

DIGITAL ECONOMY AS A DRIVER OF BUSINESS DEVELOPMENT**VERHAL Kseniia**

ORCID: 0000-0001-6611-0489

PhD in Economics, Vice director, Educational and Scientific Institute of Information Technologies and Robotics (National University "Yuri Kondratyuk Poltava Polytechnic", <https://nupp.edu.ua>, Ukraine, verghal.ks@gmail.com)

ABSTRACT

This article examines the impact of the digital economy and digital transformation on business development of the enterprises. Given the active implementation of information and communication technologies, social networks, virtual reality, artificial intelligence, and rapid economic development, companies can not stay out of progress, and are forced to change business practices, implement digitalization, automate processes. The aim of the article is to study the benefits and directions of the impact of digital technologies on business structures. To achieve this goal, a review of the scientific literature and reports of international companies that studied the impact of IT technologies on enterprises was conducted. It is established that the concepts of digital economy and digital transformation do not have a well-established definition at this time. The business goals that the company plans to achieve in the process of digitalization are systematized. The article identifies the areas of focus in digital transformation. The article systemizes the goals of digital transformation, which are carried out in the direction of changing the strategy, the transformation of business processes, the introduction of intelligent systems and cloud technologies, the transfer of employees to remote working conditions. It is determined that despite the advantages, information technologies as components of digital transformation require significant investment costs.

KEYWORDS: *Business, business development, business model, digital economy, digital transformation, investments in IT*

JEL CLASSIFICATION: *O33; O47; L86*

INTRODUCTION

In recent years, the digital economy has become a new economic form based on the information technologies and a main driving force of world economic development in the condition of Covid-19. Companies, organizations, and people have faced the challenge of adapting to a digital world and reliant on new technologies of business process that became critical necessity. Cloud computing, mobile digital platform, wireless technologies, Web sites, distributed work, data analyses, data warehousing and data mining have transformed business and unlocked numerous unheard opportunities and creates great challenges as well for the business management. The integration of digital technology into all areas of a business, fundamentally changed the interface of the interaction and the flow of communication between clients and business.

According to a new McKinsey Global Survey of executives, their companies have accelerated the digitization of their customer and supply-chain interactions and of their internal operations by three to four years. And the share of digital or digitally enabled products in their portfolios has accelerated by a shocking seven years (McKinsey Global Survey).

Tapscott (1996) characterizes the digital economy as global knowledge economy, which is based on brief cycles of innovations and digital information stored in networks.

The digital economy and digital transformation have attracted worldwide attention. Regardless, there is no commonly accepted definition of these terms and, thus, their meaning remains often quite unclear.

Tapscott characterizes the digital economy as global knowledge economy, which is based on brief cycles of innovations and digital information stored in networks (Tapscott, 1996). European Parliament identify the digital economy as a “complex structure” (European Parliament, 2015). Rouse defines the digital economy as the worldwide network of economic activities enabled by information and communication technologies (Rouse, 2016). However there is no largely

accepted definition for digital transformation as well. According to Mazzone digital transformation is the deliberate and ongoing digital evolution of a company, business model, idea process, methodology, both strategically and tactically (Mazzone, 2014). PwC describes digital transformation as the fundamental transformation of the entire business world through the establishment of new technologies based on the internet with a fundamental impact on society as whole (PwC, 2013). According to the literature analyze by Sascha Kraus and et, the focus of digital transformation definitions varies from the adoption and use of new technologies; to improvements in processes, operations, customer relations, and performance; to the creation of new business models; all the way to possible outcomes and impacts on several actors and environments (Sascha Kraus and et, 2021).

METHODS.

The analysis purpose is to systemized the different approaches on the impact and visible benefits of digitalization on business and economics.

RESULTS AND DISCUSSIONS.

These days, business is constantly under pressure to use digital technologies and to adapt their business models to this new reality (Kohli, R., Melville, N, 2019).

Berger and Frey suggest that digital transformation has impacted society at different levels, mainly on the economic levels. The automation of different business operations such as increasing production, reducing costs, and enhancing the operational frameworks have added a huge sustainability benefit to the businesses. The digital economy has offered novel opportunities for businesses and the job market. The extensive and diverse range of services the digital economy offers has created numerous new jobs that have impacted both entrepreneurial and employment markets. The digital economy uses a huge amount of data and information for its operational framework that has helped to deliver the same public services such as health and education more efficiently. The sustainable digital economy has also impacted the social governance mechanisms by enhancing the quality of interactions between governments and their citizens (Berger and Frey, 2017).

AltexSoft offers the holistic approach to the digital transformation in business that consolidates the change in four main business aspects (AltexSoft).

- Core operations: transforming them from physical to digital by either reshaping how the value is delivered or what is delivered.

- Experience: reconsidering the customer/partner and employee experience as a solid experience-feedback mechanism.

- IT infrastructure: adoption of available cloud-based tools to operate software, build and seamlessly integrate new applications, store/retrieve data, and compute.

