

Exploratory Descriptive on the Self-Confidence of Prospective Accountants Toward Economic Digitalization

Anisa Kusumawardani¹, Dhian Andanarini Minar Savitri², Aurel Ariandrani³

Faculty of Economics and Business (STIE Totalwin Semarang)^{1,2}

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Correspondence:

Anisa Kusumawardani

nsawardani@stietotalwin.ac.id

ABSTRACT

One of the key characteristic features of change in the modern socio-economic environment is information, which manifested in both the dynamic development of the information within the communication technology and in the transformation of the information itself into a strategic resource for the entities' welfare, especially for an economic entity inside the turbulence of an ever-changing world. Accounting is considered one of the fragments that is significantly impacted by the speeding up of digital transformation. Academics and practitioners have noted several difficulties and issue that comes to the surface concerning the decline of accounting functionality and the reporting value of the information for stakeholders. The existence of new technological capabilities such as artificial intelligence does not eliminate the possibility of alteration on the role of an accountant, and this can create tension for students majoring in accounting. Whether it is a threat or an opportunity for accounting development for the 'generation Z' facing the AI era. The existing volatility assessment of the future accounting profession has contributed to the decline in motivation of the current generation to see the prestige of the accounting profession, and negatively affected the demand for accounting education. This study examines how future accountants undergo formal education in the face of the digital accounting era, provide actionable recommendations for individuals and organizations to build and maintain self-confidence in the context of Industry 5.0. The analysis used in this study is qualitative methods with phenomenological approaches analyze with QSR NVivo12 which leads to the conclusion that the current vision and role of an accountant who was previously called a record holder must develop to a bigger role that possesses a certain influence within the present-day market and society. The function of an accountant cannot be fully automated, due to the wide variety of accounting functions that require professional judgment based on systems of expertise, experience, and intuition. By achieving a comprehensive vision and role, the acceleration of accounting information technology will require the role of an accountant and not vice versa.

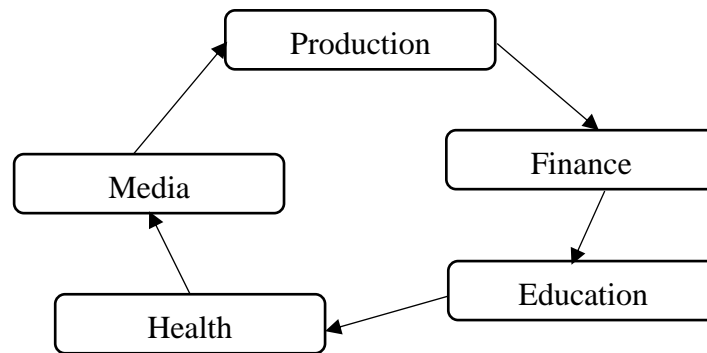
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INTRODUCTION

The rapid development of the world economy makes one of the important resources for an organization is information, that must undergo significant changes. By collecting certain information, organizations gain knowledge about the problems they hope to solve. This is connected to hardware and software that serve as tools to process the information. According to Karpova (2018) through the definition that the digital economy is the effect of information and communication technology undergoing transformation, the transformation areas under the influence of the digital economy can be identified as follows:

Figure 1. Digital Economy Transformation Area



Source: Karpova, Tatiana Petrovna (2018)

From figure 1, it can be seen that the financial sector is transforming, as a result, accounting procedures must be capable of responding effectively to current economic changes. Accounting is separated into two major categories: managerial accounting and financial accounting, each of which serves as a controller and a source of information. The advancement of theory and the enhancement of accounting processes result in rapid changes in information technology. Many experts feel that the primary focus of technological change will be on enhancing reporting accuracy and accounting theory itself. Research that leads to intellectual human resources as intangible assets, research and development results, and customer bases in the digital economy is increasingly rich. It is undeniable that the role of education is important to produce a highly intelligent accountants is increasingly being expected, both from the corporation as a direct beneficiary and from the state as a party that grew in line with improving economic conditions.

