

WILL ACCOUNTANTS STILL EXIST? CHALLENGES OF THE ACCOUNTANT PROFESSION IN FACING TECHNOLOGICAL DISRUPTION IN THE NEW NORMAL ERA

Putu Putri Prawitasari
Universitas Pendidikan Nasional
putriprawitasari@undiknas.ac.id

ABSTRACT

This study aims to analyze the challenges faced by the accounting profession in dealing with disruption due to the industrial revolution 4.0, 5.0, and the Covid-19 pandemic. The method used in this research is descriptive qualitative through the study of published literature studies related to problems related to the accounting profession in dealing with technological disruption as a form of adaptation to a new life in the midst of the Covid-19 pandemic on Google search, Google Scholar, and Research Gate. The results show that there are several attitudes that accountants must have to face challenges in the New Normal Era, namely Technical and Competence, Intelligence, Creativity, Digital Intelligence, Emotional Intelligence, Vision and Experience. In addition, accountants must possess soft skills as the key to success, including Leadership, Flexibility and Adaptability, Critical Thinking, Tech savvy, Communication and Emotional Intelligence, and Creativity and Innovation.

Keywords : *Accountants, Digitization, New Normal Era*

FOREWORD

In the digital era and technological developments like now, the flow of information goes so fast, internet technology has changed one's view of getting information, including in the world of business accounting. Technological developments change business, making less and less human resources needed in business, including accounting staff. This resulted in the underestimation of the accounting profession regarding the impact of technology on the work of accountants. This is a formidable challenge that must be answered.

A critical attitude towards technological developments gives general concern to the work of accounting staff and professional accountants in the future, where the issue that arises is that the role of humans will be replaced by computers. The future demand for manpower in the Accounting Sector which is predicted to change, is often viewed with doubts and worries. This concern about the Digital and Virtual Revolution actually happened in the First Industrial Revolution Era (Najjar, 2019). The concern that arises is that this era poses a threat to jobs, security, skills, and unpreparedness to accept all changes including major changes in the structure and culture of society. The same is the case in this Digitalization and Virtual Era, where gradual changes are unavoidable, raising concerns over the threat of work in fields not far from monotonous data processing such as accounting which is predicted to be replaced by machines (Marr, 2016). In this Digital and Virtual Era, many tasks of data input and accounting data analysis can be automated through the Transaction Process System. This is considered to be a barrier to the role of humans in providing value to the field of accounting for business development in general.

Common understanding of the Digital and Virtual Age is an era that is able to change the situation by making humans replaced by machines, humans versus machines. Artificial Intelligence can be exploited by humans for business development, not the other way around, so that it becomes an awareness to solidly partner with machines which are the future (Daugherty & Wilson, 2018). This can be seen in the functions in organizations where the

areas of leadership, understanding attitudes and culture and decision making in the field of accounting are purely human realms, while the realm of transactions, iterations, predictions and adaptations is the realm of machines that provide functions in their activities (Daugherty & Wilson, 2018).). The collaboration activities between humans and machines where humans complement machines are in the train, explain, sustain areas, while machines complement humans in the amplify, interact and embody areas (Daugherty & Wilson, 2018).

Jobs and assignments in the Accounting Sector that have occurred so far have started from the development of ICT (Information and Communication Technology) including digitalization, virtualization to transformation. Most of the duties of accounting staff, accountants and auditors cannot be separated from the use of ICT. According to Liu & Vasarhelyi (2014), this development is not only able to increase the effectiveness, efficiency and quality of accounting services, it also expands the scope of the accounting function, where through ICT that continues to grow, accountants can provide support services for management in strategic business decisions. This Decision Support service can also be seen from the use of the auditor's prediction model that can identify and assess the risk of accounting materiality (Kuenkaikaw, 2013). By using electronic data, many services in the Accounting Sector are realized in a labor-intensive manner, derived from historical data can be more efficient and effective, and this automated platform represents the foundation in providing clients with continuous auditing and continuous monitoring services (Teeter, 2014).

Advances in ICT have led to changes in accounting, with unexpected consequences that may not always be positive, because accounting is an industry that continues to evolve due to the development of factors that influence it (Andersen, 2019). The growing use of ICT has an influence on the implementation of the pattern and process of Accountant education and Accountant operations, where the use of ICT accompanied by an understanding of its development can add insight into the consequences, both positive and negative, that affect the career of Accountants (Andersen, 2019).

Kruskopf et al. (2019) explains that the future potential in accounting and auditing stems from the impact of the development of ICT through the industrial revolution, where this arises because of the strong relationship between ICT and decision making, which lies in a network of smart machines that can create, analyze and share information. . Industry 4.0 is all about how smart, connected technologies will be embedded in companies, assets and people and is characterized by the development of analytics, robots, cognitive technologies, artificial intelligence, quantum computing, internet and others (Kruskopf et al., 2019). The fast-growing revolution is seen as a factor that can lead to the loss of clerical jobs, as well as creating new opportunities not only for new accounting graduates, but also for those who have the motivation to develop new ICT skills in accounting, as well as for companies using digitalization to organize, process and evaluate financial data that can increase productivity and cost and time efficiency (Kruskopf et al., 2019). Changes in ICT basically have an impact on every line of business because accounting is an important and core part of the company's success (Kruskopf et al., 2019).

The development of ICT has given rise to Artificial Intelligence (AI), which is used to obtain information and automation that cannot be separated from risk, where the primary AI program risks the loss of workers at the accounting data input skill level (clerical), so companies must ensure that ICT is still used efficiently in order to remain competitive in the competition, with human adjustments to its use in the form of increasing expertise in the field of ICT (Geisel, 2018).

Blackwell (2018) also emphasized that in the field of Audit, without public trust in Auditors, Audit Opinion provides very little value, with the use of ICT in Artificial Intelligence, in many industries providing solutions to auditor problems, especially in Big Data. The use of Artificial Intelligence in the audit process has the potential to provide public trust in the assignment for audits of Public Accountants. Likewise for tax accounting which is the most popular sector of the accounting industry for accountants in providing services for preparing tax reports because it is driven by increasingly complex tax rules, tax accounting seeks to provide consultation for clients in completing their tax returns and become agents in dealing with tax examiners. The use of automation in Big Data is also required by the Tax Auditor in conducting the examination of the Taxpayer's Tax Report (Blackwell, 2018).

The growing belief in automation is causing businesses to move towards automation as a way to reduce the amount of technical work on Big Data that humans do (Blackwell, 2018). The growing belief in automation has caused more and more businesses to move towards automation as a way to reduce the amount of manual work done by people (Blackwell, 2018). The introduction of Artificial Intelligence as a business process automation technique has the potential to greatly increase public confidence in accounting because AI can process large amounts of information with greater accuracy than humans, reducing the likelihood of errors (Bernard, 2017). Accounting has long avoided most automation, but recent technological advances have finally made a major impact on the development of the accounting profession. The introduction of software that automatically transfers relevant financial data into Financial Statements and then into tax forms, has changed the responsibilities of many entry-level tax accountants (Girsch-Bock, 2017). Automation in the development of ICT has shown itself as a tool that can provide benefits for human labor, and can reduce entry-level work so that the accounting profession is more focused on tasks that are more detail-oriented and decision-making (Marshall, 2011). Reducing the task at entry-level can result in significantly greater productivity, as well as giving accountants more time on assignment at the level, as manual processes have no place in the financial future. Entry-level tasks are time-consuming and lead to uneven workloads, long working hours, and increased frustration (Parcells, 2016).

Changes in information technology that occur exponentially are in line with developments in the field of accounting which gradually change naturally. As explained in Diamandis' Theory of Exponential Growth, technological change begins with the Digitalization Era Stage (analog to digital transformation) which is the initial stage of the development of the Deception Era (the starting point of a technological leap). This Deception Era became the beginning of the Disruption Era, namely a reaction to a point of comfort or establishment, which nowadays people are 'made into panic'. The Disruption Era in this stage is actually a transitional phase to the final 3 stages. The Dematerialization Phase (digital cloud, no physical), Demonetization Phase (cost efficiency, so everything is priceless), and ends with the Democratization Phase (abundance of products with minimal costs) to become the Abundance or Free Economy era (Ahmad Zainuddin, 2018). These stages of technological growth are natural processes that occur, which are currently running, and will definitely run, and run more massively in every field, in this particular field of Accounting.

As with the concept of growth, at each stage of change will cause distortion as well as provide opportunities, where the lack of understanding of the technological changes that occur can lead to the loss of certain tasks. The loss of certain tasks or functions is a common thing in a revolution. On the other hand, it is important, upgrading in the field of professional expertise is the best choice for individuals in the Accounting field in responding to technological changes that occur. As creatures who have reason and want to learn, humans will certainly choose to continue to adapt totally to accept a change. Adaptability must be possessed by individuals who are engaged in assignments in the Accounting field, in the face of technological advances through increasing soft skills which include mental strength and social skills as well as the ability to think technically systematically in dealing with problems. Because the business world is not only able to rely on technical expertise in dealing with environmental changes to survive in business competition

The user's general understanding of the need for accounting personnel is limited to the scope of the user's assessment of his role at the entry level, namely inputting data into the information system used by the industry, and submitting the results or information needed to the information system owned. The scope of the assessment of the limited accounting personnel reduces the value of the accounting staff. For users of accounting companies, of course, they have a much broader view in providing value to accounting personnel, which is not limited to the entry level. Senior accountants need more than just data entry in their assignments, the need for expertise that goes beyond automation and data analysis in the accounting field. Mental strength and social skills in dealing with developments and competition are the focus in addressing accounting graduates from universities who only have academic abilities, which is another phenomenon in facing the era of Disruption. The problems

of this era are not only limited to technical skills, but what is no less important is the ability of individuals to adapt to changes that occur.

