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Digitalization in Accounting

Muhasebede Dijitalleşme

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The study that used to start with summaries such as "In a globalized world...", "In a globally interconnected economy...", "With globalization...", has now shifted its focus to summaries emphasizing digitization, such as "In a digitized world...", "With the rise of digitization"... This is because, for many years now, the globalized world has been immersed in the process of digitization. Both the business world and the academic world are engaged in topics related to digital realms, and digitization has become integrated into our daily lives. Digitization not only leads to fundamental changes in business processes and the redesigning of value chains but also can bring about differences in even smaller applications used within a single department. The concept of digitization is broad and encompasses many sub-concepts or applications, especially from a managerial perspective. These sub-concepts are addressed in the first part of the study. The second part of the study examines the relationship between digitization and one of the functions of businesses, namely the accounting function. It investigates what changes will occur in the accounting information system with digitization, and how the sub-concepts of digitization will affect or contribute to which stage of the accounting information system.

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Önceden "Küreselleşen dünyada...", "Küresel olarak birbirine bağlı bir ekonomide...", "Küreselleşmeyle birlikte..." gibi özetlerle başlayan çalışmalar, artık "Dijitalleşen dünyada...", "Dijitalleşmenin yükselişiyle birlikte..." gibi dijitalleşmeyi vurgulayan özetlere odaklanmış durumdadır. Bunun nedeni, küreselleşen dünyanın uzun yıllardır dijitalleşme sürecine girmiş olmasıdır. Hem iş dünyası hem de akademik dünya dijital alanlarla ilgili konularla ilgilenmektedir ve dijitalleşme günlük hayatımıza entegre olmuş durumdadır. Dijitalleşme sadece iş süreçlerinde köklü değişikliklere ve değer zincirlerinin yeniden tasarlanmasına yol açmakla kalmıyor, aynı zamanda tek bir departman içinde kullanılan daha küçük uygulamalarda bile farklılıklar yaratabilmektedir. Dijitalleşme kavramı geniş bir kavramdır ve özellikle yönetimsel açıdan birçok alt kavramı veya uygulamayı kapsamaktadır. Çalışmanın ilk bölümünde bu alt kavramlar ele alınmıştır. Çalışmanın ikinci bölümünde dijitalleşme ile işletmelerin fonksiyonlarından biri olan muhasebe fonksiyonu arasındaki ilişki incelenmektedir. Dijitalleşme ile birlikte muhasebe bilgi sisteminde ne gibi değişiklikler olacağı, dijitalleşmenin alt kavramlarının muhasebe bilgi sisteminin hangi aşamasını nasıl etkileyeceği veya katkı sağlayacağı araştırılmaktadır.

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INTRODUCTION

Businesses have consistently been faced with the need to constantly innovate. Over the years, various approaches have emerged, such as new production techniques, new management approaches, and innovative accounting practices, which have brought changes to the functions of businesses. Some businesses have adapted these approaches as much as possible and as successfully as they could. However, some have been resistant to these innovations and have continued with old production techniques, and consequently, with old management and accounting practices. But in today's era, where smart applications are at the forefront, businesses no longer have the luxury of ignoring or resisting innovation. Adapting to innovations has become imperative for businesses to survive in the market and remain competitive.

The current innovation is termed digitization, and it differs from previous innovations with its unique changes. This is not just a change in a single business, a single method of doing things, a single country, a single cost method, or a single management technique; it can be expressed as a fundamental change in everything. Digitization, with its various subdomains, is changing entire societies and the world itself.

1.DIGITIZATION

Digital technology is a technology that changes and transforms previous technological innovations (Karaçuha and Pado, 2018, p. 119). Digitization involves the renewal of communication technologies and information transfer technologies, compatibility with coding software, and e-business programs, and is referred to as a "revolution in information technology" (Barışık and Yirmibeşcik, 2006, p. 40). Within the framework of globalization, the process of digitization has brought people face to face with a world where everything is expressed in digital codes (Mercan and Einstein, 2010, p. 103). Digitization converts information into a digital form represented by 0s and 1s; it represents an object, sound, image, or document as a series of numbers (Banger, 2018, p. 24).

The breathtaking developments in technology over recent decades have continually reduced distances between people and expanded communication resources. Digitization has not only brought about individual changes but also profound changes in the corporate context; it has replaced adherence to old business models with a commitment to evolving innovations over time (Miçooğulları, 2018, p. 6).

