The digitalization of accounting: from the past to the future

Abstract: How the needs for digitalization of accounting system and its solution arose as well as what digital programs are currently utilized is illustrated in the providing article. Additionally, the data about the achieved positive changes in usage of the digital technologies in the accounting system are given.

Key words: accounting, digitalization, e-accounting, the digital accounting programs, paperless accounting, 1C accounting

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Introduction

In the last years the result of multiplying the digitalized markets leads technological changes to occur. The cause of these changes is thought as digitalizing of business. Digitalization of the entrepreneurship occurs with the initiative of two main factors. They are the preference of the consumers to online services and producers and sellers who are ready to conduct the ambitions of their customers. Additionally, the third biggest reason of digitalization of the operating business is combing the costs. Indeed, automation of many operations in the companies gives a chance to have less labour force and quickly doing the works. Due to digitalization, industries will modify structurally, digital services will arise, digital platforms will simplify, the local services will turn into the global ones and production will be improved. Not with standing, many places of jobs will probably lose because of the digitalization. Today the demand of the market industry from the business subjects is an entrepreneurial capability along with digital innovations. Therefore, a great number of the firms are trying to be digitalized.

The digitalization of accounting is claimed as predictable event in the economy. Actually, there are needs to modernizing of business strategies and activities through the digitalization. The followings can be said as a means of digitalization: the internet, e-commerce, electronic data exchange and other software programs. Moreover, digitalization may influence management strategies of the companies. Because running the digital technologies in the processes of the firms needs using digitalization in the management of the cooperatives.

Nowadays the companies have implement innovative digital technologies in the branches of the companies such as planning, marketing strategies, business models, production, distribution, human resource and others.

The value created by the digitalization varies from the traditional value and it effects the image and accounting system of the company. The digitalization requests the reformations and practical renewing of the structure of the company. Before forming new innovations of the strategy what change are needed and what they mean must be fathomed.
Main part. The accounting is referred as a runner stimulating any other fields of doing business. The meaning of the digitalization is transforming the information from analog to digital. It provides the rapid access to the Internet and global communications between people. Also it is connected to the digital instruments. The difference between totally-digitalized businesses and low-digitalized ones is that by internally and externally cloud computing, social and analytical means as well as mobile technologies are dramatically used [4]. The medium firms find the issue to solve the business problems related to the digital technologies, which makes their workers and customers have difficulty in using the digital technologies effectively. In general, it is seem that the digitalized companies have more efficient activities, instruments, knowledge division and communication than the not fully digitalized ones for all industries. The companies must have innovative strategies to have these strategic advantages and can renew their businesses due to the digitalization. There are the workers together with the managers who support the digitalization and innovations to perform successfully the digitalization.

The lack of information in the digitalization of the accounting system and difficulty of finding the data increase the degree of importance of the researches in the article. Another reason of focusing the accounting is that there is the probability of 98% of the accounting computerized.

These days the importantly economic missions of the government are considered as the liberalization of the economic-social relationships, upholding the business subjects enormously, amplifying the investment attractiveness for flourishing entrepreneurship. The accounting system plays an essential role in terms of procuring reliable, qualitative information on the investment environment of the our country to the investors, ensuring to match up the corporate management to the world principles such as transparency, accountability and responsibility. According to the project “The strategy of actions” by the President of the Republic of Uzbekistan regarding five dominant directions of developing the Republic of Uzbekistan in the period from 2017 to 2021 [2] and the decree-3946 about “The measures of further progression of the auditing activities of the Republic of Uzbekistan” by the President of the Republic of Uzbekistan on 19th September, 2018, the significance of reaching the quality of the auditing activity to the degree that it meets the international standards, supplying to be conducted an audit at real time through strengthening belief of the business entities in audit reports is rising [1].

Discussion. The digital accounting or e-accounting represents the accounting information in the digital format which can process and transmit the data electronically. The standard of the digital accounting has no definition but it means the events occurring in the accounting through computer and networking technologies. The accounting is sometimes called lagging science since the accounting is reactive, it influences the progresses in business and technologies [7]. Interestingly, the accounting is the first modern appearance of the Revolution of Information Technologies. The roots of the digital accounting spread to the second world war and the great depression time. The tax management of that time was deeply complex and came across the problems by controlling the data. Furthermore, the information about financial operations and the location of foods even on the hands of militaries began to lose its reliability. Only less wage and accuracy were given for doing these works. The tabulating machines was the solution of this issue and the phrase “the world does not need more than five computers” came from the tabulating machines. The tabulating machines rapidly developed, which were being rich in new and wide applications the former creators did not dream of. So the information communication technologies concerning the accounting has been making progress and changing as a result of the technologic development until now. The prime source of these progressions is the only to resolving the questions in the accounting system.

Furthermore, Yan Breman, a Dutch scientist, claimed in his book “The work in the information economy of India: from the bottom to the top” that the markets radically change in the process of the digitalization, many firms try to digitalize their business yet some sectors of the national economies have not still been digitalized totally [9].

These days different software programs are used in the accounting system. The examples given below can be shown as these programs:

1. SlickPie—an online accounting software oriented for small business. The program is totally online to be access to the Internet from anywhere. It proposes the accounts compose the program which will give a chance to the user to utilize one of the pre-installed topics or design the site of their accounts. In addition, the software offers to run online accounts and documents. Through Slick Pie the users can make financial reports monitor the trends in business. There is also tax management in the program. Another merit is that the program is free and it can be loaded from the Internet. Slick Pie can automate sending of the reports, accounts and payments.

2. QuickBooks Online—has been used as an accounting program orientated to the small business subjects. It has two varieties. They are online and licensed varieties. The software enables the access to the servers of consumers and workers easily. The price of it is not costly. The main benefit of this program is to supply the management of capital, cash and assets.

