

ACCOUNTING, DIGITALIZATION, CONTROL

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Abstract: Digital transformation is reinventing operations to accelerate business models, processes and all kinds of organizational activities to take advantage of the opportunities offered by various emerging and emerging technologies. Above all, digital transformation is about changing mindsets. We can no longer say how we did it in the past. It's about how we need to do it in order to survive and thrive in the future.

Analyzing the need for digitalization in accounting and control, we must clarify this as a concept that was first used in 1953, and today "digitalization" /digitization/ means the conversion of analog information into any form /text, photographic material, voice, etc./ in digital form through electronic devices (scanners, cameras, etc.), so that information can be processed, stored and transmitted through digital circuits, equipment and networks.

Digitization and digital transformation bring significant changes in all spheres, regardless of their size and the economic area in which they work. Accounting should not remain aloof from these fundamental changes, even in many aspects it is ahead of control. Digitization and digital transformation are an essential part of the processes taking place in it. The main activity of accounting is the collection of primary data from the various information systems in the company, their processing and transformation into new information that did not exist until now.

Looking at the digitalization of the control, we should know that each of the existing controls including financial control, internal audit, external audit, considered as evaluation control /Accounts Court and Independent auditors/, Tax control, etc. are facing numerous challenges due to the digitization of industry and the economy. Generally speaking, control in all its aspects should also be digitized and the sooner the better. Otherwise, the overall digitization process will lag behind and its effectiveness will decrease. Even in some cases, the digitized control or audit must precede the digitization processes in society and the economy.

In this regard, a number of processes in accounting and control have been digitized in recent years, considering the available accounting programs, the issuance of electronic invoices, electronic signature, remote accounting, submission of all types of declarations electronically with an electronic signature to the National Revenue Agency, reports in the Commercial Register and much more others.

Keywords: digitalization, control, accounting, audit, taxes

1. INTRODUCTION

In summary, digitization refers to the conversion of analog "things" into digital form. In other words, computers are capable of recreating much of reality if given information as a string of ones and zeros (or in more modern variants, longer strings of numbers). That is, digitization refers to the translation of the surrounding world into a language accessible to modern machines.

Or the digital revolution of the late 20th century, managed to find ways to digitize much of the world around us. In fact, about 95% of the information a person receives about the outside world can be digitized through sound and auditory reproductions.

In digitization, we collect digital information about the real world, process it quickly and efficiently using digital technologies, and apply it to our daily lives in a useful and understandable way. The challenge is how exactly to apply available technologies to tangibly improve business, society and, in general, our daily lives. This is where we start talking about digital transformation – the process of discovering, understanding and properly implementing the relevant methods and strategies to improve our daily experience and performance. <https://www.digitalizebg.com/>

2. INDUSTRIAL REVOLUTIONS

The industrial revolutions in Europe began in the 1860s, when J. Watt and his steam engine initially revolutionized industry. The beginning was difficult, but in the 19th century British steam locomotives, ships and engines conquered the world and Great Britain became the most powerful empire on the planet. Over time, the technologies of the First Industrial Revolution spread to other countries, in Belgium, France, Germany and across the Atlantic Ocean - the USA.

The so-called First Industrial Revolution caused incredible growth in wealth in these countries for those who led them, but also incredible suffering among the poor in the industrialized countries.

The third industrial revolution, when at the beginning of the second half of the 20th century, "Microsoft" and "Apple Computer" were created, which with their development, in the 90s of the last century, brought the Internet into offices and homes. The third industrial revolution increased productivity is significantly improved by processing

more information, coordinating the actions of entire enterprises faster and instantly. This has unleashed the greatest wave of globalization in history: production can be separated from the back office, and the headquarters of the company from its global value chain, and its effect on a global scale is undoubtedly more resident / Schwab Cl. , Vanham P. 2021/

Regardless of the fact that many technologies from the Third Industrial Revolution still exist and are used, since the beginning of the 21st century. humanity is gradually entering the Fourth Industrial Revolution. It is characterized by a fusion of technologies, artificial intelligence is all around us: from autonomous cars and drones to virtual assistants and software that translates or invests.