1.1 DIGITIZATION OF BUSINESSES

In Turkey, the rapid adoption of e-commerce and e-government initiatives in recent years stands at the forefront of the innovations brought about by digitization. In Turkey, while a significant portion of the infrastructure completion process of transformation efforts has been completed and some are still in progress, it is not possible to quantify the effects of the new economy and e-commerce with numerical expressions (Barışık and Yirmibeşcik, 2006, p.40). Private companies and public institutions in the e-commerce sector are working in parallel with the developing digital economy. Every technological development and innovation undergoes a transformation with digitization over time in its own unique domain (Karaçuha and Pado, 2018, p.119). İnvolves not only the digitization of data or data sources but also the digitization of business processes. In this context, the digitization of all the accumulated knowledge of the business can be considered. Digitization of a business can involve the digitization of each aspect of its operations, such as the digitization of corporate automation (Seker, 2014, p.7), and at the same time, digitization can also involve the digitization of all stakeholders in the supply chain.

1.2. AREAS OF DIGITIZATION

Digitization demonstrates the revolution in information technology by showcasing technological advancements, but its boundaries are not easily delineated. Applications that can be encompassed within digitization include Industry 4.0, big data, cloud computing, robots, blockchain, Internet of Things (IoT), smart factories, 3D printers, and e-applications.

2.INDUSTRY 4.0

Industries globally are undergoing transformations referred to as revolutions. It is known that during transitions between revolutions, existing and new technologies coexist. In the current phase, termed Industry 4.0, smart factories, robots, cobots (collaborative robots) represent concrete changes within the scope of digitization (Fırat and Fırat, 2017, p.212). Industry 4.0, first seen at the Hanover Fair in 2011 and described as a revolution, encompasses the automation of all functions of the corporate value chain and therefore, the integration of all functions and systems into the digital transformation and financial technologies (Fırat and Fırat, 2017, p.213). Industry 4.0 entails four distinguishing factors compared to previous revolutions: speed, breadth, depth, and system impact (Özsoylu, 2017, p.46). The concept of Industry 4.0 has brought about changes such as 3D printers, IoT, smart factories, artificial intelligence, cyber and physical systems, cybersecurity, big data, autonomous robots, cloud computing, which have encompassed all aspects of life within digitization (Bulut and Akçacı, 2017, p.54).

2.1.BIG DATA

Big data refers to data piles taken from various sources, stored in complex and unstructured forms (Banger, 2018, p.40). Globally, the volume of information generated and stored daily cannot be measured. Big data focuses on this information. The formation of the big data platform is characterized by 3Vs (volume, velocity, and variety), and now, with the addition of two components, it is represented as 5Vs. Data quality and data value are the two factors added to the formation of big data (Yılmaz, Bülbül, and Atik, 2017, p.89). Systems are being developed to sift, reduce, and reach target data over cloud technology for big data (Fırat, 2015). The significant features of big data involve calculations at the petabyte and exabyte levels, making critical the use of programming languages and data in information technology infrastructure. In parallel, cloud computing platforms are provided for big data services (Wu, Zhu, Wu, and Ding, 2013, p.103).

CLOUD COMPUTING

Cloud computing is defined as information and communication services that are easy to use and manage, tailored to needs, available anytime without time constraints, and based on shared resources accessible over the internet (Koyuncu, 2011). Cloud computing, which encompasses various platforms, services, and infrastructure (Aytekin, Erdoğan, and Kavalcı, 2016, p.49), involves businesses obtaining information system services related to their operations from third parties via the internet. Additionally, it includes application, data storage, backup, data processing, application development, communication, and other areas (Keloğlu, 2012, p.14). With the constantly evolving and developing technology, cloud computing has become a prominent trend in the field of information and communication technologies. Companies providing services on a large scale globally have begun to offer solutions in line with this trend, and cloud computing has evolved from being merely an innovation to a transformative technology. It is expected that in the new era, computers will largely rely on cloud computing, with components such as hard disks, memory, processors, graphics cards, etc., being replaced by cloud computing, and most operations will be carried out through cloud computing (Özsoylu, 2017, p.49).