The rapid development of technology is a signal of the era of automation or what we know as digitalization. That is, the role of technology began to shift control of the work that is usually done by humans. The potential of technology to replace the role of the accounting profession is only a matter of time. The role of accountants will be strategic and consultative. Therefore, accountants need to have certifications such as technologically fluent, in order to be able to survive in the competition. An accountant must also have a strategy, including mastery of soft skills, both interpersonal skills and intra-personal skills, business understanding skills and technical skills to be able to answer the challenges of this digital era. An accountant must be aware of the development of the industrial revolution 4.0 by looking at the opportunities that exist.

Changes in the era are unavoidable, and therefore must always be able to control reactions and attitudes towards these changes in order to be able to move forward with the times. In the accounting sector, the various challenges that come with the advent of the digital era cannot be left alone, they must be studied properly in order to determine the attitude to overcome them. Fluency in technology is one of the keys to facing challenges in this era.

The industrial revolution 4.0 is an era where everything changes rapidly, such as rapidly developing information technology, smart robots, computer services that facilitate human work in all sectors, causing disruption in everything, including the accounting profession. The emergence of big data will erode and take over the work of accountants such as recording and processing transactions, many large companies have implemented big data for their financial management processes, because using big data can make the work of accountants more efficient and effective. This causes the role of accountants to be shifted along with the development of Disruption technology, which comes from English which means "disruption", where a company with limited resources is able to defeat large companies (market rulers), the thing that is attached to disruption is digital disruption or known as digital disruption. The term digital disruption is the occurrence of the industrial revolution.

Changes that occur due to the industrial revolution are environmental changes faced by the real industry. Indications suggest that some professions are more likely to be disrupted at a faster rate than those emerging in new industries or markets. The predicted major shortages in certain areas will allow skills to train emerging industries to survive amidst digital disruption. Digital not only creates great opportunities for the public and business interests, but also has an impact on business continuity risks and the credibility of the company's organization (Novayanti and Herliana, 2018). Accountants are also one of the professions that can disappear due to digital disruption. Technology provides various conveniences for accountants in carrying out their profession, but on the other hand technology can also threaten the existence of accountants. It is possible that in the future the accounting profession will not be needed because of the application that can provide convenience in presenting financial information.

The presence of the Industrial Revolution 4.0 and 5.0 brought changes to the adjustment of work in humans, machines, technology and processes in various professional fields, including the accounting profession. The Industrial Revolution requires the accounting profession to adapt to the development of information technology and big data. encourage the creation of new markets and shift the existence of old markets. Smart machines and robots are now taking on many roles and seem to rule the world. In the Industrial Revolution 4.0 and 5.0 there was an extraordinary shift in various fields of science and profession, therefore the way accountants work and practice needs to be changed to improve service quality and global expansion through online communication and the use of cloud computing. In the digital era and technological developments like now, the flow of information goes so fast, internet technology has changed one's view of getting information, including in the world of business accounting. Technological developments change business, making less and less human resources needed in business, including accounting staff. This resulted in the underestimation

of the accounting profession regarding the impact of technology on the work of accountants. This is a formidable challenge that must be answered.

The global pandemic that emerged at the end of 2019 and continues to this day has shocked the world community. This is due to the fast spread of the virus to all corners of the world. So that this global pandemic becomes a new challenge that is not only faced by a number of countries, but is also a global challenge that must be faced by all countries. This global pandemic is an infectious disease caused by the corona virus which is now known as Corona Virus Disease 2019 (Covid-19). Corona virus which is a family of SARS and MERS viruses that cause flu to severe respiratory disorders - pneumonia. This virus was first discovered in Wuhan, China at the end of 2019.

Based on WHO data, Covid-19 has infected more than 39 million people in the world with a death toll of more than 1 million as of October 18, 2020. The first case of Covid-19 in Indonesia was announced by President Joko Widodo for the first time in early March 2020. To date, as of October 19, 2020, seven months since the announcement of the first case of Covid-19 in Indonesia, 357,762 people have contracted Covid-19 with a death toll of 12,431. The World Health Organization (WHO) has officially declared or declared the Corona virus as a pandemic. Reporting from JHU CSSE Covid-19, the number of Covid-19 cases until August 15, 2021 was known to be 20,813 new cases, bringing the accumulation to 26,903. The latest news that occurred at the end of 2019 has changed the situation from various directions and requires all resources to deal directly with and adapt to the current situation. The rapid spread of cases throughout the world causes people to think outside the box and look for solutions in order to survive. Changes that are very visible from the outbreak are from the economic sector, and cannot be avoided. Many professions have been affected by being laid off, out of business, and even acquiring assets.

Putri, et al (2020) explain that the COVID-19 pandemic is a the disaster that hit the Indonesian nation even become a global disaster or globally causing significant losses large for various sectors, especially economic sector and result in many workers to be affected termination of employment (PHK). Even the number of layoffs in Indonesia is known during the pandemic continues to soar up to 3.05 million workers only within 3 months after Covid19 appeared in Indonesia, and also Indonesia is a country with growth the economy has declined over time this pandemic. Economic growth in the second quarter it reached minus 5.32% (CNBC Indonesia,2020)

The rapid spread of the virus and the increasing number of deaths have made people anxious and worried. The impact that is affected by Covid-19 is not only on everyone's psyche but also has an impact on the economy of world countries, such as in Indonesia. Various efforts were implemented starting from social distancing, School From Home, Work From Home, to Large-Scale Social Restrictions or PSBB which were implemented in Indonesia as of April 23, 2020. Not only in Indonesia, which carried out various policies to slow the spread of the Covid-19 virus, even in a number of countries. countries set a "lock down".

The 2019 coronavirus disease (Covid-19) pandemic in Indonesia has had a large socio-economic impact outside the health sector. Changes caused by the Covid-19 pandemic include various regulatory and policy aspects, to challenges to changes in the accounting and education sectors. Currently, Indonesian accountants are faced with several big challenges, namely the industrial revolution 4.0, 5.0 and the Covid-19 pandemic whose completion is not yet known when it will end. One of the impacts of the Covid-19 outbreak is that there are restrictions on direct interaction and communication between one individual and another, both through regulation and enactment of rules: regional lockdowns, policies for the Implementation of Micro Community Activity Restrictions (PPKM), PPKM Level 1,2, 3,4 and so on, which resulted in the emergence of a new phase in human life or what is often referred to as the new normal era, where in the new normal era many old habits have changed and shifted into new habits or new habits which are seen as more efficient and effective. effective, including: Work from home (WFH) system, Online meeting, Virtual office, Online class, Me Time for self and

family becomes more so that from this new era can result in efficiency and effectiveness of time, place and cost for organizations/companies .

Large-Scale Social Restrictions set by the government have an impact on economic instability due to hampered or restricted community activities outside the home. Realizing the need for appropriate action to keep the economy running, the New Normal became a new policy set by the government. Not only in Indonesia but also implemented by various countries in the world to stabilize the country's economy. It is also realized that this global pandemic cannot be said to be over, but life must go on, so it cannot be avoided, but must be faced together. For this reason, people begin to have to get used to adapting to new life habits which are now known as the New Normal.

The existence of the Covid-19 pandemic which was followed by a number of restrictions, gave birth to new constructions in the national and global economic structure, increased poverty rates, increased unemployment which in the end the world would also enter a new phase and also face a phase of sustainable inclusive economic recovery. Many changes will occur in various fields, starting from the macro sector, regulation, industrial dynamics, education, technology, geopolitics, to changes in human behavior. A multidisciplinary approach is needed in the economic recovery phase through a less contact economy and various stimulus programs to accelerate the handling of the Covid-19 pandemic to support successful development by eradicating poverty, reducing social inequality and protecting the environment globally through the Sustainable Development Goals (SDGs) and Millennium Development Goals (GST) programs. MDGs) to realize new opportunities, enable the growth of local markets, strengthen the global economy as a whole, and increase the intensity of trade around the world. One of the challenges for accountants in assisting the process of economic recovery through a less contact economy is mastering digital technology, where information technology is needed as a decision-making tool and makes it a valuable asset to ensure that entities remain relevant in the dynamics of the global economy. Mastery of reliable information technology gives birth to: Ways of working, ways of interacting and communicating, learning methods, business models, to viewpoints on values have changed following the digital economy platform and have become primary needs in every aspect.

One of the professions studied in this case is the accounting profession. Accountants are a profession that has developed from century to century and has experienced ups and downs in maintaining its existence. This profession is increasingly developing into a business that creates public trust and is expected to be a promising profession. According to Thomas Sumarsan, accounting is an art to collect, identify, classify, record transactions and events related to finance so as to produce information, namely financial statements that can be used by interested parties. While the accountant himself is someone who oversees and records the financial flows that exist within a company. All transactions and financial flows within a company or organization obtain financial statements that can be accounted for in accordance with existing provisions within the company.

Calculation of data and recording of financial statements must be carried out carefully and in harmony to avoid an error that can be fatal. For this reason, an accountant now must not only adapt to technology but it is very important to master the skills in the field of information technology so that their functions and roles cannot be replaced by current digital changes. The phenomenon of digitalization disruption, which is followed by this pandemic, cannot be avoided. The government said that people must be able to live side by side with Covid-19, which is now known as the era of society 5.0. In implementing the current policy, of course, requires careful consideration and readiness.

