ini analisis regresi berganda digunakan untuk memprediksi secara parsial atau simultan pengaruh variabel independen terhadap variabel dependen. Hasil statistik menunjukkan bahwa literasi digital, literasi informasi dan teknologi mempunyai hubungan yang positif dan signifikan terhadap digitalisasi pada profesi akuntansi. Sebaliknya literasi digital tidak berpengaruh terhadap adopsi teknologi, sedangkan adopsi teknologi berpengaruh positif dan signifikan terhadap digitalisasi pada profesi akuntansi.

**Kata Kunci:** Literasi Digital, Literasi Informasi dan Teknologi, Adopsi Teknologi, Profesi Akuntansi

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## INTRODUCTION

The development and use of technology have led to various changes and innovations in the business world. These changes and innovations provide convenience and comfort to users. However, they also raise concerns among business people (Frey & Osborne, 2017). Among

others, technological innovations and developments refer to online shopping innovations that replace traditional purchases, supported by payment innovations through QR-code scans (Pan & Seow, 2016) and robotic advisors as an innovation investment (Moll & Yigitbasioglu, 2019).

Using technology, firms with limited resources can outcompete the market leader by producing cheaper, more available and reliable products than the market demands. It can also eliminate specific jobs or professions (Rückeshäuser, 2017). One of the areas heavily affected by digitalization is accounting and business, in which the accounting profession has been transformed by the increasingly massive development of digital technology (Cory & Pruske, 2012). The work of accountants has evolved with digitalization and is more closely linked to contemporary tools and technological developments than in the past (Bakulina et al., 2020). It is because the latest technology can change the process of completing an accountant's work to be faster, more practical and more accurate, which used to be done manually, took much time and was limited by the use of computers. The results are real-time with technological developments such as Artificial Intelligence (AI), Cloud Computing and Big Data being used in the accounting process (Yoon, 2020). In addition, (Bowles et al., 2020) stated that the advent of technologies such as data gathering in accounting, mobile automation and Enterprise Resource Planning (ERP) are benefiting accountants and auditors in terms of accuracy of funds in cost efficiency and data accuracy in decision-making, which is influencing accountants' expertise (Suhendi et al., 2022).

Massive technological developments require all professions to use IT, such as AI, to gain a competitive advantage and adopt processes or technologies to benefit from the innovation (Tekbas, 2018). Along with this technology development, IT innovation is driving user decisions. Companies and accounting firms that use AI technology are usually potential employers for accounting graduates (Damerji & Salimi, 2021). Some students rely primarily on the accounting curriculum to enhance their accounting, auditing and technology knowledge and skills at university. The acceptance and willingness of young accountants to engage with new technologies depend on the effectiveness of the accounting curriculum. The different levels of technology adoption that emerge between industry players and educational institutions will widen the knowledge gap between entrepreneurs and students (Greene et al., 2014).

By examining the mediating effect of individual perceptions in the adoption and use of a technology system towards the relationship between digital literacy and digitalization in the accounting profession, this study can design an implementation strategy that considers elements of readiness in the use of digital technology that will impact the accounting profession ( Ifada L. M. & Komara, 2023). The application of digital literacy and the use of AI in data analysis can prepare accounting students to compete in the future. Therefore, it is necessary to demonstrate the readiness of skills and technology adoption for accountants to meet the demands of the industry with digital developments.

The understanding of the use of digital technology to meet information needs is known as digital literacy (tools, devices and software). According to (O'Callaghan et al., 2021), digital literacy involves understanding current technologies and the best ways to use them. It

involves learning to utilize digital tools to interact with the community while upholding moral principles. It involves learning to locate and convey information using computer hardware, software, the Internet, cell phones, tablets, and other digital devices (Ifada et al., 2021).

Scholars use the term “digital literacy,” which is interchangeable with “media literacy” or “computer literacy,” in a range of situations, such as in reference to the use of technology for personal, academic, and professional usage (Angeles, 2022), and the cognitive skills required to understand and use information in different formats (Goh et al., 2021). Digital literacy aims to improve the ability to read, evaluate and use Big Data information to link all devices and determine specific activities. In addition, digital literacy reduces the workload of accountants when using computer systems (Ślusarczyk, 2018). Accounting professionals benefit from digital literacy because it enables them to capture better and analyse and synthesize digital data.

