# Trading enterprises' accounting provision of controlling in the digitalization era

# Valentyna Kostyuchenko<sup>1</sup>, Anastasiia Kamil<sup>2</sup>, Serhii Holov<sup>3</sup>

<sup>1</sup>Kyiv National University of Trade and Economics Faculty of Finance and Accounting, Department of Accounting and Taxation Kioto street 19, 02156, Kyiv, Ukraine Email: valentynak1098@gmail.com

<sup>2</sup>Kyiv National University of Trade and Economics
Faculty of Finance and Accounting, Department of Accounting and Taxation
Kioto street 19, 02156, Kyiv, Ukraine
Email: kupriienko1@gmail.com

<sup>3</sup>International Management Institute (MIM-Kyiv) Management and Economy Department Shulyavska street 10/12 B, Kyiv, Ukraine E-mail: golov@mim.kiev.ua

**Abstract:** The article is devoted to analyze accounting provision of controlling at the trade enterprise in the digitalization era. The influence of COVID-19 on the development of ecommerce in Ukraine and the world is described. The etymology of the "digitalization" concept and its difference from automation is studied. The main digital elements of accounting provision of controlling at the trade enterprise are defined, namely inevitable transition to electronic document circulation (e-document circulation) and use of modern ERP-systems. The main advantages and difficulties of digitalization of accounting controlling provision are analyzed.

Keywords: digitalization, accounting provision, controlling, ERP, trade enterprise

JEL codes: L53; L81; M41; O32

#### 1 Introduction

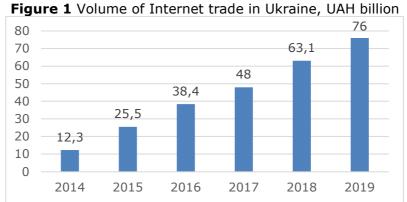
Digital transformation is becoming widespread in all areas of activity, including trade. According to the forecasts of the American international research and consulting company "IDC" (2019), global investment in digital technologies and services by 2023 should amount to \$ 2.3 trillion.

According to Kuprina (2016), digitalization is a way to digitalize any kind of information. Halapsis (2017) takes a slightly different position on this issue defining digitalization not as a method but as "a process related to the tendency to bring into electronic form of various types of information used by man, a process tentatively called by the researcher". Digital transformation (digitalization) is often confused with automation or even data digitization. However, this is only part of the process of digitalization, ie digital transformation. As Dligach (2020) points out automation makes the process less dependent on the human factor but it does not change the essence of the processes. Already established workflow is described algorithmically and then transferred to digital format with part of the functions performed by man is transferred to the system. Ligonenko (2018) emphasizes that digitalization provides domestic enterprises with the following competitive advantages, including trade enterprises: providing additional value of goods through quality service; high level of communication with customers and target audience; improving the company's image through fast communication with customers, reducing prices through process automation and digitization of business processes; transparency of internal and external processes of the enterprise; increase customer loyalty to the company.

The COVID-19 pandemic was a turning point and divided digitalization in all spheres of society into "before" and "after" and pushed all market players to forced change. Issues remain relevant not only in the transition to remote work and networking but also in improving the process of electronic document management, implementation of CRM and ERP systems, the use of cloud solutions for storage and transmission of information etc. at trade enterprises of all shapes and sizes. The purpose of this publication is to study trading enterprises' accounting provision of controlling in the digitalization era.

# 2 Methodology and Data

The dictionary of modern Ukrainian language and slang chose "digitalization" as the word of 2019 year, and the EU recognized digital literacy as one of the 8 key competencies for a full life and professional activity in the modern world. Forecasts of the German statistical online portal Statista (202) show that by 2021 the global e-commerce market will reach \$ 4.9 trillion a year. And according to the analysis of Digital Commerce 360 (2019), the volume of online sales in the world in 2016-2019 grew by an average of 20% per year. At the same time offline retail sales increased by 3.5% for the year. If this trend continues, the volume of the global e-commerce market will exceed the volume of traditional retail by 2036.