With the transformation from era 4.0 to era 5.0, accountants are now entering an era where the main element is humans, which indicates that times are growing and have an impact on fundamental changes and changing all systems and arrangements, which is also called disruption in several fields. Disruption in the form of analog processes that become digital must be addressed so that its role is not replaced by technological advances today. Digital change is currently growing rapidly among the community as a solution in carrying out daily activities in the era of society 5.0 and is increasingly replacing the role of humans in their fields.

One of the developed countries, namely Japan, has launched the Society 5.0 program, in Indonesian, Society means society. So the meaning of society 5.0 is the concept of community technology that is human-centered and collaborates with technology to solve social problems that are integrated in virtual and real world spaces. In this era, we will summarize some of the ways of working that are completed with several technologies such as sensors, artificial intelligence, and robots that will be used to do work. Facing today's latest industrial era, the development of the digital economy has opened up new possibilities while simultaneously increasing risk.

These changes have a significant impact on the development of accounting. In this era, technological developments and innovations seem to be catching up with time. New innovations are the creation of new markets that use online media and shift the old market, machines and robots that take on many roles and seem to rule the world. The probability of the accountant profession being replaced by a robot is 95%. The large percentage is due to the development of Robotics and Data Analytics (Big Data) which takes over the basic work carried out by accountants. Therefore, the Chief Executive Officer (CEO) of Briven Asia data, Imran advised accountants to start studying programming and algorithms and develop important competencies for an accountant, namely data analysis, and leadership skills (Subur, 2019).

In the world of accounting, the Covid-19 pandemic has had an impact on financial reporting and auditing practices. According to Prof. Dr. Ainun Na'im, MBA as Secretary General of the Ministry of Education and Culture of the Republic of Indonesia said that the Covid-19 pandemic had an impact on increasing uncertainty, and also had an impact on many changes, both from regulatory and policy aspects, to economic changes. He even said that the pandemic had caused disruption to various institutions, organizations or companies, so that certain sectors experienced a very sharp decline. This makes its own challenges, especially in the field of accounting.

Prof. Ainun said that all countries were affected by this pandemic, from an economic perspective, economic growth declined even to a negative level, as well as social aspects, many people lost their jobs, changes in interactions between individuals, and so on. Therefore, it is necessary to manage the conflict between the health sector and the economy. In the New Normal era, health protocols are the main thing in carrying out daily life. The government has also issued a Decree of the Minister of Health of the Republic of Indonesia number HK 01.07/MENKES/328/3030 dated 20 May 2020 concerning Guidelines for the Prevention and Control of Covid-19 in office and industrial workplaces in supporting business continuity in the Covid-19 pandemic situation. Of course, with the issuance of these provisions, there will be many changes in various sectors because every organization or agency needs to adjust according to its field, including accountants.

In the New Normal era, health protocols are the main thing in carrying out daily life. The government has also issued a Decree of the Minister of Health of the Republic of Indonesia number HK 01.07/MENKES/328/3030 dated 20 May 2020 concerning Guidelines for the Prevention and Control of Covid-19 in office and industrial workplaces in supporting business continuity in the Covid-19 pandemic situation. Of course, with the issuance of these provisions, there will be many changes in various sectors because every organization or agency needs to adjust according to its field, including accountants.

Challenges in the accounting sector mainly result in financial reporting, both in terms of profit, then there are subsequent events, going concern, risk problems, impairment, therefore OJK and related authorities provide regulations to overcome the impact of Covid-19 on companies. In addition, the auditing process is carried out online, due to the lack of direct interaction. Digitization is something that cannot be avoided because of the New Normal era. Accountants are expected to be more aware of technological changes so that they are able to adapt. For this reason, the purpose of this study is to find out how an accountant deals with the technological transformation of the New Normal era, what accountants' skills are needed in this New Normal era.

LITERATURE REVIEW

Changes in every industrial era occur along with the development of human reason and needs. The Disruption Phase is one of the phases of change in the development of the Industrial Revolution as a transitional era that will bring life to an era of abundance of information so as to achieve a much better civilized economy. This phase of change encourages the emergence of innovation and at the same time increases human creativity. From a positive perspective, this creativity can provide a strong impetus for the development of all fields, including accounting as the essence of business and economic development. There is no need to glorify the paradox of this phase as destroying an establishment and even threatening previous conditions. Switching the establishment-destroying paradox to constructive thinking is important. This is due to the fact that the more creative people think in facilitating their lives by continuing to create ways of solving problems, especially in the socio-economic field of society. Changes towards convenience are perceived as changing human culture which will ultimately change the culture to be much simpler in dealing with business problems.

The rapid development of technology is a signal of the era of automation/digitalization. That is, the role of technology began to shift control of the work that is usually done by humans.

Disruption according to the Big Indonesian Dictionary (KBBI) means being uprooted. Starting in 1995, Clayton Christensen and Joseph Bower wrote the article 'Disruptive Technologies' published in the Harvard journal 'Business Review'¹ discussing competition in the business world, so since then the term disruption has been known among business people / world economy. Clayton as the originator of the disruption theory wants to ensure that systems, paradigms, and corporate models will change and continue to change forms, and the old form will inevitably be abandoned by the new form that is more promising and provides efficiency, effectiveness, and accuracy. Companies that do not want to adapt to market demands and stick to the old model will be left behind and left behind, while competitors who are able to present new models and provide fulfillment of effectiveness, efficiency, and accuracy will get the market's attention, because the public has a trend of wanting which one easier, cheaper and faster.

The theory of disruptive innovation was first created by Harvard professor Clayton M. Christensen in his research on the disk drive industry and later popularized in his book *The Innovator's Dilemma*, published in 1997. This theory explains the phenomenon where an innovation changes an existing market or sector. by introducing simplicity, convenience, accessibility, and affordability (simplicity, convenience, accessibility, and affordability) where the complications and costs are quite high. Initially, disruptive innovations are formed in a limited market that seem unattractive or unimportant to an existing industry, but eventually a new product or idea is fully capable of creating industry change.

It seems that disruption is very closely related to technology, this can be understood because technology is developing so rapidly that when humans realize that their tasks can be lighter, faster, more effective and efficient because of technology, humans will definitely use it. In the midst of the 4.0 era, Indonesia is actually still experiencing difficulties but continues to try to catch up. In this difficult situation, the corona virus emerged at the end of 2019 which hit the world and also reached Indonesia.

The phenomenon of the Industrial Revolution The Industrial Revolution 4.0 is a term that was first coined in Hannover, Germany, when the Hannover Messe/Fair was held (an international meeting in the field of industry and automation) in 2011. At the meeting, the German government announced to the public that it would disburse 400 million euros for research and development of Industry 4.0. The emergence of Industry 4.0 will have a big impact on the industrial, economic and even social conditions of society globally.

Big Data is a term that can describe large volumes of data, both structured and unstructured data. In many businesses people have started using Big Data. It's not just the size of the data that matters, but the organization's use of that data. Big Data can be analyzed for insights that lead to better decision making and business strategies. VUCA Phenomenon

– Volatility, Uncertainty, Complexity, Ambiguity VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity.

Volatility means a state of uncertainty and vulnerability to change. Uncertainty is an uncertainty and situation full of surprises that can occur at any time. Complexity is a situation full of complexity, and Ambiguity is a floating state that causes confusion to read directions clearly. Accounting Developments from Period to Period The history of accounting began in 1494, when Luca Pacioli introduced the double entry book keeping system. However, the practice of accounting has actually existed since earlier times. Alvin Toffler states that in 8000 BC people began to recognize technology, information, and accounting which was stated to be the period of farming. Accountants and Technology. Technological developments will lead to a new normal, new standards and a new equilibrium. Technological developments will change business in the following ways: 1. Funding for businesses is now turned into technological assets 2. Resources needed in business are reduced 3. Creation and development of new companies in the form of virtual offices 4. Using online market places to sell products and services

Corona Virus Disease 2019 (Covid-19) according to the World Health Organization (WHO) is an infectious disease caused by a newly discovered coronavirus. The COVID-19 virus is spread mainly through droplets (drops of saliva or liquid that come out of the nose when an infected person coughs or sneezes). It is even alleged that touching skin / shaking hands and contact between humans involving intermediaries such as paper, books, tissues, money and any object are believed to be capable of transmitting the corona virus. There are many ongoing clinical trials evaluating potential treatments for this virus but there do not appear to be any conclusive results. The World Health Organization (WHO) has declared COVID-19 a Global Pandemic on March 11, 2020. And WHO will continue to provide updated information as soon as clinical findings become available.

The emergence of covid 19 has really taken the world by surprise. Life can't be as free as it was before the pandemic. Covid-19 has really changed the pattern of life and is even able to undermine various aspects of life, such as the economy, education, religion, politics, sports and social-society life.

The potential of technology to replace the role of the accounting profession is only a matter of time. The role of accountants will be strategic and consultative. Therefore, accountants need to have certifications such as technologically fluent, in order to be able to survive in the competition. An accountant must also have a strategy, including mastery of soft skills, both interpersonal skills and intra-personal skills, business understanding skills and technical skills in order to be able to answer the challenges of this digital era. An accountant must be aware of the development of the industrial revolution 4.0 by looking at the opportunities that exist. Era change is unavoidable, and therefore must always be able to control reactions and attitudes towards these changes in order to be able to move forward with the times.

