



## **DIGITAL LITERACY AND THE CHANGING LANDSCAPE OF THE ACCOUNTING PROFESSION: THE ROLE OF TECHNOLOGY ADOPTION MODEL**

**Luluk Muhimatul Ifada<sup>1(\*)</sup>, Acep Komara<sup>2</sup>**

<sup>1</sup>Department Accounting, Faculty of Economic, Universitas Islam Sultan Agung, Kota Semarang, Jawa Tengah, Indonesia

<sup>2</sup>Department Accounting, Faculty of Economic and Business, Universitas Swadaya Gunung Jati, Kota Cirebon, Jawa Barat, Indonesia

**Correspondence Author<sup>(\*)</sup>: [luluk.ifada@unissula.ac.id](mailto:luluk.ifada@unissula.ac.id)**

### **Abstract**

*The aim of this research is to find out the current changes in the accounting professional landscape, that is the digitization of the accounting profession and the importance of digital literacy to deal with it, and how the technology adoption model mediates this relationship. Auditors at the Public Accounting Firm (KAP) Central Java Indonesia became the object of this study, a total of 21 Public Accounting Firms. This study uses purposive sampling method with sampling criteria respondents having work experience as an auditor for more than 3 years. Data collection uses a questionnaire distributed via Google form and paper. Multiple regression analysis is used in hypothesis testing, by testing the validity, reliability and classical assumption tests. The results of the study show digital literacy has a beneficial and significant impact on digitization in the accounting profession. Digital literacy, on the other hand, has no effect on technology adoption models. In addition, the Technology adoption model has a beneficial and significant impact on digitization in the accounting profession. Accountants should improve their digital literacy using the technology adoption model to make effective, accurate and relevant accounting judgments. This research has a novelty in the concept of mediating the technology adoption model in increasing the effect of digital literacy on the accounting profession in the context of Public Accountant auditors.*

**Keywords:** *Accounting profession; Digitalization; Digital literacy; Technology adoption models.*

### **Abstrak**

Tujuan dari penelitian ini adalah untuk mengetahui perubahan lanskap profesional akuntansi saat ini yaitu digitalisasi profesi akuntansi dan pentingnya literasi digital untuk menghadapinya, serta bagaimana model adopsi teknologi memediasi hubungan tersebut. Auditor di Kantor Akuntan Publik (KAP) Jawa Tengah Indonesia menjadi objek pada penelitian ini, sejumlah 21 Kantor Akuntan Publik. Penelitian ini menggunakan metode purposive sampling dengan kriteria pengambilan sampel responden memiliki pengalaman kerja sebagai auditor lebih dari 3 tahun. Pengumpulan data menggunakan kuesioner yang di sebarakan melalui google form maupun hardcopy. Analisis regresi berganda digunakan dalam uji hipotesis, dengan melakukan pengujian validitas, reliabilitas dan uji asumsi klasik. Hasil penelitian menunjukkan literasi digital memiliki pengaruh yang positif dan signifikan terhadap digitalisasi dalam profesi akuntansi. Literasi digital, di sisi lain, tidak berpengaruh pada model adopsi teknologi. Selain itu, model adopsi Teknologi memiliki pengaruh yang positif dan signifikan terhadap digitalisasi dalam profesi akuntansi. Akuntan harus meningkatkan literasi digital mereka menggunakan teknologi dalam pemeriksaan akuntansi yang efektif, akurat, dan relevan. Penelitian ini memiliki kebaruan dalam konsep mediasi Model Adopsi Teknologi dalam meningkatkan pengaruh literasi digital terhadap profesi akuntansi dalam konteks auditor Akuntan Publik.

**Kata Kunci:** Digitalisasi profesi akuntansi; Literasi digital; Model Adopsi teknologi.

**Profile and corresponding author:** Luluk Muhimatul Ifada from Department Accounting, Faculty of Economic, Universitas Islam Sultan Agung.

## INTRODUCTION

In the business sector, there have been many developments due to the application of technology. Over the last decade, technological developments have become an very crucial in the development of accounting systems. Today's decision making can be assisted by computerized accounting, no longer just by manual recording. (Sulistiyowati et al. 2022). The emergence of innovations and improvements offers people ease and comfort. However, it also causes worries for those in business (Frey & Osborne 2017). Online shopping innovation, which replaces traditional shopping, is supported by payment innovation via Scan QR-Code (Pan, 2016), and investing innovation through the use of robot advisors (Moll & Yigitbasioglu, 2019). By utilizing technology, businesses with limited resources can outcompete the market leader by creating items that are less expensive, more readily available, and more dependable than what the market requires. Additionally, it may result in the abolition of particular professions or employment (Rückeshäuser, 2017).

In the current era of digitalization 4.0, the role of accountant is a new opportunity in supporting the performance of the accounting profession (Ifada et al. 2021). The Work Employment and Social Outlook Trend predicts unemployment in the next few years globally to be 204 million people, up 2.7 million. Indonesia has similar conditions with other western countries. Borrowing from research results from (Fakhri et al. 2022) industrial revolution 4.0, in terms of the influence of digital technology, in the next 5 years there will be types of jobs that will disappear or shift as many as 52.6 million. The accounting profession is thought to be one of them.

Accounting is one profession that has been significantly impacted by digitalization; similarly, to other professions, the field of accounting has undergone changes due to increasingly significant advances in digital technology (Cory & Pruske 2012). The accountant's work has changed due to the digitalization of the profession, becoming more tightly tied to the advancement of modern tools and technology than in the past (Bakulina et al, 2020). The reason for this is that cutting-edge technology has the potential to speed up, make more sense, and be more accurate in the completion process of accountants' work, which was hitherto laborious, manual, or reliant only on computers. With the advancement of technology, including AI (Artificial Intelligence), Big Data, Cloud Computing come in accounting processing, the outcomes are immediate (Yoon, 2020). As further explained by Bowles et al. (2020), data collection in accounting using technology, mobile automated, ERP assists accountants in terms of accuracy of funds in cost efficiency and data correctness in terms of decision-making, influencing the accountant's skills (Sulistiyowati et al. 2022).

