ΛΌΓΟΣ

L'ARTE DELLA MENTE SCIENTIFICA

RACCOLTA DI ARTICOLI SCIENTIFICI

CON GLI ATTI DELLA CONFERENZA SCIENTIFICA E PRATICA INTERNAZIONALE

LE TENDENZE E MODELLI DI SVILUPPO DELLA RICERCHE SCIENTIFICI

13 MARZO, 2020 • ROMA, ITALIA

TOMO 1

DOI 10.36074/13.03.2020.v1
ISBN 978-88-31277-12-9

EUROPEAN
SCIENTIFIC
PLATFORM

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UDC 001(08)
L 44

https://doi.org/10.36074/13.03.2020.v1

L 44 **Le tendenze e modelli di sviluppo della ricerche scientifici**: Raccolta di articoli scientifici «ΛΌΓΟΣ» con gli atti della Conferenza scientifica e pratica internazionale (T. 1), 13 marzo 2020. Roma, Italia: Piattaforma scientifica europea.

ISBN 978-88-31277-12-9
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La raccolta contiene materiali dei partecipanti di una conferenza scientifica e pratica internazionale multidisciplinare «Le tendenze e modelli di sviluppo della ricerche scientifici», che si è tenuta a Roma il 13 marzo 2020.

L'evento è incluso nel catalogo di conferenze scientifiche internazionali, approvato sulla piattaforma ResearchBib e certificato dallo standard Science Science SCC-2000 dall'Euro Science Certification Group.

La descrizione bibliografica dei materiali della conferenza è indicizzata da ORCID, Google Scholar, CrossRef, OpenAIRE e OUCI.

UDC 001 (08)

ISBN 978-88-31277-12-9

CONTENUTO

investment activity, etc. Considering the theory of audit, Ukrainian audit is clearly defined as documentary and evidential [1]. Pavlova K. A. highlights several issues related to audit development in Ukraine: 1) significant negative impact of "shadow" business; 2) the negative impact of the literal translation of foreign standards and concepts without taking into account the peculiarities of our country's economic development; 3) lack of standard forms of audit documents; 4) state professional organizations of accountants are not large-scale, so this impedes the process of discussing and solving problems of accounting practice [2].

In the context of market relations, the company seeks to reduce its costs, because it provides revenue growth, improves efficiency and enables expansion of its scope of activities through the release of resources.

Therefore, in our opinion, the key areas of the audit are: 1) identifying mechanisms that will reduce the cost of raw materials, fuel, electricity, etc .; 2) offer the best option for reducing depreciation; 3) apply methods that will allow to reduce the passive part of fixed assets; 4) improve the organization of production and increase labor productivity; 5) provide recommendations for improving the management system; 6) expansion of business areas and redistribution of capital of the enterprise. Therefore, the audit should be considered as a complex concept, which includes a number of indicators, and the effectiveness of the audit should be judged on the results of further activities of the enterprise.

References:

1. Ilyin, V. Yu. (2010) Innovacijni aspekty` rozvy`tku audy`tu v Ukrayini [Innovative aspects of audit development in Ukraine]. *Innovative economy*. vol. 16. pp. 83-86. Rertrieved from http://www.irbis-nbuv.gov.ua/cgibin/irbis_nbuv/cgiirbis_64.exe?C21COM = 2&I21DBN =UJRN&P21DBN=UJRN&IMAGE_FILE_DOWNLOAD=1&Image_file_name=PDF/binf_2013_11_55.pdf
2. Gutsalenko, L.V., Prishlyak, N.V. (2011) Audy`t v Ukrayini: rozvy`tok, problemy` ta shlyaxy` yix vy`rishennya [Audit in Ukraine: development, problems and solutions]. *Innovative economy*. vol. 20. pp. 97-101. Retrieved from http://www.irbis-nbuv.gov.ua/cgi bin/irbis_nbuv/cgiirbis_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE_FILE_ DOWNLOAD= 1&Image_file_name=PDF/binf_2013_11_55.pdf

DOI 10.36074/13.03.2020.v1.05

FINANCIAL ANALYSIS WITH THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

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The second half of the twentieth century is characterized by the emergence of a fundamentally new, information-based, economic model. This model is called information (postindustrial) economy, which has replaced the industrial society. In this regard, approaches to the methodology and organization of analytical work both at the micro and macro levels are changing. This also applies to financial analysis of entities. Central to it is the analysis of financial condition. Therefore, the chosen subject of the study is quite relevant.

The purpose of the study is to disclose an analysis of the financial position of economic entities in the context of the use of information and communication technologies.

The paper is devoted to solving the following tasks: disclosing the legal basis of the concept of creation and development of information and digital society (information-communication and digital technologies) in Ukraine; reflecting financial position analytical study using information and communication technologies.

Information society is a theoretical concept of post-industrial society, a historical phase of possible evolutionary development of civilization, in which information and knowledge are produced in a single information space.