In the era of the Industrial Revolution 4.0 the use of technology, communication, and information is increasingly advanced and continues to grow. The term, which was introduced for the first time at the 2011 Hannover Fair in Germany, was given to summarize the various forms of change that occurred in it, such as artificial intelligence (artificial intelligence), digital commerce (e-commerce), giant data (Big Data), financial technology, to the use of robots. Then in this era the digitalization process took place. According to the Big Indonesian Dictionary (KBBI) digitization is the process of giving or using a digital system.

This process continues to progress quite rapidly. With this rapid progress, digitalization is very helpful for the community by providing convenience and creating many changes because in this era we must be able to make various kinds of technology-based innovations that can be used for daily activities. According to the Minister of Communication and Information, digitalization is the key for Indonesia to be competitive with other countries that are able to make the economy more efficient.

The government and Bank Indonesia (BI) have high hopes for digitalization and its contribution to the development of the domestic economy. With digitalization, the Coordinating

Minister for Economic Affairs Airlangga Hartarto expressed his optimism about the economic value in Indonesia. The rapid growth of the digital economy cannot be separated from the Covid-19 pandemic which forces people to stay at home so that they adapt to digital technology in their daily lives. He added that digital technology has become part of our daily life. Covid-19 encourages the acceleration of digital technology adoption in various community activities.

The presence of the Industrial Revolution 4.0 and 5.0 brought changes to the adjustment of work in humans, machines, technology and processes in various professional fields, including the accounting profession. The Industrial Revolution requires the accounting profession to adapt to the development of information technology and big data. Facing today's latest industrial era, the development of the digital economy has opened up new possibilities while simultaneously increasing risk. These changes have a significant impact on the development of accounting. In this era, technological developments and innovations seem to be catching up with time. New innovations encourage the creation of new markets and shift the existence of old markets. Smart machines and robots are now taking on many roles and seem to rule the world. In the Industrial Revolution 4.0 there was an extraordinary shift in various fields of science and profession, therefore the way accountants work and practice needs to be changed to improve service quality and global expansion through online communication and the use of cloud computing.

In the accounting sector, the various challenges that come with the advent of the digital era cannot be left alone, they must be studied properly in order to determine the attitude to overcome them. Fluency in technology is one of the keys to facing challenges in this era. In the next 5 years, where 5G technology in telecommunication devices has been fully adopted, internet access at Gigabit per second speed and hardware and humans have been connected to each other either by IoT or IoP, will change the role of accountants which will be replaced by AI technology (Artificial Intelligence) and robotics in carrying out the basic work of accountants, namely recording transactions, processing transactions, sorting transactions, automating financial reporting and analyzing financial statements independently without human intervention. This pattern of self-management of the basic functions of accountants certainly increases the efficiency and effectiveness of work and the results are known immediately (real time). Many companies have developed this because it has been supported by the standardization of financial management processes and adequate standardization of information system architecture and according to the demands of the fourth generation industry so that the crucial competencies needed for further accountants are data analysis skills, following developments in information technology and updating leadership styles. Furthermore, the impact is that accountants and accounting firms will be "forced" to develop mobile applications to be able to access data directly from mobile phones, tablets and virtual reality (VR) devices. The audit of financial statements is carried out on a real-time basis where regulators and auditors pull the required data automatically directly from the systems and sensors attached to operational activities so that the transparency and accuracy of the resulting data can be accounted for. If the accountant does not have adequate expertise in information technology, other professions can take over the function of the accountant, so that it can be said that information technology is a basic need that must be met to be studied and understood by the accountant himself.

Quoted from the December 2016 edition of the International Edition of Accounting and Business Magazine, Roger Leonard Burrit and Katherine Christ mention four steps that accountants must take in facing the industrial revolution 4.0, namely:

1. Awareness that the industrial revolution gave birth to new opportunities or opportunities. This emerging opportunity grows new businesses that have never existed before, for example Germany as the originator country has 80% of companies that are ready to implement the industrial revolution 4.0 or China which realizes that development is needed in the knowledge aspect and targets 60% investment in this sector. Not only these two countries, but many countries are already in the early stages of disseminating information which will then develop deeper to carry out the 4.0 revolution in total.

2. Education (Education). Regulators or governments and education practitioners are required to be able to create relevant curricula adapted to the development of digital connectivity, such as coding training, information management between several different programs and platforms or the implementation of real-time accounting aimed at all departments and company organizations including shareholders. .

3. Professional development. Improving the performance of the accounting profession and programs that support its development by conducting online and face-to-face discussions and evaluating the impact on the capability of the accounting profession in the future.

4. Implementation of high standards (Reaching Out). As an accountant, you are required to have maximum control over the resulting data, where physical data or information is usually obtained under the responsibility of engineers so that the working relationship between accountants and engineers must run in harmony so that accounting data and information are properly maintained.

The phenomenon of digitalization disruption, which is followed by this pandemic, cannot be avoided. The government says that people must be able to live side by side with Covid-19, which is now known as the New Normal. Implementing the new policy is certainly not arbitrary and requires careful consideration and preparation. According to Prof. Ridwan Amiruddin Ph.D, Epidemiologist from the Faculty of Public Health, Hasanuddin University, a new normal life can only be achieved when a country has fulfilled a number of conditions. These requirements were issued by the World Health Organization (WHO) as a reference for all countries affected by the COVID-19 pandemic. When referring to the WHO reported to republica news, there are six criteria that need to be met before easing restrictions and starting the new normal era. The six criteria include the state must have proof that the spread of Covid-19 transmission in its territory can be controlled, the existing health system is able to identify, isolate, test, trace contacts, to quarantine infected people, can suppress outbreaks in areas with vulnerability. has established preventive measures in the work environment, the risk of cases outside the region must be controlled, and provides opportunities for opinion and participation to the community. Accountants also have views that are in line with the new normal.

On the other hand, Budi Satrio, Vice President Group Head Employee Relations & Internal Communication at CIMB Niaga said that the government's new normal and big ideas about the new normal are appropriate because they are the implementation of a win-win solution to try to run the economy and health. to be able to keep going and awake. In addition, not only is the new normal concept compiled as efficiently and effectively as possible, the Ministry of Finance in this case also tries to encourage the implementation of Flexibel Working Space (FWS). This concept is similar to the concept of Work From Home (WFH) as a breakthrough in facing the new normal era. The difference between this Flexibel Working Space and Work From Home is that it does not recognize the boundaries of the house, it can be done anywhere according to the needs and conditions that support the implementation of the work—flexible space

Accountants in the perspective of the industrial revolution are no longer "book keeper" but have expanded into something new that may not touch the financial aspect at all. The exploration of new things, of course, also gives rise to specializations that do not yet exist at the present time. Specialization here when looking at the explanation above will increase into a new field of work that demands different capabilities and capacities because it is needed to be able to see potential changes in the short term and in the long term. The gap between the real world of work and the academic world should be bridged for further research and research to be carried out where the research results can be used to provide constructive and informative solutions that can then be applied in the teaching and learning process in universities, colleges and the accounting profession.

The presence of the Industrial Revolution 4.0 and 5.0 brought changes to the adjustment of work in humans, machines, technology and processes in various professional

fields, including the accounting profession. The Industrial Revolution requires the accounting profession to adapt to the development of information technology and big data. The rapid development of technology is a signal of the era of automation/digitalization. The role of technology began to shift control of the work that humans usually do. The potential of technology to replace the role of the accounting profession is only a matter of time. An accountant must also have a strategy, including mastery of soft skills, both interpersonal skills and intra-personal skills, business understanding skills and technical skills to be able to answer the challenges of this digital era. An accountant must be aware of the development of the industrial revolution 4.0 and 5.0 by looking at the opportunities that exist. Entering the era of the industrial revolution 4.0 and 5.0, it indicates the era is growing which has an impact on the occurrence of disruption in various fields. Disruption in the form of digitalization is a challenge that must be addressed by an accountant so that his role is not replaced by technological advances.

Accountants have not finished with the challenges faced due to the industrial revolution, now accountants are facing challenges in the New Normal era due to the Covid-19 pandemic where in the New Normal era requires every individual to limit their activities outside the home in order to break the chain of the spread of the Covid-19 virus. New Normal activities are closely related to the disruption of digitalization due to limited community activities so that the use of technology online is maximized. The phenomenon of digitalization disruption and the New Normal era cannot be avoided. Disruption of digitalization is increasingly spreading among the community as a way out of carrying out daily activities in the New Normal era. An accountant now not only has to adapt to technology, but it is important to master the skills in the field of information technology so that digitalization cannot replace its function and role.

This new phenomenon requires accountants to take the positive aspects of technological developments. The government says that people must be able to live side by side with Covid-19, which is now known as the New Normal. Quoted from the Covid19.go.id page, the Minister of Communication and Information, Johnny G. Plate, invites the entire community to implement new protocols by continuing to wear masks and vaccinate. Using masks and vaccinating, according to Johnny, these two things are the main keys for people to be able to live side by side with Covid-19. Transition and adaptation steps that can be applied and prepared for this new lifestyle era, namely a healthy lifestyle even though side by side with Covid-19. Covid-19 has completely changed the way people live. Something that was previously unusual has now become a natural and even an obligation.