An accountant who simply utilizes technical accounting abilities such as insurance audit, finance report, financial management, company strategic performance planning, tax, and risk management will be quickly replaced by cutting-edge automated technology. An accountant has a 95% risk of losing their career due to computerization, (Frey & Osborne, 2017). This will have an impact on the already existing digital economy, which will present a number of

opportunities while also posing certain risks. There are many duties and responsibilities of an accountant. For this reason, accountants should improve competence because and upgrade skills (Awang et al. 2023). Currently, the environment already demands digitization, so accountants should be accustomed to using Information Technology, especially SIA (Accounting Information System).

Not all of the work done by accountants is a simple, routine activity that can be done by technology. According to Prasad (2015), technological advancements are, however, altering the organisation of duties and work as a means of adjusting to digital work. Accountants must therefore adapt their accounting skills and combine them with other skills like literacy (Pan 2016). In order for a firm to respond to such difficulties in a competitive manner, the knowledge and skills of its employees are essential (Stancheva-Todorova, 2019). Digital literacy is one sort of literacy. Eshet-Alkalai (2012) defined digital literacy as the individual's capacity operationalize digital technology, internet-connected devices to locate, access, integrate, communicate, analyse, and produce secure information in order to adapt to economic and social life. Digital literacy is expected to be a requirement for future accountants to prepare them for the working world's demands (Ifada et al., 2021). At this time, digitalization is fundamentally changing business models. However, digitalization can represent the language of technology and guides the business model. The Evolving business models have an effect on how the accounting and finance professions collect, review, and use an increasing amount of data.

Al-zoubi's (2017) explains that the development of technology such as cloud computing technology which is integrated with the accounting system can support business activities in analyzing, controlling, managing, and assisting decision-making on an ongoing basis, as well as automatic data collection with more diverse financial and non-financial data (Rückeshäuser, 2017). The use of computerized technology such as the internet of things and the internet of service will be common for accountants because of the time demands which should be mastered in using the internet in their work. This will not be the same as it was 20-30 years ago and is expected to continuously evolve in the future as new AI technology innovations .

The current business model may look very different from the business model that will exist in five to ten years. The digital accountant's journey requires taking the time to invest in and monitor relevant technical and practical advancements.

Due to rapid technological advancements, all professions must use IT and adopt new procedures or technologies, including AI to stay competitive (Tekbas, 2018). As these technologies advance, IT advancements influence user adoption choices. AI-adopting businesses and public accounting organizations are typically potential employers for accounting graduates (Damerji & Salimi, 2021). Some college students rely heavily on the accounting curriculum to develop their understanding and competency in technology, auditing, and accounting. This will help the acceptance and readiness of young accountants in facing emerging technologies based on the accounting curriculum effectiveness provided to prepare their skills. The difference in the adoption rate of emerging technologies between industry players and educational institutions will widen the knowledge gap between entrepreneurs and students (Fuad et al.,2021).

By examining the mediating effect of individual perceptions on the adoption and use of the technology adoption model in the relationship between the use of the accounting profession the implementation strategy can be designed taking into account the elements of readiness to implement digital technology. Digital literacy for digitization in the accounting profession. Accounting students can be prepared to compete in the future by using digital literacy and implementing AI in data analysis. Therefore, it must be demonstrated that accountants need to be tech-savvy and adopt new technologies in order to satisfy market needs.

This research is important because it reveals the factors that motivate accountants to adopt technology particularly the factors that mediate the relationship between technology readiness and AI technology adoption. Hence this strategy has great potential to allow accountants to carry out their activities and overcome barriers such as inconvenience by enabling rapid technological advancement and increasing optimism and innovation through the adoption of AI. (Payne 2014). Thus, this research attempts to expand the literature in several ways; First, this research focuses on identifying how the application of the technology adoption model can mediate the development of digital technology that affects the accounting profession. This study differs from previous studies that only considered the future of mediation in the era of the 4.0 revolution (Yazdifar & Tsamenyi, 2005), the role of the Technology Adoption Model in the E-learning adoption (Baki, Birgoren, & Aktepe, 2018) and changes in the accounting system in the 4.0 revolution era (Bakulina, 2020) and robotic process automation and its impact on accounting (Jędrzejka, 2019).

## **LITERATURE REVIEW**

### ***Digital Literacy***

The exponential growth and development of information rapidly require the accounting profession to have the primary ability to support the completion of their work with Digital Literacy, Media Literacy, ICT Literacy, Information Literacy, and Internet Literacy (He & Zhu, 2017). One of these is digital literacy or the ability to understand and use information in a variety of formats and sources available on computers or digitally. Jones and Hafner (2021) explained that digital literacy does not only involve skills in operating tools such as computers and cell phones but also skills to adjust the capabilities and limitations of tools in certain circumstances.

Digital literacy is the awareness, attitude and ability of people to use digital tools and facilities appropriately to identify, access, manage, integrate, evaluate and synthesize digital resources, create new knowledge, communicate with others through media and express oneself in certain contexts (Taib et al. 2023).

According to Paranoan (2019), digital literacy becomes an offer that is practical, sophisticated, and easy to accept. This is essential for understanding the field's information and communication technology tools (Lestari & Santoso, 2019). Rosmida (2019) stated that the development of digital technology to change the role of accountants requires a strategy to prepare for all the changes. Accountant-technology collaboration benefits from the speed of innovation and the value of digital services (Ifada et al., 2021).

This aims to integrate accountants with technological innovations in digital services to complement each other in completing work. Digital literacy aims to improve reading ability to analyze and use information in big data and enable all devices to connect and decide specific tasks. Also digital literacy in computer systems has reduced the workload of accountants as complex and challenging accounting transactions using traditional methods can now be done easily and quickly (Ślusarczyk, 2018). Through digital literacy, accountants are expected to understand and utilize information sources in various formats and be able to operate supporting devices.

### ***Digitalization in Accounting Profession***

Digitization describes changes that go beyond the digitization of existing processes or services, so that companies are impacted by digitalization in multiple ways through the use of digital technologies in the workplace or operating environment (Taib et al. 2023). According to the Financial Accounting Standards Board (FASB) a balance sheet is a service activity that provides quantitative information in financial decision making. According to Financial Accounting Standard 1 the purpose of financial statements is to provide information about the financial position and cash flows of the organization that will assist certain users of the report in making financial decisions. According to the International Federation of Accountants the accounting profession refers to accountants who have experience in all areas of work within the accounting field including public accountants government accountants and financial and commercial accountants. (Mirna, 2016).

