

The Challenge of Digital Accounting in Facing the Industrial Revolution 4.0

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Abstract. The purposes of this research are to describe the challenges companies must have to face in the industrial revolution 4.0 of a modern accounting information system. The method used for this research was qualitative descriptive, which was provided an explanation using analysis and interview. The results of this study were found that the industrial revolution 4.0 greatly influenced all aspects of the business elements including accounting information systems, how an information system can be understood and applied by every company. The research concluded that the use of accounting information systems in the face of industrial revolution 4.0 is needed especially to facilitate decision making for companies. An appropriate accounting information system can support the realization of an integrated, modern and competitive international system.

1. Introduction

In the era of industrial revolution 4.0, the importance of implementing a control system and managing an organization is needed. In making decisions, in the field of Accounting is useful for communication and control of information relating to management decisions in decision making. [1]. Data can be defined as a real entity that describes an event. Something that happens at a certain moment is called an event. The data processed into a form that is more useful and has meaning for those who receive it is called information. [2].

If a small firm wants to succeed, to prevent failure and poor performance, they must pay attention to whether information management has been appropriate, especially in terms of control and monitoring [3]. Most of the data is the biggest feature in the globalization era which requires companies to collect all the relevant data accurately and on time, while also stressing continuity, completeness, and adequacy of the information. [4]. If the accounting management wants to use big data to guide the production and management company effectively, the accuracy and security of data can be the key. Information that companies collect includes confidential information on organizations and individuals. For example, chat and map applications on our cell phones are required to obtain various authorizations before they access user information. [4]. Entrepreneurs who use digital technology not only rely on the innovation ecosystem of digital entrepreneurs but, the complex dynamics of digital platforms and infrastructure. They combine technology-based knowledge systems with consumer knowledge [5]. If the accounting management wants to use big data to guide the production and management company effectively, the accuracy and security of data can be the key. Information that companies collect includes confidential information on organizations and individuals

[4]. Therefore, have basic computer and technology skills are needed in the workplace for new employees entering the workforce. Basic technological knowledge makes them more creative and can also help them adapt to the new work environment quickly [5]. Belief in information everyone can embed it. Digital facilities and products must not only be easy to learn and efficient to use, but also provide a lot of knowledge for users. This user knowledge can help at the level of usability, aesthetics, and support [6].

The purpose of this research is to find out the readiness of the current accounting information system to deal with the industrial revolution 4.0 because if there is information lagging, it causes a slow process of economic growth in the field of technology. After all, even today a renewable and modern system can compete internationally, and certainly must know in advance what will be the challenges faced in Accounting Information Systems. The method used in this research was qualitative descriptive and tend to use the analysis on the ground directly. The main core of this qualitative method was the cornerstone in the theory used as a guide to study following the facts contained in the field.

2. Method

The method used in this research was a qualitative method that was descriptive and tends to use existing analysis in the direct field, which was done by interview. Interviews were conducted with 5 flower shop owners. The number of questions asked was 17 questions.

3. Results and Discussion

The results of this research are some new evidence that small shops such as flower shops that we researched still did not understand what Accounting Information Systems mean, they still used the manual system in the sales process, even though in the face of the industrial revolution 4.0, small businesses should arrange strategies to compete globally. We made a small shop as a sample in this study because it hoped that this small shop run its financial management by using an accounting information system so that it was more accurate in terms of managing financial data

The use of accounting information systems could make it easier for companies to sell, store data, and less paper, which reduced, but we had not found it in that store. In the era of big data, management accounting companies face new challenges and opportunities. The effective use of big data with management accounting can provide companies with a more accurate basis for business and decision making, creating huge opportunities for their development. It puts forward higher requirements as well as a great challenge for a management accounting company. Based on the era of globalization as a background, outlining the opportunities and new challenges that management accounting faces, and proposing appropriate countermeasures to effectively combine accounting with big data and to promote the development of management accounting so that companies can offset the development of the globalization era and create economic value the bigger one. Evidence of advances in information technology is an improvement over internal control and data processing for financial reporting. The development of computer-based accounting information systems will provide new opportunities for the accounting profession to achieve digitalization in accounting information systems. [7].

