Transformation In Business Accounting: Adapting to the Future

Ahmadi Aidi [1], Heksawan Rahmadi [2], Redjeki Agoestyowati [3], Agus Budiwaluyo [4]

[1,2,3,4,] Institut Ilmu Sosial dan Manajemen STIAMI, Jakarta, Indonesia

[1] ahmadiaidi64@gmail.com; [2] heksawanrahmadi@stiami.ac.id; [3] redjeki_agoestyowati@stiami.ac.id;

[4] aguswaluyo@stiami.ac.id;

* Correspondence: ahmadiaidi64@gmail.com

Abstract

The focus of this article is digital transformation in business accounting. Digital transformation in business accounting is an important guide for students and practitioners of digital accounting and business to carry out the impact of digital technological advances, digital disruption, and digital transformation on the accounting profession. Writing method is using a theoretical approach. Writing is done by conducting studies of various theories sourced from books or literature and from various official journals related to the results of research on digital transformation in business accounting. Before the writing was done, a focus group discussion (FGD) was conducted to discuss various literature and journals related to digital transformation in business accounting The results of this paper conclude that digital transformation in business accounting are accountants need to play critical roles in helping organizations to safely undertake digital business transformation, to optimally leverage digital technology advancements, and to the benefits of becoming a transformation digital business accounting. Suggestions that can be given to playing these critical roles requires changes in the roles, activities, and competencies of accountants. It requires accountants to understand key digital technologies and their implications for organizations, to understand digital transformation and digital business capabilities and practices, and to understand how digital technologies and digital business capabilities impact accounting value creation and practice.digital.

Keywords: *Accounting; Transformation; Business; Adapting; Future;*

INTRODUCTION

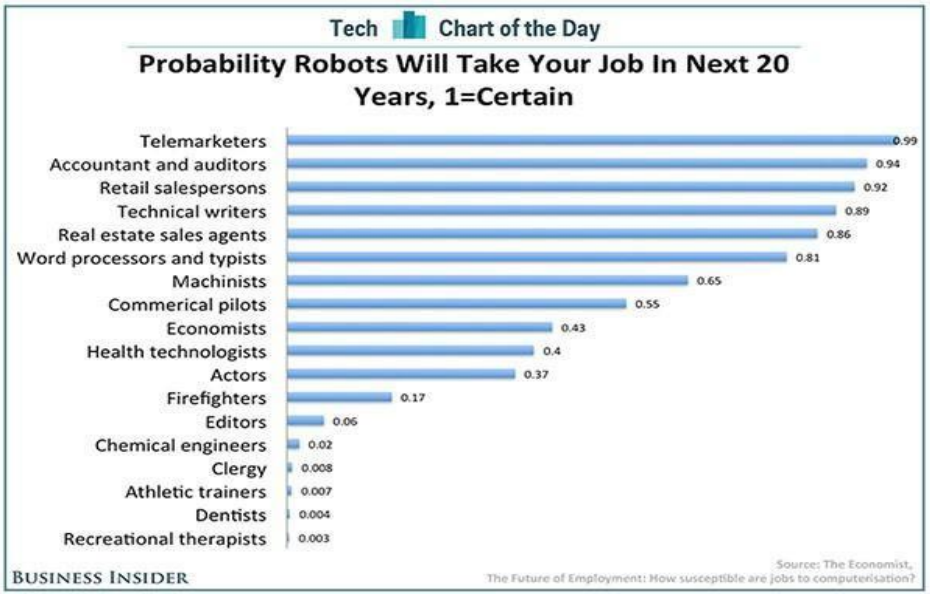
The development and advancement of digital technologies such as artificial intelligence, cloud computing and blockchain have created a different atmosphere and eco-system in the implementation of accounting practices in society, industry and business (KhanomTahmina. 2017). Globalisation and industrialisation have an impact on the accounting profession. The accounting profession is one of the professions that is greatly affected by the development of information technology today. It is alleged that the accountant profession will be eroded and replaced by robots, in fact, it will not fully materialise because the skills and expertise of an accountant are still needed in the business world to produce much-needed information when making business decisions.

Changes in the business environment, both the internal environment and the external environment, still require the role of accountants (ECIIA. 2019). The rapid flow of information and global developments in the fields of science and technology have resulted in changes in the external environment that are accelerating so that this is a positive impetus for accountants to adapt to the global environment (Mujiono, M. N. 2021). To deal with these major changes, every educational institution that produces accountants must improve, especially in the aspect of curriculum and learning methods in order to produce graduates who are reliable and able to adapt to the rapidly developing global environment and be able to contribute directly to the activities of today's business world.