As an adaptation process stated by Mrs. Dwi Martani, new habits that can be carried out in the New Normal era are such as online meetings, virtual offices, online classes, efficiency and effectiveness of time, place and cost. The impact of accounting in the New Normal era is seen in terms of financial accounting, management and cost accounting, behavioral accounting, taxation, information systems, internal and external controls, and external audit. Several things happened in financial accounting where financial reporting was in a condition of uncertainty, potential fraud and earning management taking a bath, changes to PSAK 71.72, and 73 as well as PSAK 07, PSAK 71, 73 in Covid-19. Management and cost accounting are adapting because changing business processes require different decision-making information, business planning under conditions of uncertainty, cost control and management is needed. Control, honesty, integrity, transparency, accountability and responsibility are considered in behavioral accounting. Not only that, in terms of taxation, the new normal results in changes in tax rates, PPh facilities in the context of Covid-19, e-commerce taxes, and macro impacts on changes in central and regional government tax revenues. Information systems are the main target of business processes, there is an IT-based process transformation but business control can run well, audit trails for each activity, as well as business process improvements through continuing learning. External audits are carried out connected to the auditee database and an IT-based audit process.

The New Normal era resulted in accountants having to be able to leave old habits and make improvements to old habits to be more effective and efficient so as to produce new, better habits. Before the Covid-19 pandemic happened, life was normal and we only heard stories about how people were dealing with the pandemic. After being affected by Covid 19, we must be able to adapt to the symptoms and various consequences caused by Covid 19 and understand the Covid 19 health protocol. In the new normal era, various individuals try to carry out activities with new protocols where in trial activities during a pandemic, both work, study and socialize. Health protocols are implemented, new habits are formed such as: online meetings, virtual offices, online classes, efficiency and effectiveness of place, time and cost. New regulations were formed such as special incentives related to Covid 19, changes in tax provisions, as well as the emergence of new accounting standards such as PSAK 71, 72,73 and press released IAI.

New Normal is the main means of business processes, IT-based process transformation but business control can run well, audit trails for every activity are kept and business process improvement through continuing learning. Not only that, external audits cannot normally be carried out by the system and audits of the system. Control is carried out by the system so that IA can be monitored by system by monitoring red flags. IT-based external audit where the auditor is connected to the auditee database and data integrity is guaranteed. Alternative audit procedures to provide assurance.

Quoted from Habib Basuni, an accountant from the Public Accountant Office (KAP) Habib & Heriyadi was quoted by Klik Legal, "With the New Normal, there must be a change in the situation and behavior that has been considered normal, both the New Normal protocol in the office, clients, as well as cooperation in fulfilling the audit process, such as 1) re-layout the office space in accordance with the new normal provisions from the government, 2) providing probiotic drinks for employees, 3) providing a place and hand soap, 4) hand sanitizer, 5) if deemed necessary, provide food, 6) strengthen the office IT system, 7) conduct training related to online work procedures and online communication, 8) provide daily progress reports, 9) cost efficiency that is not important."

The New Normal concept is also supported by the Ministry of Finance, the concept of working without being tied to an office or usual place of work was implemented during the corona virus (Covid-19) pandemic in the first quarter of 2020, namely the Work From Home (WFH) mechanism. Working on a WFH basis is carried out using existing facilities and setting employee work patterns that provide flexibility in working locations for a certain period. The momentum from the experience during Covid-19 prompted radical changes to enter the new normal era by implementing FWS (flexible working space/FWS). Advances in information technology allow accountants to be connected anywhere at any time.

The Executive Director of the Indonesian Institute of Accountants (IAI), Elly Zarni Husin, has made a guide to the Covid-19 prevention protocol within the IAI during and after the PSBB as a guide for the implementation of IAI activities during the Covid-19 pandemic which was followed by New Normal. Face-to-face activities and services such as meetings, class courses, webinars, focus group discussions, and others are partially replaced virtually through Microsoft Teams.

The development of technology and information is currently very fast, has brought changes in the world entering the digital era, digitization which is defined as a change from conventional/analog forms to digital forms. Digitalization and the role of accountants are closely related in the industrial revolution 4.0 and 5.0, which was followed by the new normal, requiring accountants to be able to coexist with Covid-9 and technological developments so that they can achieve effectiveness and efficiency in carrying out the basic work of an

accountant both in the field of financial accounting, management and cost accounting, behavioral accounting, taxation and auditing.

Digitization is a "relatives" that an accountant cannot avoid but instead becomes part of an accountant's job to increase effectiveness and efficiency in carrying out the basic work of an accountant such as recording transactions, processing and sorting transactions, automating the preparation of financial reports as well as analyzing the financial statements accurately. technology assistance.

METHOD

The method used in this research is descriptive qualitative through the study of published literature studies related to problems related to the challenges of the accounting profession in dealing with technological disruption as a form of adaptation to the new normal life in the midst of the COVID-19 pandemic on Google search, Google Scholar, and Research Gate. According to Sugiyono (2016:9) qualitative descriptive method is a research method based on the philosophy of postpositivism used to examine the condition of natural objects (as opposed to experiments) where the researcher is the key instrument of data collection techniques carried out by trigulation (combined), data analysis is inductive/qualitative, and the results of qualitative research emphasize meaning rather than generalizations. Qualitative descriptive research aims to describe, describe, explain and answer in more detail the problems to be studied by studying as much as possible an individual, a group or an event. In qualitative research, humans are research instruments and the results are written in the form of words or statements that are in accordance with the actual situation.

RESULTS AND DISCUSSION

In maximizing opportunities in forming a business, especially in the economic sector and various fields, it cannot be denied that there are many changes that must be faced.

The rapid development of technology today, on the one hand, greatly facilitates the world of industry and human work. For example, more and more products are emerging as a result of technology development. Starting from the presence of super computers, smart robots, driverless cars, and others. But on the other hand, a view states that the era of digital industrialization eliminates 1-1.5 billion jobs during 2015-2025 because the role of humans has been largely replaced by machines. That is, the role of technology began to shift control over the work that is usually done by humans.

The Digital and Virtual Era in this Disruption Phase creates opportunities and benefits for businesses in addition to risks. The main thing that must be the focus of attention in the Accounting Sector is the business opportunities and benefits to improve the way of thinking and develop along with the changes in this industry, not keep recording worries. The field of accounting can be a guard in the progress of economic civilization and the business sector where everything becomes easy. Accountants as presenters of information for decision makers both in risk management, investment decisions and supply chain management, must have a responsibility to provide quality information. In audit assignments, accountants are responsible for carrying out quality audits of financial statements. As well as responsibilities in other assertion areas. This responsibility can use ICT as a tool in increasing the effectiveness and efficiency of work.

The accountant in this case acts as an application controller to oversee the process of data into information to the brainware controller of the information system application used. So that accounting staff and accountants as well as auditors need to understand the opportunities of this global ICT trend so that businesses can grow with optimal security and privacy. The dynamic development of cyber security can be utilized in every accounting activity, where the role of accounting can protect data properly because the main core of accounting activities is by process, and prioritizes internal control where clear responsibilities

in the implementation and security of information systems related to Big Data, build understanding and commitment in the development of information systems applications. With the development of ICT everything is possible, where with this ICT ability can analyze various information in the accounting field.

The development of the field of accounting is inseparable from the development of the use of the internet, this progress of the internet provides a wide open stream of additional data that can be collected, which must then be able to be analyzed by accountants for various business purposes. This rapid development on the other hand requires thorough investigation, so data security and privacy issues will arise in the context of this human-machine collaboration. This data security and privacy demands the response of accountants in absorbing data as a source of information that is in accordance with business objectives, which in the end the information can provide valid and accurate information for decision makers.

The development of ICT in the Era of Disruption increases the effectiveness and efficiency of work in the accounting sector as an important activity in supporting business, namely in managing, processing, analyzing and evaluating accounting information. As has been understood, the main principles of accounting as an information system are certainly a crucial part that cannot be separated from the development of information technology, so that all accounting and auditing processes in this case are computerized and predictions of major changes in the future can be known. The accounting profession is projected to grow steadily, due to the advancement of ICT which requires Accountants to make progress in the business sector. So that this virtualization era should not need to make the business community panic, but it should only be understood as part of a revolution in civilization progress that will get better.

The field of accounting covers the field of data, processing data into information, reporting and analyzing financial information, with the issue of ICT development being an important part in the development of process automation and methodologies in the accounting sector. An important fact in the field of accounting is data quality. Although the sophistication of information technology can take over the automation of processes, data quality remains very important. In obtaining quality data in accounting, there is a need to transfer knowledge into the information systems used. The task of transferring knowledge of quality data is the responsibility of experts in the field of accounting, who understand the information needs of users and decision makers, and who have expertise in solving problems in technology related to information systems. So in this case the role of accounting remains important in the pace of development and implementation of information and communication technology.

Financial accounting personnel, accountants and auditors must be able to handle data security and link various financial data from various sources to become part of the big data in the information system used. Management Accounting Staff in carrying out their duties will be faster, more precise and detailed with the use of computers with sophisticated capabilities. The task is in the form of collecting data to be processed into information needed by managers in making the right decisions. With the use of the sophistication of ICT, the task of accountants has become more focused on the preparation and analysis of data. Accountants will be much faster in recognizing relevant and important information because of the availability of so much information in Big Data, that information is used in decision making. This ability requires strong communication skills, so accountants, accountants and auditors must also have highly qualified skills in the field of communication.

