

MODERN ECONOMY DIGITAL TRANSFORMATION MAIN TRENDS IN THE CONTEXT OF THE BSR

Olena Martyniuk¹, Liubov Lingur²

Abstract. The article considers the main stages of development of social business standards and the evolutionary path that led to the formation of the concept of "digital space of socially sustainable business development." Based on the study of trends inherent in modern society, it is determined what characteristics a company's business model should have in order to gain the key benefits of specificity in the market. Defined as requirements define information technology IT technology. Research by consulting firm Cartner and business trends altered by quarantine conditions related to the Covid-19 pandemic shows that global trends in the business environment are increasingly leaning toward digitalization and the creation of new digital business models. That is why it is proposed to define a new paradigm for the development of corporate social responsibility in the context of digitalization. However, on the basis of the new paradigm, key elements have been identified that will allow the formation of new CIS CSR standards. It is also proposed to consider an integrated approach that combines the concepts of sustainable development, social responsibility and digitalization in a single format "digital space for enterprise sustainability." To support this format, an integrated corporate information system is proposed, which includes three blocks: a digital business infrastructure, an information and communication system and a system for managing digital business processes at the enterprise. This will determine the algorithm for upgrading the existing system or implementing a new IS, the key idea of which will be the concept of sustainable development of the enterprise with elements of corporate social responsibility.

Key words: sustainable development, social responsibility of business, digitalization, models of digitalization, Industry 4.0, small business, CSR IP.

JEL Classification: M11, M14, G13, O35

Introduction

In recent years, the social responsibility of business has become increasingly relevant. In developed countries, perceptions of the public perception of business, not only in terms of its profitability, but also in terms of its tools, consequences and environmental impact, are being formed. That is, at the present stage, the market mechanism of functioning of economic entities is integrated with social and environmental functions, which actually has its impact on the market value of the company.

In Ukraine, these processes are still in their infancy but are gradually developing. The greatest interest to the corporate social responsibility (CSR) in our country is shown by some managers-practitioners of leading financial companies and industrial groups, as well as enterprises with foreign entities in the structure of

their stakeholders (Kolot, Grishnova, 2012). For most European countries and countries with developed economies this is already becoming one of the mandatory standards of doing business.

The problems of "digitalization" of the economy and the application of digital technology in Ukraine are now being studied by various scientific schools and specialists, with research beginning with macro-economic processes followed by consideration of deep micro-processes and micro-cybernetic models. And it is not surprising, because in the Concept of development of the digital economy and society of Ukraine for 2018–2030, as the priority areas for "actualization of the introduction of digital technology" are defined such as public safety, education, health, tourism, e-democracy, ecology and environmental protection, urban life, cashless payments, harmonization with

Corresponding author:

¹ Odessa National Medical University, Ukraine

E-mail: emartynuk2017@gmail.com

ORCID: <https://orcid.org/0000-0002-0377-7881>

ResearcherID: B-8635-2019

² Odessa Polytechnic National University, Ukraine

E-mail: lingurl@ukr.net

ORCID: <https://orcid.org/0000-0002-0730-2381>



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European and global scientific initiatives, public administration (Starodubskaya, 2016).

1. Methodology of research

The authors define the current stage of CSR development as a specific stage in which managers are particularly responsible for the implementation of the company's external and internal policies. A characteristic feature of the modern period is that this stage in the development of social responsibility in business is associated with the emergence of globalization processes and the emergence of various information technologies. In addition, many managers have come to understand that business profitability depends not only on economic efficiency, but also on the willingness of companies to comply with the laws of society. Figure 1 shows the periods and sequence of the emergence of concepts related to the essence of CSR.

With the emergence of special responsibility of corporate managers in the implementation of external and internal company policies, the financial performance and market value of such structures are increasing, and the brand and image of the company are being promoted both at home and abroad.

Thus, in modern conditions, a special direction of corporate social responsibility of business is formed, which provides for the current costs of enterprises and the long-term development of their social relations, thereby the subject creates the conditions for sustainable profits.