Compiled by author on the basis of: Ecommerce Region report 2020

According to the Europe 2020: Ecommerce Region Report (2020), shown in Figure 1, Ukraine's e-commerce market in 2019 grew by 17% (to UAH 76 billion) against a growth of 30% a year earlier. Last year, Ukraine had the lowest e-commerce growth rate in all 12 years of the company's operation

## 3 Results and Discussion

Digitalization changes business approaches, business processes and relationships between people. The importance of controlling during the current crisis is even more important for a trading company because it serves as the link that meets the criteria of complexity and integration, provides a synthetic and holistic view of the company in the past, present and future through accounting and a systematic approach to identification and solution of existing and potential problems of the trading company. The work of the controller is directly related to the collection, analysis and evaluation of accounting data for making considered management decisions and to meet needs of accounting provision at trade enterprises. In the context of digitalization the presence of such elements as electronic document management (EDMS) and ERP system is a "must have". We propose to consider them in more

Speed and price are the driving factors that determine the transition of document flow to the electronic area. A trade enterprise regardless of the form of ownership, size or field of activity constantly works with accounting documents which must be periodically reviewed,

adjusted and transferred to others: government services, partners, contractors. EDMS allows you to transfer all these processes into digital area and save a huge amount of time and resources.

In the rise of social responsibility among domestic enterprises another important ancillary factor is reputation. After all, EDMS is a choice in favor of environmental responsibility. Reducing the number of paper documents relieves the pressure on the environment and adds another advantage to modern technologies in favor of the environment. Despite the existence of a sufficient legal framework in Ukraine regarding the use of EDMS two main myths should be identified: distrust in the legal force of electronic documents and the low level of protection of credentials and the risk of provision electronic documents. This opinion is widespread among domestic trade enterprises which significantly slows down the possibility of introducing EDMS in the accounting provision of controlling.

The basis of the introduction of EDMS is the ERP system. Table 1 shows the comparative characteristics of ERP-systems that allow full or partial provision of accounting information and systematize the data in the appropriate modules in the form of reports.

**Table 1** Comparative characteristics of ERP-systems for accounting provision of controlling at the trade enterprise

controlling at the trade enterprise				
ERP type	The size of the enterpri se	Dedicated controlling module	System characteristics	Provider
Kerivnyk PROF	Small and medium	N/A	Solves the issue of management accounting automation. Allows you to keep records of the centers of financial responsibility (CFV). There is a module of consolidated accounting.	1C Pidpryemstvo
Consolidation	Medium and big	N/A	Allows to adjust consolidated financial statements according to IFRS. Implements all forms of managerial and financial reporting for both internal and external users. Existence of a methodical model "Budgeting of the trading company".	1C Pidpryemstvo
Management by objectives (MBO) and KPI	All	N/A	Tool for automating the process of goal setting, monitoring and control. Integration with accounting systems is used to build end-to-end controlling processes.	1C Pidpryemstvo
BAS: Corporate Performance Management	Big	ljN/A	Available subsystems of budgeting, accounting and reporting under IFRS. Allows consolidation and management of variable and fixed costs.	BAF
SAP S/4HANA	Big	Finance and controlling: FI-CO	Takes into account costs and profits according to the centers of their detection. Forms planned and actual cost. Serves as the main source for management information.	SAP AG
Galaktyka	Small and medium	Controlling	A full-fledged product for budgeting, automation of all types of accounting (including tax) and cost management by units.	Galaktyka
IT - Enterprise	Big	Budgeting and controlling	Provides analysis of weaknesses: detailed research of deviations between the actual and planned cost, process-oriented cost management.	Information Technology