According to Guo (2018), developing a professional identity involves comprehending one's past and prospective future, rather than only focusing on the present. describes the "never-ending process of becoming" individuals shaping throughout their journey. Knowledge of technology and skills is needed by prospective accountants(Al-Htaybat & von Alberti-Alhtaybat, 2017; Karpova, 2018). Thus, the accounting profession should be elevated in dignity, encouraged, and reinvented in this new civilization 5.0 (Tavares, Azevedo, Vale, et al., 2023). Where there are other opinions state that the accounting profession is an individual who lacks keeping up with the times. According to Picard et al. (2014), accountants have been constantly portrayed as boring and conservative individuals. It's not to be denied by the many studies that indicate the truth of these stereotypes. As Friedman & Lyne (2001) dalam Tiara Silalahi & Hermawan (2022) reinforcing the statement that precision and form, methodical and conservative, and a boring character was largely accepted as the unambiguous stereotype of an accountant until now, not disappearing with a variety of nuances. The accounting profession is very much bound by strict standards, regulations and procedures. Supported by the research of Jonida (2021) imply that their data on how the accountant was portrayed in Dante's day aligns with the unfavorable stereotype that has been identified in other recent research on the accountant in popular culture. That is why conservative accountants may find the Industrial Revolution 5.0 challenging as new technologies may change the way of working that has been governed by current regulations. Besides, accountants who are considered conservative tend to be more cautious and may be reluctant to adopt new technologies that they perceive as risky or unproven.

The character of accountants who are believed to be conservative may prefer traditional methods that are well known and tested. But recently, the perception of being technologically savvy and up-to-date with the latest digital advancements can enhance a prospective accountant's

professional image. This positive self-perception can contribute significantly to their self-confidence, as they feel more capable and respected within their professional community. Then, institutions that support economic digitalization often provide resources such as training programs, workshops, and certifications will allows prospective accountants to build their competencies and confidence systematically. Knowing that they have support systems in place can mitigate anxiety and enhance their self-confidence. From the fenomena and research gap, this research wants to see the attitudes and perceptions of prospective accountants towards new technologies such as artificial intelligence, big data, blockchain, and automation. Another possible benefit of this research is to measure the impact of the education that has taken place so that data and information that can be used by policy makers and regulators in developing strategies and policies that support the adoption of technology in accounting are available.

Theory of Planned Behavior (TPB)

Icek Ajzen was the pioneer of the theory of planned behavior in 1985. In the Theory of Planned Behavior it is stated that there are three factors that can predict human behavior in the theory that has been re-developed by Ajzen there are:

1. Attitude towards behavior, is the extent to which an individual has a positive or negative attitude toward the particular activity.
2. Subjective norms, which are the social pressures on an individual to perform or not perform the behavior
3. Perceived behavioral control, refers to a person's assessed competence to complete an activity based on previous experience or predicted obstacles

With the rise of technology, for example today Artificial Intelligence (AI) is being implemented into all sectors, accountants and prospective accountants must be able to meet these challenges so as not to be replaced by AI technology. The willingness to increase knowledge and accept technology could be studied using the criteria described in the explained theory of planned behavior.

Digital Quotient (DQ) and Accountant Profession

According to Pitria & Mahyuni (2022)the concept of Digital Quotient (DQ) is the awareness of the influence of technology and adaptation in the application of digital-based standards. Digital Quotient is based on eight dimensions, there are digital use, digital emotional intelligence, digital safety, digital security, digital identity, digital communication, digital literacy and digital rights Nan et al. (2019). If in the past the digital world only belonged to those in the world of technology and information (segmented) then this is no longer the case (Rozas et al., 2021). Almost in all sector have an impact with economic digitalization excluded education. Education systems, particularly universities, must redesign their curriculum to be more technology and future-oriented because companies must invest in technology and personnel skills to avoid costly business losses and insolvency(Kruskopf et al., 2020). Supported by the research of (Yuan et al., 2022)that supply chains in a corporation have a positive impact on shareholder value, particularly when they are integrated and modern. According to the post-hoc study, digital SCI has a greater positive impact on shareholder value than intelligent SCI, whereas technology-type SCI has a greater positive impact than process-type SCI. Each investor as an individual will make decisions which then encourage certain financial behavior including investment decisions and behavior in the capital market (Anisa Kusumawardani & Eka Yuliyanti, 2023). And that decision now will more complex with the come of industry revolution 5.0.

