Digital Technology Hegemony On The Role Of Accounts

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Abstract. Science and technology have substantially changed human culture and behavior. Digital hegemony of technology greatly affects the need for human labor which is starting to be replaced by technology. The concept paper aims to discuss the changing role of accountants over time along with the occurrence of digital technology hegemony from what used to be a lot of clerical accounting jobs to jobs that require more judgment, discretion, innovation/creation, and are more strategic. Indeed, repetitive, mechanistic, predictable and uncomplicated work has been and will continue to be replaced by the role of machines, computers and robots. Likewise in the context of auditing. Even machines, computers, or robots that have been programmed with artificial intelligence will not be able to perform as well as a professional accountant. Technology will never be able to replace it. The work of accountants shifted to matters closely related to judgment and discretion, and the accounting profession had to broaden its expertise.

Keywords: Hegemony, Digital Technology, Role of Accountants, Concept Paper.

1 Introduction

Science has progressed over the decades, creating eras such as the Ancient Greek era, the Middle Ages, the Modern Age, and the Contemporary Age, [1]. Philosophy, which was originally more mythological in nature, has now developed into a science that covers various fields. Science, in its current development to its derivatives to the development of digital technology, is more than just a means to support human life. Science and technology have now become something substantial, part of self-esteem (prestige) and myth, which will ensure the survival of a nation, a prerequisite for achieving progress (progress) and excellence or hegemony (power) needed in globalization. Science and technology, in its substantive position, have touched many aspects of life, and consequently changed human culture and behavior. Currently the phenomenon of change is occurring in our society which is undergoing a transition period to the digital era of technology.

For this reason, the presence of a philosophy of science is needed in the midst of the development of digital technology which is marked by the sharpening of scientific specialization. Because by studying the philosophy of science, we will become aware of its limitations and will not be trapped in intellectual arrogance. What is more needed is an attitude of self-disclosure, so that we can greet each other and direct all of our scientific potential for the benefit of mankind. Science and technology issues require consideration of epistemology, ontology, and axiology, and these dimensions can sometimes have an impact on the process of further development of science and technology.

In recent years, the influence of technological developments on the role of professions and jobs has significantly reduced the role of human labor in doing these jobs. The main reason is related to the development of information technology, robots, computerization, and other automations that are more controlled and efficient. Borrowing research results from [2] that the impact of digital technology on the industrial revolution 4.0 will result in 52.6 million types of jobs moving or disappearing from the face of the earth over the next five (5) years Accountants are one of the professions that are expected to become extinct. And it is undeniable that some of the work of the accounting profession has begun to be taken over, replaced by technology. This shows that automatic journaling, accounting software, and the current reality of accounting have been widely studied by the non-accounting community, so that simple accounting jobs do not require an accountant graduate from college, and the reality of accounting has now been widely studied by the non-accounting community. accountancy. The digital hegemony of this technology raises the question what about the accounting profession?

Is this estimate correct? Many parties immediately confirmed the findings of the study because some of the accountants' roles had been replaced by the role of technology (information). Others may disagree with these findings. For example, according to [3], job change does not disappear. This statement can be interpreted in two ways. The first is the shift of the profession away from many clerical jobs and towards jobs that are more discretionary, strategic, or based on discretion within the accounting profession itself. The second factor is the changes that have taken place, which have resulted in a reduced role and need for accountants in the workplace, forcing them to move to other occupations or industries.

Based on the phenomena discussed above, the concept of this paper discusses the changing role of accountants from time to time, as well as the occurrence of digital technology hegemony from previously many clerical accounting jobs to jobs that require more judgment, wisdom, innovation/creation, and are more

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strategic. The discussion begins with the presentation of the concept of digital technology hegemony. This is followed by an explanation of the changing workforce needs based on various published reports. These publications examine the shifting patterns of labor demand in various industries. Furthermore, the causes of changes in labor needs in the future are discussed, both in terms of technology and socio-economics. The cause of these changes occurred due to changes in the pattern of labor needs in various industries, the role of the accounting profession was discussed to predict changes in the needs of professional accountants. The final section of this paper presents a conclusion about the current and future needs of the accountant workforce.