- Information management and analytics: building a data-driven organization where decision-making relies heavily on insights obtained from gathered data.

Business invests heavily in digitalization to achieve following business objectives (Matt, C., 2015):

- Operational excellence;
- New products, services, business models.
- Customer and suppliers intimacy.
- Innovative growth.
- Improved decision making.
- Competitive advantage.
- Reduction of expenses for doing business;
- Organizational solutions and increased internal efficiency.
- Survival.

To achieve these goals companies choose the areas of focus in digital transformation:

- Customer experience.
- Process efficiency.
- Company culture.

- Technology infrastructure.
- Data management.
- Employee experience.

So, digital transformation is about more than devices and software. It is about organizational change through the use of digital technologies to materially improve performance (Donald A. Marchand and Michael R. Wade., 2020). Achieving these is due to the following goals of digital transformation:

- Digitalization as an important direction of strategy. According to Gartner, 91% of businesses are engaged in some form of digital initiative, and 87% of senior business leaders say digitalization is a priority.

- Process Transformation. Examples of successful process transformation include companies like Domino's Pizza, where today customers can order from any device. They've entirely reimaged the food ordering process. This innovation has helped them to overtake their rival Pizza Hut concerning sales (Annacone, A., 2019).

- Business Model Transformation. Business model transformations aim at the foundational building blocks of how value is delivered in a specific industry. In essence, companies are using digital transformation to change traditional business models. Examples of this type of reinvention of the business model include Netflix's redesign of video distribution and Apple's reinvention of music delivery: iTunes (Annacone, A., 2019).

- Intelligent systems. According to Gartner 70% of customer engagements is driven by intelligent systems by 2022. Companies have spent \$58.3 billion on AI as of 2021 and according to Markets and Markets, this spending will increase up to \$309.6 billion by 2026.

- Cloud Adoption. According to Fortune Business Insights, the 2021-2028 period will make the global market for cloud storage worth more than \$390 billion.

- Improving remote work experience. The most successful corporations recognize digital transformation requires a flexible workflow, a decentralized decision-making process, a bias toward testing and learning, and a greater reliance on different business ecosystems. One of the best examples of this cultural/organizational transformation is the consumer credit agency Experian. It was able to change its organization by instilling collaboration and agile development into its workflows. Additionally, it spearheaded a fundamental shift in employee focus from equipment to data throughout the company (Annacone, A., 2019).

However, although going digital evokes many benefits, it also requires investments and associated costs (Ahmad M., Murray J., 2019).

According to the international report developed by Fictiv and Dimensional Research states, in 2021 91% of manufacturing companies have increased their digital transformation investments. It is also important to point out that 77% stated their investment increase in digital transformation was significant or dramatic and 95% agree that digital transformation in manufacturing is essential to their company's future success.

In compliance with the International Data Corporation report in 2022 more than half the global economy is based on or influenced by digital. In fact, according to the report, direct digital transformation investments will accelerate to a compound annual growth rate (CAGR) of 16.5% in 2022-2024, up from a 15.4% CAGR in 2019-2024, becoming 55% of all information and communications technology (ICT) investments by the end of 2024. According to this forecast that global spending on the necessary technologies and services for digital transformation will reach \$2.3 trillion by 2023 (International Data Corporation, 2021).

As for the areas of investment, companies are continuously investing in new technologies, applications, and platforms (32 %) as well as upgrading legacy systems (32 %) in an effort to meet digital transformation goals (Forrester report, 2017).

Analyzing the cost of IT development DC FutureScape gave the prediction of the Worldwide Digital Transformation and the investment areas for 2023-2026: (DC FutureScape, 2021)

1. Double Digit Investment Growth. Direct digital transformation investments accelerate to a 16.5% CAGR in 2022-2024, up from a 15.4% CAGR in 2019-2024, becoming 55% of all ICT investment by the end of 2024.

2. Digital GDP Rules. Responding to the pandemic, organizations accelerated their investments in digital. This means that in 2022 more than half the global economy is based on or influenced by digital.

3. Physically Architecting Digital. By 2023, 90 % of organizations worldwide will prioritize investments in digital tools to augment physical spaces and assets with digital experiences.

4. Automating Enterprises and Ecosystems. By 2025, 60 % of organizations will capitalize on disruption with an enterprise- and ecosystem-wide approach to automation, leveraging model-based enterprise concepts, centers of excellence (COEs), and low-code/no-code platforms.

5. Leadership for Digital Resiliency. By 2026, 54 % of CIOs drive business transformation, empowering digitally resilient organizations via strategic technology roadmaps and re-platforming to enable an agile, data-driven, collaborative workforce.

6. Digital Enculturation and Empowerment. Leveraging low-code/no-code tool and data utilization capability, the majority of employees at 60 % of enterprises will lead transformation and embody digital resiliency at their roles by 2024.

7. Digital Resiliency. By 2022, 55 % of organizations will have expanded resiliency plans to future-proof their business, improving profitability, innovation rates, and cost efficiencies by more than 20% compared to their peers.

