



THE ROLE OF TECHNOLOGY IN THE SOCIO-ECONOMIC DEVELOPMENT OF THE POST- QUARANTINE WORLD

Edited by Magdalena Gawron-Łapuszek,
Andrii Karpenko

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2.3. "CROWN CRISIS" AS AN INCENTIVE FOR DIGITALIZATION OF ACCOUNTING ACTIVITY OF UKRAINIAN ENTERPRISES

With the introduction of quarantine measures in connection with the pandemic COVID-19, which has made significant adjustments in the lives of every inhabitant of the world, effective management of the enterprise is impossible without the widespread introduction of modern information technology processing of economic information, including accounting. Businesses had to face unprecedented challenges and restructure their activities in a matter of days: optimize internal processes; to establish uninterrupted remote work; reallocate resources. Therefore, experts suggest that company leaders focus on four important points for rapid recovery and the formation of competitive advantages:

1) profit recovery. Large and medium-sized businesses, of course, have a better margin of safety, so most companies that have suffered financial losses, namely 36%, have suffered up to 20% of revenue losses. While the losses of small businesses are much more significant – a third of sole proprietors, namely 33%, report 50-75% of income losses, as well as a significant increase in receivables;

2) rethinking business. It will take up to 1 year for most businesses to reach the pre-quarantine level, and small businesses – up to 2 years. The systems of sales, marketing, e-commerce, customer service, planning and risk management need to be rethought – everything that in one way or another affects the company's financial results;

3) restructuring of operations. As part of the anti-crisis strategy, companies will try to reformat their work in such a way as to reduce the impact of external factors and potential crises on operating activities. Financial instability provoked by prolonged quarantine has already affected behavioral patterns and will continue to do so. In order to retain their customers, companies will have to offer new, even more customer-oriented, personalized, innovative solutions. So very soon we can expect a wave of new technologies, digital solutions and process automation. It is necessary to be ready for the emergence of new professions and phenomena, and therefore, companies must pay close attention to continuous training of employees and the acquisition of new soft and hard skills. Those companies that understand and accept this will eventually be able to succeed in the new changing business environment;

4) acceleration of digitalization. Quarantine allowed to test the remote employment regime. Both small companies and large corporations are ready to switch to this form of work, because remote work has a number of advantages associated with the optimization of resources, namely: saves time on the way to the office, improves work-life balance, there is an opportunity hire people without being tied to a particular district or city. More than 60% of companies are considering the option of a complete or partial change of remote mode. Global research shows that the productivity of employees in remote work is 20-25% higher than in standard office work. Ukrainian business will also have to rely on its own creativity and innovation. This gives a good impetus to the development of IT services.

In recent decades, the spread of information and communication technologies (hereinafter – ICT) has led to a radical transformation of the world into an information society. The spread of ICT has significantly increased resource efficiency, reduced production costs and contributed to greater demand and investment in all sectors of the economy.

Information technologies and digital transformation are the main factors of technological changes and conditions of competitiveness both at the level of individual enterprises and at the level of countries, they are the main driving force of changes in all economic and production processes, productivity growth. That is why the solution to the global systemic crisis can be achieved through a set of new technologies called the "digital economy", which in modern conditions is a major factor in the economic growth of national economies, industries and businesses.

The main elements of the digital economy are: e-commerce; electronic banking, electronic payments, Internet advertising, Internet content and others.

Thus, the digital economy is a system of institutional categories (concepts) in the economy, based on advanced scientific advances and advanced technologies, primarily on digital information and communication technologies, the operation of which is aimed at improving social production, maintaining stable economic growth to improve welfare and quality of life of the country's citizens.