2 The Concept of Digital Technology Hegemony

Gramsci's theory of hegemony (1891-1937) explains how the supremacy of social groups manifests itself in two ways: intellectual and moral domination and leadership. Hegemony is a relationship of agreement based on political and ideological leadership rather than a relationship of domination based on power. Hegemony enters society through the path of spontaneous agreement arranged by the dominant group for social consensus. The most dominant and invisible hegemony in modern and postmodern society is entering through information technology channels which we now call digital technology. In this case, hegemony can be interpreted as a driving force for the ideology of society, which has been well understood by certain parties (capitalists) who take advantage of advances in science and technology.

As an ideology, society is considered to need technology. People subconsciously experience oppression that they are not aware of. This conceptualized oppression has penetrated all fields, including economic, political, social, and educational institutions. This is very concerning, because technology is present in our daily lives. As a result, they become addicted to technology. The digital hegemony of technology is the key to changing people's culture and behavior. The doctrine of technology has succeeded in changing the process of thinking and human movement so that it can reduce the need for human labor in almost all fields.

3 Changes in Labor Needs

In various industrial sectors, advances in information technology, robots, computers, and online media have shifted the role of human labor. The following is a summary of various sources reporting and forecasting current and future workforce needs. WEF publishes a report based on the results of a survey of 13,549,000 workers from various industries (Basic Industry and Infrastructure, Consumer, Energy, Financial & Investor Services, Health, Information and Communication Technology, Media, Entertainment and Information, Mobility (Transport and Logistics), and professional services), [4]. The percentage of core skills that will be disrupted is highest in Financial Services, Basic Industries, and Mobility. Financial analysis, information systems security, data center, and networking skills are in high demand in the financial services industry. Therefore, companies in the industry must improve the skills of their employees through various trainings. WEF also tracks labor market trends by occupation (Architecture and Engineering, Management, Business Operations and Finance, Sales and related matters, Installation and Maintenance, Construction and Extraction, Art, Design, Entertainment, Sports and Media, Production and Manufacturing), [4]. , and Office and Administration). Jobs that require complex problem solving, critical thinking, and high creativity are on the rise, while administrative and office jobs are on the decline. Administrative work is being lost across all industries.

Learn from history and trends to forecast future jobs lost or increased demand. Robots, computers, and technological advances have changed or replaced human jobs while creating new jobs. By 2030, 75-375 million people in the world will have to change jobs or upgrade their skills [5]. Health care providers; professionals such as engineers, scientists, accountants, and analysts; is the category with the highest percentage of job growth (even after accounting for automation) in almost all countries. In addition, information technology professionals and other technology specialists, as well as managers and executives whose jobs cannot easily be automated, are in high demand. In developing countries, the growth in demand for labor such as artists and other entertainment players is only modest, in line with the increase in people's incomes and demand for recreation [5]. With increased investment in infrastructure and buildings, various professions have also developed. Jobs in services associated with uncertainty, such as healthcare and home care, have also evolved over time.

According to Barclays (2018), rapid technological advances are changing the way people work. It is true that machines are now capable of performing seemingly impossible complex tasks. Machines can now learn like humans, who go through a learning process and learn from their mistakes, thanks to artificial intelligence. Humans, on the other hand, continue to have an advantage over machines. Humans have an advantage over machines because of their innate skills and abilities. Humans use their senses to process what they see, hear, and touch, and then act in response, which is often spontaneous [3]. Much of what humans do every day is based on or learned from experience, and making imperfectly informed decisions requires judgment. The machine hasn't done it yet/hasn't been able to do it. The work that humans do in the future will be dominated by types of work that have: 1) highly unpredictable circumstances, 2) complex personal relationships, such as doctors, nurses,

who trust and feel comfortable in relationships. important, and 3) requires creativity (real creativity). Machines have not been able to replicate self-expression, emotions, opinions, and imagination as well as artists.

Further into the future, ([6]; [7]; [8]) predict that there will be six jobs that will dominate the demand for labor by 2040. 1) Virtual Store Manager, 2) Robot Mediator, 3) Robot Trainer , 4) Drone Traffic Controller, 5) Augmented Reality Designer, and 6) Micro Gig Agents are six jobs. Six future job forecasts suggest that technology still needs human control. Automation, computerization, the use of online, and other technologies have a significant impact on the effectiveness and efficiency of a business. Information technology investment by business people, on the other hand, can have a negative impact on company performance if it is not supported by a workforce that has the expertise to control it.

According to various existing publications, jobs that are replaced by robots, computers, automation, online use, and other technological developments occur in jobs that have mechanistic characteristics, are repetitive, and have a high degree of certainty. Meanwhile, jobs with unpredictable scope, focus on personal relationships based on trust and comfort, and the need for creativity will experience increasing demand from time to time.