Accounting that used to use manual recording and analysis, with the digitalization process is now automated. Automation does make the work of accountants easier and can be called an enormous opportunity, but of course there will be challenges to face. The solution to this challenge is to develop the Digital Quotient (DQ). Effective operation of a computerized accounting

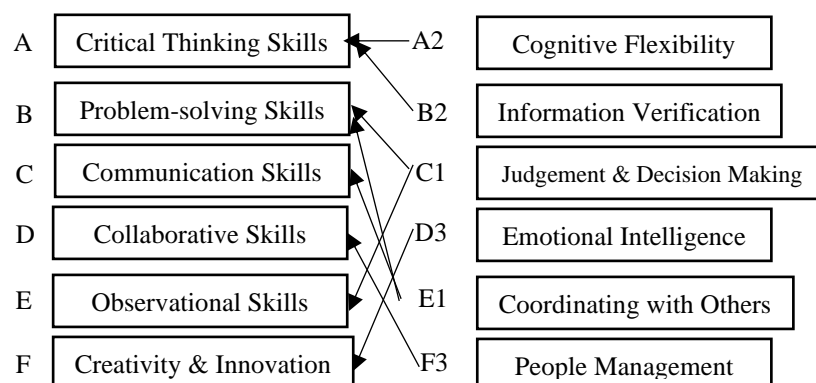
information system depends on several factors, including user involvement, training and education, personal technical skills, accounting expertise, and support from superiors in regional financial management (Purba et al., 2024). In the next ten to twenty years, the accountants will again, might play a different role but once the digital quotient is in place then any kind of digitalization of the economy will surely be overcome.

The Readiness of Prospective Accountants

The introduction of Artificial Intelligence (AI) as a component of evolving technology has resulted in many people losing their jobs to some extent. Customers who are going to replace the current ATM card are no longer need queue to the customer service, the machine to recognize electronic ID Card and face recognition can print the new ATM card. Manufacturing companies in Japan have developed the concept of Cyber Physical Systems where production is run on time through AI technology. With the rapid development of technology, the revolution of the age of society 5.0 is already in sight and not wanting the whole work has to adapt to it. The study's of Hendarmin & Rafika Sari (2024) findings demonstrate that AIS's embrace of cutting-edge technology enhances customer satisfaction, improves decision-making, and increases operational effectiveness. The industrial revolution encompassed many technologies, including the Internet of Things (IoT), big data, neurotechnologies, blockchains, artificial intelligence, components of robototronics and sensory technologies, cyber security, wireless technologies, technologies of virtual and additional realities and cloud computing (Lom et al., 2016). Social conditions that are increasingly dependent on the facilities that technology provides, make graduates of education demanding to be competent along with the digital industry revolution. The harmonization process of the integration of standard professions and higher education systems into the homework is still ongoing and needs to be completed as soon as possible.

According to Karpova (2018) the inter-stage formation of graduate competence includes the development of standards, indicators, measurements, criteria, norms, scales of internal evaluation of the university, the development and testing of comprehensive procedures and standardized methods that allow accumulation of valid results on the portfolio of each student during the duration of their studies. Universities usually provide only the basis and methodology, while further development is the student's own responsibility. Teknowijoyo (2022) explained that aducation in society 5.0 requires students to have the ability to solve complex problems, think critically, and be creative. These abilities are needed in order to adopt the development of science and technology, not only as a "taker" but also as a "maker" through the principles of education.

Figure 2. Learning Model 5.0



Source: (Sajidan et al., 2021)

RESEARCH METHODS

This type of research is using a phenomenological research design and employs a qualitative approach. Researcher collect the data instrument with interview some university student major in accounting in their last semester. Johnson and Christensen (2014) claim that the primary goal of phenomenology is to get access into the world of study participants and to understand their perspectives. Fenomenology advances the advancement of knowledge through specific steps, in which a phenomenon encountered by humans becomes a subject of study (Tumangkeng & Maramis, 2022). The data source in this research is primary data, which is data obtained directly from respondent. Furthermore, Creswell (1998) states that "...all individuals studied represent people who have experienced the phenomenon." Although Creswell claims that there are up to ten informants, this is not the most important point. The most essential aspect is the presence of redundant data. The data collection method in this study uses an interview method via message in whatsapp and google form link that contains descriptive questions to answer research questions, How does economic digitalization impact the self-confidence of prospective accountants in their professional competencies and career prospects? How does the integration of digital technologies in the accounting profession influence the self-confidence of prospective accountants?

The data collection start from January 2024 until May 2024. As many as 56 responden from various universities in Indonesia answered the survey well. After the primary data was obtained, it was analyzed using QSR NVivo software. Using NVivo in qualitative data analysis provides researchers with a comprehensive and flexible tool for handling the complexity of qualitative data, making it a popular choice over MAXQDA, ATLAS.ti, or QDA among academic and professional researchers. All statements generated from NVivo's output are included in the discussion and formulated in as much detail as possible to show the phenomena that occurred.