2.2. ROBOTS

In many sectors where digitization is taking place, instead of human labor, robot technology is now being used. The evolving robot technology, especially robot arms, substitutes for many needs in production, prevents unnecessary energy loss, and saves time (Özsoylu, 2017, p.53). Fırat and Fırat (2017) have noted in their study that significant changes are occurring in both the speed of operations and adaptation to this technology, not only in Turkey but globally. The widespread use of industrial robots and their adaptation to flexible working environments, along with the simplification of robot calibration and usage, as well as the diversification, reduction in size, and decrease in prices of robots to meet simpler industrial needs, will pave the way for smart manufacturing (Özsoylu, 2017, p.54). Robots, which are the fundamental elements of smart factories, are developing in a wide range of fields from the industrial sector to healthcare, home and office services, and personal use, alongside the Industry 4.0 revolution (Fırat and Fırat, 2017, p.217).

2.3. BLOCKCHAIN

Blockchain technology is a distributed ledger management system that does not require a centralized authority. Although it is well-known for virtual currency transfers, it is also used for tracking ownership of numerical or physical assets and monitoring transactions involving these assets (Kırbaş, 2018, pp.75-76). Blockchain technology has various features, including decentralization, anonymity, traceability, and sustainability (Avunduk and Aşan, 2018, p.381). Furthermore, it is stated that the system, created by interconnected chain codes and digital signatures of powerful computers, will be open to everyone's use and monitoring while being protected against cyber-attacks (Altunbaşak, 2018, p.361).

2.4. INTERNET OF THINGS

(IoT) The Internet of Things (IoT) is a communication paradigm that allows us to monitor and analyze physical events in our surroundings through devices, software, and access services. These physical events can include production processes, energy networks, patient monitoring systems, recycling processes, transportation, smart buildings, shopping, etc. Additionally, the devices and sensors in this network are organisms capable of human-to-machine and machine-to-machine (M2M) communication (Görkem and Bozuklu, 2016, p.47). IoT has gained more attention with Industry 4.0, embracing the idea of machines interacting with each other and all everyday objects staying in communication. Any object or system using IoT technology is rebranded as "smart." For example, a smart refrigerator will automatically provide information via the IoT system about which food items are running low or when they will expire. Similarly, smart autonomous taxi services can allow people to call taxis over the internet, be taken to their destination, and then make payments online (Koşunalp and Arucu, 2018, p.4).

Despite the progress in IoT, according to the study by Bulut and Akçacı (2017), the level of technology adoption in Turkey, while relatively high, is not considered sufficient, especially in the context of developing IoT systems in the digitizing world. It has been observed that the level of technology usage in households is quite low.

2.5.SMART FACTORIES

It's clear that traditional methods are no longer sufficient for production, and gaining competitive advantage through these means is no longer feasible. With Industry 4.0 and the emergence of fully digital processes, the structure of the manufacturing industry has changed, and the focus is now on producing "smart" products using automation technologies such as robots (EKOIQ, 2014, p.4). Smart factories, which represent an important feature of Industry 4.0, involve vertical integration of networked production systems for smart production. For the implementation of smart factories, they must integrate smart objects with big data analysis (Yıldız, 2018, p.552). Smart production in smart factories involves

enabling objects to communicate with each other via the internet (Bulut and Akçacı, 2017, p.56). In smart factories, the number of human workers is reduced, production quality is improved, and production time is shortened. Errors in production are minimized, and the production flow can be sustained autonomously through complete automation (Hofmann and Rusch, 2017, p.25).

2.6.3D PRINTERS

3D Printers are effective tools for materializing digital designs of smart products in a manner different from their normal shapes. Unlike other digital developments, the use of 3D printers has spread to broader areas, especially in education and medicine (Yıldırım, Yıldırım, and Çelik, 2018, p.163). 3D printers enable the creation of three-dimensional outputs in stacked layers, facilitating time and cost savings, easing backups, providing geometric freedom, and being environmentally friendly, thus benefiting people. Additionally, they allow for cost and time savings, providing the chance to produce more products in a shorter time compared to traditional production processes (Demir et al., 2016, p.481).