The above conditions are explained by Crossler et al., (2014), that in the accounting domain, data security and data privacy in the development of ICT are able to increase the effectiveness and efficiency of Accounting services and the availability of data for Audit services, so that with the ability of Accountants to be able to accept and adopt This technology in the field of work will provide value to accounting work. The importance of data security and privacy due to increased data accessibility is an accounting domain, where company data must be safe by providing easy access to data needed by accounting staff as well as accountants and auditors in carrying out their duties. Accounting in this case is required to understand and be able to build data access control tools, through many approaches to policies in the field of data security. This is important because compared to other

professionals, accounting jobs are more sensitive to potential data security threats. Consumer privacy is an additional problem in the field of accounting, which expands the branding of accountants in providing consumer privacy protection services, which has an impact on reducing concerns about unauthorized data access, and has implications for information disclosure intentions (Raschke et al., 2014).

At the basic level, the work of accounting staff at the beginning of a career at the entry level as a beginner and standard assignment, in principle teaches about basic knowledge and skills in Engineering in Accounting, which then builds an advanced understanding. The task of accounting staff at the entry level in inputting data requires expertise in understanding important and quality data in producing information. Because it is understood together that garbage in garbage out. Manual understanding becomes the basis for developing and sharpening skills and sharpness of accounting understanding. It is important for accounting actors to have an understanding of the entire accounting and auditing process, how to understand the relationship between various documents and conduct a detailed examination of the data, in order to build a strong foundation. It does not matter at the level of monotony or job replication that is the nature of accounting work for an individual, because for long-term goals this can master accounting skills and systematic ways or patterns of thinking in generating information and understanding information. These basic accounting skills cannot be eliminated but become additional skills that are absolutely necessary for accounting staff related to information technology used to support work. Because of the important implications of using advanced information and communication technology, these basic skills become the basis for offshoring jobs, where the task of entry-level accounting personnel must become proficient with technology.

Technical skills regarding data analysis, the ability to use software, understanding interaction with programs, understanding and ability in the digitization process, are skills that must be possessed by accounting staff as well as accountants and auditing to be able to adapt, so that information technology is understood that not all of them will take on the following tasks. accounting duties. Because after all work in the accounting field cannot be separated from technology, and technology continues to develop, accountants must also follow developments well. The digital and virtual revolution is rapidly changing jobs in the accounting and auditing fields, where tasks can be made easier with the use of technology, so that accountants and auditors can provide professionals with a focus on value added assignments and more specifically on the results of financial analysis using technology as a tool. This increases the efficiency and effectiveness of assignments and work.

According to Moffit & Vasarhelyi, (2013) the accounting domain as a provider of information for business decision making demands an understanding of information technology in conducting contemporary business information analytics that is able to provide current financial indicators or future predictions in a Big Data environment, where contemporary data technology not only improves accuracy of prediction results but also broadens the scope of analysis of structured data and unstructured data. The role of accounting and accountants has changed from manual activities and manipulation of transaction data to activities in the selection of automated techniques and business data analysis, which requires skill requirements to use advanced data analysis techniques, so that the application of advanced data analysis technology can increase work productivity in the Accounting Sector, increase efficiency organization's business processes, and with sophisticated data evaluation techniques can expand the scope of accounting service offerings in finance. The nature of accounting work can be fundamentally changed through the application of an exploratory and predictive approach to data analysis.

Accountants must also be able to understand the application of Artificial Intelligence in helping decision makers (Gal & Steinbart, 1987). Likewise for Auditors who have more challenges in this data analysis technology in a Big Data environment, where the application of sophisticated data analysis routines results in a large number of abnormal transactions that require substantive investigation (Kuenkaikaw, 2013). Artificial Intelligence in accounting is a technology that allows computers to perform decision-based tasks that were originally done

by humans, where analysis and decisions are getting better (Ovaska, 2017). This expansion of scope is an opportunity for accounting and accountants to input new sources of information in the analytical process, so that decision makers gain comprehensive insight into the financial condition of the organization (Moffit & Vasarhelyi, 2013).

On the other hand, there are social skills that require patience, understanding logical thinking and reasoning, and the ability to adapt. These soft skills are of great value because they enable individuals to bridge the gap between hardware and brainware, between computers and humans. As the accounting and auditing professions move toward a more strategic and insight-based field, these soft skills will become more important and more needed. This is because accounting staff who master these skills will be much better at doing their jobs, which are not always dealing with computers but will also be dealing with other individuals in completing their tasks. Business organizations will not only view accounting personnel as a source of financial information, but also individuals who understand their business inside and outside the organization as a whole and provide valuable knowledge. Accounting staff are always given a basic understanding of the basic concepts manually in the field of accounting, then they are then given skills, both technical skills and soft skills.

Accountants must be able to improve their skills with software and database management in collaboration with knowledge of accounting and financial regulations and interpretation of fiscal laws and regulations. Accounting analytics is defined as the application of data analytics and big data technologies in the accounting field. In addition to helping accountants manage specific tasks, accounting analytics enables professionals to answer business problems, build corporate strategies and forecast financial trends.

Accounting reporting in real time allows accounting reports to be continuously updated, as well as following the needs of stakeholders both in general and specific. The role of the internet in providing utilitarian functionality for accounting information in terms of accounting tools that are able to identify abnormalities and automatic correction errors and support auditor activities (Kogan et al., 2013).

The presence of the Industrial Revolution 4.0 and 5.0 will eventually encourage the adjustment of human work. Like it or not, all professions must adapt to the technology that is developing in their respective fields, including the accounting profession. In the next five years, telecommunications equipment, internet technology, hardware and people will be connected to each other. At that time, the role of accountants will be replaced by AI (Artificial Intelligence) technology and robotics in carrying out the basic work of accountants. Starting from recording transactions, processing transactions, sorting transactions, automating the preparation of financial reports and analyzing financial statements. Everything can be done independently by machines without human intervention. With the help of machines, managing the basic functions of this accountant will certainly increase work efficiency and effectiveness and the results can be immediately known in real time.

In order to continue to carry out their profession in the midst of technological advances, accountants cannot only rely on their ability to calculate and report accounting. More than that, an accountant needs to adapt to technology, in order to survive in the competition. As a result of the development of the digital era, accountants and accounting firms will be "forced" to develop mobile applications to be able to access data directly from mobile phones, tablets, and other technological devices. Accountants are in charge of preparing mobile applications for their clients to be able to access business data through their work.

It's not just about mastering technology. As an accountant, you are expected to be able to think critically and systematically and have good data literacy skills. With good analytical skills, an accountant can analyze and use information in big data formats and technological literacy by understanding how AI works. In addition, an accountant must also have mastery of soft skills, both interpersonal and intrapersonal skills, as well as the ability to understand business. In other words, if accountants want to be able to continue to survive as accountants in the era of the industrial revolution 4.0 and 5.0, accountants must have other abilities that can only be done by humans and cannot be replaced by machines.

In the transition period to enter the new normal era, where, the role of accounting has changed, from just recording or book-keeping to being a competitive advantage. Because,

accounting was not spared from technological developments. This change in role will have an impact on the business world, in addition, it is necessary to pay attention to the role of accounting in the future and the transformation of the accounting profession. The development of information technology that exists today greatly affects changes in business models. In the pre-industrial revolution many jobs were done conventionally or manually. Entering the era of the industrial revolution, human labor is starting to be replaced by machines. There are several important aspects that must be considered by an accountant in the new normal era, including: How accountants in the world must have a perspective that the accounting profession is based on the formation of trust and high accountability in the structure. In the digital economy, elements of digital transformation will change the order of conventional accounting business systems with the presence of big data, artificial intelligence, cyber security and automation which will have an impact on the financial accounting profession and junior level auditors because the work they do is clerical and repetitive. In the future, with the mastery and expertise of information technology in digital information platforms, they will play more roles in business analysis, data analysis and advisory which demands high specialization as well as the provision of effective, efficient and efficient accounting services. and mobile in encouraging businesses to meet the requirements of the Sustainable Development Goals (SDGs) through enhancing innovation capabilities, emphasizing the importance of ethical behavior, focusing on best practices in governance and assisting the business sector in their financial reporting.

Accountants have received a wave of automation over the years to increase the efficiency and effectiveness of their work. But until now technology has not been able to replace the need for decision making by experts. Indeed, previous generations of intelligence systems generally demonstrated the continued strength of human expertise and the limits of machines (ICAEW, 2018). Accounting is an important instrument for realizing accountability, for that, under various conditions, accounting and the accounting profession should not be left behind and abandoned. Accounting science and the accounting profession must develop and adapt to environmental changes, have a vision for the future - predictive, so that it provides benefits and is kept up-to-date and relevant, but must also be connected to the world (Mardiasmo, 2018).

Accounting developments are seen from various aspects, in the managerial aspect of preparing the latest accounting information (digitalization) including cash flows and projections, reorganizing cash flows, evaluating accounts payable, income levels and cost structures as well as investment feasibility analysis. The regulatory aspect consists of the initial presentation of audited financial statements for the benefit of the general meeting of shareholders, investors and management decisions. Aspects of educational institutions covering the development of a digital financial accounting curriculum, innovation of management accounting models needed in management and operational decisions, updating of the accounting curriculum according to market needs and developing the competence of digital accounting educators. Aspects of human resources including updating self-competence in digital accounting development.

Attitudes/accounting skills that accountants must have to deal with technological disruption in order to adapt in the New Normal Era:

1. Technical and ethical competencies (TEQ)

A skill and ability to work consistently with the highest standards of integrity, independence and skepticism.

2. Intelligence (IQ)

Have the ability to acquire knowledge and use it in thinking, reasoning, and solving problems.

3. Creativity (CQ)

Can use knowledge for renewal, make connections, explore potential results for the creation of new ideas or innovations.