Regardless of the fact that only five years ago - in 2017 - a concept for the digital transformation of Bulgarian industry (Industry 4.0) was adopted in our country, according to the European Commission and its report "Industry 5.0 Towards a sustainable, humancentric and resilient European industry", the Fifth Industrial Revolution, or Industry 5.0 does not come to replace, nor is it an alternative to Industry 4.0, but is its logical continuation.

Compared to the Fourth Industrial Revolution, which is still focused on the digitization of processes and the use of artificial intelligence to increase productivity, Industry 5.0 concentrates on the human factor and the human being at the center of the production process. According to the so-called a new paradigm, technology should be in favor of man, and he should actively cooperate with machines. In other words, if Industry 4.0 is based on the relationship between machines and IT systems, Industry 5.0 brings together the strengths of man and machines. / <https://digitaltalk.bg/new technologies/>

In this regard, the emergence of Society 5.0 can also be assumed, when advanced IT technologies, the Internet of Things, robots, artificial intelligence and augmented reality are used as a daily basis in our lives, industry, healthcare and other activities, but not only for the purpose economic advantage, and in service and for the convenience of each of us. / <https://digitaltalk.bg/new technologies/>

Therefore, the Covid-19 Pandemic, man-made or real, has largely proved to be a test of the endurance of society and industry. The geopolitical changes and natural and health crises we have gone through and are still going through have shown how fragile industries are. Industry is supposed to be innovative and flexible and able to adapt to the different demands of the surrounding environment, regardless of any future crises. And not to return to the "old normal", but to apply innovative technologies and the opportunity to develop a "new normal". / <https://digitaltalk.bg/new technologies>

3. DIGITIZATION IN ACCOUNTING AND CONTROL

When we talk about the need for digitization in accounting, control and auditing, we need to be clear about this as a concept. The verb "digitize" was used for the first time in 1953, and today "digitization" means the conversion of analog information in any form (text, image material, voice, etc.) into digital form through electronic devices (scanners, cameras, etc.) so that information can be processed, stored and transmitted through digital circuits, equipment and networks.

What is considered the Fourth Industrial Revolution itself is changing the way businesses work, accountants and auditors will need to adapt to stay relevant and evolve. The training and education of accountants and auditors must also adapt to better prepare new professionals and allow retraining of current accountants to adapt to new technology and the new practices, procedures and processes that technology will enable. /Charles Hoffman, Modernizing Accounting and Auditing: Three Technology Trends, <http://xbrl.squarespace.com/journal/2017/5/27/>

Accounting, which has been around for so many years, even before the creation of formal counting systems, is constantly evolving. There are three specific new technologies that can be used to significantly improve and modernize accounting and financial reporting. These technologies will be imposed in the coming years in the field of:

- XBRL based structured digital financial statements
- Knowledge-based systems and other application of artificial intelligence
- Blockchain based distributed ledgers

Double-entry bookkeeping adds an additional property to the accounting system, that of a clear strategy for identifying errors and removing them from the system, which has the added effect of protecting against abuse or fraud. This, in turn, leads to the construction of a new audit strategy./Charles Hoffman, Principles of XBRL-Based Digital Financial Reporting, <http://xbrl.squarespace.com/digital-financial-reporting-pr/>

And the double-sided recording itself is the work of Luca Pacioli - an Italian mathematician and Franciscan monk, who in his scientific work "All about Arithmetic, Geometry, Proportions and Proportionalities" /Summa de arithmetica, geometrica, proportioni et proportionalita - Venice 1494/, summarizes the knowledge of merchants and became known as the "Father of Accounting". The book contains a separate chapter "Treatise on accounts and

records" /Particularis de Computis et Scripturis/, in which for the first time the so-called The Venetian accounting system, known to this day as double-entry bookkeeping.

Accounting information systems are only a part of the whole range of information systems that serve the business. They are one of the first systems to change in the fast-moving process of digitization and digital transformation of the economy. Accounting is a field in which there is a strict discipline of managing the processes related to the generation and use of documents. /Lazarova V. Collection of reports Conference 2019, ISBN 978-619-232-356-1, pp. 80-85/

In the process of digitalization, accounting and the related information system is perhaps the first system in which human labor is almost completely robotized and moves to paperless document circulation. The accountant's profession is apparently changing, and the main functions will be mainly reduced to checking, validating and authorizing business operations. This will require new knowledge and skills from everyone involved in these activities. Already on the market, there are already products in this area for accounting, such as Sendera, Controlisly, TEAM LOOK, etc.