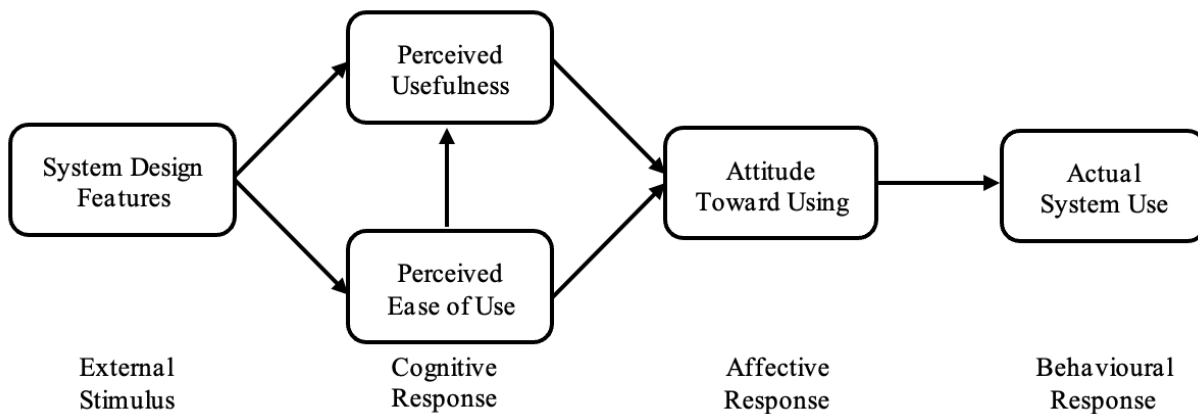


Figure 1. Technology Acceptance Model (TAM), (Davis 1989)

The adoption of technology in this research refers to the model of Davis (1987) in his Technology Acceptance Model (TAM) framework. This model itself was an application of the Theory of Reasoned Action (TRA), which deals with modelling user acceptance of technologies. TAM describes a causal relationship between a belief (the benefits of an information system and its ease of use) and an information system’s behaviour, needs and users of an information system. TAM is the first and most important traditional IT adoption theory (Gangwar et al., 2014). Its main postulates are based on economic, utilitarian and attitudinal grounds and provide a basis for identifying the effect of external variables on adoption decisions. TAM proposes Perceived Usefulness (PU), which reflects individuals’ perception that certain technologies will improve their work performance in the organization, and Perceived Ease of Use (PEOU) as a determinant. PEOU is how adopting certain technologies makes work accessible, simpler, more effective and more efficient (Flynn & Davis, 2017). Leopold et al., (2018) explained the findings of the TAM analysis that the perception of the usefulness of digital technologies is very important in making the work of the accounting profession easier. Accountants use technology to improve time management, flexibility, responsiveness, and client pleasure. Accountants must do their tasks faster, be present for their clients, and have greater freedom and availability. This research is based on

TAM (Technology Acceptance Model) which is discussed as a paradigm for technology adoption at the organizational or individual level. Figure 1 shows the framework of technology adoption based on TAM by Davis (1989).

Information technology is an essential factor for competitiveness and the organization's ability to improve its future performance. Digital literacy is a consideration for the accounting profession for future success (Zhang et al., 2018). The impact of digital literacy on accounting has become a discipline for disclosing accurate financial information. The development of digital literacy has led to accounting becoming increasingly dependent on technology to conduct business transactions (Gelinas Jr., U.J., 2006). The continued development of digital literacy will impact various aspects of the accounting (Bowles et al., 2020). Computerised accounting, as an example of the development of digital literacy, is no longer limited to bookkeeping but also Internal control and provides Information based on accounting analysis. In addition, digital literacy automatically changes financial reporting based on applicable standard reporting requirements (Warren et al., 2015). Companies can take advantage of digital literacy by changing business models to automate business, combining technologies such as management systems with supply chains that use the internet and ensuring information transparency in transactions between parties (Pan & Seow, 2016). The use of digital literacy supports the accountants' tasks and saves costs for the company. In other words, technology can influence the accounting profession (Santoso & Lestari, 2019). Therefore, it is hypothesized that:

**H1:** Digital literacy has a positive effect on the digitalization of accounting profession.

Digital literacy readiness is defined as the propensity of people to use technology to achieve their goals in getting their work done. The role of digital literacy in accounting and auditing is evolving very rapidly. This development is useful as a predictive analytics technology in an organisation by integrating the adoption of technologies such as AI (Kokina & Davenport, 2017). In addition, digital literacy can automate technology in business processes to increase efficiency by reducing the time it takes people to use information systems and transferring records from one system to another via the internet (Jędrzejka, 2019). Companies that use digital literacy as an information and communication technology in recording financial transactions and their reports can reduce the ' workload of employees (Marshall & Lambert, 2018). (Zhang et al., 2018) also stated that with the massive technological developments and adoption of AI, the form of coding programs such as inputting and managing information from various computer systems will be useful for accountants and auditors in conducting analysis and completing audit work. In addition, (Damerji & Salimi, 2021) stated that TAM can be used to predict behaviour in adopting and facilitating digital literacy at work or profession (Li, 2013). Therefore, it is hypothesized that:

**H2:** Digital literacy has a positive effect on the technology adoption

The study of changes in accounting and auditing in the industry that uses AI technologies shows a correlation between the elements that affect accountants' technological readiness. It involves information technology in the current and future implementation of key accounting tasks in companies. Firms that use AI significantly impact accounting information systems by auditing financial statement risks, analysing accounting journals and influencing

the quality of the information in the financial reporting (Kokina & Davenport, 2017). Issa et al., (2016) also noted that the use of technology in audits, particularly Big Data and analytics, allow the focus on producing analytical audit results by processing data collected from clients and incorporating the analytical results into the chosen audit strategy. In addition, auditors who use technology facilitate documenting, examining and extracting relevant words from contracts, leases, employment agreements, tax invoices and other legal documents (Leopold et al., 2018). As a result, accountants should be encouraged to use AI to make their work more efficient by analysing data for decision-making. Thus, the hypothesis is:

**H3:** The technology adoption has a positive effect on the digitalization of accounting profession.

The technology adoption had a significant impact on various information and technology education applications. This adoption explains, among other things, how the user reacts when confronted with a completely new technology in a company or organisation (Davis, 1989). The TAM as the basic model of technology adoption has been extended and tested for potential external factors in adopting different applications. Several studies on this topic have shown that they have also extended its application in the form of the Internet (Chen, 2015).

Pratiwi & Saefullah (2022) describe several advantages of technology adoption which refer to TAM. Firstly, technology adoption is an alternative response when a system cannot meet users' needs, causing users to lose interest in the information system created. Secondly, TAM exists to build a solid theoretical foundation. Thirdly, TAM has passed many research tests, with the conclusion that TAM is included in the category of positive impact. Finally, TAM becomes a model that has a simple but valid appearance. (Asri & Suariedewi, 2023) added that technology adoption reveals that the user can independently determine the technology they will use. Therefore, the use of information systems must be developed with technology adoption in mind to optimize performance and improve the public's view of technology use. The next hypothesis of this research is, therefore:

**H4:** Information and technology literacy has a positive effect on the technology adoption

Accounting is a business language for reporting economic activities and communicating financial information to users (Warren et al., 2015). Accounting comprises various subsystems designed to sequentially process-specific operations called the accounting cycle. Romney & Steinbart (2018) stated that the accounting cycle can be carried out by implementing Electronic Data Interchange (EDI) and Electronic Fund Transfer (EFT). Accounting applications are part of an Accounting Information System (AIS) that must be able to capture records and process all financial transactions (Turner et al., 2020). Integration of accounting applications on the internet, ERP, and web-based Supply Chain Management (SCM) (Xie et al., 2014), s became a driving force that forced all parties globally to change the way in providing and communicating information virtually and integrate all stakeholders in the supply chain.