Information and knowledge should become the main products of information society production. The characteristic features of the theoretical information society are: increasing the role of information and knowledge in society; an increase in the number of people engaged in information technology, communication and production of information products and services, an increase in their share in the gross domestic product; the growth of information technology and the role of information technology in social and economic relations; creation of a global information space that provides effective information interaction of people, their access to global information resources and meeting their needs for information products and services.

The concept and terminology of "information society" has become widespread in Ukraine following their spread in the world with the same, world-specific, contradictions and ambiguities in their application. In most cases, the term "information society" is used as a vivid synonym for the term "information and communication technologies", and the concept of "information society" has, to this day, not received deep understanding and adaptation to Ukrainian realities due to the decline of Ukrainian science.

For the first time, Ukraine's orientation towards the creation of an "information society" was formally enshrined in Ukraine's EU Integration Strategy (Chapter 13), adopted in 1998 [1].

It is worth noting that at the same time, in 1998, two Laws of Ukraine were adopted: "On the Concept of the National Informatization Program" [2] and "On the National Informatics Program" [3], which defined the principles and program of actions of informatization of Ukraine rather than construction of "information society." This contradiction in conceptual bases between different groups of experts and politicians at the highest level of political decision-making in Ukraine testifies to the uncritical perception of foreign innovations, which greatly damaged the practice of information and communication development of Ukraine.

The use of the term "information society" became popular again in Ukraine in the early 2000s, during preparatory work for the participation of the Ukrainian delegation in the first and second meetings of the World Summit on Information Society, and in the course of attempts to implement the decisions of this summit after 2005. According to the first Summit Decisions (Geneva Action Plan, 2003) [4], Ukraine should develop a National Strategy for the Development of an "Information Society" and proceed with its implementation. In 2005, a Parliamentary Hearing was held in Ukraine on this issue, and in accordance with its results, the Law of Ukraine "On Basic Principles of Development of the Information Society of Ukraine for 2007-2015" was adopted in early 2007 [5]. In August 2007, the Plan of Measures for the Implementation of the Tasks of this Law was adopted (CMU Order No. 653-p of 15.08.2007) [6]. According to this plan, only in 2012 the National System of Indicators of Development of "Information Society" in Ukraine (CMU Resolution No. 1134) [7] was adopted, and in 2013, the Strategy of Development of "Information Society" in Ukraine (CMU Decision No. 386-p) [8]. At the same time, the above mentioned laws on informatization of Ukraine continue to be in force.

Information and communication technologies are the objective basis of the information economy. Information adequately reproduces the phenomena and laws of the outside world, the spiritual activity of mankind, creates opportunities for predicting and transforming reality in the interests of the international community. Information has become of global value, that is, of international character; information is also an integral part of other vital global phenomena.

Therefore, in the twentieth century, the information factor made the most profound changes in the life of civilization throughout its history: it united the world into a single system that functions in real time.

In 2018, the Concept of Development of the Digital Economy and Society of Ukraine for 2018-2020 (CMU Ordinance No. 67-r of 17.01.2018) [9] was approved. The development of Ukraine's digital economy lies in creating market incentives, motivations, demand and needs for the use of digital technologies, products and services in the Ukrainian industrial sectors, sectors of life, business and society for their efficiency, competitiveness and national development, high-tech production and welfare of the population [9].

Digitalization of the real economy is a major component of the digital economy and a determining factor for the growth of the economy as a whole, including the digital industry itself as a technology producer. Digital technology in many sectors

is at the heart of product and manufacturing strategies. Their transformative power is changing traditional business models, manufacturing chains and processes, leading to the emergence of new products and services, platforms and innovations.

Central to financial analysis and analysis of financial statements is the assessment of the financial condition of the enterprise as the main link of the economy. The introduction of digitalization into the real sector of economy is characterized by the widespread use of information and communication technologies in the analysis of the financial condition of economic entities. Suggestions for analysis of the financial condition of enterprises using information and communication technologies are shown in table 1.

Eleven organizational stages of financial analysis based on the use of information and communication technologies are suggested. The first phase consists of collecting and grouping input information for calculation of financial indicators. This information is formed as at a certain reporting date. In the case of an annual report, it will be the data at the beginning and end of the reporting year. In the case of a few annual reports over a number of years, it would be advisable to construct the input information as at December 31 (31.12) each year. The second stage is processing the input array of time series for further numerous calculations of financial indicators, checking the reliability of the input information via counter calculations according to financial reports, etc. The third stage is the most voluminous as a great variety of financial condition indicators in terms of economic content are calculated here. No less important is the fourth stage – the stage of formation and grouping of data arrays of the obtained results and their evaluation for the recommended limits. On the fifth stage, analytical conclusions based on the obtained arrays of financial condition calculated results are formed. At the sixth stage, the obtained resultant information is informed or transferred to the stakeholders. Then, the next seventh stage is development of proposals for improving the structure of assets and liabilities, for increasing the liquidity and improving the financial stability of the enterprise. At the eighth stage, activities are developed aimed at implementing the established recommendations and proposals for improving the financial condition. On the ninth stage, a forecast is made and strategic indicators of financial condition are identified. On the tenth stage, the financial condition predicted results are informed and/or transferred to the stakeholders. At the final eleventh stage, a corporate policy is formed regarding the stable financial position and sustainable financial development of the enterprise on the basis of the obtained time series of final and projected indicators of the financial condition of the enterprise.

