

THE DIGITAL AUDIT AS A KEY ELEMENT OF UKRAINE'S WAY OUT FROM COVID-19

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Abstract. The article examines the impact of digitalization on audit development and determines the prospects for its development under such conditions. The author of this article determined conditions and suggested recommendations for the development of audit efficiency under automation. The elements that affect the mechanism of audit digitization and the possible directions for the development of audit functions in the computerized sphere are identified. The author of this article analyzed the classification of audit information technologies and the circumstances of audit software development. Factors that hinder audit automation are identified. A new level in the audit environment is its digitalization. This level is rapidly developing at Ukrainian enterprises, as almost all enterprises use an automated accounting method. Auditors use programs of various orders that must meet the requirements of the modern world. It is digitalization that will become an important component for audit firms seeking to increase their competitive advantage and take positions in the audit services market.

Keywords: audit, digitization, COVID-19, development, software.

INTRODUCTION

The quick spread of COVID-19 is forcing a lot of entrepreneurs to modify their priorities. Therefore, organizations that produce services offline are attempting to prepare their services for the latest actualities. In spite of the pessimistic effect of the pandemic on the global economy, it seriously speeds up the growth of digitization. The digital modification of corporations has generated a need for improving the duties of auditors. A large amount of information necessitates a search for efficient and productive ways to audit management. Immediate access to every bit of needed and all-important information will allow experts to recognize risks rapidly and generate relevant business solutions. According to the worldwide research titled "COVID-19: Business Impact and Counteraction" by the Association of Chartered Accountants (ACCA), the spread of COVID-19 had a substantial effect on audits (Covid-19 Global Survey: Inside business-impacts..., 2020). The author of this article believes auditors, through the critical time of COVID-19, should organize their occupations in compliance with the latest studies. This study implied conducting an opinion

poll on the impact of the spread of COVID-19 on the audit of organizations, which showed notable complications in working with clients. The greater part of interviewees (53%) said they experienced some tension when working with customers, and more than a third (36%) said they did not have the opportunity to meet deadlines for reporting. A fourth part of the interviewees said that the procedure of collecting audit evidence had become even more complicated, and 27% of the interviewees said that audit risk related to valuing assets, fulfilling obligations, and ensuring business continuity had increased significantly.

On the subject of the COVID-19 pandemic, many companies were forced to address the issue of arranging subsequent activities, as long as some of these companies had already had to present finance reports. Restricted conditions for the functioning of organizations have a negative influence not only on themselves but also on auditors.

Under the effect of forced quarantine restrictions, companies have experienced some troubles in the preparation of reports and, as a consequence, in managing audits since the beginning of quarantine. Since these restrictions affect not only interconnection but auditors when they select the necessary information to come up with the audit report, there is a direct necessity to contemplate alternative attitudes to auditing (Audit and Covid-19: The FRC recommends developing..., 2020).

Auditors have to appraise the influence of COVID-19 on the following elements:

- collection of sufficient and relevant audit evidence. Nevertheless, it is impossible to manage the audit mechanism in the standard way during a pandemic, so the methods of collecting evidence have to be modified or even completely changed;
- in the case of an audit of groups of organizations, it is needed to be concentrated on how the audit of a single department of this group is organized;
- the auditor activity should be under constant supervision to justify the assessment of the activities and the need for continuity or prerequisites for the liquidation of the audit;
- ability to maintain reliability and verify factual information received from the audience about the influence of COVID-19 on the occupation of the audited unit and its comparison with the published one;
- the auditor has to evaluate the need for some of the planned procedural rules and discuss with the audited offices the possibility of providing information as soon as possible due to the rapid change in the situation in the country (Aditya et al., 2018; Kudirko, 2018).

Auditors are comfortable working with the audience and transmitting valid information on time. In such a way, an auditor can guarantee that an adequate level of information is disclosed by a company, even though it significantly differs during the pandemic from those that auditors see in annual reports under normal circumstances. Thus, auditors will have a real opportunity to report on existing risks to the business, industry, or company.

The development of new methods of auditing is dictated by the dramatic growth of information and the need to work with Big Data. The key detail for auditors is a digital audit.

