

## Accountant's Digital Technologies Competencies in The Digitalisation Era

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### Abstract

Digitalisation is the integration of technology across all areas of an organisation. The business accounting and auditing sectors have switched to digital; data analysis has also used software in the digital age. The role of accountants in business has changed and transformed into a computerised accounting system. This study hopes to reach the following research objectives such as explore the impact of digital transformation on accountants' work and professional life, identify the needs and priorities of the accountants in the digitalisation era, identify challenges and opportunities associated with digital transformation for accountants, and determine the potential outcomes of providing access to digital tools and resources, training and support, and recognition for the accountants' work in the digitalisation era and identify the potential risks associated with providing access to digital tools and resources, training and support, and recognition for the accountants' work in the digitalisation era. This study will use a questionnaire survey method. The questionnaire will be designed based on the needs and priorities identified by the accountants in the digitalisation era. The questionnaire consisted of a series of questionnaires designed to gather data on different aspects of accountants' work in the digitalisation era. The questionnaire will be distributed to the accountants using email. The research outcomes will be analysed using the most recent version of SPSS. Finally, the data will be analysed to answer all the research questions to achieve the research objectives.

**Keywords:** Accountants, Competencies, Digitalisation Era, Information Technologies, Digital Risks

### Introduction

During the last few years, the role of accountants in business has changed and transformed into a computerised accounting system. For more than a century, information technology has made the accounting process easier for accountants, according to (Jasim & Raewf, 2020). Berikol & Killi (2021) claim that many businesses have started implementing modern cost and management accounting tools as part of their digital transformation process. Wessel (2018) mentioned that digital technologies (DT) competencies are necessary for accountants to

proceed with their work. For accountants, determining these abilities is critical. Data collection, storage, processing and distribution among the stakeholders have changed because of the DT advancement (Nasiopoulos et al. 2014). DT is employed extensively in the accounting world today, and they cannot complete many accounting and financial activities without it. For accountants to be effective, they must make a significant transition in their skill set (Rom & Rodhe, 2007; Kaye & Nicholson, 1992; Ellis, 1986). The use of technology in accounting is now widespread, and it has become a daily practice. Technology is now required to carry out most accounting and financial functions. This move implies a major shift in the abilities required of accountants. It has been accepted by academic and corporate circles alike, and several researchers have undertaken to explore these new abilities (Ahmed, 2003; Kaye & Nicholson, 1992; Belfo & Trigo, 2013; Lange et al., 2006; Ellis, 1986).

According to Ritter & Pedersen (2020), digitalisation is the integration of technology across all areas of an organisation. The business accounting and auditing sectors have switched to digital; data analysis has also used software in the digital age. Of course, the company will prefer to use the system rather than human labour. Based on the world economic forum, 2016, the digitalisation era will eliminate around 1 to 1.5 billion jobs from 2015 to 2025 due to replacing human positions with automatic machines. Sommer (2015) predicted that in 2030, there would be 23 million jobs lost because of automation. One of the jobs that can be threatened is the accountant. According to Dai (2016), accountants at the time of the fourth industrial revolution will fight over positions in companies that will increasingly be fewer because technology has replaced human labour. Hoffman (2017) said that robots replace accountants in routine work, such as data analysis. So, what needs to be done to sustain the profession in the industry?

Thus, this study will answer the following research questions: 1. What is the impact of digital transformation on accountants? 2. What are the needs and priorities of accountants in the digitalisation era? 3. What are the challenges and opportunities associated with digital transformation for accountants 4. What are the potential outcomes of providing access to digital tools and resources, training and support, and recognition for the accountants' work in the digitalisation era? 5. What are the potential risks associated with providing access to digital tools and resources, training and support, and recognition for the accountants' work in the digitalisation era?

Therefore, based on the earlier research question, this study hopes to reach the following research objectives:

- Explore the impact of digital transformation on accountants' work and professional life.
- Identify the needs and priorities of accountants in the digitalisation era.
- Identify challenges and opportunities associated with digital transformation for accountants.
- Determine the potential outcomes of providing access to digital tools and resources, training and support, and recognition for the accountants' work in the digitalisation era.
- Identify the potential risks associated with providing access to digital tools and resources, training and support, and recognition for the accountants' work in the digitalisation era.

- Will present a framework for DT competency for the accountant in the era of digitalisation.
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### Literature Review

An important aspect of 21st-century life is its transformation into a digital economy. People and businesses are influenced by digital technologies in many ways, including new ways of communicating and collaborating. These new products include a significant service component, the role of data in economic growth through artificial intelligence (AI), the automation of tasks, and the emergence of new business models. The way we live and work together is fundamentally altering due to the digital revolution through its effects on productivity, job opportunities, skills, incomes distributed among people at all levels in all sectors, and trade and the environment. As a result, it tremendously impacts businesses in all sectors" (OECD, 2019).

Regarding accounting, the usage of DT has become common place, and it is no longer feasible to undertake most accounting and financial activities without it (Damasiotis et al., 2015). This shift from manual to computerised accounting has also affected the function of accountants (Hoffman, 2017). According to Wessel (2008), DT skills are essential for accountants to fulfil their duties effectively. Since business transactions are growing more complicated, companies are turning to professionals with technical backgrounds, such as certified public accountants (CPAs) (Rufino & Lim, 2018). Consequently, accountants' tasks and responsibilities are becoming increasingly important and difficult.