As the transactional and manual accounting process changes through digital transformation, there is a change in methods and techniques. The first stage is capturing data and entering it into company records. This can be manual, followed by data entry with a

computer that is not integrated into an information system, or it can also be categorized as a semi-manual process. Another form of integration into a computerized accounting information system is that the transaction capture process uses a database management system (DBMS) based information system application that later is explored and processed in various forms of system processing, including an integrated financial reporting process. In addition, for further integration or full automation of transaction processing, various electronic data capture (EDC) tools linked to the internal online system DBMS are used. Therefore, further data exploration can be done, and the results can be distributed to all internal and external users. It can be concluded that the form of accounting processing consists of three groups: semi-manual, semi-automatic and fully automatic. This third form is called digitalization, which is based on machine-to-machine processing. Digital accounting has become part of the supply chain in the global digital business chain. Thus, the three models still require skills in accounting and technology, with the highest need for skills in the third model. This leads to the fifth hypothesis of this research, which is:

**H5:** Information and technology literacy have a positive effect on the digitalization of accounting profession.

Digital literacy, information and technology literacy are interrelated and complementary skills. Digital literacy provides the foundation for using digital technologies effectively, while information literacy ensures that users can find and evaluate relevant information. Technology literacy enables users to understand and utilize the specific technologies used in accounting, such as financial software and data analytics tools.

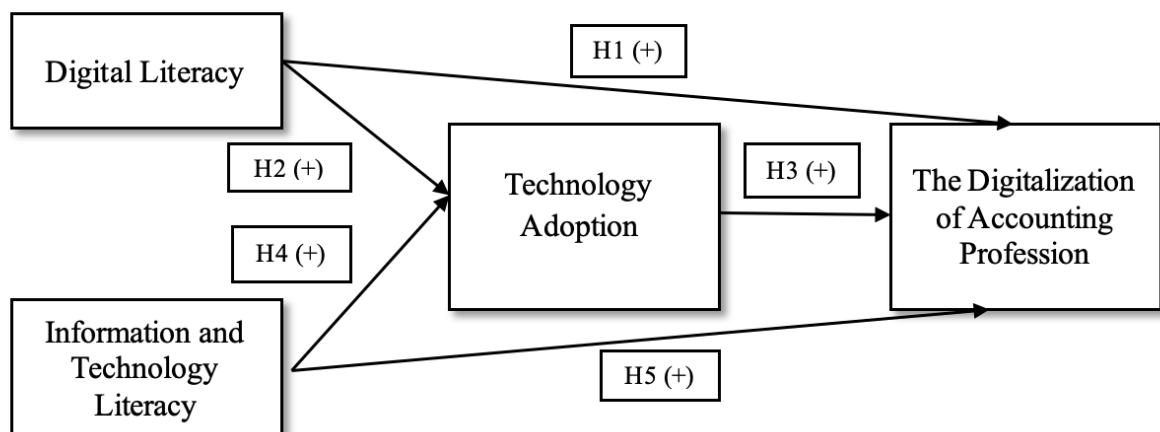


Figure 2. Research Model

Figure 2 is a research model in this paper. The advantages of this research model compared to the previous technology adoption model are digital literacy, information and technology literacy are essential for digitalization in accounting. TAM as the basic concept of technology adoption provides a framework for understanding how these literacies influence the adoption and utilization of digital technologies in accounting. By focusing on these literacies and the role of technology adoption, accounting professionals can better

leverage digital technologies to improve their work and the overall efficiency of accounting practices.

## **METHOD**

### **Population And Sample**

The population in this research were auditors in Semarang City. Specifically, the subject is an auditor at a public accounting firm which includes all public accounting firms in the city of Semarang. Sampling used purposive sampling with the criteria of auditors having work experience of more than 3 years. The requirement for auditors to have more than 3 years of experience is essential to ensure they possess the necessary practical knowledge, skills, and competence to conduct audits effectively, including those involving IT devices and adhering to professional standards. This research has a cross-sectional model, meaning that data is collected on a certain object and at a certain time. The research was carried out from 02 May 2022 to 30 June 2022 with different research stages, including observation, testing research instruments, distributing questionnaires, and data analysis.

### **Measures**

This research consists of two independent variables, namely digital literacy (X1) and information and technology literacy (X2), and one dependent variable, namely digitalization in the accounting profession (Y), with technology adoption (M) serving as the mediating variable. Table 1 shows the research variables and their indicators which represent the questions for respondents. All variables are measured on likert scale in range of 1 to 5 where 1 = strongly disagree and 5 = strongly agree. The first step is to identify the variables and indicators that will be used in the study. Variables and indicators derived from previous studies were obtained through literature.