Digital accounting is a very important tool used by managers to achieve higher levels of efficiency and productivity in business operations, especially when this is done in conjunction with changes in business practices and management behavior enabling the use of real-time data when making decisions.

Digitization in accounting also implies advantages in terms of faster and more efficient business processes, significantly less space for archives, time savings, more control options, reduction of costs for materials, human resources, etc. /Lazarova V. Collection of reports Conference 2019, ISBN 978-619-232-356-1, pp. 80-85/

Accounting should not remain aloof from these fundamental changes, even in many aspects it is ahead of control. Digitization and digital transformation are an essential part of the processes taking place in it. The main activity of accounting is the collection of primary data from the various information systems in the company, their processing and transformation into new information that did not exist until now. From the primary documents issued by the various systems, secondary documents are prepared in accounting, the information of which serves managers to make effective management decisions. /Lazarova V. Digitization and digital transformation in accounting/

Its organization implies goals and tasks such as:

- Data quality and accuracy - the accuracy and quality of a company's data is critical, whether it's sales records, purchases or sensitive customer information. If some of this information is inaccurate or incomplete, the effect on the organization can range from a bad image to a disaster, which is why digitizing accounting is necessary.

- Paperless accounting - the transition to paperless accounting is also a step towards digitization, as the necessary technologies for this are already available. When communication with external counterparties is via electronic documents, internal accounting must carry out verification and validation.

- Real-time reporting – with the digitization of accounting, real-time reporting has largely become a fact / Especially after the changes in H-18 and SUPTO/. Real-time reporting is a part of business intelligence systems that consists of collecting up-to-date data and delivering it to users as it happens.

- Uniformity of the system - according to numerous studies, one of the main problems facing accounting for now is the compatibility between the individual information systems.

These and other changes to the digitization of accounting give rise to numerous requirements for accountants and auditors in our country and in other countries.

Looking at control and digitization, we must know that each of the existing controls including internal audit, external audit /Court of Audit and Independent Auditors/, Tax control, etc. are facing numerous challenges due to the digitization of industry and the economy.

In support of the above, in November 2018, the Second Conference of the International Tax Association took place in our country on the topic: "The future of VAT. Digital Economy", which was organized by the association IFA Bulgaria, an official branch of the International Tax Association, in cooperation with the Faculty of Law of SU "Kliment Ohridski". Inevitably, taxes in the age of digitalization will undergo a change.

There is a need to create new concepts in the field of direct and indirect taxes to cover companies providing services without having a physical presence in any particular jurisdiction. Digitization and automation, which makes business easier and brings more value and efficiency, places new responsibilities on the tax administrations of EU countries.

Regarding independent auditing, according to Deloitte CEO Cathy Engelbert, "in the next five or six years, the accounting and auditing profession will change more than in the last 30 years combined" /Cohn, M. Nov. 14, 2016/.

In recent years, there has been talk of a digital audit, as well as a permanent audit. These two concepts are a product of rapidly developing technologies applied by both client businesses and auditors, especially large audit firms. In the digital audit, not only electronic documents, electronic working audit files are predominantly used, but also the content and volume of the information used, its transfer from the client to the auditor, verification and analysis are carried out in a new way - with the help of modern digital technologies based on artificial intelligence, robotics and

automation; the use of drones to identify physical objects and assets, etc./ [https://www.ides.bg/media/article/Prof. F. Filipova - journal. IDES-IB, year XXV/](https://www.ides.bg/media/article/Prof.F.Filipova-journal.IDES-IB-year-XXV/)

In this regard, the Audit Chamber, as SAI of Bulgaria, participated in the III joint EUROSAT – ASOSAT conference, which was held in Jerusalem from March 10 to 14, 2019. The conference was attended by 21 heads of supreme audit institutions (SAIs) and more than 130 delegates from 43 SAIs from Europe and Asia, including representatives of the General Secretariat of INTOSAI. During the conference, presentations were made on various topics - e-governance and digitization in the public sector, preparedness for emergencies in cyberspace, audit of the management of programs for 97 adults with dementia, upcoming trends of negative growth and population aging at the end of the XXI century and the expected social, political and economic consequences, etc. [/www.bulnao.government.bg/](http://www.bulnao.government.bg/)

