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### ACCOUNTING THEORY CHALLENGES OF ACCOUNTING PROFESSION IN THE DIGITAL ERA

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### Abstract:

The purpose of this study is to analyze the challenges of the accounting profession in the digital era. The study focuses on how the challenges of the accounting profession in the digital era and how accountants can respond to these challenges and adapt to an increasingly complex economy. Digital transformation requires accountants to adapt to technology-based systems such as automation, artificial intelligence, big data, and blockchain. The research methodology includes a comprehensive literature review on topics relevant to the study. We quantitatively analyze the data used to identify the main challenges faced by accountants in the digital era. The study shows that accountants face a variety of challenges, including the complexity of data security, complex system integration, and the need for advanced technology skills. The impact of the digital era has changed the paradigm of financial information management, Enabling more detailed data analysis and opening up new opportunities in consulting services. This study provides valuable insights for accounting practitioners, academics, and other stakeholders to understand the role of accountants in the rapidly evolving digital era.

Keywords: Digital Transformation, Accounting Profession, Intelligence and Automation

### INTRODUCTION

The advancement of digital technology has recently brought very significant changes to all areas of life, including in the accounting profession. Accounting is basically a system that is commonly used to analyze, record and group financial information into one type. In the digital era, technological developments are very encouraging because almost all financial and non-financial activities have been digitized. Information technology enables efficient data integration and indepth analysis, but also poses challenges such as the need for digital skills and data security threats. This can have a technological impact on the accounting profession, so that an accountant must be able to adapt by following increasingly sophisticated technological developments and being able to follow advances in artificial intelligence technology such as AI which presents challenges for an accountant so that with the advancement of digitalization it has encouraged the transformation of information technology in modern accounting practices. such as with cloud-based systems, automation of recording processes, to the use of artificial intelligence (AI), is now an inseparable element of an accountant's work. Information technology enables faster, more accurate and in-depth data processing and analysis. With these conditions, accountants are currently required not only to understand conventional accounting principles, but also to have good adaptability to technological advances.

The development of digital technology has brought significant changes in various fields, including the accounting profession. Digital transformation not only presents opportunities, but also major challenges for accountants in carrying out their functions effectively.





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According to Susanto and Meiryani (2019), information and communication technology has changed the way accountants work from manual systems to computerized systems. This requires accountants to have digital competence, not only in the use of accounting software, but also in understanding data analysis and information systems.

The digital era also presents challenges in the form of automation of accounting processes. As explained by Warren, Reeve, and Duchac (2018), many traditional accounting jobs can now be replaced by technologies such as artificial intelligence (AI) and machine learning. Therefore, today's accountants must develop skills that are not easily automated, such as critical thinking, professional ethics, and communication skills.

IFAC (2021) also emphasizes the importance of ethics and professional responsibility amidst the use of digital technology. Dependence on technology can increase the risk of data security and privacy violations, so accountants must be able to apply the principles of good information technology governance.

In addition, another challenge is the need to update the accounting education curriculum. According to Mulyani et al. (2020), educational institutions need to adjust the curriculum to be able to produce graduates who are ready to face digital challenges, such as understanding big data, cloud computing, and blockchain.

Thus, it can be concluded that the challenges of the accounting profession in the digital era are not only technical, but also touch on aspects of competence, ethics, and education. Professional accountants are required to continue learning and adapting in order to remain relevant amidst rapid change.

In the era of digitalization, there has been a major shift in the world of accounting, namely from a manual system to a digital system that makes the accounting process more efficient in recording and classifying. So that an accountant not only masters the principles of conventional accounting, but an accountant must also be able to adapt and operate various accounting software by following increasingly sophisticated technological developments such as cloud accounting, big data analytics and artificial intelligence AI. The main challenge is the gap in skills to be able to adapt to the development of digitalization. Modern accounting systems are a mainstay foundation for organizations to maintain efficient strategies that drive growth. This system combines old accounting practices and provides control for organizations over finances by establishing internal controls to protect company assets. Many accountants feel uncomfortable leaving the manual system that they are used to. Another important challenge is the need for regulatory updates that are in line with digital developments, so that accounting practices remain accountable and in accordance with professional standards. The accounting profession must be ready to adapt quickly to the demands of the digital era through capacity building, continuous learning, and strengthening its strategic role as a data and technology-based business partner. With this, it can be stated that the challenges of the accounting profession have a significant influence in the digital era

H1: The challenges of the accounting profession have a significant impact on the effectiveness of implementing digitalization in accounting practices according to (Suryanto, T., & Komalasari, R. (2020)).

### **METHODS**

This study uses a systematic literature review approach to identify and analyze the various challenges faced by the accounting profession in the digital era. The literature used was obtained from accredited national and international journals, scientific books,. The literature search process was carried out through databases such as Google Scholar, with the keywords "digital accounting

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challenges", "digital transformation of accounting", and "digitalization of the accounting profession". Inclusion criteria include articles published before 2025, in Indonesian or English, and directly relevant to the issues of the accounting profession and digital technology.

The data collected from various sources were then analyzed thematically to identify patterns of key challenges, including the need to improve digital competence, integration of technologies such as AI and cloud accounting, and issues of ethics and data security. This method allows researchers to gain a comprehensive understanding of the impact of digital transformation on the accounting profession. This literature review is also used as a basis for formulating hypotheses and directions for further research regarding the readiness and response of accountants to technological developments.