### **Data Collection and Analysis**

Primary data collected through the distribution of questionnaires were used in this study. The questionnaires are distributed to the auditors through social media such as LINE, WhatsApp, Instagram and email with Google form feature. The main advantage of using a questionnaire is that it can cover the entire city of Semarang, minimizes the costs incurred, can be distributed simultaneously and does not take much time. However, the method of distributing questionnaires online also has a weakness: the possibility of double entries. To avoid this, the researcher asked respondents to provide their telephone numbers to prevent double entries voluntarily.

There were 143 questionnaires distributed at 21 Public Accounting Firms in Semarang City and only 87 questionnaires were returned. From this information, it shows a response rate of  $87/143 = 60.83\%$ . Of the total questionnaires received by researchers, 6 questionnaires could not be used. There are 81 questionnaires that can be processed and analyzed.

The technique used in this study was a quantitative analysis to explain the relationship between digital literacy and digitalization in accounting, with technology adoption serving as the mediating variable. In this research, multiple regression analysis was used to partially or

simultaneously predict the effects of multiple independent variables on a dependent variable and to ensure that the data conform to the classical assumptions (Sugiyono, 2019). Validity tests based on Ghozali's research (Ghozali, 2018) were also used in this research. The validity test was used to measure the questionnaire's validity.

Table 1. *Research Variables and Indicators*

Variable	Indicator
Digital Literacy (X1) The technical ability to use the computer and internet.	<ol style="list-style-type: none"> <li>1. I like using ICT for learning.</li> <li>2. I know how to solve my technical problems.</li> <li>3. I have good ICT skills.</li> </ol> <p style="text-align: right;">(Taib et al., 2023)</p>
Information and Technology Literacy (X2) The set of skills and knowledge related to the ICT industry.	<ol style="list-style-type: none"> <li>1. I find that the Internet is a great resource for obtaining information I am interested in (e.g., news, sports, dictionary).</li> <li>2. I read information about digital devices to be independent.</li> <li>3. I start to find a solution on my own if I have a problem with digital devices.</li> </ol> <p style="text-align: right;">(Awang et al., 2023)</p>
Digitalization in the Accounting Profession (Y) Evaluate, access, analyze, create and participate in understanding the role of media literacy in digitalization in the accounting profession,	<ol style="list-style-type: none"> <li>1. Digitalization creates more new jobs.</li> <li>2. Digitalization reduced working time</li> <li>3. Digitalization raises more work autonomy.</li> </ol> <p style="text-align: right;">(Taib et al., 2023)</p>
Technology Adoption (M) A set of attempt on how users accept and use new technology	<ol style="list-style-type: none"> <li>1. Increase productivity at work.</li> <li>2. Increase efficiency in work.</li> <li>3. Makes work easier.</li> </ol> <p style="text-align: right;">(Awang et al., 2023)</p>

## FINDING AND DISCUSSION

### Validity and Reliability Test

The data validity test analyse the validity of a question previously collected and used in measuring a variable (Ghozali, 2018). In this study, the significance test used the value of r table for the sample with 81 respondents to the auditor of the Public Accounting Firm in Semarang City. This study has a significant level of 0.05, so the r table value is 0.215.

The validity test using product moment correlation which compares the calculated r-value with the r-table (0.215) shows the result that all items indicating digital literacy, information and technology literacy, technology adoption and the digitalization of the



accounting profession are valid. Thus, all items in the questionnaire can be used for further data testing.

The result of the reliability test shows that each variable between digital literacy, information and technology literacy, technology adoption and the digitalization of the accounting profession was found to be  $\alpha > 0.6$ , so the question item is reliable. Thus, the results of the reliability test for all variables are reliable.

**Descriptive Statistical Analysis**

Table 2 shows the results of the descriptive analysis of the 81 responses received, where the mean value of the digital literacy variable was 70.1481, the IT literacy variable obtained a mean value of 6.24739, the technology adoption variable obtained a mean value of 7.79674 and the accounting profession variable obtained a mean value of 3.74537.