An accountant profession must be professional, develop mastery and insight skills, be open to change, contribute to ethics, maintain good values, and transform into the 4.0 revolution (Suhendi, Ifada, and Kiryanto 2022). In addition, there is a need to enhance the capabilities of accounting professionals through non-financial data acquisition such as data analysis, information technology development, and leadership skills. The use of cloud-based accounting data will affect the use of big data. Therefore, accounting integrates non-traditional financial information into modern systems (Ifada et al., 2021).

By developing skills and abilities, gaining a wide understanding of technological developments, and upholding moral principles and a code of ethics for contributing, the accounting profession must be professional and able to keep up with the advancement of digital technology. Additionally, accounting professionals need to strengthen their non-financial data capabilities, such as data analysis, information technology development, and leadership abilities. The accounting system will be impacted by the integration of non-financial data due to the usage of digital technology-based accounting data such as cloud, big data, and IoT. As a result of the quick changes and enormous technical advancements, IT will become a need (Yoon, 2020). Thus, an accountant who is aware of the digital technology development will have strategic and consultative way to see opportunities and meet future challenges (Ifada et al., 2021).

### ***Technology Adoption Model***

Davis (1989) developed a model of technology adoption to help determine individuals attitudes toward the adoption and use of specific technology systems. technology adoption model 's fundamental model is an outgrowth of social psychology's Reasoned Action Theory (RAT), which was developed by Hill et al. in 1977. Davis (1989) also used RAT to explain why consumers want technology, particularly computer use. Davis (1989) developed a model of

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technology acceptance that helps determine individual attitudes toward the acceptance and use of specific technology systems. (Li, 2013).

Damerji & Salimi (2021) explained that two elements of belief underlie the technology adoption model as the main determinant in the adoption of digital technology. The first is the perceived usefulness of individuals perceptions that certain technologies will improve their work performance in the organization. Second, perceived ease of use is how adopting certain technologies becomes easier, simpler, more effective, and more efficient in completing work. (Flynn & Davis, 2017). Therefore, someone will choose to use technology when he feels the technology is helpful. The ease of using technology is an essential factor in accepting technology. Leopold et al., (2018) explained, in the results of the analysis from technology adoption model, that the perception of the usefulness of digital technology is critical to facilitating the work of the accounting profession.

Data analysis is increasingly vital for the controlling profession due to tasks on cost accounting such as product and target costing, reporting, analysis, and performance management (Ifada et al., 2021). In the technology acceptance model theory, perceived usefulness, ease of use, and behavioral intention are three separate variables that collectively influence technology adoption. Although the three can be measured separately, technology adoption model measurement and analysis usually involve a combination of these variables to form a single unit variable which is referred to as a "construct". Once these variables are measured, the next step is to combine the results of the measurements of perceived usefulness and ease of use to form a single variable that represents the user's perception of the technology.

## **Hypothesis Development**

### **The Effect of Digital Literacy on Digitalization in The Accounting Profession**

The development of IT increases the dependence of the accounting function on technology in conducting business transactions (Ifada et al. 2021). Information technology is critical to determining a company's ability to improve competitiveness and performance in the digital age. Accountants must be able to find and apply evidence to assess the accuracy of digital content and perform sophisticated Internet searches to identify information relevant to their clients (O'Callaghan, et al., 2021). Consequently, digital literacy becomes a consideration for the accounting profession's future success (Zhan et al., 2018). The impact of digital literacy on accounting has become a discipline for disclosing accurate financial information. The advancement of digital literacy has increased the accounting function's reliance on technology in completing commercial operations in various aspects of accounting (Gelinas Jr., U.J. 2006; Bowles et al. 2020). In such cases, computerized accounting is no longer limited to bookkeeping but includes internal control and provides information based on the results of accounting analysis. In addition, digital literacy automatically changes financial reporting based on applicable standard reporting requirements (Warren et al., 2015). Companies can utilize digital literacy by modifying business models to automate business by combining technology, such as management systems, with supply chains using the internet to ensure information transparency when transactions between parties are taking place (Pan and Seow 2016). In reality, digital literacy facilitates the completion of accountants' tasks and saves costs incurred by the company as technology will allow them to better gather, analyse, and synthesise digital data (O'Callaghan, et al., 2021) and thus affect the accounting profession (Lestari and Santoso 2019), Therefore we hypothesize that:

**H<sub>1</sub>:** Digital literacy has a positive effect on digitization in the accounting profession.

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### **The Effect of Digital Literacy on Technology Adoption Model**

Widana (2020) defines digital literacy as the ability to create evaluate and share content using the Internet. Therefore, digital literacy readiness refers to people's tendency to use technology to achieve goals in completing their work. The importance of digital literacy in accounting and auditing is rapidly growing. This advancement is a useful predictive analytics technique for businesses combined with the use of technologies such as artificial intelligence (Kokina and Davenport 2017). In addition, digital literacy can do automation in using technology from business processes to increase efficiency, reduce the time required by humans in using information systems, and move data collections from one system to another using the internet (Jędrzejka 2019). Companies that apply digital literacy as information and communication technology in recording financial transactions and their reporting can lighten the workload of routine work (Marshall and Lambert 2018). As such, the Technology Acceptance Model theory is employed to specifically propose an explanation for the factors influencing digital literacy attitudes toward information technology. Zhan et al., (2018) also explained that along with massive technological developments, adopting and using artificial intelligence (AI) technology in the form of coding programs such as inputting and managing information from various computer systems, accountants and auditors will be helpful in conducting analysis and completing audit work. Furthermore, in their research, Field Damerji & Salimi (2021) explained that technology adoption model could be used to predict the behavior of the adoption and the convenience of digital literacy in work or profession. (Li, 2013). Thus, we hypothesize that:

**H<sub>2</sub>:** Digital literacy has a positive effect on the technology adoption model.

### **The Effect of Technology Adoption Model on Digitalization in The Accounting Profession**

A study of changes in accounting and auditing in the industry using AI technology reveals a correlation between factors affecting auditors readiness for the technology. It integrates information technology in implementing relevant accounting tasks in organizations now and in the future. Companies that adopt AI have a significant impact on accounting information systems in the form of examining financial statement risks, analyzing accounting journals, and influencing the quality of the information in the company's financial reporting (Kokina and Davenport 2017) Issa et al., (2016) also explained that the application of technology adoption, especially on the use of big data and analytics in audits, can focus on delivering analytical audit results by processing data collections from clients and integrating analysis results into the audit approach undertaken. Furthermore, accountants, who adopt technology use, facilitate the work of corporate audits in documenting, reviewing, and extracting relevant terms from contracts, leases, employment agreements, tax invoices, and other legal documents (Leopold et al. 2018). Since Technology Acceptance Model is an information systems theory that describes how users come to accept and use technology, consequently accountants should be motivated to adopt AI to analyze data for decision-making more productively. Therefore we hypothesize that:

**H<sub>3</sub>:** Technology adoption model has a positive effect on digitalization in the accounting profession.

## RESEARCH METHOD

### Sample and data

The subjects of this quantitative study were all auditors of the Public Accounting Firm in Central Java, totaling 21 Public Accounting Firms. Central Java is a large province where there are large and small scale Public Accounting Firms, thus demanding an understanding of accounting digitalization in carrying out financial report audits.

Respondents were selected using non-probability sampling with a purposive sampling method based on specific considerations (judgment sampling) as the basis of sampling. Judgment sampling provides helpful information about a population since it involves various research subjects who are in the best position or are most advantageous in providing information (Sugiyono, 2017). The sampling criteria used were respondents having work experience as an auditor for more than 3 years.

The data was collected using a self-developed questionnaire with questions inspired by past theories and notions of (McDougall et al 2018). The distribution of questionnaires was given to auditors who worked at the Public Accounting Firm in Central Java, so that the questionnaire respondents gave good and accurate answers. After distributing 143 questionnaires to all respondents, 87 returned questionnaires (response rate of 60.8%). Of the 87 questionnaires, there were 6 incomplete questionnaires, so that respondents who met the criteria obtained 81 samples that could be used for analysis. The questionnaire was graded using a Linkert scale ranging from 5 strongly agree to 1 strongly disagree. Using the Statistical Package for Social Sciences (SPSS) version 24, the acquired data were examined for validity and reliability, as well as multiple regression analysis methodologies which previously tested the classical assumptions (multicollinearity and heteroscedasticity).

### Instruments

Questionnaires were developed based on the various sources as mentioned below.

**Table 1.** Operational Variables

| No. | Variable                                | Description   | Indicator  | Source                     |
|-----|---|---|--|----------------------------|
| 1.  | Digital Literacy                        | Complex ability to use various digital technologies, analyze information, and communicate it effectively  | <ul style="list-style-type: none"> <li>• Information literacy</li> <li>• Communication and collaboration</li> <li>• Digital content creation</li> <li>• Problem-solving</li> <li>• Operating Software and hardware</li> <li>• Career-related competencies</li> </ul> | Eshet, (2012)              |
| 2.  | Technology Adoption Model               | Perceived usefulness is how far an individual believes that using a certain technology will improve their work performance. and Perceived ease of use is how much someone believing that the use of a technology will create effective and efficient work | <ul style="list-style-type: none"> <li>• Beneficial</li> <li>• More effective</li> <li>• Increase productivity</li> <li>• Easy to learn</li> <li>• Easy to use</li> <li>• Flexible</li> <li>• Increase Skills</li> </ul>   | Davis (1989)               |
| 3.  | Digitalization of Accounting profession |   | <ul style="list-style-type: none"> <li>• Job opportunities and competition</li> <li>• Gender equality</li> <li>• Flexible</li> </ul>   | Lestari and Santoso (2019) |

## RESULTS AND DISCUSSION

### Results

Next, we discuss the results of the statistical analysis of all the variables (Table 2).

**Table 2.** Descriptive Statistics

|                           | N  | Minimum | Maximum | Mean  | Std. Deviation |
|---------------------------|----|---------|---------|-------|----------------|
| Digital Literacy          | 81 | 58.00   | 80.00   | 70.15 | 4.85           |
| Technology Adoption Model | 81 | 5.00    | 70.00   | 59.62 | 7.79           |
| Accounting Professions    | 81 | 34.00   | 50.00   | 43.51 | 3.75           |

A Likert scale ranging from 1 to 5 is used to measure each variable. As described, table 2. includes descriptive statistics of research variables.

The interpretation of the average score level follows Abdullah et al., (2017); Idrus and Abdullah (2018). Average score 1.00 - 2.33 in the "low" category, 2.34 - 3.67 including "medium", 3.68 - 5.00 is called "high", respectively. The digital literacy variable shows a mean value of 70.15. It can be concluded that the average respondent is familiar or often using digital technology tools or media in everyday life. 58.00 is the minimum value and 80.00 is the maximum value. This shows that digital literacy has begun to be used in daily activities, especially in completing the work that has been prepared. At the same time, the standard deviation of digital literacy is 4.85.

The variable technology adoption model has an average value of 59,62. The respondents agree that using the technology adoption model will make producing accountant policies easy, effective, and accurate. Meanwhile, the minimum value is 5.00, which means that respondents are still hesitant to use the technology adoption model and consider the technology adoption model to be difficult to use. The maximum value of 70.00 means that respondents agree with using the technology adoption model because of the ease and benefits of receiving good and correct information. At the same time, the standard deviation of the technology adoption model is 7.79.

**Table 3.** Data Quality Test Results

| No. | Variable               | Validity Test |         |             | Reliability Test |             |
|-----|------------------------|---------------|---------|-------------|------------------|-------------|
|     |                        | R Count       | R Table | Information | Cronbach Alpha   | Information |
| 1.  | Digital Literacy       | 0.548         |         | Valid       |                  | Reliable    |
| 2.  | TAM                    | 0.513         | 0.215   | Valid       | 0.643            | Reliable    |
| 3.  | Profession Accountancy | 0.342         |         | Valid       |                  | Reliable    |

**Source:** Primary data processed by SPSS 25, (2022).

Based on the results of validity testing in table 3, it can be seen the amount a sample of 81 auditors has level significant 0.05 and r table value of 0.214. Based on these results it can be concluded that each variable digital literacy, TAM and professions accountancy has a positive

coefficient value and r count is greater than r table then, the data obtained and the indicators in the questionnaire can be declared valid. Reliability test results generated mark The resulting Cronbach's Alpha is more than 0.05. From the above data it can be concluded that the statements contained in each variable in this study are reliable and can be used for further research processes.