The transformation of standards of social ethics and social responsibility of business took place in accordance with the development of entrepreneurship,

business models and the challenges of society and the economy, which have changed and acquired new characteristics. At the present stage, the formation and implementation of certain elements of social responsibility or philosophy are not just a requirement and need of society, but are defined as a key factor of the company's competitiveness. Therefore, it is necessary to consider the formation of a new concept of corporate social responsibility in the digital space.

World processes of globalization and current trends show the rapid development of digital models in business, communications, forms of government regulation, and even activities that have emerged over the past 20 years, thereby transforming simply the forms of interaction in society.

As any global phenomenon, CSR is the subject of numerous discussions among scholars, businessmen, and representatives of ordinary citizens. This study is based on the indisputable need to implement standards of social responsibility of business and individuals to determine the possibilities of dynamic development of each company, economic space and public welfare.

2. Results and discussion

2.1. Identify major IT trends that will influence the development and changes in business, society, and technology over the next 20 years

The rapid development of new technological tools, software products, electronic and communication networks determines the need to analyze the current state of business informatization in Ukraine and

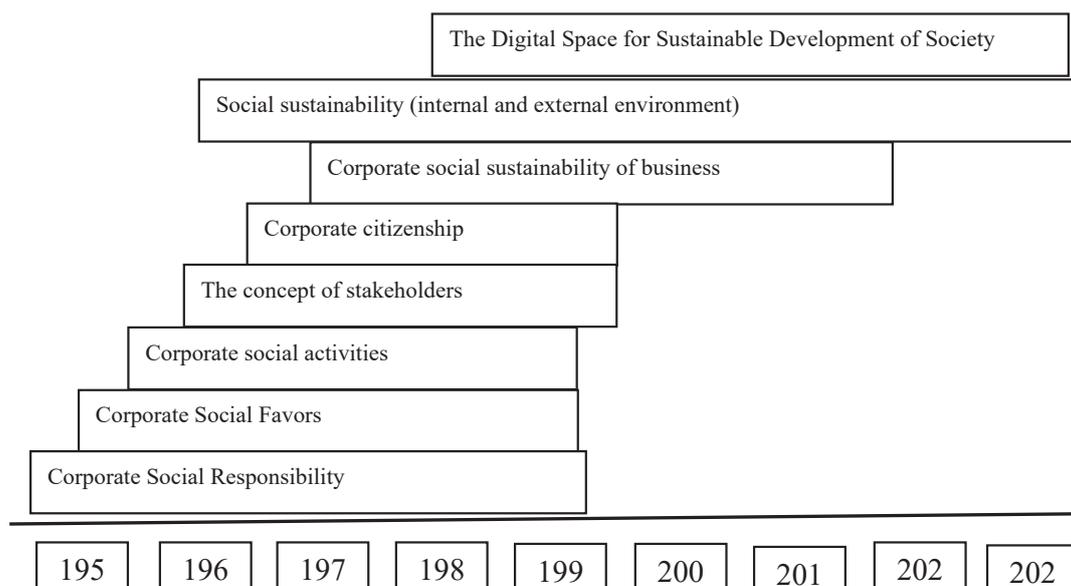


Figure 1. Coevolution of concepts on approaching the "digital space of social sustainable development"

Source: summarized by the authors

determine its future prospects and development trends in the context of the introduction and widespread use of information and communication technologies in enterprises. Today's business realities establish that the development of information technology has a direct impact on the growth of business performance of enterprises. Therefore, the introduction of information technology with the definition of the most adapted business models for use opens up broad competitive opportunities. In the context of the transition from an industrial society to an information society, information technology must meet the following requirements (Chuprina, Orozova, 2020; Martyniuk, 2020):

- ensuring document management and information processing in accordance with their performance criteria;
- including a full range of information processing devices, as well as hardware and software to support IT processes;
- embodiment of a flexible organizational structure, which should ensure efficient planning and regulation of data processing;
- application of methods for implementing and controlling business processes in terms of their optimal design;
- adherence to a functional and meaningful procedure for implementing information technology, as well as their use as the basis for adapting automation tools;
- take advantage of advanced information technology, the implementation of modern IT solutions and the use of IT services.