The development of computer-based accounting information systems will produce an integrated systematic data that is accurate and can produce the data we need quickly without requiring a long time. A large number of financial transactions with digital payment systems require companies to do IT Spending intangible assets in the form of a Big Data and Cloud Computing security system. his technology provides benefits for companies in terms of providing information and data analysis to speed up the decision making process and secure storage systems and affordable costs. Through the medium of information technology, will facilitate the management to make decentralized decision-making [8].

What is meant by digital is not just about size, but it exceeds where the knowledge and practice are contained in the fabric of the global economy. [9]. knowledge of digital technology is needed in the economic field for the achievement of a goal [9]. Thus, the experience experienced by people of the globalization era in multimedia operations has made them become more visually bound and better in spatial awareness. Analysis of the effect of information technology on organizations, propose that deep understanding and evenly on the role of information technology will also allow the identification and systematic evaluation of the risks and costs. The benefits of information technology for a company or business are, it can bring us closer to consumers, can help us to reduce costs, and can help us be more flexible. Strategic expertise used to strengthen modern IT systems is an important requirement if an organization still wants to be superior to its competitors.

IT has many functions in an organization including automated processes and system management; but for managers, empowering technology is the key to the role. To simplify business processes, managers must use and choose IT systems to communicate [10]. It is known that Indonesia entered into the order-7 with a percentage of 40% in terms of optimism going digital technology. It is a challenge for Indonesia to be more optimistic in terms of digital technology, the readiness of supporting factors for the running of a digital and environmental based accounting information system greatly influences the success of a digital system (See Figure 1).



Figure 1. Diagram Digital Optimism. This figure was adopted from, <https://www.goodnewsfromindonesia.id/2018/02/06/inilah-perkembangan-digital-indonesia-tahun-2018>, on 12 October, 2019

Indonesia was included in the category of most internet users in Asia ranked 4th with a percentage of 30.5%. The data concluded that the digital accounting information system could be applied to see graphs of internet usage in Indonesian society (See Figure 2).



Figure 2. Graphic of Internet users, This figure was adopted from, <https://katadata.co.id/grafik/2016/01/13/indonesia-peringkat-4-pengguna-internet-asia>, on 12 October 2019

Another challenge that must be faced is, human resources must be given extensive knowledge about the accounting information system and how to operate it to be effective. After the human resources are given knowledge managers can provide training to employees on digital information systems. Everyone in this era must know what is included in the digital category because everyone must use it daily. Before improving an accounting information system, internal control must be improved first, because a new system that is implemented will not run if there is no integrated system, both internal and external. From the results of the analysis, found that the lack of knowledge of digital accounting information systems is a type of challenge that must be overcome, but all can be overcome by conducting a seminar on digital accounting information systems, it must all be done quickly because seeing the rapid technological development can shift a company that is lagging in processing a digital system. Of course, that all is not easy, the company's must-have innovation to compete with other companies. Companies must also be quick in decision making, seeing that is facing the 4.0 industry revolution, speed is needed in capturing existing information, but all existing information certainly needs to be filtered first so that errors do not occur in the latest information knowledge.

Therefore, an understanding of accounting information systems in the face of the industrial revolution 4.0 is needed, so that there is no lagging in technology because everyone will compete, if a company experiences ignorance of technology, it can be concluded that the company will experience a knowledge loss and it can result in consumers moving to a company that is easier to access, of course, this digital accounting information system is needed to facilitate the public in accessing the information he needs. A digital accounting information system will create the quality of a company if it can be applied correctly and wisely.

4. Conclusion

Accounting information systems in the face of the industrial revolution 4.0 are greatly influenced by computerized and technological factors, digital accounting information systems will produce a modern system, the resulting data will be accurately and safely stored. The public will more easily access data to meet all needs quickly. Advances in information technology will make existing systems increasingly digital, the costs incurred will be more efficient and easier to access data. However, in the face of the industrial revolution, some challenges must be faced such as the difficulty of access to use different networks for each person, it will hamper the course of digital information technology. In facing the 4.0 industrial revolution, the community must be fully prepared with the tools needed to help facilitate the running of a digital and modern accounting information system.

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