Problem and conflict issues should be addressed to develop an all-inclusive method for audit digitalization in a time of economic transformations and limited business practices caused by the global pandemic of 2019-2020.

MATERIALS AND METHODS

The economic consequences of the pandemic have been studied by Ukrainian and foreign scientists, such as S. Kulytsky (2020), A. Stavytsky, A. Nezhiva M. and Minyailo V. (2020), Navin Donthu (2020) and Anders Gustafsson (2020), Oleksandr V. Bartik, and others.

S. Kulitsky explores what to expect in Ukrainian society, including the economic sphere (Kulytsky, 2020). The scholar determines the impact of the pandemic on the economic and social spheres of life. Navin Donthu (2020) and Oleksandr V. Bartik analyze the results of COVID-19 for various industries and the economy in general. They found that many businesses, predominantly small ones, were closed, and employment fell.

All authors note that companies use innovative strategies to meet customer demands during the COVID-19 crisis. A. Stavytsky says that the pandemic and economic crisis must form a new country in which there will be changes in the structure of the economy. M. Nezhiva and V. Minyailo (2020) suggest a way to solve these problems with the help of professional software products. The purpose of the article is to determine the role of digitalization in the financial sphere, in particular in the field of audit, study the results of technology implementation in foreign countries, and identify promising areas for Ukraine in the context of COVID-19.

The materials of the study were indicators of the spread of the COVID-19 pandemic in the world, public publications of scientists, official reports of international organizations, regulations, etc. Many methods were used during the study of this issue, including methods of analysis and synthesis. They are necessary for the study of the economic essence of the audit in the conditions of COVID-19. Methods of general analysis and a systematic approach that determines the methodological foundations of the enterprise management system are equally important. In order to analyze the impact of the COVID-19 pandemic on business, the author of this article considers general and specific methods that provide a broader understanding of the objective nature of economic phenomena and processes. Causality methods are also necessary to study auditing with the impact of digitalization. System analysis methods and scientific abstraction make it possible to formulate general conclusions.

RESULTS AND DISCUSSION

In 2019, the Ministry and the Committee for Digital Transformation of Ukraine were established to implement the digital policy (Ministry and Committee for Digital Transformation of Ukraine, 2022). The Ministry aims to accelerate the country's digitalization to run at least 50% of all public services online..

The newly created department is responsible for the formation and execution of state policy in the sphere of digitizing, national electronic information resources, etc.

The main goal of this Ministry is to ensure full coverage of Ukraine with high-quality, high-speed Internet. Going-forward plans imply teaching people digital skills. It is also planned to launch an online platform where everyone can get such skills for free.

Furthermore, the Ministry supports the IT sector, which supports the EP, in addition to 10%. Developers are currently working on the "Action" platform, through which public services will be provided online (Electronic application "ACTION", 2022).

The International Auditing and Assurance Standards Board has developed information for

2020-2022 using the operative “evolution” of technology. The main tasks for this period are as follows:

- improvement of internal auditing processes through the introduction of new technologies;
- proper allocation of resources;
- responsiveness to the growing needs of key required pages.

Ukraine has approved tax changes in the framework of the BEPS Action Plan (Law of Ukraine On Amendments..., 2020) and prepared a set of new recommendations of the Organization for Economic Cooperation and Development, previously called BEPS Action Plan 2.0, which consists of two parts.

The first part explains how the present rules of worldwide taxation can be changed to consider the digitalization of the global economy and the changes it will bring. The second part deals with other issues that remain open. In particular, it is necessary to dispossess conglomerate corporations of the opportunity to bring financial gain to jurisdictions with low levels of taxation.

Experts note that the digitizing process will actively contribute to the growth of the world economy in the coming years, and the digital economy will cover almost a quarter of the global GDP in 2025.

Under quarantine circumstances, given the existing limitations on movement and entry to the business, alternative strategies are used to obtain audit evidence. They use remote photo and video recording of the stocktaking or online communication with the client’s staff through secure communication channels.

Financial reporting and auditing were allowed to be expanded and made public, greatly simplifying the audit process and postponing some audit procedures related to direct access to primary documents and assets.