4 Causes of Changes in Labor Needs

Changes in labor demand are divided into three categories based on time: 1) has occurred, 2) is occurring, and 3) will occur. Due to: 1) technological advances; and 2) demographic and socioeconomic changes, labor requirements have changed dramatically [4]. 1) Internet (smartphone/cell phone) and online data storage technology; 2) Advances in computer technology and Big Data; 3) The need for new energy supply and its technology; 4) Things that are triggered by the internet; 5) Use of shared resources by various companies; 6) Advances in robot technology and transportation automation; 7) Advances in machine technology with artificial intelligence; 8) Advances in three-dimensional printing technology. Automation will lead to significant changes in the workplace, such as robotics changing or replacing some jobs, while others are created that require fewer people (quantitatively). This means millions of people worldwide may need to change jobs and upgrade their skills [5]. According to [3], technological advances are the main cause of changing workforce needs. Machines can now perform complex tasks, and thanks to artificial intelligence, machines can now learn the same way humans do, by experiencing the process of learning and learning from experience. This increases the likelihood that computers, machines, and robots will replace a growing number of jobs.

Meanwhile, demographic and socioeconomic changes have resulted in the following [4] Changes and flexibility of the workplace (both in terms of time and location); 2) Increasing middle class population in developing countries; 3) Climate change, limited natural resources, and the transition to an eco-friendly economy; 4) Increase in global trade and transfer of experts; 5) Consumer concerns about ethical and privacy issues; 6) An increasing trend of people working longer hours (until the age of 65) to meet their retirement needs and contribute to society; 7) An increase in the number of young people getting better education and entering the labor market; 8) Increasing the number of women participating in the workforce; and 9) Increased urbanization. These changes have occurred and are currently impacting changes in the labor market from a demographic and socioeconomic perspective. Automation brings major changes in the world of work in both developed and developing countries [5]

What about the future of the accounting profession? Will technological advances and socioeconomic demographics have a significant impact? Currently, according to Forbes advertisiment, the accounting profession is not among the 25 dead or dying industries, nor is it on the list of the ten slowest growing jobs.

5 Current and Future Trends in the Accounting Profession

Before understanding how the professional accounting workforce is changing, one must first understand the context in which the accounting profession operates. Financial accounting, management accounting, public and not-for-profit accounting, auditing, accounting information systems, and tax accounting are all parts of accounting. Is it true that jobs in all accounting fields will require fewer people in the future due to the digital hegemony of technology? The following is an explanation of the various types of work inherent in each accounting field. To illustrate trends over time in the occupational/accounting profession, a discussion of technology and socioeconomic demographics is described.

5.1 Financial Accounting

The main role of professional accountants in the field of financial accounting is related to the preparation and analysis of financial information for reporting to external parties. The generally accepted practice of financial reporting today is to base it on financial accounting standards, which are also known as Statements of Financial Accounting Standards (PSAK). Financial reports are prepared in an international context in accordance with International Financial Reporting Standards (IFRS). A principles-based approach is used to implement IFRS. PSAK, the Indonesian accounting standard, largely follows IFRS. This means that IFRS and

PSAK take a principles-based accounting approach. The main benefit of principles-based accounting is that the broad guidelines can be applied in a variety of situations, bringing it closer to the concept of IFRS as a globally accepted standard. The possibility of different interpretations for similar transactions is an inherent characteristic of principles-based accounting standards. The problem with principles-based accounting standards is the lack of guidance, which often causes problems with comparability.

Existing requirements can sometimes force managers to make discretionary judgments and policies when preparing financial statements. It will become more common as global business becomes more complex. This aspect cannot be replaced by technology, so the work of accountants cannot be replaced by technology. From a demographic perspective, the fact that there is currently only one accounting standard and is used globally increases the possibility of business expansion outside the domicile. Along with the growth of the global economy, the demand for accountants is also increasing, because every company (including subsidiaries) requires accountants to prepare financial statements. Mutations of experts (professional accountants) are common all over the world. This will have an impact on variations/shifts in the needs of accountants around the world. The needs of a country will be met by accountants from other countries if they do not have or are unable to produce professional accountants.