**Table 4.** Test Results for Hypothesis Model

| Model      | Multicollinearity |       | Heteroscedasticity | Unstandardized |        |      |
|------------|-------------------|-------|--------------------|----------------|--------|------|
|            | Tolerance         | VIF   |                    | B              | T      | Sig. |
| (Constant) |                   |       | 10.392             | -17.050        | -1.641 | .105 |
| LD         | .982              | 1.018 | .148               | .224           | 2.040  | .045 |

Dependent Variable: TAM

F-test: 1.431. P value: .235. R Square: .018.

**Note:** LD (Digital Literacy); TAM (Technology Acceptance Model); PA (Accounting Profession).

**Table 5.** Test Results for Hypothesis Model 2

| Model      | Multicollinearity |       | Heteroscedasticity | Unstandardized |       |      |
|------------|-------------------|-------|--------------------|----------------|-------|------|
|            | Tolerance         | VIF   |                    | B              | T     | Sig. |
| (Constant) |                   |       | 3.062              | 3.851          | 1.258 | .212 |
| LD         | .982              | 1.018 | .041               | -.106          | -.936 | .352 |
| TAM        | .982              | 1.018 | .025               | .090           | .797  | .428 |

Dependent Variable: PA

F-test: 23.318. P value: .000. R Square: .374.

**Note:** LD (Digital Literacy); TAM (Technology Acceptance Model); PA (Accounting Profession).

The multicollinearity test of model 1 obtained a tolerance of 0.982, indicating more than 0.10. VIF (Variance Inflation Factor) has a value of 1.018, less than 10. The conclusion of model 1 is that multicollinearity between independent variables does not occur. Heteroscedasticity test has a value of 0.148 more than 0.05, heteroscedasticity does not occur. F - test value is 1.431 with a P-value of 0.235. R Square of 1.8% shows that digital literacy can influence the digitalization of the accounting profession by 1.8%. 98.2% remaining is influenced by variables outside the model.

Meanwhile, the multicollinearity test in model 2 obtained a tolerance of 0.982 each, indicating more than 0.10, VIF of 1.018. This shows that the VIF value is less than 10, the conclusion of model 2 is that multicollinearity does not occur. Heteroscedasticity test of model 2 obtained that the heteroscedasticity of 0.041 and 0.025 is greater than 0.05, conclusion in model 2 heteroscedasticity does not occur.

F - test model 2 of 23,318, with a P-value of 0.000, and R square of 37.4% indicate that digital literacy and technology adoption model can influence digitalization in the accounting profession by 37.4%, 62.6% remaining is influenced by variables outside the model.

**Table 6.** T-test

| Model    | Coef. | Sig.  |
|----------|-------|-------|
| LD → TAM | 0.133 | 0.235 |
| LD → PA  | 0.512 | 0.000 |
| TAM → PA | 0.274 | 0.003 |

**Note:** LD (Digital Literacy); TAM (Technology Acceptance Model); PA (Accounting Profession).

Based on table 5, hypothesis testing was carried out by assessing the significance level and direction (positive/negative) of the standardized beta coefficients for each equation (Ghozali 2018). Hypothesis H<sub>1</sub> declared that digital literacy has a positive effect on the digitization of the accounting profession, showing 0.512 as a coefficient value, a significance level of 0.000. The significance level is below 1% and positively affects the regression coefficient value, which means the positive and significant influence of digital literacy on the digitalization of the accounting profession. This significant influence means that if an accountant's digital literacyability is high, it will be easier and more effective to analyze, read, and use digital information in completing his work.

In hypothesis H<sub>2</sub>, the effect of digital literacy on the technology adoption model has a positive coefficient of 0.133 with a significance level of 0.235. The significance number is greater than 5%, so digital literacy does not influence the technology adoption model, meaning that the H<sub>3</sub> hypothesis is rejected. In hypothesis H<sub>3</sub>, the effect of the technology adoption model on digitalization in the accounting profession has a coefficient of 0.274 with a significance level of 0.003. The significance number is below 5% with a positive direction, meaning that H<sub>3</sub> is accepted.

## Discussion

### Digital Literacy and Digitalization in the Accounting Profession (H<sub>1</sub>)

The first hypothesis states that digital literacy has a positive effect on the digitization of the accounting profession, showing a coefficient value of 0.512 with a significance level of 0.000. The significance level is below 1%, has a positive effect, which means digital literacy has a positive and significant effect on the digitalization of the accounting profession. This significant influence means that if an accountant's digital literacy skills are high, it will be easier and more effective for him to analyze, read, and use digital information in completing his work.

The results were in line with the research of Gelinias Jr., U.J., (2006); Zhan et al., (2018); and Bowles et al., (2020); who have the same perception as Warren et al., (2015). These results further emphasized that today's 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 digital literacy abilities. The importance of mastering digital literacy requires the accounting profession to use the information obtained to make it practical and more manageable. With search tools, accountants can learn quickly about job tasks. Access to information from various sources can also assist accountants in finding various methods and strategies that will be applied in completing work in a relatively short time.

Furthermore, Huang and Oh's (2015) research explained that the impact of digital literacy on the digitization of the accounting profession is currently a discipline for disclosing accurate financial information. Li and Liu (2019) added that the accountants' digital literacy skills were aimed to improve reading skill, analyze or use information computerized. Big Data as internal control and provide accurate information based on accounting analysis. Companies can take advantage of digital literacy by modifying business models to automate business by incorporating technology to ensure information transparency when transactions between parties occur. Thus, it can be interpreted that digital literacy has a contribution and role in facilitating the completion of accountants' tasks.