4. Digital Quotient (DQ)

Able to adapt to existing and emerging technologies, capabilities, strategic practices and digital culture.

5. Emotional Intelligence (EQ)

Able to identify emotions in both self and others and use them to organize and manage tasks.

6. Vision (VQ)

Able to anticipate trends accurately and think innovatively.

7. Experience (XQ)

Able and skilled in understanding customer expectations in achieving desired results and creating value.

The industrial revolution 4.0, 5.0 and the New Normal era gave rise to many new job opportunities that emerged. When new job opportunities began to emerge, there are several things that accountants can do to make candidates for a competitive job market.

A report by Deloitte Access Economics considers two-thirds of all jobs by 2030 will consist of soft-skill-intensive work, so accountants need to develop their soft-skills intensive.

Some of the intensive soft skills that accountants can have as the key to competitive success are:

1. Leadership (Leadership)

A leadership attitude must not only be possessed by a manager, accountants can have good leadership skills by communicating strategy and vision. Being self-aware and holding an accountant accountable is essential during the difficult times of the New Normal era. Accountants also need to improve oral and written communication skills and deepen interdisciplinary knowledge and understanding of public relations, research, negotiation and management, for more effective leadership.

2. Flexibility and adaptability

The New Normal era caused several changes to occur, so that accountants are required to be flexible and adaptable in recent months. Businesses around the world are seeing a sharp increase in the number of employees who are able to work from home, it is likely that this new way of working will persist even after the pandemic is over. Flexibility at work used to go hand in hand with geographic mobility, nowadays it's about having an open mindset, being able to work well under pressure, adapting to new and unexpected deadlines, prioritizing tasks and, in some cases, taking on additional responsibilities.

3. Critical thinking

Accountants are required to have soft skills such as critical thinking in problem solving and thinking globally. In addition, accountants can think clearly and rationally when evaluating information objectively to make the right decisions.

4. Tech Savvy

All businesses in the world need accountants who are tech-savvy, even before the Covid-19 virus, digital skills were indispensable. However, the Covid-19 pandemic has accelerated the urgent need for specialized digital expertise to help businesses become more attuned to today's technologies and platforms.

5. Communication and emotional intelligence

Communication and social intelligence go hand in hand. Having good emotional intelligence means being aware of, and showing empathy for, the emotions and behaviors of others which is very important, especially when people are uncomfortable.

6. Creativity and innovation

Creativity and innovation play an important role as the key to the success of accountants, so that the role of accountants cannot be replaced by digital machines/technology. Creative accountants must be able to see the opportunities and threats that exist during the industrial revolution and the current New Normal Era.

Technological developments must be balanced with the increase in Human Resources as a determinant of economic success, because in society 5.0 it is more focused on the human component. The concept of society 5.0 is a new innovation and society 1.0 to 4.0 in human history in the world.

With society 5.0, the things that must be prepared by an accountant are:

1. Make sure you have a certification, by having a certification of validity and legality as an accountant is certainly getting stronger. In addition to certifications recognized in Indonesia, professional accounting also needs to obtain certification from international accounting institutions.

2. Creating goal orientation, making goals that are in accordance with abilities as a professional accountant, including mastering the field of information technology. Because in the digital era and the 5.0 revolution, especially the accounting revolution, all work cannot be separated from technology.

3. Make time management, good time management someone will be more organized in completing work.

4. Always up to date, the profession of an accountant in the digital era must always be up to date to get the latest information. What's more, new innovations in the accounting field are now emerging. This is important to get work done and analyze problems quickly, precisely, and accurately.

5. Using software to maximize performance, the advantage of using software for accounting is that it is more accurate when compared to calculating manually. Then be able to present data faster and more importantly, save more time.

In essence, an accountant must be able to transform and be professional to the revolution, both from the 1.0-5.0 revolution, namely by increasing soft skills in various fields, especially accounting.

In this new normal era, accountants must improve skills, competencies, and the basic nature of ethical behavior. In the era the new normal also demands accountants to able to take advantage of the technology growing rapidly. Accountants don't only improve skills and competencies in the field of accounting, but also must collaboration with other fields of science accounting, this is because if the accountant don't want to change and adapt quickly on the change to the new normal, good knowledge, competence, mastery of technology interest in learning or in terms of nature will be easy eliminated from the world's competition increasingly free, so that accountants now starting from how to adapt, knowledge, competence, mastery of technology so that conditions and the potential of today's technology is not role and function (Bariyyah, Okfitasari, & Meikhati, 2020).

Another thing that can be explained that there is still an interest in human domination in carrying out business tasks in the accounting field is the explanation that the future of artificial intelligence is still not clear what the limits of its power will be. There will always be a need for a human presence in the workplace to ensure the system operates properly with reasonable results. The main thing in sustainable development is material that prioritizes hard skills and soft skills as well as additional work experience for higher education provided to students. Hard Skills, including knowledge of accounting standards and industry regulations, accounting software and fintech software skills and expertise, data analysis skills, basic coding, understanding the importance and management of data security, understanding forensic accounting, understanding database management. Soft Skills, including the ability to adapt to

the environment and changes that often arise, communication skills, problem solving that arises from conflicts, leadership both for oneself and others, risk management, decision making on information received, expertise in emotional intelligence, and have creativity. Accounting reporting in real time allows accounting reports to be continuously updated, as well as following the needs of stakeholders both in general and specific. The role of the internet in providing utilitarian functionality for accounting information in terms of accounting tools that are able to identify abnormalities and automatic correction errors and support auditor activities (Kogan et al., 2013).

The COVID-19 pandemic has had many negative impacts on various sectors. These negative impacts hit all aspects of life, including the accounting profession. Accountants have a key role in the global economy, namely to provide financial information through processing business activity data into strategic managerial and financial information. Company operations cannot be separated from financial-related transactions. With a pandemic event that has caused many companies to go bankrupt, companies must start to get up and run their operations more wisely in managing their finances.

Therefore, it is very necessary for financial professionals, namely accountants to do the accounting work. Broadly speaking, the accounting profession can be classified into external accountants, internal accountants, government accountants and educator accountants (Jusuf.H, 2005). The accountant profession needs to pay close attention to the development of very dynamic business conditions during this pandemic condition to always be able to adapt well. These unforeseen events affect accounting principles for business under normal circumstances and require substantial modifications. The extent of the modification scope depends on the progression of the pandemic, but the progress of the pandemic is still very difficult to predict. In carrying out their work as providers of financial information, of course, accountants need to prepare themselves to face this pandemic condition by enriching their skills as an accountant profession.

Rosmida's research (2019) shows that accountants must start to increase their competence in the field of accounting and information technology in order to compete in the era of the industrial revolution 4.0 and Society 5.0. Another skill that accountants must have in facing the industrial revolution 4.0 is the ability to think critically and analytically (Sumarna, 2020). In addition to skills and competencies, the other most important thing that an accountant must have from the previous year to the present is ethical behavior (Puspitasari, et al, 2019). Bachtiar & Nurfadilah (2019, in Bariyyah, Okfitasari, & Meikhati, 2020) state that there are 8 ethical principles of accountants listed in the Indonesian accountant code of ethics, namely professional responsibility, public interest, integrity, objectivity, professional competence and prudence, confidentiality, professional behavior, and technical standards. In this new normal era, accountants must improve their skills, competencies, and the basic nature of ethical behavior. The new normal era also requires accountants to be able to take advantage of technology that is growing rapidly. Accountants not only improve skills and competencies in the field of accounting, but also have to collaborate with fields of science other than accounting, this is because if accountants do not want to change and adapt quickly to changes to the new normal, both knowledge, competence, mastery of technology, interest in learning or In terms of nature, it will be easy to be eliminated from the world of increasingly free competition, so accountants now have to start thinking about how to adapt, both knowledge, competence, mastery of technology so that the current conditions and potential of technology do not replace their roles and functions (Bariyyah, Okfitasari, & Meikhati, 2007). 2020).

As explained by Effendi (2020), the impact of the Covid-19 pandemic has forced all government agencies to change the work pattern of their employees from working from the office or Work From Office (WFO) to working from home or Work From Home (WFH), including the work mechanism of the Internal Auditor. The government to carry out its duties online using information and communication technology. The Covid-19 pandemic has provided important lessons for government internal auditors to have the competence to carry out the

Audit process using a computer or known as Computer Assisted Audit Techniques (TABK) or Computer Assisted Audit Techniques (CAAT) (Effendi, 2020). Thus, in the era of digital disruption and society living side by side with Covid-19 through a breakthrough back to the new normal, accountants are required to make peace with technology because it is the main need for accountants in carrying out their work. The current condition and potential of technology can replace its role and function, for that accountants must think about how to adapt, both knowledge, competence and mastery of technology (Bariyyah, Okfitasari, & Meikhati, 2020). Furthermore, in addition to these skills and competencies, the other most important thing that accountants must possess is ethical behavior. The existence of policies related to state finances during the Covid-19 pandemic raises concerns regarding the accountability of local governments, namely the risk of causing corruption, because in a disaster situation, supervision and transparency are weak.

CONCLUSION

Based on the literature review that I use, the conclusions that can be given are the attitudes that accountants must have as challenges in facing the New Normal era, namely Technical and Competencies, Intelligence, Creativity, Digital Quotient, Emotional Intelligence, Vision and Experience. In addition, accountants must possess soft skills as the key to success, including Leadership, Flexibility and Adaptability, Critical Thinking (Critical Thinking), Tech Savvy (Understanding Technology), Communication and Emotional Intelligence (Communication and Intelligence). emotional intelligence), and Creativity and Innovation (Creativity and innovation).