5.2 Auditing

The auditing sector follows a principles-based approach, in line with developments in the financial accounting sector. This happens because the audit is conducted to ensure that the financial statements have been presented in accordance with generally accepted accounting principles (GAAP) or in accordance with International Financial Reporting Standards (IFRS) (in a narrow sense). The need for auditors to make judgments and policies (discretionary) during the audit process grows with the increasing complexity of the business. This aspect, like financial accounting, cannot be replaced by automation, so the work of auditors cannot be replaced by information technology. Computerization is generally used to increase efficiency and effectiveness in completing tasks. From a demographic point of view, given that current audits tend to use the same global standards, the likelihood of auditors having to make professional judgments in the context of implementation in a country's local context is increasing. As the global economy grows, the demand for auditors also increases, especially in developing countries whose economies are growing rapidly.

5.3 Management Accounting

The main role of professional accountants in the field of management accounting is related to the preparation and analysis of financial information for reporting to the company's internal parties. Management accountants, for example, are responsible for generating information about product costs and the budgeting process. A Chief Financial Officer, also known as a controller, is responsible for more strategic matters, such as the formulation of corporate strategy, formulation of the company's strategic plan/blueprint, and preparation of the compensation system. Computers and other information technologies cannot replace them.

In this case, information technology is used to complement rather than replace the role of management accountants. The role of management accountants which emphasizes work with unpredictable scope, personal relationships based on trust and comfort, and creativity, will experience increasing demand from time to time. They must develop a business strategy to deal with the uncertainty of business competition. They have to innovate, and creativity is needed to do so. Internally, they should emphasize personal relationships based on trust and work comfort. From a demographic and socioeconomic point of view, the larger the global business, the greater the demand for management accountants. Management accountants are in high demand in developing countries where business is booming, including a significant increase in start-up.

5.4 Accounting Information System

Technological advances in the field of accounting information systems have driven progress in financial reporting, such as integrated reporting, extensible business reporting language (XBRL), sustainability reporting, and so on. One possibility is that the role of professional accountants in the field of accounting information systems is changing. This is due to the company's access to state-of-the-art software. Enterprise Resource Planning (ERP) software, for example, is business process management software that enables organizations to manage business and automate many back office functions (including accounting information systems) related to technology, services, and human resources. This technology is likely to replace data entry and journaling jobs. Advances in reporting technology, such as XBRL and the Taxonomy of Financial Reporting, are likely to shift the work of workers in this field to a greater emphasis on software engineering for accounting information systems, especially for start-ups or companies in complex industries. The demand for accounting information systems experts will grow both demographically and socio-economically, especially in developing countries where business is growing rapidly along with a significant increase in start-up companies.

5.5 Public Accounting and Non-Profit Entities

Public and non-profit entities have a pattern similar to that of publicly listed firms. As a result, the changing workforce needs of public and nonprofit entities will be affected in the same way as private entities. As the economy develops and the number of nonprofit organizations grows, so does the need to manage public

funds and their use. This makes it clear the importance of financial reporting and public accountability needs to be carried out by the role of accountants. In public accountability, financial statements of non-profit entities, both government and non-government, have a bigger role than private entities to report [9]. This means that in the field of public accounting and non-profit entities, the role of accountants is still very much needed in the context of reporting and accountability with human labor operations.

6 Conclusion

The concept of this paper describes the changing needs of the role of accountants based on the changing trends of the workforce from time to time from various industries due to the hegemony of digital technology. The roles are in financial accounting, management accounting, auditing, accounting information systems, public accounting, and non-profit entities. As stated by Gramsci in his concept of hegemony, the doctrine of technology has succeeded in changing the thought process and human movement, so that it can reduce the need for human labor in almost all fields.

Repetitive, mechanistic, predictable and not easy jobs have been and will continue to be replaced by the role of machines, computers and robots. Machines and computers have replaced some of the jobs of accountants that are closely related to these characteristics. The development of principles-based accounting standards (IFRS), still requires room for creativity rather than human judgment. Likewise in the context of auditing. Even machines, computers, or robots that have been programmed with artificial intelligence or better known as Artificial Intelligence (AI) will not be able to perform as well as a professional accountant. Due to increasingly fierce business competition (aspects of socio-economic demographics), management accountants must be more innovative/creative and make strategic decisions based on wisdom. Technology will never be able to replace the role of accountants. The work of accountants shifted to matters closely related to judgment and discretion, and the accounting profession had to broaden its expertise. In global competition and growth, the need for the role of accountants has changed (WEF 2018; Manyika et al. 2017), so that digital technology hegemony does not reduce the role of accountants but changes its role.

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