### Digital Literacy and Technology Adoption Model (H<sub>2</sub>)

The effect of digital literacy on the technology adoption model as second hypothesis have a coefficient of 0.133 and 0.235 as significance level. The significance number is greater than 5%, then digital literacy has no effect on the technology adoption model, meaning that the second hypothesis is rejected. These results did not support some previous studies such as Damerji and Salimi (2021); Marshall and Lambert (2018); and Jędrzejka (2019), concluded that along with massive technological developments by adopting and using digital technologies as well as Big Data or artificial intelligenc, it requires digital literacy skills for accountants in a process of financial reporting and recording of transactions. Thus, it assists in completing the accountants' workload. Field Eshet (2012) found that digital literacy skills are positively

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related to technology adoption model in his empirical findings. To think in real-time in understanding how to interact with the digital environment and communicate by reading message instructions in graphic visual form will provide convenience and interest in using technology that does not require great effort in using it.

Digital literacy had no statistical effect on the technology adoption model. Meaning that the ability of digital literacy comes with many current dimensions, the most important thing is someone's desire to understand digital literacy by reading and applying themselves as the digital information user (De Groot and Verboven 2019). In addition, there were technological limitations, user population, and system usage. The use of a technology adoption model could show a negative attitude towards the use of a system that indicated user support and poor reliability, or a system that provides little usability. It was due to accountants non-performance factors, such as social influences, habits, or experiences regarding digital literacy information. These findings indicated that digital literacy was incomplete without feedback mechanisms from technology adoption, learning, and user discovery behavior (Fatmawati 2015).

### **Technology Adoption Model and Digitalization in Accounting Profession (H<sub>3</sub>)**

Third hypothesis obtained results the effect of digital literacy on the technology adoption model has a coefficient of 0.133 and a significance level of 0.133 with a significance level of 0.235. The significance number is greater than 5%, then digital literacy has no effect on the technology adoption model, meaning that the second hypothesis is rejected. Thus results support previous research from Kokina and Davenport (2017); Issa et al., (2016); and Leopold et al., (2018). Meaning that 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 technology adoption model - based technology in the digitalization era, the accounting profession does not only use it in data management but also be 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 survival of the company (Estridge 2018).

Furthermore, Oliveira et al (2011) explained that technology adoption model technology supports the activities of the accounting profession in the digitalization era in conducting careful inspections and supervision as well as conducting audits following the established audit structure. This is very helpful in supporting the auditing activities seamlessly and producing better reports et al. Yu et al. (2017). The Technology adoption model provides convenience for accountants in the control mechanism for auditing activities. Thus, it provides information quickly and produces maximum accountant performance in the era of digital technology. With the technology adoption model, accountants can quickly, accurately, and reliably produce report information.

### **CONCLUSION**

This research examines the effect of digital literacy on digitalization in the accounting profession through technology adoption model. The main finding was that digital literacy positively and significantly impacted digitalization in the accounting profession, which means that the importance of mastering digital literacy requires the accounting profession to use the information obtained to make their work easier. Accountants' digital literacy skills affected various aspects and functions of accounting to facilitate the completion of accountants' tasks and save costs incurred by the company.

On the other hand, digital literacy did not affect the technology adoption model. It showed that the current digital literacy ability did not necessarily guarantee accountants to use the technology system because it was not supported by other factors such as social and organizational factors in practice. The accountant's digital literacy skills will not affect the application of technology such as technology adoption model.

In addition, the technology adoption model has a positive and significant effect on digitalization in the accounting profession. This means there was a high awareness of IT implementation in the accounting profession. In addition, knowing the positive benefits will produce fast, effective, and reliable accounting reports.

It concludes that nowadays, it is essential for accountants to improve their digital literacy skills in adopting technology, thus, to increase AI adoption. In this research, the technology adoption model used is very simple; further research can develop a model by testing the ability to use technology adoption model (applicability) in Indonesia because it has not been carried out in the context of Indonesia. In addition, this research is limited in the survey method; thus, it is expected to add data collection with interviews to provide deeper analysis in further research.

## REFERENCES

- Abdullah, Abdul Halim, Sharifah Nurarfah S. Ab. Rahman, And Mohd Hilmi Hamzah. 2017. "Metacognitive Skills Of Malaysian Students In Non-Routine Mathematical Problem Solving." *Bolema - Mathematics Education Bulletin*. doi: 10.1590/1980-4415v31n57a15.
- Al-Zoubi, Abdullah Mohammad. 2017. "The Effect Of Cloud Computing On Elements Of Accounting Information System." *Global Journal Of Management And Business Research: D Accounting And Auditing*.
- Awang, Y., Taib, A., Shuhidan, S. M., Zakaria, Z. N. Z., Ifada, L. M., & Sulistyowati, S. (2023). Mapping Between Digital Competencies And Digitalization Of The Accounting Profession Among Postgraduate Accounting Students. *Asian Journal Of University Education*, 19(1), 83–94. <https://doi.org/10.24191/ajue.v19i1.21226>.
- Baki, Rahmi, Burak Birgoren, And Adnan Aktepe. 2018. "A Meta Analysis Of Factors Affecting Perceived Usefulness And Perceived Ease Of Use In The Adoption Of E-Learning Systems." *Turkish Online Journal Of Distance Education*. doi: 10.17718/tojde.471649.
- Bakulina, Galina, Galina Kalinina, Inna Luchkova, Maria Pikushina, And Alla Gracheva. 2020. "Transformation Of The Accountancy Profession During Digitalization Of Agriculture." *BIO Web Of Conferences* 17:00188. doi: 10.1051/bioconf/20201700188.
- Bowles, Marcus, Samrat Ghosh, And Lisa Thomas. 2020. "Future-Proofing Accounting Professionals: Ensuring Graduate Employability And Future Readiness." *Journal Of Teaching And Learning For Graduate Employability*. doi: 10.21153/jtlge2020vol11no1art886.
- Cory, Suzanne, And Kimberly Pruske. 2012. "A Factor Analysis Of The Skills Necessary In Accounting Graduates." *Journal Of Business And Accounting*.