2.7.E-APPLICATIONS

With the process of digitization, not only daily life but also business operations have undergone a transformation. Therefore, terms such as digital economy or new economy have emerged, referring to this system that directly affects not only devices but also people and societies (Miçooğulları, 2018, p.6). The digital economy encompasses all the elements listed under the digitalization areas heading (Tektüfekçi, 2018, p.102). According to Yılmaz (2011), digitalization, especially with Industry 4.0, has facilitated commercial transactions. E-commerce, actively used in our daily lives, has become indispensable for people. Additionally, Kıyan (2005) has discussed the concept of B2B e-commerce, which refers to business-to-business transactions formed in the information economy and e-business, in his study. It has been emphasized that for less developed countries to adapt to the global economy and make strategic changes in their e-commerce, effective adaptation to technology is necessary and can be achieved through supportive government policies. As Bulut and Akçacı (2017) have noted in their study, businesses in our country do not sufficiently apply the method of distributing products to markets over the internet.

Alongside the innovations brought about by digitization, public institutions have transitioned to e-applications. These applications facilitate the bilateral transmission of some documents between public institutions and individuals, as well as between public institutions and businesses.

The processing of data to generate information is of great importance for businesses. Information can be defined as the meaningful interpretation of any data, subject, or entity. During the formation of information, data undergoes stages known as processing or processing. The cost of this data processing process, as well as its relevance to the process, has increased interest in (Sürmeli, 1996, pp. 12-13), leading to increased efforts to develop and adapt this process to technology. The collection, storage, and processing of this information within a system are referred to as an information system (Güney, 2012, p. 14). An information system is defined as a group of interrelated elements working together to collect, store, and disseminate information for planning, control, coordination, analysis, and decision-making purposes (Ersoy, 2012, p. 19). The information system is of great importance for the market and businesses. The fundamental goal of an information system is to provide the necessary information at every level fully and in a timely manner (Veeken and Wouters, 2002, p. 347). According to Ndubizu's study (as cited in Karasioğlu, 2001), the reliability and neutrality of the information in this system are valuable as long as it is presented in a timely manner.

Generally, a classical information system consists of three stages, as seen in the figure above: Input, which refers to the data required for information generation. Process, which refers to the stages where inputs are processed. Output, which is the intended information of the system. The five elements that should be present in an information system are as follows (Romney and Steinbart, 2015, p. 36):

- People who manage the system and perform its functions,
- Processes that collect, process, and store data using human or automated means,
- Data related to business processes,

- Software that processes data,
- Information technology infrastructure.

With the advent of digitization, significant changes have occurred in these elements - except for humans, of course. Processes for processing and storing data, data-related to processes, software, and infrastructure have evolved with digitization, resulting in changes to the information system. Consequently, the role and knowledge of individuals managing the system and performing its functions have also changed.

The accounting information system is the system where accounting information is generated. It covers all functions in the accounting organization and can be likened to the nervous system of a business organization (Gökdeniz, 2005, p. 87). Like in other systems, input, process, and output stages are followed in this system as well.

The inputs of the accounting information system, or the data, are documents obtained from both internal and external users of the business, such as accounting documents, invoices, checks, promissory notes, receipts, vouchers, delivery notes, cash register receipts, and other financial transactions (Dinç and Karakaya, 2014, p. 24). These documents, uploaded to the system in their raw form, are processed through the accounting information system process to be transformed into reports in a format useful to users. At this point, it should be noted that digitization has an impact on all systems, including the accounting information system, affecting the input documents, output reports, and the process itself.

Moreover, according to Tekbaş, Kurnaz, and Azaltun (2018), innovations brought by Industry 4.0 are more pronounced in the field of accounting. Sener and Elevli (2017) stated that Industry 4.0 consists of the integration of sensors, data, information, and processes, eliminating unskilled labor. Sensors are essential for machines to collect data, and the data collected from sensors are processed into general data. Despite the ease in data collection, the vast amount of data from various sources poses a challenge. it is evident that the system must start with an element that serves as a sensor in conjunction with Industry 4.0. The sensor not only collects raw data but also prepares them for processing, a capability that is becoming increasingly embedded with Industry 4.0. The sensor here can be considered not only as one of the data collection methods arising from digitization but also as a component used in robotics technology. For example, according to Tutar (2019), through technologies like 3D visualization and augmented reality (sensors collecting data), the system can visualize the product's bill of materials and technical drawing. This enables the estimation of the production time and cost, making this data part of the accounting information system. Additionally, agreements, quotations, orders, invoice information, and inventory records with suppliers can be automatically recorded and transferred to the accounting information system by robots. The quality control of orders can also be automated by individually controlling products coming to the business through smart sensors (Tutar, 2019, p. 333).