In the current situation, Ukraine's main task is to strengthen the government's role in the development of ICT as a driving force to increase competitiveness and ensure sustainable economic growth. That is why the Cabinet of Ministers of Ukraine approved the Concept of Development of the Digital Economy and Society of Ukraine for 2018-2020 and the action plan for its implementation. This document is in fact a roadmap for the digital transformation of the Ukrainian economy. The concept envisages the transition from a raw material type of economy that consumes natural resources to high-tech industries and efficient processes through IT technologies and communications.³⁴⁴

The Ukrainian experience of using the opportunities of the new model of economic development is at an early stage, but has a number of positive changes. Thus, the development of the digital economy in Ukraine is marked by a number of significant events:

- Brussels Summit of the Eastern Partnership: announced support for Ukraine's European aspirations and intentions for gradual integration into the EU digital market, as well as the adoption of a Joint Declaration on the distribution of the benefits of the digital single market among partner countries;

- Approval of the Concept of development of the digital economy and society of Ukraine for 2018-2020. Approval of the action plan for the implementation of this initiative.

The introduction of the digital economy should include the following elements:

- development and implementation of universal digital services for citizens in science, health care, education;

- development of sectoral strategies of digital development with the involvement of business;

- improvement of the IT industry and harmonization of legislation;

- modernization of education, creation of research centers;

- measures to stimulate the development of "smart technologies";

- installation of mobile 4G and 5G.

Technology is transforming business, including accounting. It is known that the history of accounting has its roots in the past. Technologically, accounting as a process begins with the detection, measurement and registration of facts, actions and events in order to obtain information about business transactions. The most common way to display accounting data is through documents. Most authors unequivocally state that accounting begins with documentation, the process of creating a document and reflecting the primary information in it. The existing document management system is complex and cumbersome due to the presence of a significant number of different types and forms of documents, repetitions of individual indicators in different documents, the multi-stage process of document management. Studies have shown that in the process of documenting a number of accounting functions are insufficiently implemented (without regulation and the necessary current control). With the use of electronic media of accounting information there was a problem in making copies of documents in terms of computerization of accounting, ensuring the suitability of accounting information for storage in the archive and its use in the future. In the conditions of fully automated accounting (only primary and financial accounting) as a system of collecting, registering, transmitting and processing information without human participation, it is necessary to clarify the nature and role of document accounting and documentation as accounting.

Effective automation of accounting is not only a matter of convenience in the work of an accountant, it is a trend of the time. The current level of development of computer technology has made it possible to process primary documents, accounting data, the formation of reporting using a computer. Thus, the new information technology of accounting data processing covers all levels of accounting: collection and registration of primary information; maintaining accounting registers of

³⁴⁴ The concept of development of the economy and societies of Ukraine for 2018-2020 [online]. [Cited 05. 09. 2020.] Available online: <http://zakon.rada.gov.ua/laws/show/67-2018-%D1%80>.

business transactions; organization of accounting of enterprise calculations, accounting of production costs and calculation of production costs; calculation and printing of reporting forms.

It is electronic document management that opens up opportunities for improvement, longterm preservation of documents, management of electronic archives, taking into account the procedures for writing off and destroying documents. There are basic requirements for electronic document management, namely:

- the information contained in electronic documents must be accessible (easy to read and interpret) for its further use (for this it is necessary to have the appropriate software);
- it must be possible to restore the electronic document in the format in which it was created, sent or received;
- if necessary, you should keep information that allows you to set the date and time of sending or receiving, origin or destination of the electronic document (you need to control whether someone copied the electronic document, changed the data, printed on a printer, etc.).

All this is possible only in a management system built on the basis of fully electronic document management.

Accounting technology has always played an important role in simplifying the work of an accountant. As our knowledge of technology grew, so did the accountant's ability to analyze statistical values. Improvements in technology have increased an accountant's ability to interpret data effectively, spending less time on routine paperwork and reducing errors. This can be achieved with the following elements:

1. Artificial intelligence and robotics automate complex and repetitive tasks and processes with extreme precision, reducing operating costs and increasing efficiency. This technology is changing the role of the modern accountant, which is manifested in the ability to think critically, at the moment, robotics and artificial intelligence are not able to provide this.