It has been established that competencies are a combination of information and abilities that enable individuals to perform well in their profession in various scenarios since knowledge is defined by what they know. Skill is defined by what one can accomplish (Stone et al., 1996). Comparatively, accountants needed a specialised software package, "IT Competencies" (Berikol & Killi, 2021; Damasiotis et al., 2015). "The traits exhibited through actions such as the ability to develop a spreadsheet or database for a specific purpose, as well as the ability to utilise software" were defined by (Carnaghan, 2004). Learn about automated data processing concepts and tools; learn about basic communications hardware and software; use automated accounting and financial systems to record and classify financial transactions; apply computer application skills to present financial data in an appropriate format; integrate new applications/software into work activities; where most consumers of organisational data profit from significant technological advancements, automation, and digitisation of company information (Drew, 2017).

Accountants expect basic computer applications, automated data processing principles, tools, systems and Internet capabilities. Also included in the IT expertise is the ability to detect and evaluate the internal controls in computerised systems, set standards for adapting, implementing, and using IT, and manage IT security measures for companies or customers (Rufino & Lim, 2018). To keep their employees and adapt to the digital business world, accountants should prepare themselves to embrace digitisation, and every firm should digitise (Ogaluzor et al., 2019).

An accountant should be a user, assurance provider and evaluator, an information system manager, and an information system designer. These are the major categories of IT skills defined by the International Federation of Accountants (IFAC, 2014). On the other hand, this research focuses on IT skills in general.

The four basic IT abilities necessary for accountants were categorised as follows by (Damasiotis et al., 2015), Bean & Medewitz (1987): Computing may be divided into four categories: programming, software, hardware, and networks and communications. Transferring data across local area networks, electronic commerce, and the internet are all skills that an accountant should have under their belt (Larres & Oyelere, 1999; Williams & Leung, 1995). Big data sets may bring fresh insights into firms, which accounting professionals may use to better decision-making, risk management, and strategic business solutions (ICAEW, 2014).

In order to handle the data that will be analysed and audited, the profession must acquire new professional abilities. Knowledge and abilities in the field of data quality and security are required. As Romney & Steinbart (2009) noted, as all company transactions are now recorded and updated electronically, accountants must have a working knowledge of the accounting computer system. For example, accounting professionals may assist in decision-making by offering better and cheaper data, a deeper analysis of data, and fresh insights into a company through the use of the capabilities of intelligent systems. Finally, after artificial intelligence programmes freed up their working time, they could focus on more important responsibilities (Stone et al., 1996).

It might allow accountants to become virtual financial directors for their customers and take the lead in strategic planning. In order to enhance their practice, businesses may use digital services to communicate their statutory and management reports to their consumers in an easy-to-read format. As a result, customers' pleasure and operational efficiency would be greatly enhanced.

Services that comply with anti-money laundering and counterterrorism finance legislation may be utilised via the first-mover advantage. The influence of cryptocurrency and blockchain technology on organisations' accounting and financial reporting must also be considered by accounting authorities and standard-setting agencies. On the other hand, successful digitalisation of business models calls for employees with a well-rounded understanding of digital culture and competency. By selecting and implementing the innovations and technological advancements that have the greatest potential for improving accounting services and expanding businesses, accountants can reap the benefits of these developments. In order to enable organisations to respond effectively to the demands of digitalisation, the company must adopt the latest technologies (Veldhoven et al., 2022). This section will discuss the accountant's role in the digitalisation era and what competencies they need to fulfil their role. To meet these challenges, accountants must have a strong understanding of the latest technologies. For example, they need to be able to use software programmes such as SQL and SAP and access computers with the latest software programmes installed. They also need to be comfortable working in a digital world, where almost all their work is done on computer screens. In addition, accountants need skills in financial analysis and reporting. They need to understand complex financial statements and develop reports that provide information about

a company's finances. They must also be skilled in other areas, such as marketing and business strategy.

### **Methodology**

This study will use a questionnaire survey method. The questionnaire will be designed based on the needs and priorities identified by the accountants in the digitalisation era. A pilot test will be carried out to ensure the questionnaire is well-designed and identify any glitches. The final questionnaire will then distribute to the accountants. To select the respondent, the random sampling method will be used. The questionnaire consisted of a series of questionnaires designed to gather data on different aspects of accountants' work in the digitalisation era. The questionnaire will be distributed to the accountants using email. The research outcomes will be analysed using the most recent version of SPSS. The data will be analysed to answer all the research questions and achieve the objectives.

### **Results**

The results of this study will provide insights into the needs and priorities of accountants in the digitalisation era. This study's results will help improve the effectiveness of accountants' work in the digitalisation era. This study's results will also help identify gaps in accountants' work in the digitalisation era. Finally, the findings of this study will be used to develop future interventions and strategies for accountants. Finally, this study will present a framework for IT competency for accountants in digitalisation.

### **Conclusion**

The findings of this study hope to suggest several needs and priorities of the accountants who need to be addressed to ensure that they can effectively manage their work in the digitalisation era. The findings of this study will be used to develop future interventions and strategies for accountants in the digitalisation era. Overall, the accountant's role in the digitalisation era is to provide information and support to businesses to make effective decisions based on the changing landscape. In addition, they need to have a strong understanding of the latest technologies and financial analysis and reporting skills. In addition, they must be able to work comfortably in a digital world, where almost all their work is done on computer screens.

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