The phenomenon certainly makes me sad for accountants and auditors, but whether this prediction will come true or not history will prove it. Regardless of this prediction for us accountants and auditors, we still have to prepare ourselves and believe that the need for accountants and auditors is still needed, it's just that the way of working and the mechanism of organising it requires adaptation using the latest technology, so we need the ability to adapt to the technology itself and improve competence by continuing to take part in training and certification related to accounting and auditing. There are some important issues that Indonesian accountants and auditors face in the use of technology such as inadequate practical experience, fluency in English still needs to be improved, this is also an obstacle for our accountants to compete in the global region (Alles, M. G. 2015).

Business Insider, a business and technology news website owned by the United States with offices in New York, submitted the results of its survey related to several professions that will switch roles

from humans to robots. One of the interesting results of the survey is that the profession of accountants and auditors will switch roles to robots in a period of 20 years so around 2041, the survey results also



mention the probality or possibility of switching roles reaching 94% as shown in the following figure:

Figure 1: Professions That Will Switch Roles From Humans To Robots
Source : Business insider 2020

Accounting science has moved forward characterised by major changes in line with technological developments, especially Information and Communication technology. Digitalisation of accounting practices is a revolutionary step from previous manual accounting practices. It is targeted that Accounting work to produce financial information as the basis for financial management decision making will be more accurate and up-to-date. The challenge ahead for accountant professionals is to adapt to these changes by responding quickly and not hesitating to be accompanied by a qualified self-development programme.

Digitalisation of accounting practices has made accounting not just a tool in producing financial statements but has become a business planning strategy that can meet the expectations and expectations of company leaders and company owners in running their business efficiently effectively and transparently in accordance with the principles of business administration by implementing good corporate governance.

The presence of artificial intelligence and blockchain and cloud-based accounting software has now become a standard and indicator in the industrial sector (Cindy Greenman. 2017). The existence of blockchain as a provider of openness or transparency facilities and security or data security where this has never happened in the previous era. On the other hand, we witness and feel that in artificial intelligence all financial data can be analysed more quickly and accurately and in depth so as to make professional accountants able to analyse data more deeply and precisely when they are making reliable business decisions (Griffin, O, 2016).

One of the biggest challenges that accountants face is adapting to new technology. Many accountants feel overwhelmed by the need to constantly learn and adapt to ever-changing technology (Chen, 2019). Continuous training and a significant investment of time are required to keep up with the latest developments. In addition, the increasing use of digital technology also brings greater data security risks (Level, Vial, G. 2019).Accountants are required to have a deep understanding of how to protect client data from evolving cyber threats.

The main obstacle faced by accountants is the adjustment to the presence of new technology. It is still widely found and felt that accountants make the presence of new technology a burden. For this reason, continue to learn to understand this new technology whose development is very fast and dynamic by participating in a continuous competency development programme so that this is a good

solution in overcoming the accelerated development of this new technology.

The obstacles and constraints faced in this technological transformation include the following: Firstly, changes in accounting regulations and standards have not been able to keep up with the speed of this technology, while artificial intelligence and blockhain will continue and develop rapidly. The availability and ability of resources, both human resources and financial resources, have not been able to fully keep up with the speed of technological development itself

(Jim Marous, 2017). Data security is a significant obstacle in carrying out daily accounting practices. Accounting work is dense with data data whose level of confidentiality must be maintained properly because it is a challenge for accountants to maintain the confidentiality of these data safely. The threat of cyber crime forces accountants to protect client data.

Accounting practice faces a sophisticated type of crime, namely cybercrime and digital crime. In an effort to maintain the security of client data and maintain the integrity of client information and protect the client's business assets, professional accountants are required to use the concepts of cyber criminology and digital investigation in the daily practice of accounting. Cybercriminology is a scientific discipline that focuses on understanding and preventing cyber crime (Lin Mei Tan & Fauzi Laswad, 2018). It involves the study of the behaviour of cyber criminals, the methods they use and efforts to identify and address the associated risks. Cybercriminology covers a wide range of digital criminal acts, including hacking, identity theft and financial fraud.

Cyber criminology is a science that concentrates on knowledge related to cybercrime prevention. It focuses on the behavioural aspects of cybercriminals, the ways in which they commit their crimes. Cyber Criminology covers several aspects of digital crime including hacking, identity theft and financial fraud such as account takeover and occurs when fraudsters take ownership of online accounts often using stolen identities, money laundering, fraudulent payment of cash withdrawals and deposits, cheques, online payments, debit card transactions, bank transfers, and loan repayments.