Solvency, liquidity and financial stability indicators were investigated in the monographs [10, 11].

Table 1

Analysis of financial position with the use of information and communication technologies

Stage	Stage Content
1	Formation of time series of input information for calculation of financial position indicators
2	Processing of the input array of time series for formation of mega calculations of financial position indicators

3	Mega calculations of the financial position indicators of the enterprise (absolute and relative indicators of the composition and structure of assets and liabilities of the balance sheet, their subdivisions and relationships between certain groups of assets and liabilities; absolute and relative indicators of solvency and liquidity of the balance sheet and the enterprise; absolute and relative indicators of financial stability of the enterprise, determination of the types of financial stability of the enterprise)
4	Formation and grouping of digital arrays of the obtained results
5	Formation of analytical conclusions based on the arrays of calculated results
6	Bringing the final results of the financial position analysis to the stakeholders
7	Development of proposals for improving the structure of assets and liabilities of the balance sheet, increasing the liquidity and improving financial stability
8	Development of activities for implementation of recommendations and proposals given
9	Forecasting the financial condition of the enterprise (strategic optimal balance sheet structure, strategic absolute and relative financial stability, solvency, liquidity) for the future (construction of forecast series of the dynamics of financial condition indicators)
10	Bringing the forecast results of financial position to the stakeholders
11	Development of a corporate policy of stable financial position and sustainable financial development of the enterprise on the basis of the obtained time series of final and forecast analytical indicators of the financial position of the enterprise

In the conditions of introduction of the concept of digital jobs, digitization of the real sector of economy, implementation of projects of digital transformations, there will be no problems with realization of fast, timely, and methodologically correct analytical study of the financial condition of any business entity. Studying the financial condition of a digital economy entity with the use of information and communication technologies will significantly elevate the methodology and organization of financial analysis to a new world level.

Conclusions. Information-communication and digital technologies in the analysis of financial condition provide an opportunity to: intensify the analytical process of studying the financial condition of the enterprise; improve the level and quality of the perception, understanding and assimilation of resultant final and forecast information on the financial condition of a digital economy entity. Using modern professional financial-analytical computer programs, media- and interactive tools, it is easier to use information and communication methods in the analysis of financial state through the introduction of innovative technologies.

As a result, financial analysts and all kinds of stakeholders are much better at absorbing information and formulating relevant conclusions and suggestions and making management decisions, being in an emotionally-comfortable professional environment. They do not lose the desire to work qualitatively, constantly develop and improve their professional skills, generate ideas and develop creative approaches to improving the financial condition of economic entities.

References:

1. *Стратегія інтеграції України до Європейського Союзу* (Указ Президента України). № 615/98 (1998) (втрата чинності від 10.07.2015). Вилучено з https://zakon.rada.gov.ua/laws/show/615/98.
2. *Про Концепцію Національної програми інформатизації* (Закон України). № 75/98-ВР (1998). Вилучено з https://zakon.rada.gov.ua/laws/show/75/98-%D0%B2%D1%80.
3. https://zakon.rada.gov.ua/laws/show/75/98-%D0%B2%D1%80/*Про Національну програму інформатизації* (Закон України). № 74/98-ВР (1998). Вилучено з https://zakon.rada.gov.ua/laws/show/74/98-%D0%B2%D1%80.
4. *Женевський План дій.* Вилучено з https://old.apitu.org.ua/wsis/pd.
5. *Про основні засади розвитку інформаційного суспільства в Україні на 2007-2015 роки* (Закон України). № 537-V (2007). Вилучено з https://zakon.rada.gov.ua/laws/show/537-16.
6. *План заходів з виконання завдань, передбачених Законом України «Про Основні засади розвитку інформаційного суспільства в Україні на 2007-2015 роки" (537-16)* (Розпорядження КМУ). № 653-р (2007). Вилучено з https://zakon.rada.gov.ua/laws/show/653-2007-%D1%80,
7. *Про запровадження Національної системи індикаторів розвитку інформаційного суспільства* (Постанова КМУ). № 1134 (2012). Вилучено з https://zakon.rada.gov.ua/laws/show/1134-2012-%D0%BF.
8. *Стратегія розвитку інформаційного суспільства в Україні (*Розпорядження КМУ). № 386-р (2013). Вилучено з https://zakon.rada.gov.ua/laws/show/386-2013-%D1%80.
9. *Концепція розвитку цифрової економіки та суспільства України на 2018-2020 роки.* (Розпорядження КМУ). № 67-р (2018). [Вилучено з https://zakon.rada.gov.ua/laws/show/67-2018-%D1%80.
10. Лахтіонова, Л.А. (2010). *Аналіз платоспроможності та ліквідності суб'єктів підприємницької діяльності*. Київ: КНЕУ.
11. Лахтіонова, Л.А. (2013). *Аналіз фінансової стійкості суб'єктів підприємницької діяльності*. Київ: Знання України.