2. Cloud computing is a type of Internet-based computing that provides shared computing resources and data to process computers and other devices on demand. This allows accountants to perform accounting tasks from anywhere, as well as the ability to deliver financial information and reports through a cloud environment. This opens up a new way for accountants to work with their clients.

Accounting software is a computer application that helps businesses record and process all of their accounting transactions at once. When developing such a program, the software developer must always ensure that it has several functional modules, including: accounts payable, receivables, payroll, and so on.

Given the sensitive nature of accounting, it is important to identify business-specific software. Before evaluating software, a company must first identify the issues facing them in accounting. Spreadsheets are the simplest type of software. Small businesses without complex accounting tasks can use spreadsheet programs such as Google Spreadsheets, Microsoft Excel, or Open Office. One of the reasons why they are best suited for this type of business is that they can meet basic accounting needs, such as a list of sales, expenses, and other advanced accounting functions. It should be noted that they are free and do not require significant training. Common business accounting software includes SAP, Oracle, and Microsoft Dynamics GP, and in Ukraine it is 1C. As the business continues to grow, the challenges gained in the process can be used to create customized accounting software. Businesses can also adapt them if there are no commercial programs that fit their activities. The availability of accounting software helps to record income and expenses in an organized manner. Accountants need to make rapid progress in the field of accounting technology if they want to remain relevant in the field of accounting. This includes adherence to modern technological trends, optimization and adaptation of current accounting software to meet the needs of their company and openness to the adoption and study of advanced technologies.

The main advantages of a computerized accounting system are listed below:

- 1) Speed – data entry to a computer can be done much faster than any manual processing.

2) Automatic production of documents - fast and accurate invoices, credit invoices, printed statements and documents for remuneration are made automatically.

3) Accuracy – less errors, because for each transaction requires only one accounting record, not two (or three) as for a manual system.

4) Current information – accounting records are automatically updated, so account balances (for example, customer accounts) will always be relevant.

5) Availability of information – data is available to different users in different places at the same time.

6) Management information – reports are prepared to help management control the business, for example, the analysis of obsolete debtors will show which customer accounts are overdue, trial balance, trading account and income statement, balance sheet.

7) Legibility – screen and printed data must always be legible, thus avoiding errors caused by incorrect numbers.

8) Staff motivation – the information system will require staff to learn to use new skills, so they can feel more motivated.

9) Cost savings – computerized accounting programs reduce staff time on accounts and reduce audit costs because records are up-to-date and accurate.

10) Ability to work easily in multiple currencies – computerized accounting packages allow you to minimize the problem associated with currency changes.

11) Simplified Tax Compliance: Tax liabilities take about 175 hours per year for all US companies. In other countries, they can take up to 400 hours. Thanks to the tax planning features offered by many accounting programs, it is possible to store receipts, invoices and income statements on one convenient platform.

These advantages provide features of accounting software such as: automatic data backup; prognostication; cost forecasts; customizable reports; integration of external programs; Accounting; inventory management; password protection.

Thus, accounting software is a set of programs designed to collect, record, summarize and store financial data for interpretation. These programs minimize the effort that users make to calculate the data. Moreover, they accelerate the creation of comprehensive financial statements and allow you to immediately analyze cash flows. The main reasons why accountants use new technologies include efficiency gains (64%), improved service quality (44%) and attracting new customers (42%).

In September 2019, the Government decided to establish the Ministry of Digital Transformation of Ukraine. This ministry:

- is responsible for the formation and implementation of state policy in the field of digitalization, open data, national electronic information resources and interoperability, implementation of electronic services, electronic trust services;

- in cooperation with other government agencies and international partners introduce electronic services in all areas of the economy – business registration, ecology, registration of subsidies, state aid, payment of housing and communal bills, land services.