Table 2. *Descriptive Analysis*

	Minimum	Maximum	Mean	Std. Deviation
Digital Literacy	58.00	80.00 (16 SD 20)	70.1481	4.85054
IT Literacy	77.00	105.00 (21 SD 26)	89.0864	6.24739
Tech. Adoption	5.00	70.00 (14 SD 17)	59.6173	7.79674
Accounting Profession	34.00	50.00 (10 SD 12)	43.5185	3.74537

Table 3. *Summarized Result of The Classic Assumptions Test*

Model	Test	Critical Value	Test Result	Conclusion
1	Normality	K-S <0.05	0.200	Normal
	Multicollinearity	VIF <10	Digital Literacy = 1.510 IT Literacy = 1.510	No Multicollinearity
	Heteroscedasticity	Glejser <0.05	Digital Literacy = 1.181 IT Literacy = 0.799	No Heteroscedasticity
2	Normality	K-S <0.05	0,094	Normal
	Multicollinearity	VIF <10	Digital Literacy = 1.511 IT Literacy = 1.541 TAM = 1.039	No Multicollinearity
	Heteroscedasticity	Glejser <0.05	Digital Literacy = 0.210 IT Literacy = 0.445 TAM = 0.171	No Heteroscedasticity

Based on the significance value of the Kolmogorov-Smirnov test, the tested data is normally distributed as the Kolmogorov-Smirnov significance value is 0.200, greater than 0.05. Therefore, the test on digital literacy variables, IT literacy on technology adoption is normally distributed. Based on the results of the normality test of Model II, the data using the One-Sample Kolmogorov Smirnov Test resulted in a significance value of 0.094. Based on the significant value of the Kolmogorov Smirnov test, the data tested are normally

distributed because the Kolmogorov Smirnov significance value is 0.094 greater than 0.05. Therefore, the test for digital literacy, IT literacy, technology adoption on the accounting profession is normally distributed.

The tolerance and VIF values for digital literacy and IT literacy shown in the Table 3 above are based on the findings of the multicollinearity test model I. Based on these results, it is possible to conclude that there are no signs of multicollinearity. This occurs because the obtained tolerance values are greater than 0.1 and the VIF value is less than 10. The results of the Model II multicollinearity test (refer Table 3) show the tolerance and VIF values for digital literacy, IT literacy and technology adoption. Based on these values, it can be concluded that there is no multicollinearity issue. This happens because the tolerance values obtained are each more than 0,1 and the VIF value is less than 10.

According to the heteroscedasticity test results for Model I (refer Table 3), the significant value of each digital literacy variable is 0.181, and IT literacy is 0.799. The significance value of each variable is greater than 0.05. Therefore, it can be concluded that the regression model in Model I has no heteroscedasticity. Based on the heteroscedasticity test for Model II (refer Table 3), it can be explained that the significance value of each digital literacy variable is 0.210, IT literacy is 0.445, and TAM is 0.171. The significance value of each variable is greater than 0.05. It can be concluded that the regression model (in Model II) has no heteroscedasticity. Overall, statistically, it can be concluded that the data passes the classical assumption test. Therefore, further analysis phases of the data processing can be carried out.

### Hypothesis Testing

The t-test is used to partially test the effect of the independent variable on the dependent variable with the assumption that the other variables are constants (Ghozali, 2018). The results of the t-test are shown in Table 4.

Table 4. Result Of Multiple Regression Analysis for Models 1 and 2

Model 1			Model 2		
Variabel	B	Sig	Variabel	B	Sig
(Constant)	-21.629	0.000	(Constant)	3.082	0.578
Digital Literacy	0.128	0.124	Digital Literacy	0.285	0.001
IT Literacy	0.145	0.021	IT Literacy	0.151	0.023
			TAM	0.117	0.007
R		0.441			0.644
Adjusted R Square		0.172			0.392
F		8.453			18.217
Sig.		0.001			0.000

The results of the F test of Model I show an F value of 8.453 with a significance of  $0.001 < 0.05$  (the level of significance used). This shows that digital literacy, IT literacy has an effect on TAM. The F test Model II results show an F value of 18.217 with a significance of  $0.000 < 0.05$  (the level of significance used). The results of the F-test model II show an F-value of 18.217 with a significance of  $0.000 < 0.05$  (the significance level used). This shows

that digital literacy, IT literacy, technology adoption has an impact on the accounting profession.