Auditors need to consider how to collect adequate audit evidence in the face of existing restrictions. Since most people now work remotely, workflow control is required. This can be done using various software (Merhout & Havelka, 2008). An example is CaseWare Cloud, which allows a company to control all workflows. CaseWare Cloud, in combination with CaseWare Working Papers, makes auditing better organized and arranged, as this software is automatic. In addition, all stages of audit procedures comply with International Standards on Auditing.

These programs help auditors monitor procedures. They allow auditors to view tasks online from any device. As a result, auditors are always aware of all workflows, regardless of their location.

It is possible to highlight the following benefits of CaseWare Cloud:

- control of work tasks using only mobile phones or computers;
- no need for employees to be in the office;
- ability to plan an audit;
- constant updating of data, which allows you to work with current information.

With reference to privacy, the program is provided with high-level physical security features, including compliance with SSAE 16 standards. It is PCI 1, which is ISO 27001 certified and compatible with all security systems.

As for audit software, Word and Excel are the most commonly used. In small firms, auditors replace specialized programs by performing simple calculations or printing standard forms of audit documents. They make requests to the electronic database, check individual calculations made in different areas of accounting, compile accounting registers with the help of an electronic client database, and analyze the entity's financial condition with the help of individual programs. In the companies of the "Big 4," any element of work can be done with the help of specialized programs adapted to the work of each company. Such programs include random number generators, databases that allow storing large data sets, and programs for the automatic construction of analytical graphs, charts, and more.

Ernst & Young succeeded in implementing numerous digital innovations in auditing that improved risk identification, reduced the burden on customers, and provided operational benefits and high-quality audits.

EY Canvas is the first online audit program to benefit from the ability of auditors to communicate with clients, regardless of their location. Audit firms can perform the audit process remotely and coordinate and manage their employees while providing high-quality audit services.

The program allows auditors to access the overall audit plan, review tasks daily, and share their interim audit results.

EY Canvas has many benefits that are as follows:

- availability of a central plan and audit by teams according to this plan and a single methodology;
- quick reaction, which allows you to immediately report the findings;
- rapid adaptation of the strategy to different geographical regions and response to the ever-changing environment;
- constant monitoring of the audit process and timely response to inquiries;
- optimized communication with customers through an integrated online network.

In addition, EY Canvas and Ernst & Young have developed a program called EY Canvas Client Portal, which allows customers to communicate directly with auditors so they can monitor the progress of the audit.

This program makes it possible to do the following:

- to reduce the number of e-mail inquiries and ensure better communication with clients, which saves time;
- to review the status of requests;
- to increase the security of customer data;
- to benefit from multilingual support (supports 10 languages).

The processes of automation and robotics are becoming more widespread in the world, and their advantages are as follows:

- security (technology without interference that can be configured for existing IT systems in the "as is" mode and has flexible configuration);
- action monitoring (recording and saving all actions in the systems);
- retention and development of employees (employees move on to intellectual tasks);
- speed (reduction of tasks, increased time productivity);
- significant cost reduction;
- 24/7 mode;
- reliability (systematic work without breaks, sick days, weekends, and holidays).

Ernst & Young actively uses “smart” technologies for specific audit procedures.

1. Inventory is used for the accurate measurement of bulk materials. It is developed as instrumental visual analytics with an accuracy of measurement of 95-97%, which can be performed using a smartphone camera.

2. Analysis of contracts through the use of artificial intelligence provides for reduced deadlines and increased accuracy of contract verification. A tool that includes the following additional features has been developed: obtaining primary documents for rent with text in the form of images; use of optical character and word recognition; identifying and receiving key data; data verification; marking parts of the text based on their compliance with accounting rules; sending requests for the involvement of specialists to analyze deviations. Based on the results of the audience, it is possible to consider other intellectual tasks performed, such as preparing recommendations for the client.

3. Automation of administrative processes involves the automatic conversion of scanned copies of documents into electronic, depersonalization of documents with the help of machine learning technologies, and real-time monitoring of the work status within the audit task (EY Canvas).

Digitalization is a new trend of today, which requires changes in personnel, new management styles, and other systems of work organization. Recent research shows that traditional companies are not ready for digitalization yet. People who are accustomed to working with traditional tools and methods of interaction with each other and customers predominantly face problems.