Given the above, currently the priority of the ministry is:

- optimization of management decisions through the introduction of electronic document management (this allows you to automate all processes of working with documents, virtually abandon the paper, improve internal discipline, speed up the management decision-making process);

- unification of all departments into a single system of interdepartmental document circulation;

- support for the introduction, dissemination and promotion of electronic signatures and Mobile ID and BankID technologies.³⁴⁵

³⁴⁵ Ministry of Digital Transformation of Ukraine. [online]. [Cited 05. 09. 2020.] Available online: https://ru.wikipedia.org/wiki/Ministry_of_Digital_Transformation_of_Ukraine.

Business travel, which typically brought in \$ 1.5 trillion a year (about 1.7% of world GDP), has now shrunk to a minimum due to border closures and the need to maintain social distance. Given the realities of our time, the Ministry of Digital Transformation of Ukraine has developed a well-protected platform "Action". This is a program on a mobile phone, thanks to which most Ukrainians can receive any government services. In fact, a single electronic cabinet of all public services without bureaucracy. For the period of quarantine the application for confirmation of self-isolation "Action. At home" works. After all, citizens who have been in contact with COVID-19 patients should be in self-isolation with enhanced control through the application. Every day the portal "Action" is replenished with new services: updated registration of LLC online, the ability to start and complete the construction of buildings online, belonging to the category CC1 (cafes, private houses, small buildings), eBaby online and more. For example, Apple has released the final builds of iOS 13.7 and iPadOS 13.7. If innovations in the updated operating system for the iPad are limited to debugging, the iPhone has received a new technology Exposure Notifications Express, which sends messages about potentially infected COVID-19 users. This feature via Bluetooth Low Energy notifies all users that the owner of one of the devices listed in the application has been infected with COVID-19 and you have been nearby for the last 14 days.

One example of Ukrainian-made software is "MASTER: Accounting", developed by IT-Enterprise, which has long specialized in the implementation of exclusively complex ERP-systems for large businesses. More than 30 years of experience have been consolidated into MASTER: Accounting. Thus, small and medium-sized businesses and government agencies have the opportunity to use the software used by world-class companies.

This program consists of functional modules that cover all areas of accounting and accounting in the tax system: bank, cash, sales, purchases, warehouse, production, fixed assets, salary, personnel, operations, reports and more.

The advantages of this solution are the following positions:

1) meets the requirements of regulatory documents on technical protection of information (levels G-2 and G-3) and SED for the work of CMEA OVV;

2) cloud and stationary solution;

3) full responsibility for the current legislation of Ukraine and accounting according to International Financial Reporting Standards; accounting in distributed structures, reporting consolidation, corporate data analysis schemes;

4) system integration with the Smart Tender electronic trading platform. biz and the server for the exchange of legally significant documents Smart Sign;

5) Web-client RMD – supports any operating system;

6) Web-client RM – as a client device can be used a computer, mobile phone, tablet.³⁴⁶

Other examples of such systems are Accent 2 and 7.4. These systems are developed by the Ukrainian IT companies and give the chance of complex automation of the enterprises of any kind of activity. A typical set of functional requirements provides management and financial accounting, but an open source structure allows coding modules for complex automation.

If the software does not meet the requirements of business (accounting), you can use outsourcing services, which is gaining popularity today. Outsourcing is the process of engaging outsiders or organizations outside your company, both locally and internationally, to conduct certain business transactions. This is a common business practice that allows companies of any size to grow as needed, without significant risk or investment. This service has the following advantages:

1. Savings: this service reduces the cost of full-time employees;

2. Confidentiality: outsourcing company to ensure confidentiality, responsibility for the work performed;

3. Integrated approach: in audit companies for client services are involved accountants, certified auditors, lawyers, who help to resolve issues in general;

³⁴⁶ MASTER. [online]. [Cited 05. 09. 2020.] Available online: https://masterbuh.com/?utm_source=na_chasi&utm_medium=site&utm_campaign=na_chasi_november.

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Part 2. PROBLEMS OF THE SOCIO-ECONOMIC SPHERE DURING QUARANTINE

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