8. Digital ROI and Outcomes. By 2023, 1 in 2 companies will generate more than 40 % of their revenues from digital products and services, as compared to 1 in 3 in 2020.

9. Digital Dream Teams. By 2025, companies with cross-functional leadership, a digital dream team, enjoy faster rates of innovation, higher market share gains, and greater operational efficiencies than their contemporaries.

10. Decarbonization and digital. Decarbonization initiatives are a key goal of digital transformations; fewer than 10 % of organizations say they are not applicable or not implementing objectives to reduce carbon by the end of 2023.

According to McKinsey, in addition to the high cost of investing in digital transformation there are five factors to a successful digital transformation (McKinsey, 2018):

- Having the right, digital-savvy leaders in place;
- Building capabilities for the workforce in the future;
- Empowering people to work in new ways;
- Communicating frequently via traditional and digital methods.

Additionally, there are many risks involved in digital transformation. In fact, 70% of digital transformation efforts fail to reach their goals. If the right precautions are not taken, the costs of the transformation become even greater. The digital transformation risks to avoid are ineffective digital transformation premises, missing the skill set for product deployment, attempting to transform alone, not having digital transformation experts and mentors, not proving the value from the start.

CONCLUSION

Thus, the digital transformation of business as one of the areas of development in the digital economy is a necessary but quite valuable tool for development. But the holy trinity of people, process, skills, and technology remains the foundation for successful transformation. Success will be determined by getting people, process, technology, and data right, regardless of the urge to transform, pull or push. These four forces facilitate transformation, but they also have the potential to sabotage it. This is how you can make digital transformation work for you. These four forces facilitate transformation, but they also pose risks that lead to failures.

REFERENCES

1. Ahmad, M., Murray, J., (2019). *Understanding the connect between digitalisation, sustainability and performance of an organisation*. IJBEX 17(1), pp. 83–96.

2. AltexSoft. Digital Transformation Guide: Reshaping Your Business to Meet the Digital Age. [Online]. Available: <https://www.altexsoft.com/whitepapers/digital-transformation-reshaping-business-to-meet-digital-age/>
3. Annacone, A. (2019). The 4 Types of Digital Transformation. June, Available: <https://www.linkedin.com/pulse/4-types-digital-transformation-andrew-annacone/>.
4. Berger, T., Frey, C.B. (2017). Industrial renewal in the 21st century: evidence from US cities. *Regional Studies*. [Online]. Available: 10.1080/00343404.2015.1100288
5. McKinsey. Digital transformation: The three steps to success. [Online]. Available: <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-transformation-the-three-steps-to-success>
6. Donald, A. Marchand and Michael, R. Wade. (2020) Digital business transformation: *Where is your company on the journey*. Global Center for Digital Business Transformation. [Online]. Available: https://www.imd.org/researchknowledge/articles/digital-business-transformation-where--is-your-company-on-thejourney/?gclid=EAIaIQobChMIv7Lk7b_06QIVyR0YCh1gMwbTEAAYASAAEgJaDvD_BwE
7. Forrester Study Shows Digital Transformation Affects IT With Pre-Eminence. [Online]. Available: <https://www.apptio.com/blog/forrester-study-shows-digital-transformation-affects-it-more-any-other-function/>
8. IDC FutureScape. (2021). Worldwide Digital Transformation 2022 Predictions, IDC FutureScape. [Online]. Available: <https://www.idc.com/getdoc.jsp?containerId=US47115521>
9. IDC FutureScape (2021). Worldwide IT Industry 2022 Predictions. [Online]. Available: <https://www.idc.com/getdoc.jsp?containerId=US48312921>
10. International Data Corporation. IDC FutureScape: Worldwide Digital Transformation 2022 Predictions. [Online]. Available: <https://www.idc.com/getdoc.jsp?containerId=prUS48333121>
11. Kohli, R., Melville, N. (2019). *Digital innovation: a review and synthesis*. *Inform. Syst. J.* 29(1), pp. 200–223.
12. Kraus, Sascha & Durst, Susanne & Ferreira, João J. & Veiga, Pedro & Kailer, Norbert & Weinmann, Alexandra. (2021). *Digital transformation in business and management research: An overview of the current status quo*. *International Journal of Information Management*.
13. Matt, C., Hess, T., & Benlian, A. (2015). *Digital transformation strategies*. *Business & Information Systems Engineering*, 57 (5), pp. 339–343.
14. McKinsey Global Survey. [Online]. Available: <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>
15. McKinsey Unlocking success in digital transformations. [Online]. <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/unlocking-success-in-digital-transformations#:~:text=The%20results%20from%20respondents%20who,%2C%20upgrading%20tools%2C%20and%20communication.>
16. Tapscott, D. (1996). *Die digitale Revolution: Verheißungen einer vernetzten Welt – die Folgen für Wirtschaft, Management und Gesellschaft*. Hardcover.