Digital investigation is the process of collecting, analysing and interpreting digital evidence to understand what has happened in a particular case. In the context of accounting, digital investigation focuses on collecting and analysing digital evidence to uncover suspicious activity or fraudulent acts related to finance. Digital investigation is the process of collecting, analysing and interpreting digital evidence to find out what fraudulent events occurred in the case at hand. In accounting practice, digital investigation is applied to collect digital evidence and then analyse the digital evidence to examine digital evidence that is suspected of having elements of fraud so that from the start the accountant has suspected and detected the digital evidence, especially if there is preliminary evidence that leads to fraud related to financial aspects. Professional accountants are required to always prioritise this aspect of protecting client data from cybercrime.

After being able to solve the challenges of acceleration will also appear in the form of opening up various opportunities for progress in the implementation of accounting. These opportunities include the automation of accounting processes so that it will minimise human error, which in turn will save operational costs. With the automation of the accounting process, accountants have more time to focus more on carrying out strategic tasks such as providing business advice to clients including providing consulting services related to business planning and financial planning so that clients feel helped in making reliable business decisions. A continuous self-development programme is the best solution in aligning the challenges and potentials. Education and certification programmes play a vital role in preparing superior human resources in the accounting field. The existence of a human resource development strategy will be able to maintain accountants in preparing for a better future.

RESEARCH METHODS

A literature review is a systematic method for identifying, evaluating, and synthesizing scholarly works, previous research, and expert opinion on a specific topic. It is a critical analysis that serves as a theoretical foundation, identifies research gaps, and positions new studies within a broader academic context. Research method literature review is a study aimed at mapping current knowledge, identifying research gaps, and providing a strong theoretical foundation. The type of literature review in this article

is a narrative review, namely a qualitative study that summarizes various studies, which is freer and broader in nature. Common systematic steps taken include: Determine specific research topics and questions. Search for relevant sources (journals, books, reports) using databases (e.g.: Google Scholar, Scopus, Science Direct) with specific keywords. Filter articles based on criteria such as year of publication or study focus. Assess the credibility and data contribution of selected articles. Analyze data, look for patterns/themes, and synthesize findings from various articles into a unified understanding. Compile the analysis results into a research report (background, methodology, discussion, conclusions).

RESULTS AND DISCUSSION

The role of artificial intelligence and robot automation in accounting practice will be greater in the present and future. Artificial intelligence has the ability to automate the analysis of financial data, while robotic automation has the ability to handle daily accounting work more efficiently and effectively. Blockchain technology has the ability to make the audit process more precise and accurate. Big data and machine learning have the ability to assist accountants in analysing financial data. These powerful capabilities allow companies to identify sales trends, evaluate financial performance and predict future earnings accurately and precisely, so that companies will be able to make informed and strategic decisions.

The use of digital technologies such as artificial intelligence, blockchain, big data and cloud computers has turned manual accounting into digital technology-based accounting. Digital technology-based accounting is different from manual accounting, these differences include increasing aspects of openness or transparency, improving data security systems, and efficiency in using paper. The presence of digital technology-based accounting or can be called accounting digitalisation changes the old pattern from a centralised to a decentralised system, this can happen because with digitalisation most of the data can be sent to the parts that need the data online. All parties who need the data can get it in real time. Accounting digitalisation is also able to reduce the risk of human error and the risk of fraud. Thus the business decision-making process can be done more quickly, accurately and reliably.

One of the digital technology-based accounting is a cloud computer, where this cloud computer has software that is able to provide accounting team cooperation movement facilities. Data that can be accessed anywhere and anytime causes the accounting team to be able to access it easily so that it can carry out its duties flexibly so that the company will quickly respond to changes in the business environment. Since all financial data is digital, it is imperative that data security systems are well-prepared from cybercrime threats, such as malware, hacking and phishing. Companies must implement strict data security system policies such as data encryption, using firewalls and tiered access authorisation systems to information. A lot of financial data is stored in digital form, making data security very important. The company must commit to spending funds to protect this data security. Apart from that, companies must also make reliable regulations related to data security protection.

Accounting software such as Xero, MYOB, Quick Boks and so on greatly assist the work of accountants in completing recording or journal transactions to produce financial reports including tax calculations. This software will increase efficiency, reduce the risk of human error. The impact of this automation makes accountants have more time to work on more important tasks such as data analysis and strategic planning. This is in line with the results of the study, (Khanom, Tahmina. (2017), that one of the biggest technological trends at the moment is the emergence of cloud technology. The cloud is a platform to make data and software accessible online anytime, anywhere, from almost any device having an internet connection. In cloud computing, users access software applications remotely through the internet or other network via a cloud application service provider. Likewise, in cloud accounting, data is sent into “the cloud”, where it is processed and returned to the user. All application functions are performed off- site, not on the users’ desktop, which frees the business from having to install and maintain software on individual desktop computers.