Compiled by author

The main advantage of the introduction of more expensive ERP-systems is the synergetic effect of the integration of all business areas in order to more effectively manage the company but this is relevant only for large trade enterprises. Procházka (2010) emphasizes that individual accounting systems that served for only one specific group of users were tend to be replaced by a single accounting system that assists a wide range of users in making economic decisions through the integration of financial and managerial accounting. According to Angelkort et al. (2008), IFRS are an important driver for the transition to integrated accounting systems as they are focused on supporting investment decisions, and therefore much more suitable for internal planning and control purposes as they rely heavily on the information provided by managerial accounting systems. Tuzarová and Mejzlí (2017) on the example of Czech trading companies show the successful integration **IFRS** information software into the of public trading

Despite the many advantages of using ERP-systems the main disadvantage of their implementation in Ukraine is the cost which can reach several hundred thousand US dollars per year depending on the size of the enterprise, number of working places, service support, direct or indirect access to updates, etc.

#### **Conclusions**

The variability of the external environment requires the trading company to constantly comply with all world trends and standards, to provide competitive advantages that will allow long and stable business support. The expediency of accounting controlling's digitalization is determined by the speed of establishing an effective system of communication flows within the enterprise.

Digital technology is not just a trend, it is something that changes and will change the attitude to doing business. Digitization was a trend ten years ago and today it is a reality. Unfortunately, a significant number of domestic trade enterprises lag behind by 7-8 years compared to the United States.

The development of digitalization of controlling today is an important factor that determines the pace of development of a trade enterprise. Digital technologies save time, increase the motivation of employees and develop their creative thinking; multimedia and interactivity contribute to better performance and at the same time even better assimilation of provided information.

## References

Angelkort, H., Sandt, J., Weißenberger, B. E. (2008). Controllership under IFRS – Some Critical Observations from a German-Speaking Country. Rotterdam: 31st Annual Congress of the European Accounting Association, 22. 4. 2009 – 25. 4. 2009, pp. 4-5
Digital Commerce 360. Received from: <a href="https://www.digitalcommerce360.com/2020/04/30/how-a-pandemic-transforms-tech-priorities">https://www.digitalcommerce360.com/2020/04/30/how-a-pandemic-transforms-tech-priorities</a>

Dligach, A. (2020). Digital transformation as an elevator to the future. Received from: https://tqm.com.ua/ua/likbez/ua-articles/cyfrova-transformaciya-yak-lift-u-majbutnye

<u>Europe 2020: Ecommerce Region Report.</u> Received from: <a href="https://retailx.net/product/europe-2020/">https://retailx.net/product/europe-2020/<a href="mailto:retail&utm">netail&utm</a> medium=article&utm</a> campaign=europ2020

German <u>online portal</u> for <u>statistics</u>. Received from: https://www.statista.com/topics/871/online-shopping/

Halapsis, A. (2017). Globalization and the metric of history. Received from: <a href="http://halapsis.net/globalizatsiya-i-metrika-istorii">http://halapsis.net/globalizatsiya-i-metrika-istorii</a>

Kuprina, K. A. (2016). Digitalization: concept, preconditions of origin and scope of application. Bulletin of scientific conferences, Vol 5-5 (9), pp. 259-262

Lihonenko, L., Hripko, A., Domanskyy, A. (2018). Content and mechanism of digitalization strategy formation in business organizations. Kyiv: International Scientific Journal "Internauka", Vol.  $N^{o}$  2, pp. 20–25

Procházka, D. (2010). The development of financial and management accounting after the IFRS adoption: a case from the Czech Republic. <u>SSRN Electronic Journal</u>. Working paper, 2nd version. Received from: <a href="https://www.researchgate.net/publication/228295305">https://www.researchgate.net/publication/228295305</a> The Development of Financial a nd Management Accounting After the IFRS Adoption A Case from the Czech Republic

Tuzarová, S., Mejzlík, L. (2017). The IFRS Assessment by Publicly Traded Companies. <u>The Impact of Globalization on International Finance and Accounting</u>, pp. 341-346