- Damerji, Hassan, And Anwar Salimi. 2021. "Mediating Effect Of Use Perceptions On Technology Readiness And Adoption Of Artificial Intelligence In Accounting." *Accounting Education* 30(2):107–30. doi: 10.1080/09639284.2021.1872035.
- Davis, Fred D. 1989. "Perceived Usefulness, Perceived Ease Of Use, And User Acceptance Of Information Technology." *MIS Quarterly: Management Information Systems*. doi: 10.2307/249008.
- Dianita, Mirna, Dan Niki Hadian. 2016. *No Title*. Dianita, Mirna, Dan Niki Hadian. 2016. "Persepsi Mahasiswa Akuntansi Terhadap MEA 2015 Tentang Publik Profesi Akuntansi" 1 (1): 34–41.
- Dube, Thando, Rene Van Eck, And Tranos Zuva. 2020. "Review Of Technology Adoption Models And Theories To Measure Readiness And Acceptable Use Of Technology In A Business Organization." *Journal Of Information Technology And Digital World*. doi: 10.36548/jitdw.2020.4.003.
- Eshet-Alkalai, Yoram. 2012. "Thinking In The Digital Era: A Revised Model For Digital Literacy." *Issues In Informing Science And Information Technology*. doi: 10.28945/1621.
- Eshet, Yoram. 2012. "Thinking In The Digital Era : A Revised Model For Digital Literacy." *Issues In Informing Science And Information Technology* 9:267–76.
- Estridge, Craig Steven. 2018. "Perceived Value Technology Adoption Model For Accelerating Enterprise Transformation." *Proquest Dissertations And Theses*.
- Fakhri, M. M., Fadhilatunisa, D., Yuanita, Rosidah, & Sari, N. R. (2022). The Use Of The Extended Technology Acceptance Model (TAM) To Measure Behavioral Intention Users Of Zahir Accounting Software. *ASSETS*, 12(1), 107–123.
- Fatmawati, Endang. 2015. "Technology Acceptance Model (TAM) Untuk Menganalisis Sistem Informasi Perpustakaan." *Iqra': Jurnal Perpustakaan Dan Informasi* 9(1):1–13.
- Flynn, Anthony, And Paul Davis. 2017. "Investigating The Effect Of Tendering Capabilities On SME Activity And Performance In Public Contract Competitions." *International Small Business Journal: Researching Entrepreneurship*. doi: 10.1177/0266242616630035.
- Frey, Carl Benedikt, And Michael A. Osborne. 2017. "The Future Of Employment: How Susceptible Are Jobs To Computerisation?" *Technological Forecasting And Social Change*. doi: 10.1016/j.techfore.2016.08.019.
- Fuad, Khoirul, Winarsih, Luluk Muhimatul Ifada, Hendry Setyawan, And Retno Tri Handayani. 2021. An Analysis In The Application Of The Unified Theory Of Acceptance And Use Of Technology (UTAUT) Model On Village Fund System (SISKEUDES) With Islamic Work Ethics As A Moderating Effect. Vol. 278. Springer International Publishing.
- Gelinas Jr., U.J., And J. L. Gogan. 2006. "Accountants And Emerging Technologies: A Case Study At The United States Department Of The Treasury Bureau Of Engraving And Printing." *Gelinas Jr., U.J., And J.L. Gogan (2006), "Accountants And Emerging Technologies: A Case Study At The United States Department Of The Treasury Bureau Of Engraving And Printing," Journal Of Information Systems (20)2, Pp. 93-116.*

- Ghozali, Imam. 2018. "Aplikasi Analisis Multivariate Dengan Program SPSS-Imam Ghozali-2018." *Badan Penerbit Universitas Diponegoro*.
- De Groote, Olivier, And Frank Verboven. 2019. "Subsidies And Time Discounting In New Technology Adoption: Evidence From Solar Photovoltaic Systems." *American Economic Review*. doi: 10.1257/aer.20161343.
- He, Tao, And Chang Zhu. 2017. "Digital Informal Learning Among Chinese University Students: The Effects Of Digital Competence And Personal Factors." *International Journal Of Educational Technology In Higher Education* 14(1). doi: 10.1186/s41239-017-0082-x.
- Hill, Richard J., Martin Fishbein, And Icek Ajzen. 1977. "Belief, Attitude, Intention And Behavior: An Introduction To Theory And Research." *Contemporary Sociology*. doi: 10.2307/2065853.
- Huang, Wen-Hao David, And Eunjung Oh. 2015. "Retaining Disciplinary Talents As Informal Learning Outcomes In The Digital Age".
- Idrus, Hairuzila, And Muhammad Ridhuan Tony Lim Abdullah. 2018. "Implementation Of PBL To Enhance The Soft Skills Of Engineering Students." *SHS Web Of Conferences*. doi: 10.1051/shsconf/20185303008.
- Ifada, L. M., Sulistyowati, S., Awang, Y., Taib, A., Shuhidan, S. M., & Zakaria, Z. N. Z. 2021. "The Conceptual Model Of Digital Technologies Application In Supporting The Accounting Profession: Industrial Revolution 4.0 Era". 23–24. *Proceedings of the 38th International Business Information Management Association Conference (IBIMA)*
- Issa, Hussein, Ting Sun, And Miklos A. Vasarhelyi. 2016. "Research Ideas For Artificial Intelligence In Auditing: The Formalization Of Audit And Workforce Supplementation." *Journal Of Emerging Technologies In Accounting*.
- Jędrzejka, Dariusz. 2019. "Robotic Process Automation And Its Impact On Accounting." *Zeszyty Teoretyczne Rachunkowości*. doi: 10.5604/01.3001.0013.6061.
- Jones, Rodney H., And Christoph A. Hafner. 2021. *Understanding Digital Literacies: A Practical Introduction*.
- Kokina, Julia, And Thomas H. Davenport. 2017. "The Emergence Of Artificial Intelligence: How Automation Is Changing Auditing." *Journal Of Emerging Technologies In Accounting*. doi: 10.2308/jeta-51730.
- Leopold, Henrik, Han Van Der Aa, And Hajo A. Reijers. 2018. "Identifying Candidate Tasks For Robotic Process Automation In Textual Process Descriptions." In *Lecture Notes In Business Information Processing*.
- Lestari, S., And A. Santoso. 2019. "The Roles Of Digital Literacy, Technology Literacy, And Human Literacy To Encourage Work Readiness Of Accounting Education Students In The Fourth Industrial Revolution Era." *Kne Social Sciences*. Doi: 10.18502/kss.v3i11.4031.
- Li, Chu-Fen. 2013. "The Revised Technology Acceptance Model And The Impact Of Individual Differences In Assessing Internet Banking Use In Taiwan." *International Journal Of Business And Information*. doi: 10.6702/ijbi.2013.8.1.4.
- 
-