The increase in accounting data necessitates the addition of data fields created by automatic sensors to the accounting records. The use of technologies like radio frequency identification (RFID) and sensors enables the automatic capture of data, allowing the addition of other accounting process definitions to the system. For instance, instead of using various methods to determine inventory costs, using data obtained from RFID or barcode systems, which are one of the big data sources, allows real-time viewing of inventory costs from the system (Aslan and Özerhan, 2017, p. 869).

When viewed from the perspective of robots, the impact of robotic operations on the accounting information system lies in the displacement of humans in the system and the prominence of robotic operations in both the data collection and processing stages. Ultimately, while robotic operations may increase general production costs, their impact on the accounting information system is closely related to the elimination of traditional inventory control methods.

Smart factories and automation technologies give rise to smart accounting systems. Ejder Erturan and Ergin (2018) addressed "smart business" and "smart accounting" systems. In smart factories, all systems, departments, computers, and other devices can communicate with each other, allowing automatic recording of inventory upon its entry into the warehouse. The placement of stocks on shelves by robots is automatically recorded in stock cards. Similarly, materials sent from smart warehouses to

production are automatically entered into stock cards. In smart factories, products can be personalized for customers without keeping stock. Recording customer-specific orders and payments are made simultaneously and automatically. Furthermore, machines can procure materials based on their production plans, and the records of these processes will be automatically generated.

The reflection of digitization on the accounting information system is most prominently demonstrated through e-applications. In Turkey, the authorized institution for regulations in the electronic environment during the electronic transformation process is the Revenue Administration Presidency (GİB) of the Ministry of Finance. Transition to electronic document (e-Belge) and electronic ledger (e-Defter) applications has been facilitated by GİB. Electronic invoice (e-fatura), electronic archive (e-arşiv), electronic dispatch note (e-irsaliye), electronic freelance service receipt (e-smm), electronic producer receipt (e-mm), e-ledger, electronic ticket (e-bilet), and electronic travel list (e-yolculistesi) applications, among others, not only accelerate processes but also contribute to environmental conservation by saving paper (Tektüfekçi, 2016; Tektüfekçi, 2017). Additionally, for the expanding e-commerce companies, having a compliant documentation and reporting system is crucial because e-commerce necessitates changes in all business processes (Yılmaz, 2011).

Cloud accounting, as a reflection of cloud computing in accounting, enables businesses using cloud-based accounting systems to purchase calculation, storage, and connection resources from service providers as needed and have access to services that they can manage on their own environment. With cloud accounting, automatic data entry into the system and remote access are facilitated, changes in regulations can be monitored, and declarations can be automatically filled out (Buyruk Akbaba, 2018, p.21, 27). Cloud-based companies use server hardware located in the data centers of companies providing cloud services instead of bearing the cost of server hardware in their own data centers. Therefore, they leave the maintenance of server hardware and software in their own data centers to the service provider (Aytekinvd., 2016, p.49). According to a study conducted by Ciğer and Kınay in 2018, the reasons why independent audit firms prefer cloud computing applications include ensuring the security/archiving of data and sending large files. The factors of concern about data security and privacy, and lack of familiarity with cloud systems, are prominent reasons why firms do not prefer cloud computing applications.

Furthermore, another aspect of digitization is blockchain technology, which facilitates transactions without intermediaries and claims to be much more reliable than current intermediary and regulatory methods. Operating on the principle of a distributed database, each record in the system carries a timestamp. Therefore, if any block is tampered with externally and its content is altered, other blocks will not validate this change, ensuring the preservation of real data (Özdoğan and Karğın, 2018, p.163). Thanks to this preservation feature, blockchain technology can be used in many applications in public institutions (such as birth certificates, ID cards, marriage certificates, land records, passports, etc.). Moreover, it is now possible to encrypt official certificates and valuable documents with this technology. By encrypting official documents using blockchain technology and authorizing relevant individuals to access these documents, the entire system can be made more reliable, and individuals can access these documents (Kırbaş, 2018, p.81).