3. Sage 50—is formally called as Sage Peachtree, used for the medium entrepreneurship. It suggests
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payable, reliable accounts, bank contracts and cash management. It can prepare the main book of the common activity.

4. Kashoo—a software program recommended through Apple App Store, iPhone and web use. Its form is like cloud and it can be only downloaded via Apple products. The owners of the software are able to make reports, calculate the expenditure, manage finance and send e-accounts by mobile techniques. The information of profit and expenses can be obtained and run currency expenditure. The payments are paid and accepted through Kashoo too. The program is free for the Apple customers. Besides, the online courses are organized to train the program.

5. Xero—is also a program for small business owners and accountants. This kind of the online programs as Kashoo is used via mobile technologies. The users can make accounts and transfer online calculations, which is done by pre-placed or typically created templates. Through the program different fees, for example tax pays can be paid. Xero is able to alter the data from QuickBooks. The user have a opportunity to open a lot of bank or credit accounts.

Writing the data to the sole main book facilities the users and accountants to work together. What is more, keeping account by currency is in Xero [6].

There are also such programs and patent of the digital development which impact the future activity performed by the accountants and auditors.: PwC Digital Accelerating program, Deloitte USA Block chain Lab, EY Block chain Analyses, PwC and ABBYY, Automatic selecting the language programs are included in these program and patents [7].

The leader of distributing the accounting software programs is regarded as 1C. 1C: The accounting system taking into account its specific features and parameters of the accounting system of the company allows to tune, to compose the incentive documents, to create the reports, install directories. There are 1Uzmine, Uzasbo and other programs used with 1C in Uzbekistan. 1C is considered the easiest and the most comfortable software for the business subjects in Uzbekistan though. The number of the types of 1C was constituted :1C 7.1,1C 8, Vencon 1C 8 and others.

As a part of this research, what ability and skills will be needed to manage the digital technologies in the future should be studied. The technological possibility is like two sided glaive. Exploring rapidly transforming of the skills by the information together with having the strong knowledge technologies is remarkably necessary. Even the people who has professional knowledge but did not work in this area for a long time suffer “losing the skills” and have to act to apply for a job repeatedly. The prime thing the auditors must learn—at least to be flexible in the

![Technological skills](chart.png)

1-diagram: The key skills assisting to progress the financial professions in the next five years [8].

Above the percentage expression of the skills and knowledge in ICT which the accountants and auditors should know how to use the digital technologies in their activities is illustrated. It can be seen from the diagram, the accountants and auditors must study to work with the financial software programs and have strong knowledge by the standards of the accounting. Actually, to be a professional accountant demand on the terms of the accounting along with ability to use successfully the information technologies.
working circumstance continuing to develop in the future. Although it is not compulsive, it is important to distribute the tasks. The following skills should be assimilated by the accountants and auditors to reach the peak of their careers:
- technologic and ethnic skills;
- creativeness;
- digital skills;
- intellect;
- visualization;
- experience;
- emotional intellect.

2-diagram: The barriers of the financial digitalization [8]

There are a number of obstacles to implement the digital technologies in the accounting and auditing activities. The reason of these obstacles are mentioned above. According to the diagram, the large barrier is not to have a craze to the digital technologies, which is 25%.

**Conclusion and suggestions.**

The digital transmission does not emanate in only production but also sale, human resource and finance in the company. They cover the operations of the accounting and its systems significantly rapidly. The following results are depicted how degree the digitalization has been implemented in German companies and what digital summaries it will cause:
- Paperless accounting: we digitalize all the documents or documentation is digitalized, for instance e-invoice;
- (External) interfaces to the systems: we receive accounts files directly through the interface to the accounting system from our partners (supplier, bank);
- Quality management of information: we claim the quality and accuracy of the information every year;
- Automation of the processes: we utilize the most update digital technologies for the high automation of each daily processes;
- Uniformity of the systems: The basic systems used in the accounting is the same;
- United consolidated systems: if the company has a cooperative share of another company, it will have access to the other’s databases and in this way the consolidated systems are used;
- Reporting at real time: innovative technologies such as high speed database need for the quick analyses;
- Creating transparency: the analysis permits to take the whole details all the processes from producing to sale;
- Big data analysis: The analysis of the big amount of the data in the accounting belonging to various sources will be simplified;
- The instruments of visualization; the instruments of the digital instruments give a chance for the special audience to separate the degree of accuracy and prepare graphic analytical;
- Cloud computing: The application is often transformed to clouds.
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| ICV (Poland)     | 6.630         |
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The preferable aspects of the digital accounting are given below:

- Saving more time than calculating, reporting manually.
- Cross the border geographic limits.
- Permanently quality services.
- Low degree of making a mistake.
- Enhancing cash management and savings.
- Reining the costs, especially transportation and paper expenses.
- Improved audit information and security.

Since the accounting is related to the technological changes, it will also develop when the technology makes progress. In this situation the accountants and auditors ought to know the skills and experience beside programming, working with new accounting software. The need of the time is to digitalize the accounting system, one of the things in front of the forthcoming accountant demanded to assimilate being to be able to run the digital technologies.

In the accounting systems platforms, cloud computing and electronic accounting programs the daily high digitalized processes happens. These kinds of the digital technologies possess a range of opportunities to solve the problems of the firms. However, even today the analog databases are utilized in many companies. The reason of usage of the analog technologies is considered that installing of the high-developed digital technologies costs expensively. Thus, many small business subjects cannot afford these technologies.

Digitalization of accounting of business entities is tremendously paramount to operate business activity of these firms, rein the costs and serve modern clients with up-to-date digital services. In this context, entrepreneurs in our country run accounting system in modern, digital direction, which amplifies not only their financial stability but also the governmental budget.

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