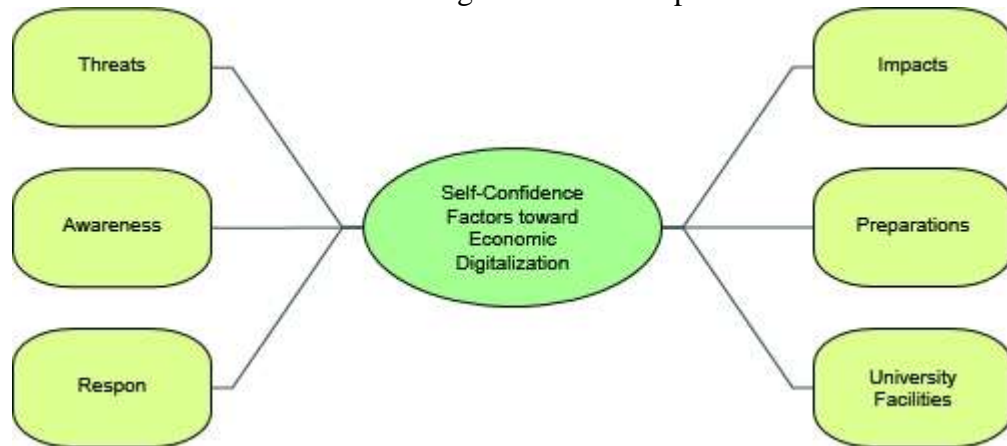
RESULTS AND DISCUSSION

The presence of digital economy had a changing effect in accounting profession. Ghufron (2018) said that this era marked by the development of the Internet of Things (IoT) and the development of IoT is followed by newest technologies including Artificial Intelligence (AI). Now, almost all data can be processed by machine learning technology and AI. From the interview, all of respondents said that they fully aware of the development in digital economy. AI technology is expected to transform the way businesses run by offering a variety of benefits ranging from automation to higher efficiency. According to Mekari research, 62% of enterprises in Indonesia are considering implementing AI technology or artificial intelligence. In Mekari Conference 2023, there is a statement that in the AI research conducted in this I-2023 quarter, there are three levels of company readiness in adopting AI technology. At the first or underlying level, companies have utilized at least one kind of digital solution to increase productivity in one of the major business processes or activities. About 95 percent of medium and large in Jabodetabek, Bandung, and Surabaya are at this level. Then, at the second level, companies have not only used, but also integrated, a wide range of digital technologies into various processes or operational operations to improve overall corporate efficiency. As many as 35% of all organizations that have already utilized at least one digital solution at the first level have managed to deepen their use of technology and advance to this higher level. At the third or top level, companies have formed a technology ecosystem by combining two key factors, the technology infrastructure and the corporate culture, so that they can optimize the use of technology for business growth. Of all companies that have already implemented and integrated various digital solutions at the second level, 62 percent are able to move forward to the top level.

Speaking of the evolution of accounting in accounting digitization in this era of the industrial revolution 4.0, we need to look back to the early understanding of the key tasks of accountancy as

supporting information of management and economic processes, which is expected to help decision-making both at the global level and at the socio-economic level. The mind map of this research shows bellow.