Cindy Greenman, (2017), declaring that Artificial Intelligence is critical to the future of the accounting and auditing professions. AI is a vital tool that will provide these professionals with the needed tools to increase the efficiency and effectiveness of their occupations. The repetitive tasks of

bookkeeping or process-driven assignments are more likely to be replaced with an automated technology than the higher value specialties that involve professional judgement. Many believe that the younger generation of accountants need to understand and be prepared to work alongside artificial intelligence.

Digital transformation is occurring in the accounting profession. This phenomenon raises anxiety for a number of accountants, because their jobs are replaced by system, so companies can reduce the number of workers which classified as accountants. Whether the accountant will die along with the development of technological innovation. Certainly not. The purpose of this research is giving insight that account-ants are required to be agile-learners who enrich skills with the aim of managing creativity and reasoning so that they are able to create infrastructure, platforms, and digital software that can control the au-tomation in business. There are nine pillars of technological innovation as follows.

IoT surrounds us with intelligent web-con-nected networks, devices and services that have the ability to sense, connect, infer and act (Siegel et al, 2018). IoT enables sensors and ac- tuators connected to computers to facilitate new products and services by reducing costs, increasing efficiency, and increasing the usabil-ity of existing systems.

Big data refers to the definition of data volumes that are so large and difficult to manage using traditional methods. Valid data is needed to prepare budget plans, formulate policies and implement them. The rise of big data has led to a shifting profile competence of accountant, such as business analytics competences and infor-mation technology skills considered a "musthave" capability for the accountant and finan-cial controller profession (Oesterreich&Teuteberg, 2019).

Generally, both Augmented Reality (AR) and Virtual Reality (VR) technologies aim to stimulate the user's perception and senses so that they are able to feel they're in an "other world" and interact in it. Augmented Reality, Virtual Reality, even Mixed Reality are new ways for the digital community to interact, bothin business and profession (Kiger, 2020).

Cybersecurity. These fields of cybersecurity are interre-lated and has the common goals of protecting the confidentially, integrity and availability of information. Some of common methods that are usually used to threaten cyber security including malware, SQL injection, phishing. Protecting confidential information is a business requirement, (Okereafor, 2008).

Artificial Intelligence (AI). AI is a simulation of human intelligence processes carried out by machines including studying constantly changing data, reasoning to understand data and self correction mechanisms to make decisions. AI improves human thinking to solve complex problems and focus on reflecting reality and delivering accurate results. But cognitive computing focuses on imitating human behavior and reasoning to solve complex problems (Wu J, 2019).

Autonomous Robot/Robotic Process Automation (RPA). RPA technology is changing the way of the world doeswork. RPA is a software technology that makes it easy to create, deploy, and manage software robots that mimic human actions to interact with digital systems and software. RPA helps to increase the efficiency of the business process and to reduce human errors and costs (Cohen et al., 2019).

Machine to Machine. Integrated system Machine to Machine (M2M) communication is used to describe any technology that allows networked devices to exchange information and perform actions without manual human assistance. M2M communication finds application in wide areas, such as smart home, e-healthcare, intelligent transportation systems, environmental monitoring, smart cities and industrial automation (Verma, 2016).

Additive Manufacturing (AM)/3D Printing. AM also known as 3D printing, is the process of building items by combining layers of material from a CAD file that dramatically changes the face of the industry. The AM techniques offers several advantages that optimize and transform both products and processes and may result in unpreceded and significant business value (de Kok, 2015).

Cloud computing is a change from traditional business ways of thinking about technology resources. Cloud computing is defined as computing services including servers, storage, databases, networking, software, analytics and intelligence via the internet. The advantage of using cloud for

small businesses is they do not pay for the resources they have not used. The advantage of using cloud for small businesses is they do not pay for the resources they have not used (Attaran &Woods,2018).

CONCLUSION

Based on the results of the discussion above, it can be concluded that Accounting has undergone significant changes due to digital technology. Accountants must adapt to technological developments and digitalisation. Accounting automation and digitisation will reduce the risk of human error in recording financial data. With Accounting software, the accountant's role is more focussed on data analysis and strategic planning. Digital transformation in business accounting are accountants need to play critical roles in helping organizations to safely undertake digital business transformation, to optimally leverage digital technology advancements, and to the benefits of becoming a transformation digital business accounting.

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