In the coming years, by 2025, according to the consulting company Cartner (Hype Cycle for Emerging Technologies), the proliferation of voice interfaces, the Internet of Things (IoT) and chatbots, the democratization of artificial intelligence (AI), and the emergence of unverified information in record volumes, have prompted a rethink of the format of large technology corporations.

It is projected that by 2022, the most promising retailers will begin to implement virtual and voice search services. This, in turn, will require such a company to better understand the desires and demand of consumers, their interests and intentions. According to analysts from the consulting company Cartner, "as a result of innovations, the revenue of e-commerce sites can grow by 30%, while also increasing the rate of attracting new customers, their level of satisfaction and controllable market share" (GlaxoSmithKline plc., 2019).

We should consider the trends of rethinking the format of the activities of large technology corporations, well-known technology giants such as American corporations Facebook, Apple, Amazon and Google and Chinese companies Alibaba, Baidu and Tencent are indeed planning to change the form of

their activities on their own initiative. This is because the scale of influence of these companies is expected to grow so much that it will become increasingly difficult to develop new profit scenarios. To get ahead of potential competitors, companies will have to "explode" their own markets and change the rules of the game, weighing all the risks involved.

Trends in digital IT are growing and progressing, acquiring the characteristic of social technologies capable of influencing the structure of the community and forming dependencies to create new formats of communication and business models. The main IT trends that will influence the development and changes in business, society and technology in the next 20 years are identified and summarized in Figure 2 (Global RepTrak 100).

With the introduction of modern IT technologies in mass production there are both positive and negative consequences in various spheres of social life.

Positive consequences (technological sphere): increasing the efficiency of enterprises, the possibility of saving on scheduled repairs of equipment and general operating costs, minimizing the occurrence of accidents in production. And also increase of predictability of industrial systems, increase of energy efficiency and competitiveness of economy, variability of production, decrease of anthropogenic impact on environment (Reputation Institut).

Negative consequences (socio-humanitarian sphere): displacement by machines of low-skilled labor (physical and mental) and emergence of new types of competences requiring high skills; moral and ethical problems in the interaction between man and machine; opposition of human and machine abilities to perceive and process information; information noise (excessive and unreliable information); complexity of information verification.

2.2. Forecast of BSR development trends towards digitalization

Consider the main influences and trends in the implementation of new trends in terms of social responsibility, corporate responsibility of business, and the approach to the business environment from the perspective of social and sustainable development of the digital space. Begin the study with an analysis of IT technologies that have had the greatest impact on industry shifts in the 2019–2020 economy.

Modern IT technologies expand and at the same time limit the range of people to whom information is available. The constant development of digital content increases the importance of information skills such as analytical modeling and the ability to use digital tools.

The rapid proliferation of mobile devices, integrated networked data collection sensors in equipment and infrastructure, 3D printing technologies and

2018–2019	2020–2021	2022–2023	2025–2027	2028–2029	2030–2032
Accelerated transition to the cloud; by the end of 2021, 80% of enterprises will be moving to the cloud twice as fast as before infrastructure and applications (compared to pre-pandemic environments).	Intelligent Digital Workspace, By 2023, 75% of businesses will focus on a shared intelligent workspace that allows them to work efficiently on collaborative projects.	Opportunities to expand IT capabilities. By 2023, 25% of companies will express a desire to buy an IT development startup. And organizations that develop their own solutions based on these IT services will move to subscription models.	New technological trends will also emerge: Fault tolerance. Hyper-automation, cellular network technology in cybersecurity. Universal access operating model Distributed cloud services. Services that ensure privacy	Major trends that will significantly change business and society. - Composite business architecture. - Algorithmic trust models. - Silicon-free technologies. - Dynamic artificial intelligence. - Digitization of the personality.	
Peripheral computing becomes a priority, 80% of investments will be directed to peripheral computing, business models will take into account the changes in office work and work from home associated with the pandemic.	Transition to autonomous IT operations. By 2023, all IT and automation initiatives will use the cloud ecosystem as a foundation		Sustainability, IT has become responsible for implementing a sustainable way of doing business. By 2025, 90% of companies will require material reuse and cost reduction.		