Based on the table above, the coefficient of determination (R<sup>2</sup>) model I shows the regression model with an Adjusted R Square (R<sup>2</sup>) value of 0.172 or 17.2%. This value means that the independent variables, digital literacy and IT literacy, are 17.2% and the remaining 82.8% is affected by other variables. Based on the table above, the coefficient of determination (R<sup>2</sup>) model II shows the regression model with an adjusted R Square (R<sup>2</sup>) value of 0.392 or 39.2%. This value means that the independent variables, such as digital literacy, IT literacy, and technology adoption are 39.2% and the remaining 60.8% is affected by other variables. The results obtained and described above are very important for their correlation with the current research hypothesis, as will be discussed next.

## **Discussion**

### **Digital Literacy and Digitalization of the Accounting Profession (H1)**

The first hypothesis shows that digital literacy positively and significantly affects digitalization in the accounting profession. The results are in line with the research from (Gelinas Jr., U.J., 2006); (Zhang et al., 2018); and (Bowles et al., 2020); who has the same perception as (Warren et al., 2015). These results confirm that accountants need validation of digital literacy skills, which almost every job relies on technological aspects. Accountants must think about digital technology and understand how solutions can be achieved through their digital literacy skills. The importance of mastering digital literacy requires the accounting profession to use the information to make it practical and easier to manage. By using search tools, accountants can learn quickly about job assignments. Access to information from various sources can also assist accountants in finding various methods and strategies that will be applied in completing work relatively quickly.

Furthermore, research from (Awang et al., 2022) explains that the impact of digital literacy on the digitalization of the accounting profession currently becomes discipline for disclosing accurate financial information. (Goh et al., 2021) added that accountants' digital literacy skills aim to improve the ability to read, analyze, and use information in computerized Big Data as internal control and provide accurate information based on accounting analysis. Companies can use digital literacy by modifying business models to automate business by incorporating technology to ensure information transparency when transactions occur between parties. Thus, it can be interpreted that digital literacy has a role and contribution in facilitating the completion of accountants' tasks.

### **Digital Literacy and Technology Adoption (H2)**

The results of the second hypothesis indicate that digital literacy has a positive effect on the technology adoption is rejected. Digital literacy does not show a statistically significant effect on technology adoption. These results do not support several previous studies such as (Damerji & Salimi, 2021), (Marshall & Lambert, 2018), and (Jędrzejka, 2019) whom concluded that along with massive technological developments by adopting and using digital technologies such as artificial intelligence and Big Data, digital literacy skills are needed for

accountants in the process of recording transactions and financial reporting. Therefore, it relieves the accountant's workload. (Eshet-Alkalai, 2012) found that digital literacy skills are positively related to TAM in their empirical findings. Thinking in real-time to understand how to interact with the digital environment and communicate by reading message instructions in the form of visual graphics will provide convenience and interest in using technology that does not require a lot of effort in using it.

Digital literacy has no statistical effect on the technology adoption. This means that digital literacy comes with many contemporary dimensions. The most important is a person's desire to understand digital literacy by reading and applying himself as a user of the digital information (Awang et al., 2022). In addition, there are limitations to the technology, user population and system usage. The use of technology adoption may indicate a negative attitude toward using a system indicating poor reliability and user support or a system that provides small usability. This is due to accountants' non-performance factors, such as social influences, habits, or experiences related to digital literacy information. These findings indicate that digital literacy is incomplete without feedback mechanisms from technology adoption, learning, and user discovery behavior (Jamila et al., 2020).

### **TAM and Digitalization of the Accounting Profession (H3)**

The results of the third hypothesis show that technology adoption has a positive and significant effect on digitalization in the accounting profession. The results of this study support previous research from (Kokina & Davenport, 2017), Issa et al., (2016) and (Leopold et al., 2018). This means that the acceptance of computerized technology can be explained as the willingness of users such as accountants, when using technology to support the completion of tasks that have been designed. Through TAM-based technology in the digitalization era, the accounting profession uses it in data management and is used to find out more quickly if problems arise in the organization (Dube et al., 2020). Making the right policies through the decisions of accountants and auditors can maintain the company's sustainability.