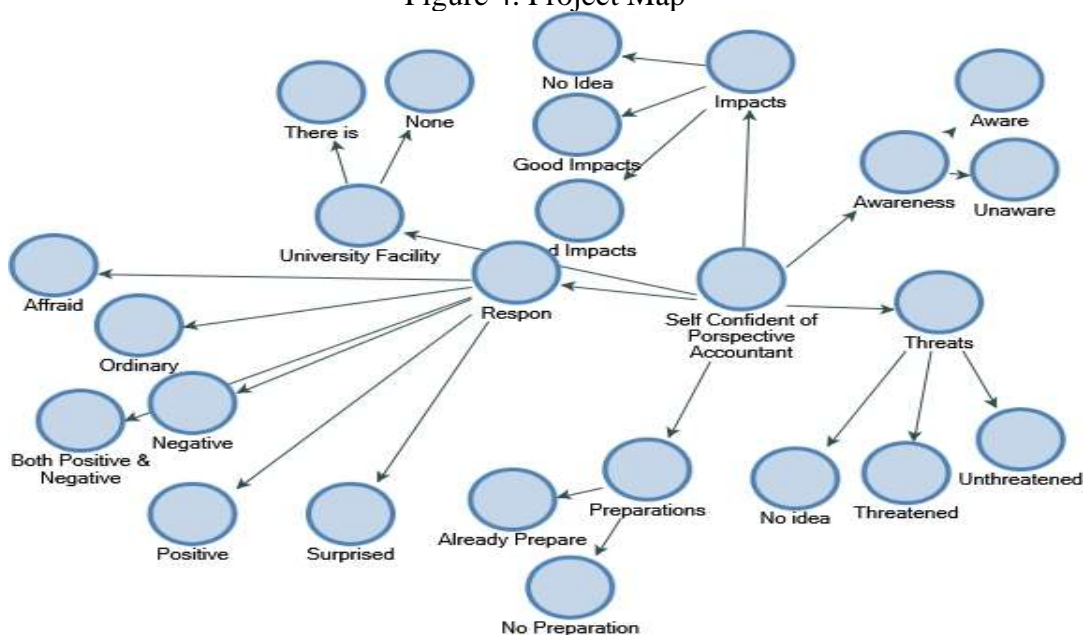
Figure 3. Mind Map



Source: NVivo 12 Output

The mind map demonstrates how each component helps to develop and enhance self-confidence in the context of economic digitalization by connecting the main theme of prospective accountants' self-confidence to a variety of elements. Threats, awareness, response, impacts, preparations, and university facilities are linked to the central nodes that is self-confidence factors towards Economic Digitalization. Threats refer to data analytics and digital literacy which are currently in high demand in the market, and competing for a job requires standing out in a tech-savvy field. Prospective accountants need to be aware of how digitalization impacts accounting practices and the new competencies required. Response is how prospective accountants react to these changes. Impacts relates to how the industrial revolution has impacted the prospective accountant. Preparations involve education and training, developing both hard skills, such as software proficiency, and soft skills, such as adaptability. And the last how the facilities of university perceived by students.

Figure 4. Project Map



Source: NVivo 12 Output

Source: NVivo12 Output

Accountant Profession and Industry Revolution became two words that appears most in NVivo's Words Cloud. So that two of it has a close connection. Companies must have proper personnel interaction between machines and operators in order to adopt industry 5.0. Employees must be trained, especially via virtual education, to reduce costs (Adel, 2022). The essential skills for the digital native workforce of the future go beyond particular academic courses and encompass a wider range of abilities required by global citizens (Tavares, Azevedo, Marques, et al., 2023). With a curriculum at educational institutions that aims to overcome problems that may be encountered by prospective accountants, the mismatch between the needs of the industry which is now heading towards 5.0 with the skills possessed by graduates can be anticipated.

CONCLUSIONS AND SUGGESTION

Due to the great diversity of accounting duties that require professional judgment based on systems of competence, experience, and intuition, the function of an accountant cannot be totally automated. The acceleration of accounting information technology will need the job of an accountant by obtaining a comprehensive vision and role. Prospective accountants who are generation Z are confident facing the digital economy era. They think that university graduates and the so-called high-skilled educated workers should not be concerned about being replaced by machines because they considered as the skillful workers. As mentioned by Ellitan & Anatan (2020) Technology and innovation should be utilized to support and improve society, not to take the place of people, as stated by. A higher standard of social order can be formed by combining Industry 5.0 with Society 5.0 to enhance people's social lives. sector 5.0 will see a merger of technical and human abilities and strengths that will benefit both the sector and its workers. Technology will not replace people; rather, it will enhance them. It will make workplaces safer, more fulfilling, and more ergonomic-places where people can apply their imagination to solve issues, take on new jobs, and develop their abilities (European Commission, 2021).

The implication of this research is to conclude that Generation Z, which cannot be separated from IoT and technological advances, has high confidence in facing the accounting digitalization. Accounting practices must begin to be developed in such a way starting from the basic education system to support the new management model that requires real-time and fast information. Accountants must be able to adapt to have the ability to evaluate and change business models. Due to the entry of digital technologies such as big data analysis, IoT elements, cloud computing, etc., all of these components are included in the field of information and communication technology, so the role of accounting must be able to shift in that direction. In addition, artificial intelligence and software bots may make it easier to move away from routine accounting operations, but the process of communication by accountants cannot be replaced. Accountants in the future are expected to develop their communication skills. This research limitations such as the number of respondents is not enough to describe the real situation. Suggest areas for further study, such as specific interventions to boost self-confidence or longitudinal studies tracking confidence over time. And have more complex methodology such as a mixed-methods research. The quantitative research methods to be able to obtain data in the form of numbers accompanied and the qualitative methods to deepen the results.

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