In addition to these, blockchain technology, which is also influential in the field of accounting, can be defined as a digital ledger that cannot be deleted or altered and offers significant advantages over traditional accounting record systems. Using a blockchain, data privacy can be maintained, and accounting records between two commercial parties can be easily compared. Thus, the balance reconciliation process that accounting units have to perform with the suppliers or customers of the business can be eliminated. (Özdoğan and Karğın, 2018, p.167). This transition from a double-entry record system to a triple-entry record system happens automatically following the transformation of the system, enabling businesses to have a shared system that directly allows access to all businesses instead of maintaining a record-keeping system based on separate commercial documents as pointed out by Uçma Uysal and Kurt, (2018). Furthermore, blockchain technology offers advantages in terms of accounting information, document, and reporting systems, stating that blockchain with digital ledgers would be less costly than historical recording, and reporting would be easier with simultaneous

recording instead of retrospective recording (Dursun, Sakız, and Sakız, 2018, p.13). Consequently, it can be said that with the Industry 4.0 process, every element becoming intelligent, the recording system should also become intelligent. Another point is that Industry 4.0 is expected to transform the accounting information system into an intelligent recording system (Kablan, 2019, p.1568).

Reports, the output of the accounting information system, are transforming into real-time reporting with the technologies brought by digitization. Real-time reporting offers many advantages over traditional periodic reporting. Traditional periodic reporting is the reporting that businesses do quarterly, semi-annually, or annually. However, reports produced after waiting for such periods may not provide the desired information to the users in rapidly changing conditions, and the information users may not find the desired information in the reports. Real-time reporting requires a digital infrastructure (Trigo, Belfo, and Estébanezc, 2014, p.118). Moreover, the traditional presentation of financial statements in the form of tables printed on paper or in electronic files as paper-like financial statements imposes a significant burden on information users. For financial statements to be analyzed, data must be rewritten or the format must be changed. Both processes impose certain risks and costs on information users (Doğan, 2013, p.125). In order to eliminate this situation, the "Extensible Business Reporting Language" known as "XBRL" has been introduced. With the innovation, users can access data without missing any information and without wasting time. The XBRL system enables the analysis of information in the accounting information system used in the business on a global scale. With the development of the XBRL system, users who want to benefit from financial statements have easier access to the information they are looking for, and the new system has facilitated the arrangement of financial statements, making it easier to audit the tables (Rezaee, Sharbatoghlie, Elam, and Mcmickle, 2002, p.160). Therefore, the impact of digitization on the outputs of the accounting information system can be explained with XBRL. In fact, through the International Accounting Standards Board (IASB)'s International Accounting Standards (IFRS) taxonomies, the visibility of XBRL among practitioners has significantly increased.

The digitization of the accounting information system also increases the risk of cyber attacks at every stage of the system (Güney, 2012, p.15). It is essential to ensure the reliability of the network system and database and to perform security checks frequently (Demir, 2005, p.149). Naturally, the need for system changes and frequent security checks will increase costs. However, if attacks cannot be prevented, additional costs will be incurred, data losses will occur, and there may also be trust and reputation loss.

The changes occurring in parallel with digitization in the accounting information system also affect accounting professionals. Using digital systems effectively and efficiently has become a necessity among accounting professionals. At the same time, effectively using digital systems in the accounting profession requires a different level of education.

CONCLUSION

The initial stage of the accounting process, which is accounting records, used to be kept manually in physical ledgers before computers. Accessing the desired information quickly was not possible. However, with advancements in computer technology, storing, retaining, and accessing this accounting information has become much easier (Aslan and Özerhan, 2017, p. 868). Beyond simply storing and accessing information easily, the goal and focus of the current era extend further.

The classical definition of accounting as "the process of recording, classifying, summarizing, reporting, analyzing, and interpreting transactions expressed in monetary terms" also encapsulates the accounting information system. The phrase "transactions expressed in monetary terms" now includes digital currencies utilizing blockchain technology, while "based on documents" has transformed into digital documents. With the recording and classification functions of accounting now being done simultaneously with the intelligent data collection tools in smart workplaces, neither of these processes

causes any significant loss of time. Moreover, summarization and reporting have transitioned into expandable reporting languages due to digitalization.

The process of storing all data and information in the system can also be accomplished using cloud technology. Therefore, the accounting information system becomes an "intelligent" system with digitalization. While the establishment and effective management of this system pose considerable costs, it is inevitable to incur these costs due to the unstoppable nature of digitalization.

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