Figure 2. Identification of major IT trends that will influence the development and changes in business, society, and technology over the next 20 years

Source: summarized by the authors

artificial intelligence translation systems will also have a significant impact on the global information economy.

Here will be substantiated trends in the global implications of information technology related to social, economic, societal and communicative changes.

The first trend is the emergence of a new historical type of property: Intellectual Property. This property can be both individual and public, that is, common to citizens. At the same time, collective intellectual property is the new economic basis of post-industrial civil society, a necessary condition for individual freedom and autonomy.

The second trend is a change in motivation to work (in cyberspace everyone can be simultaneously a producer, publisher and distributor of information). The content of work, the possibility of self-fulfillment, the prospects for professional and social growth become the determining motives of labor behavior. The employee turns into a co-owner or partner, he or she participates in the financial and economic activities of the company and is willing to give part of the income

received to expand the business. In addition, there are new jobs and professions that did not exist before (domain name registrars, cyber consultants, system administrators, digital marketers, SMM and SEO managers).

The third trend is a radical change in the social differentiation of the information society, divided into classes and poorly differentiated in information communities. This differentiation will erase the information gap in access to knowledge and information. Knowledge is no longer the privilege of the rich, the noble, and the successful few. The boundaries between traditional classes are gradually "blurring" (this is especially noticeable in the blogosphere). The development of education, science and information creates an objective basis for bringing people together in a post-industrial society. As a consequence, another interesting trend emerges: the development of social protection, education, health care, and IT services. This gives people's relationships a new civic meaning, which arises from the awareness of belonging to a common culture, participation in social development.

The fourth trend is related to the virtualization of social and political relations. Traditional contacts between citizens, or between citizens and government, or between business and government are supplemented by virtual contacts. There are non-traditional forms of political communication, participation in political life, making managerial decisions, as well as control over their implementation: electronic democracy, voting, petitions, appeals, and so on.

The fifth trend is the creation of new mechanisms of public administration, there, electronic administration and management. This facilitates international contacts between countries and becomes a new instrument of so-called global governance. Examples and trends in the virtualization of the economy are shown in Figure 3.

The sixth trend is that the development of social networks creates direct (horizontal) connections between citizens. For example, Facebook or Telegram can replace political parties, discussion boards, business conferences, and mass meetings. Most modern politicians and statesmen have accounts on social

networks and actively communicate there with their supporters, voters and citizens.

The seventh trend is cybersecurity and loss of privacy. According to analysts at the consulting company Cartner, it can be determined that in 2022 almost 50% of companies and firms will spend more money each year on developing chatbots than they do on developing mobile apps. The post-application era is beginning, characterized by the use of virtual assistants with built-in artificial intelligence (AI) and the penetration of chatbots into all areas of communication. Thus, the evolutionary processes of formation of the information society naturally influence the formation of new requirements and standards of doing business, as well as new conditions for the formation of ID, taking into account the requirements of CSR (Cone a Porter Novelli company).

Conclusions

Based on the results of this study, the following conclusions can be made.