Relevant changes caused by the digitalization of financial and economic processes in enterprises have led to an emergency situation of creating a conceptually new, digital economy. The digital economy is an economy based on digital computer technology. The digital economy is also sometimes referred to as the Internet economy, the new economy, or the web economy. The digital economy means producing, selling, and delivering products over computer networks.

However, the digital economy and digitalization processes aim to use information technology in as many processes as possible.

Computer audit should be understood as a high level of audit automation characterized by the following:

- use of the latest information technologies as a key tool in the process of preparation and verification in the computer information system;
- an audit approach that assesses the reliability of the computerized information system of the environment as a basis for conclusions about the reliability of financial statements.

The use of automated software in the audit makes it possible to retrieve and process a large amount of information from the database of the client company quickly. It also speeds up audit procedures and makes it more convenient to document the results.

Computer audit methods can be used to perform various audit procedures, including the following:

- to test information processing in the client’s accounting system;
- to provide an analytical review of procedures to identify unidentified cases;
- to access data files and libraries;
- to test the compliance of software with management and accounting systems.

In order to approach international auditing standards and practices, it is required to introduce state-of-the-art technologies that automate the process of auditing financial statements and help with confidence and related tasks.

However, the use of automated software in auditing is complicated by certain factors. One of these factors is the companies' use of various software that does not imply performing fully automated audit procedures. Thus, the main requirement for audit programs is their flexibility, which means the ability to adapt to the features of accounting in a particular enterprise.

The main prospects for the development of audit automation programs are as follows:

- integration with the accounting system and accounting software;
- creation of the concept and the detailed instruction on adjustment by users of algorithms of formation of the reporting based on the imported data of accounting of the enterprise;
- introduction and regular updating of the audit methodology in the part of the auditor's paperwork, the database of potential (typical) violations and distortions;
- implementation of the ability to describe the customer's business processes;
- calculation of key indicators based on reporting data.

Audit information technology is a set of methods and procedures that provide the functions of collecting, accumulating, storing, processing, and transmitting data using technical means to achieve the purpose of the audit in the best conditions.

A digital audit provides the ability to perform audit procedures in accordance with the standards, taking into account the use of information visualization tools and analytical tools to obtain the required level of audit confidence on large data sets, as well as analytical procedures for non-financial audits.

The current state and dynamics of business processes of the XXI century are accompanied by a significant increase in the amount of information that the company receives, processes, and produces. This has led to the formation of large amounts of information, which has received its name in the digital economy, namely Big Data (large arrays of information). After all, Big Data as a phenomenon has created a separate market for companies that provide a wide range of services related to such information. These services include storage, protection, processing, and visualization of large amounts of information.

In each market, some companies are audited for their own needs (so-called initiative audit) or in accordance with the law of the country or supranational associations (independent external, mandatory audit). As a result of these information transformations in the digital economy, an audit firm is an important, almost equal user of big data enterprises, the results of which are of public interest. Performing audit procedures does not require obtaining and processing large data sets of just one entity but many audit clients who are in the audit firm's portfolio.

In addition to the direct audit of financial statements, companies additionally order or will be obliged to order controls, processes, and IT audit of software as a mandatory non-financial audit.

Now there is an evolution in the field of auditing services. Is it because we are moving from paper to Microsoft Office software? Due to the lack of a single mass tool, there is a potential reduction in audit efficiency. In order to support this level of efficiency, enterprises

use methods to increase staff and intensive methods, such as macros for MS Excel. Since these measures do not consider the annual increase in information, they are one-time or temporary. Expansion in the number of employees has its limits, and the use of MS Excel add-ins is limited by the toolset of the software itself.

CONCLUSIONS

In the conditions of a pandemic and in conditions of uncertainty, it is necessary to use information technologies for the auditor's work. Digitization will be the new level in auditing. It is rapidly developing and spreading among enterprises that use software for automated accounting. Those programs used by enterprises for conducting audits need improvement. This is necessary to meet the requirements of the modern world.

Therefore, digitalization is becoming relevant for all audit firms, trying to gain a competitive advantage and take place in the market of audit services. All the problems that arise today in the field of audit need to be solved immediately in order to form a comprehensive approach to the digitalization of audit in the conditions of economic transformations and limitations of business practices caused by the global pandemic and in conditions of uncertainty.

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