Based on the results of the research and the conclusions above, the advice that can be given by accountants must be ready for technological disruption caused by the industrial revolution 4.0, 5.0 and the Covid 19 pandemic conditions. Accountants must be able to coexist with conditions caused by the Covid-9 pandemic and technological developments so that they can achieve effectiveness and efficiency in carrying out the basic work of an accountant in the fields of financial accounting, management and cost accounting, behavioral accounting, taxation and auditing. By having the attitude and soft skills as described above, it is hoped that accountants will be able to survive and adapt as the key to success.

The new normal era in the midst of the Covid-19 pandemic has caused many changes in various sectors of people's lives. Not only that, the new normal era was also followed by the Society 5.0 era, making technology a primary need by all groups of people. Circumstances like this force us to be able to adapt to technology to be able to carry out daily activities while still implementing applicable health protocols, such as wearing masks, maintaining distance, and washing hands. No exception, an accountant must be able to maintain his professionalism in carrying out his work, even though there are many obstacles an accountant must have certification, create goal orientation, make time management, and always be up to date to get the latest information, especially now new innovations are emerging in the field. in the field of accountants in order to help complete work and analyze problems quickly, precisely, and accurately. As an accountant, you also need to improve your soft skills regarding digitalization technology in order to be competitive, and your role and function cannot be replaced by increasingly rapid technological developments.

REFERENCES

Andersen, C. (2019) Technology in Accounting: Disruptive Innovations and Implications, Thesis, Ball State University Muncie, Indiana, April 2019.

- Anggadini, Sri Dewi dan Surtikanti. 2021. *Analisis Persepsi Mahasiswa Akuntansi Unikom Tentang Muatan Etika Dalam Pengajaran Akuntansi Keuangan*. Vol 13 No 1. Jurnal Riset Akuntansi Unikom
- Bariyyah, S., Okfitasari, A., & Meikhati, E. (2020). PROFESI AKUNTAN DI ERA NEW NORMAL. *Jurnal Bisnis Manajemen dan Akuntansi (BISMAK)*, 1(1).
- Blackwell, L. (2018) *Audit and AI: Can Artificial Intelligence Restore Public Trust? A Senior Thesis submitted in partial fulfillment of the requirements for graduation in the Honors Program, Liberty University, Spring 2018*, Retrieved from <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1802&context=honors>.
- Crossler, R., J. Long, T. Loraas, and B. Trinkle. (2014). Understanding compliance with Bring Your Own Device policies utilizing protection motivation theory: Bridging the intention-behavior gap. *Journal of Information Systems (Spring)*.
- Daugherty, P. R., & Wilson, H. J. (2018). *Human+ machine: reimagining work in the age of AI*. Harvard Business Press.
- Dewayani, Tantri. 2020. *Flexibel Working Space (FWS) Sebagai New Normal Kementerian Keuangan Pasca Pandemi Covid-19*. <https://www.djkn.kemenkeu.go.id/artikel/baca/13122/Flexible-Working-Space-FWS-Sebagai-New-Normal-Kementerian-Kuangan-Pasca-Pandemi-Covid-19.html>
- Efendi, A. (2020, August). *Mekanisme Audit Kinerja Berbasis Teknologi Informatika Pada Masa Pandemi Covid-19 Dan Pengaruhnya Terhadap Proses Pendidikan Dan Pelatihan Jabatan Fungsional Auditor (JFA) Aparat Pengawas Internal Pemerintah*. In *Prosiding Seminar Nasional Pascasarjana (Vol. 1, No. 01, pp. 53-62)*.
- Gal, G., & Steinbart, P. (1987). Artificial Intelligence and research in accounting information systems: Opportunities and issues. *Journal of Information Systems*, 2, 54-62.
- Jusup, Haryono. AL 2001. *Dasar-Dasar Akuntansi, Jilid II*. Yogyakarta: STIE YKPN
- Kogan, A., M. G. Alles, M. A. Vasarhelyi, & J. Wu., (2013). *Design and Evaluation of a Continuous Data Level Auditing System*. Working paper, Rutgers, The State University of New Jersey.
- Kominfo. *Kolaborasi Tangguh Kunci Sukses Melawan Pandemi*. 2021. <https://covid19.go.id/p/berita/menkominfo-kolaborasi-tangguh-kunci-sukses-melawan-pandemi>
- Kruskopf, S., Lobbas, C., Meinander, H., Söderling, K., Eds. Martikainen M. & Lehner OM. (2019). *Digital Accounting: Opportunities, Threats and the Human Factor*. *ACRN Oxford Journal of Finance and Risk Perspectives*, 8(2019) Special Issue Digital Accounting, 1-15.
- Kuenkaikaew, S. (2013). *Predictive Audit*. Ph.D. dissertation, Rutgers, The State University of New Jersey. Available: <https://rucore.libraries.rutgers.edu/rutgers-lib/41494/>
- Liu, Q. & Vasarhelyi, M. A. (2014). Big Questions in AIS Research: Measurement, Information Processing, Data Analysis, and Reporting. *Journal of Information Systems: Spring 2014, Vol. 28, No. 1, pp. 1-17*

Gardner, Tonja Annette. 2017. Exploring the Importance of Soft Skills Training for Accountants, United States : Walden University Journal

Girsch-Bock, M. (2017). Review of CCH ProSystem fx Tax. Retrieved from <http://www.cpapracticeadvisor.com/review/12355605/2017-review-of-cchprosystem-fx-tax>

IAI. 2020. Tantangan Profesi Akuntansi dalam Pemenuhan Ekonomi Nasional Pasca Pandemi Covid-19. <http://iaiglobal.or.id/v03/berita-kegiatan/detailberita-1308-tantangan-profesi-akuntan-dalam-pemulihan-ekonomi-nasional-pasca-pandemi-covid19>

ICAEW, (2018). Artificial intelligence and the future of accountancy. London: ICAEW.

Najjar, D. 2019. Is artificial intelligence (AI) the future of accounting? The Balance. Available: <https://www.thebalancesmb.com/is-artificial-intelligence-the-future-of-accounting-4083182> Retrieved: 25.2.2019

Mardiasmo, 2018. Peranan IAI dalam Mendukung Pencegahan Fraud dalam Era Revolusi 4.0.

Marr, B. (2016). Why everyone must get ready for the 4th Industrial revolution. Forbes. Published: Available: <https://www.forbes.com/sites/bernardmarr/2016/04/05/why-everyone-must-get-ready-for-4th-industrial-revolution/#ff5a3db3f90b> Retrieved: 25.2.2019

Martani, Dwi. 2020. Akuntansi New Normal Peluang dan Penelitian Akuntansi. <https://staff.blog.ui.ac.id/martani/files/2020/06/Webinar-Covid-Unej-26062020-13.pdf> <https://feb.ugm.ac.id/en/research/lecturer-s-article/2886-benarkah-peran-akuntan-digantikan-oleh-teknologi-informasi>

Moffitt, K. C., Rozario, A. M., & Vasarhelyi, M. A. (2018). Robotic Process Automation for Auditing. *Journal of Emerging Technologies in Accounting*, 15(1), 1-10. doi:10.2308/jeta-10589

Novayanti, D., & Herliana, K. "Peran Dunia Pendidikan Untuk Meningkatkan Sistem Informasi Akuntansi dalam Era Big Data dan Revolusi Industri di Indonesia" .(2018)

Parcells, S. (2016). The power of finance automation: free up your accountants to perform the kind of analysis that generates real, strategic contributions to help drive your business. *Strategic Finance*, 98(6), 40+. Retrieved from http://link.galegroup.com.ezproxy.liberty.edu/apps/doc/A474041253/AONE?u=vi_c_liberty&sid=AONE&xid=f578b55e

Putri, R. K., Sari, R. I., Wahyuningsih, R., & Meikhati, E. (2020). Efek Pandemi Covid 19: Dampak Lonjakan Angka PHK Terhadap Penurunan Perekonomian Di Indonesia. *Jurnal Bisnis Manajemen dan Akuntansi (BISMAK)*, 1(2).

Raschke, R., A. Krishen, & P. Kachroo. (2014). Understanding the components of information privacy threats for location-based services. *Journal of Information Systems (Spring)*.

Rosmida. (2019). Transformasi Peran Akuntan dalam Era Revolusi Industri 4.0 dan Tantangan Era Society 5.0. *Jurnal Inovasi Bisnis*.

Subur, L. (n.d.). Accounting Talk Transformasi Akuntansi pada Era Digital. Retrieved from Kompasiana.com:

<https://www.kompasiana.com/lizazu/5c2c296c12ae940f8754b280/akuntansi-di-erarevolusi-industri-4-0>.

Sulaiman, M. Lutfi, dkk. 2020. Mengelola Perubahan dan Transformasi di Era Disruptif. <http://manajemen.fe.um.ac.id/wp-content/uploads/2020/12/Prosiding-Seminar-Nasional-Ilmu-Manajemen-2020-Jilid-2.pdf>

Sumarna, Alfonsa Dian, 2020, Akuntan Dalam Industri 4.0: Studi Kasus Kantor Jasa Akuntan (KJA) Di Wilayah Kepulauan Riau, Jurnal KRISNA: Kumpulan Riset Akuntansi; Vol. 11, No.2 Januari 2020, pp. 100-109.