### **RESULT AND DISCUSSION**

Challenges in Accounting Digitalization Digitalization in accounting brings many benefits, such as increased efficiency and accuracy, but also presents a number of challenges that need to be overcome. Here are some of the main challenges in accounting digitalization, outlined in several paragraphs for each indicator:

- 1. Job Loss Due to Automation. is one of the significant impacts of technological advances in the digital era, especially in the accounting profession and other fields that are based on routine and data. Automation through the use of artificial intelligence (AI), automated process robots (RPA), and advanced accounting software allows various manual tasks such as transaction recording, financial reporting, and basic audits to be carried out quickly and accurately without human involvement. As a result, some roles that used to require human labor are no longer relevant or are greatly reduced in need. This raises concerns about job losses, especially for workers who do not have higher digital or analytical skills. However, on the other hand, this transformation also opens up new opportunities for the accounting profession that is able to adapt, by focusing on strategic roles such as data analysis, financial planning, and decision-making based on in-depth information.
- 2. Adaptation to New Technologies. is a critical challenge faced by accounting professionals in the digital era. The development of technologies such as cloud-based accounting systems, artificial intelligence (AI), big data, and blockchain requires accountants to continuously update their knowledge and skills. This adaptation involves not only mastering new software and systems, but also understanding how technology changes business processes and decision-making. Accountants are required to be more proactive in learning, taking training, and being willing to change traditional ways of working to be more digital and efficient. Failure to adapt can lead to a decline in the relevance of the accountant's role in the organization, while successful adaptation will strengthen their position as strategic partners in technology-based financial management and analysis.
- 3. Data Security and Privacy. In the digital era, the accounting profession faces major challenges related to data security and privacy. Along with the increasing use of information technology, accountants now store and manage financial data digitally, either through accounting software, cloud storage, or internet-based systems. This does provide efficiency, but it also opens up opportunities for threats such as hacking, data leaks, and misuse of information by irresponsible parties. The information managed by accountants is very sensitive—such as company financial reports, tax data, and client personal information—so it is very vulnerable to misuse if not properly secured. In addition, accountants are also required to comply with







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data protection regulations, such as GDPR in Europe or the Personal Data Protection Act in Indonesia, which require special treatment of personal information. Failure to maintain data security can result in damaged professional reputation, loss of client trust, and legal sanctions. Therefore, today's accountants must have a strong understanding of digital ethics, implement a strict information security system, and continue to improve digital literacy in order to be able to carry out their profession safely, professionally, and in accordance with applicable regulations.

- 4. Technology Implementation. One of the main challenges in the accounting profession in the digital era is the implementation of technology that does not always run smoothly. Although technological developments such as cloud-based accounting software, automation, artificial intelligence (AI), and blockchain have made it easier to record and report finances, many organizations and accounting professionals still face obstacles in adopting them. These challenges include limited technological infrastructure, lack of understanding of new systems, high investment costs, and resistance from human resources who are not ready to adapt. Not all accountants have the technical skills to operate or understand complex digital systems, so continuous training and competency improvement are needed. In addition, the transition from manual to digital systems can also pose a risk of input errors, dependence on systems that are not yet fully stable, and compatibility issues between platforms. Therefore, the implementation of technology in the accounting field must be carried out gradually, planned, and accompanied by an effective change management strategy so that its benefits can be felt optimally and do not cause disruption to the work process.
- 5. Changes in Regulations and Accounting Standards. In the midst of the digital era, the accounting profession faces serious challenges related to adapting to ever-changing regulations and accounting standards. The development of technologies such as blockchain, artificial intelligence, and cloud computing have changed the way companies record and present financial data. This requires accountants to adapt to new methods that are not yet fully regulated in existing accounting standards. Meanwhile, the process of regulatory change is generally slow, so it is not in line with the rapid pace of technological innovation. As a result, accountants are often faced with uncertainty in implementing the right standards, especially when handling digital-based transactions. To overcome this condition, accounting professionals need to expand their understanding of technology and stay active in following every update related to financial reporting practices and rules. A proactive attitude and the ability to adapt are important keys to staying relevant amidst dynamic changes.
- 6. Dependence on Technology. In the digital era, the accounting profession is increasingly dependent on technology for financial recording and reporting processes. This dependence creates new risks, such as system disruptions, cyber attacks, and digital skills gaps among accountants. In addition, excessive dependence can lead to a decline in manual skills. Therefore, accountants need to continue to develop technological competencies in order to adapt and remain relevant in the face of change.

### **CONCLUSION**

The challenges of the accounting profession in the digital era are one of the consequences of the rapid development of information technology that can fundamentally change the way accountants work. Digitalization has the application of artificial intelligence (AI), automation, cloud accounting, and also big data which not only accelerates the accounting process, but can also require











accountants to have high digital competence, analytical skills, and an understanding of ethical issues and data security. The accounting profession is now no longer limited to recording and reporting, but is also required to play a strategic role as a business partner who is able to provide data-based insights. Therefore, accountants must be able to adapt through knowledge updates, technology training, and adjustments to the education curriculum to remain relevant and competent amidst the dynamics of digital transformation. With the right preparation, this challenge can actually be an opportunity to increase the added value of the accounting profession in supporting faster, more accurate, and more transparent decision-making.

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