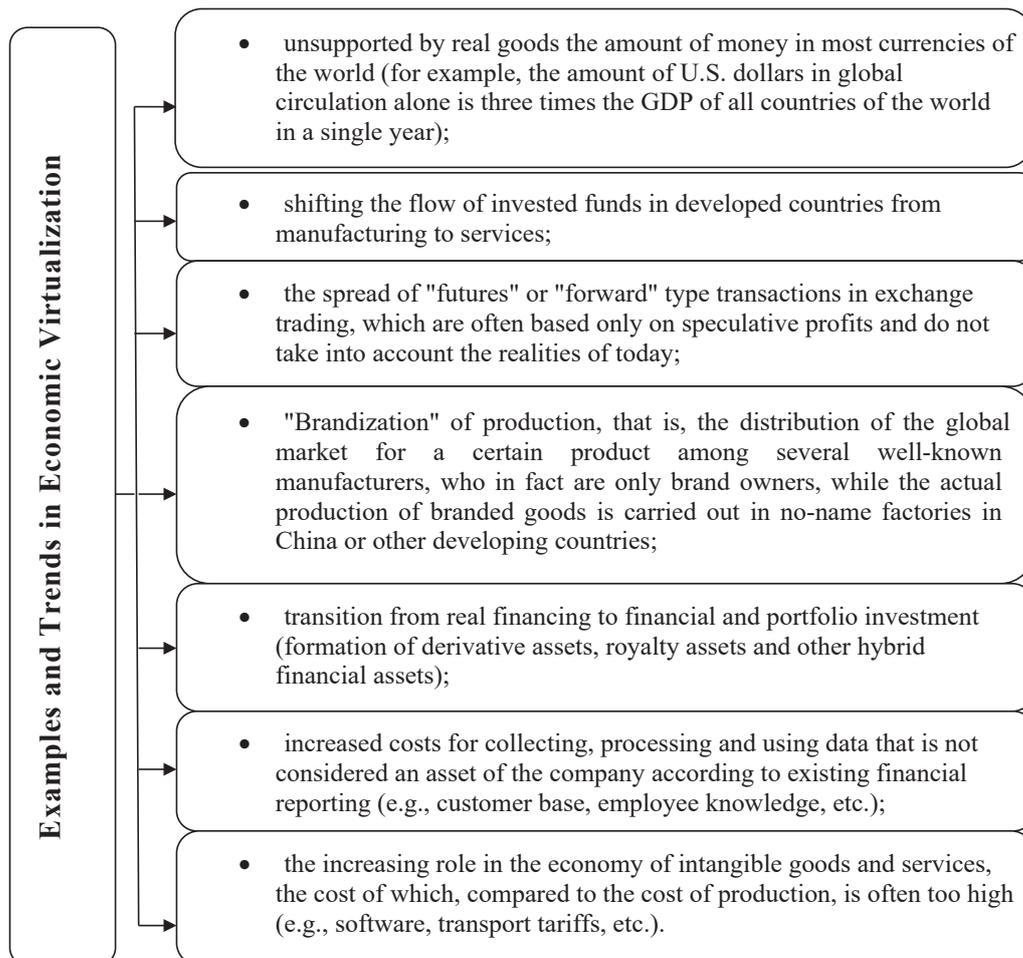


Figure 3. Virtualization of the economy: examples and trends

Source: developed by the authors based on (Saprykina, Sayensus, Zinchenko, 2011; Fleishmanhillard)

The definition of the concept of corporate social responsibility of small and medium-sized businesses in the context of digitalization of the economy proves that, despite the rather large number of studies devoted to the problems of the relationship between business and society, the scientific community still lacks a single unified approach to the definition of the interpretation of corporate social responsibility. Therefore, the analysis of the definition of CSR was conducted depending on the impact on changes in the external or internal environment.

The transformation of standards of social ethics and social responsibility of business took place in accordance with the development of entrepreneurship, business models and the challenges of society and the economy, which have changed and acquired new characteristics. At the present stage, the formation and implementation of individual elements of social responsibility or philosophy is not only a requirement

and need of society, but is defined as a key factor in the competitiveness of the company.

It is analyzed that modern trends in the process of informatization and digitalization indicate the rapid development of cloud services and technologies, mobile applications, voice interfaces, Internet of things and chatbots, the introduction of artificial intelligence in various areas of human life, the active use of augmented reality technologies, the rapid development of Big Data technologies, and the use of 3D printer technologies in various spheres of social activity, the creation of a new format of "human information ecology" and information security – all of this in sum radically changes the business space and involves a revision of both business models and business rules. Such findings are also supported by research on digitalization spending in 2021–2022 globally, increased by 60% over that 2020 figure.

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