In addition, in March 2019, at a meeting between the managements of the Audit Chambers of Bulgaria and Russia, the role of SAI was recognized and went beyond traditional financial control. Therefore, the aim of SAIs is to be not only controllers, but also external partners of ministries and departments, i.e. not only to identify problems, but also to jointly discuss ways to solve them. The Bulgarian Audit Office is actively working on the digitization of its activities, using special software that allows us to significantly improve the quality of audits, such as the financial audit and the performance audit, the activity of the auditors is fully digitalized, and the process of digitization of the compliance audit and financial control of political parties. The Bulgarian Audit Office also supports the topic of strategic audits through the implementation audits carried out by the institution. (www.bulnao.government.bg)

Information technologies in the development of public administration and the role of supreme audit institutions in achieving national priorities and goals were the two main topics that were also discussed at the XXIII Congress of the International Organization of Supreme Audit Institutions - INTOSAI with over 600 delegates representing 169 audit institutions in the world, including and SP of the Republic of Bulgaria, held on 23 - 27.09.2019 in Moscow.

Included in the main panel sessions during the congress were participant sessions on the development of INTOSAI – open small group discussions that included brainstorming around public audit issues. Digitization and digital transformation bring significant changes in all spheres, regardless of their size and the economic area in which they work

The statement of Cv. Tsvetkov - chairman of the SP, who states that the institution's activity has been modernized and works according to European and world standards for supreme audit institutions. Our new goal is complete digitization of the audit process, as we already work with specialized audit software./Iliev Pl. Collection of reports from the 1st NKPI, UNSS 2019, pp. 94-101/

4. CONCLUSION

It is clear that we cannot lag behind in our development, nor distinguish ourselves from digitization and digitization in any field. Digitization in accounting and control, as well as for business and society in general, is inevitable, but we must also take into account the not so positive trends from its implementation.

Digital accounting and control these days is already a new market reality, and not a new word at that, but already part of the cloud technologies that are the basis of business transformations.

Digitization is by no means an unknown concept for companies in Bulgaria, but they only have a partial understanding of the concept of digitization. None of the respondents in a survey conducted by "Siemens Bulgaria" and the German-Bulgarian Chamber of Commerce and Industry stated that they were completely unaware of the concept.

Although digitalization is becoming a mandatory part of business in Bulgaria, there is still a long way to go as a way to optimize resources, processes and interaction.

Digitization and digitization do not mean job losses, /is it so/ but digital competences will be increasingly sought after, as business in Bulgaria expects upheavals and job losses due to digitization, as insufficient qualification of employees hinders further digital transformation.

With this furious digitization - the elderly, the disabled, the poor are falling overboard. According to Spaniard Carlos Juan, digitization is making life difficult for elderly Spaniards, according to Deutsche Welle, on the occasion of his campaign "I may be old, but I'm not an idiot". In it, he appealed to the banks to provide staff available at least before lunch and without a pre-arranged meeting time, so that pensioners can withdraw money and pay bills.

More than 100,000 banking jobs have been cut in Spain since the financial crisis of 2008, and the pandemic is accelerating this process. In order to increase their profits, the banks are further reducing the branch network - especially in the countryside, but also in the capital Madrid. Bank advisors are increasingly replaced by chatbots, and customers are forced to deal with electronic payment methods, online banking and biometric ATMs.

The action entitled "I may be an adult, but I'm not an idiot" has been a remarkable success, with over half a million signatures collected, and the problem is the rapidly advancing digitization that has created these difficulties for part of the population./ <https://www.dnes.bg/cars/>

And one more thing in this direction, according to Prof. Iv. First from SU, digital technologies and social networks are the "new nuclear weapon" of the XXI century. There is no longer a need to drop bombs on the enemy, it is enough to control social networks and digital messages to defeat or control them./ <https://blitz.bg/obshtestvo/>

In an interview with BTA at the beginning of 2022. the professor states: "In the last 10-15 years, it has become unequivocally clear how countries can be "remotely controlled" through new digital technologies, societies can be transformed, etc."

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