- Li, Sisi, And Baocun Liu. 2019. "Joseph E. Aoun: Robot-Proof: Higher Education In The Age Of Artificial Intelligence." *Higher Education* 77(4):757–59. doi: 10.1007/s10734-018-0289-3.
- Marshall, Thomas Edward, And Sherwood Lane Lambert. 2018. "Cloud-Based Intelligent Accounting Applications: Accounting Task Automation Using IBM Watson Cognitive Computing." *Journal Of Emerging Technologies In Accounting*. doi: 10.2308/jeta-52095.
- Mcdougall, Julian, Mark Readman, And Philip Wilkinson. 2018. "The Uses Of (Digital) Literacy." *Learning, Media And Technology*. doi: 10.1080/17439884.2018.1462206.
- Moll, Jodie, And Ogan Yigitbasioglu. 2019. "The Role Of Internet-Related Technologies In Shaping The Work Of Accountants: New Directions For Accounting Research." *British Accounting Review* 51(6). doi: 10.1016/j.bar.2019.04.002.
- Natalia Paranoan, Christina Jeane Tandirerung, Anthon Paranoan. 2019. "Pengaruh Pemanfaatan Teknologi Informasi Dan Kompetensi Sumber Daya Manusia Terhadap Efektivitas Sistem Informasi Akuntansi." 3(2):1–4.
- Oliveira, Tiago, Maria Fraga Martins, And Universidade Nova De Lisboa. 2011. "Literature Review Of Information Technology Adoption Models At Firm Level." *Review Of Economics Studies*.
- O'Callaghan, S., Calloway, L. J., Walker, J. P., Elson, R. J., Dwyer, C., Boumediene, S., & Boumediene, S. (2021). Digital Literacy And Accounting Students: Implications For The Profession. *Global Journal Of Accounting And Finance*, 5(1), 45.
- Pan, Gary, And Poh Sun Seow. 2016. "Preparing Accounting Graduates For Digital Revolution: A Critical Review Of Information Technology Competencies And Skills Development." *Journal Of Education For Business* 91(3):166–75. doi: 10.1080/08832323.2016.1145622.
- Payne, Rick. 2014. "Discussion Of Digitisation, Big Data And The Transformation Of Accounting Information By Alnoor Bhimani And Leslie Willcocks (2014)." *Accounting And Business Research* 44(4):491–95. doi: 10.1080/00014788.2014.910053.
- Prasad, Acklesh, And Peter Green. 2015. "Governing Cloud Computing Services: Reconsideration Of IT Governance Structures." *International Journal Of Accounting Information Systems* 19:45–58. doi: 10.1016/j.accinf.2015.11.004.
- Rosmida. 2019. "Transformasi Peran Akuntan Dalam Era Revolusi Industri 4.0 Dan Tantangan Era Society 5.0." 7:206–12.
- Rückeshäuser, Nadine. 2017. "Do We Really Want Blockchain-Based Accounting? Decentralized Consensus As Enabler Of Management Override Of Internal Controls." *Wirtschaftsinformatik 2017 Proceedings*.
- Ślusarczyk, Beata. 2018. "Industry 4.0 – Are We Ready?" *Polish Journal Of Management Studies* 17(1):232–48. doi: 10.17512/pjms.2018.17.1.19.
- Stancheva-Todorova, Assoc. 2019. "Are Accounting Educators Ready To Embrace The Challenges Of Industry 4.0." *International Scientific Journal "Industry 4.0."*
- Sugiyono. 2017. *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta, CV.

- Suhendi, C., Ifada, L. M., & Kiryanto. 2022. Reinforce Corporate Social Responsibility Through Earnings Management. *Jurnal Aset (Akuntansi Riset)*, 075-086. doi:10.17509/jurnal aset v14i1.41872.
- Sulistyowati, S., Ifada, L. M., Awang, Y. B., Taib, A. B., Shuhidan, S. M., & Norsuriati, Z. 2022. A Privacy-Aware Framework For Financial Auditing In Digitalization Era. *Proceedings Of 2nd International Conference On Smart Computing And Cyber Security*, 207-216. doi:10.1007/978-981-16-9480-6\_19.
- Taib, A., Awang, Y., Shuhidan, S. M., Zakaria, Z. N. Z., Sulistyowati, S., & Ifada, L. M. (2023). Digitalization Of The Accounting Profession: An Assessment Of Digital Competencies In A Malaysian Comprehensive University. *Asian Journal Of University Education*, 19(2), 365–380. <https://doi.org/10.24191/ajue.v19i2.22229>.
- Tekbas, Ismail. 2018. “The Profession Of The Digital Age: Accounting Engineering.” <https://www.ifac.org/knowledge-gateway/preparing-future-ready-professionals/discussion/profession-digital-age-accounting-engineering>  
<https://www.ifac.org/knowledge-gateway/preparing-f>.
- Warren, J. Donald, Kevin C. Moffitt, And Paul Byrnes. 2015. “How Big Data Will Change Accounting.” *Accounting Horizons*. doi: 10.2308/acch-51069.
- Widana, I. (2020). The Effect Of Digital Literacy On The Ability Of Teachers To Develop HOTS-Based Assessment. *Journal Of Physics: Conference Series*. 1503. 012045. 10.1088/1742-6596/1503/1/012045.
- Yazdifar, Hassan, And Mathew Tsamenyi. 2005. “Management Accounting Change And The Changing Roles Of Management Accountants: A Comparative Analysis Between Dependent And Independent Organizations.” *Journal Of Accounting & Organizational Change*. doi: 10.1108/18325910510635353.
- Yoon, Sora. 2020. “A Study On The Transformation Of Accounting Based On New Technologies: Evidence From Korea.” *Sustainability (Switzerland)*. doi: 10.3390/su12208669.
- Yu, Tai Kuei, Mei Lan Lin, And Ying Kai Liao. 2017. “Understanding Factors Influencing Information Communication Technology Adoption Behavior: The Moderators Of Information Literacy And Digital Skills.” *Computers In Human Behavior*. doi: 10.1016/j.chb.2017.02.005.
- Zhan, A., J. Dai, And A. Vasarhelyi. 2018. “The Impact Of Disruptive Technologies On Accounting And Auditing Education.” *Eos, Transactions American Geophysical Union*.