Furthermore, (Oliveira & Martins, 2011) explained that technology adoption supports the activities of the accounting profession in the digitalization era in conducting careful examinations, supervision and auditing which follows a predetermined audit structure. This is very helpful in supporting the smooth running of audit activities and producing better reports (Velte, 2021). The technology adoption provides convenience for accountants in the audit activity control mechanism. Therefore, it provides information quickly and produces maximum accountant performance in the era of digital technology. With the technology adoption, accountants can quickly, accurately, and reliably generate report information.

### **IT Literacy and Technology Adoption (H4)**

The results of the fourth hypothesis show that IT literacy has a positive and significant effect on technology adoption. The results of this study support previous research from (Chen, 2015), (Ferro et al., 2011), (Santoso & Lestari, 2019). One's digital knowledge still needs to

be honed more, especially in terms of accepting or rejecting, evaluating, finding, the information obtained. According to (Jang et al., 2021), information technology and information literacy refers to a set of skills and abilities to find, evaluate, use, and share information.

Companies that apply IT literacy as information and communication technology in recording financial transactions and reporting can ease the burden on workers from routine work (Marshall & Lambert, 2018). (Zhang et al., 2018) also explained that along with massive technological developments and adopting and using artificial intelligence (AI) technology in the form of coding programs such as inputting and managing information from various computer systems will be useful for accountants and auditors in conducting analysis and complete the audit work. Furthermore, (Damerji & Salimi, 2021) in their research explained that technology adoption can be used to predict behavior from the adoption and ease of use of information and communication technology in work or profession (Li, 2013). Therefore, the use of information systems must be developed with technology adoption in mind, not only to optimize performance but also to increase people's views on the use of technology.

#### **IT Literacy and Digitalization of the Accounting Profession (H5)**

The results of the fourth hypothesis show that IT literacy has a positive and significant effect on TAM. Technological literacy is always related to information and communication information technology (ICT). The rapid advancement of information technology (IT) has penetrated all aspects of business including the accounting profession. IT literacy is the ability to understand and solve problems through the proper use of digital technology, communication tools or networks, including using information technology tools to access, manage, evaluate and communicate information (Sparks et al., 2016). Accounting as a profession that provides information for user decision-making and in a complex world of organizations, must use information technology to present information to users in a timely manner. The accounting function, in any organization, includes important tasks such as recording, classifying, summarizing and reporting monetary transactions and events and interpreting the results (Ghasemi et al., 2011). Technology advances have made accountants' work more efficient and easier (Ferro et al., 2011b). Information technology (IT) literacy can be an effective tool to facilitate knowledge acquisition and sharing. With ICT, it is now economically feasible for professionals to gather and share valuable information, knowledge, and ideas across functions, divisions, and geographic boundaries. ICT provides an important technical infrastructure to promote and manage knowledge management activities (Thottoli & K.V, 2022).

#### **CONCLUSION**

This research examines the influence of a mediation model that applies technology in the relationship between digital literacy and information literacy and technology on the digitalization of the accounting profession. The research results show that digital literacy,

information and technology literacy as well as technology application models have a positive influence on the digitalization of the accounting profession. Information and technology literacy have a positive influence on the technology adoption model, but the positive influence of digital literacy and the technology adoption model cannot be maintained.

This shows the importance of mastering digital literacy, information and technology literacy and technology adoption models in supporting digitalization in the accounting profession. Mastery of these three things for accountants can speed up the completion of the accounting process and cost efficiency. IT literacy skills in accountants strengthen the technology adoption model, because accountants really understand that this can be useful for supporting their work. Meanwhile, accountants' ability to digital literacy does not guarantee the implementation of technology adoption models, encouraging user feedback. The findings of this research will be further explored by collecting data through interviews. This is to overcome the limitations of the questionnaire method, so that it is hoped that accountants can find out the benefits felt by digitalizing the accounting profession and reveal the impact of digital literacy and the application of technology.

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