# DIGITAL INVESTMENT AS NECESSITY FOR FORWARD-THINKING COMPANYS` DEVELOPMENT

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Дана стаття присвячена питанням вимушених змін діяльності підприємств під впливом сучасних технологій та концепцій, зокрема Industry 4.0 у розрізі диджиталізації. У статті проаналізовані основні тенденції розвитку диджиталізації в світі, визначено мотивацію підприємств, окреслено прогнозовані результати та описано базові проблеми, з якими зіштовхуються компанії в процесі трансформації.

**Ключові слова:** інвестиції, діджиталізація, тимчасові переваги, інвестиційні стратегії, інноваційна економіка.

Данная статья посвящена вопросам вынужденных изменений деятельности предприятий под влиянием современных технологий и концепций, в частности Industry 4.0 в разрезе диджитализации. В статье проанализированы основные тенденции развития диджитализации в мире, определены мотивацию предприятий, определены прогнозируемые результаты и описаны базовые проблемы, с которыми сталкиваются компании в процессе трансформации.

**Ключевые слова:** инвестиции, диджитализация, временные преимущества, инвестиционные стратегии, инновационная экономика.

**Introduction.** In today's world, businesses are increasingly experiencing the impact of digital and internet technologies on their businesses. Customers and consumers are looking for the right product, product information, and online reviews. Personnel departments search for candidates on relevant resources. Managers of multinational corporations receive reports on the current activity of all regional offices in 24 \ 7 mode. This is only a small part of the potential for development. However, to erroneously call such consequences – potential opportunities, in the context of global transformation, the digitization of business and the public sector become an integral, basic component of functioning.

It is in such circumstances that scientific efforts should be directed to forming the theoretical and practical basis of the question of investment in digital.

Theoretical and applied aspects of the study of the characteristics of investing investment in digital, have been reflected in the scientific works of such famous scientists as E. Dolan, V. Berens, D. Morrison, K. McConnell, I. Blanc, Shvidanenko G.O., Tepliuk M. A., Russman. M., W. Sharpe. At the same time, conceptual questions regarding the guidelines and barriers of digital development, determining trends, forecasting results and finding gaps in strategies of the enterprise in accordance with the needs of modern economy, need further research. The relevance and significance of the issues outlined the choice of topic, determined the purpose and logic of the study.

**The purpose of the article** is to identify relevant issues regarding investments in digital sphere, analyze benefits and risks of digitalization for enterprise.

**The key research theses supported by the full reasoning of the results obtained.**

Disruptive technology is changing the way we work and the nature of our jobs. Many workers and entrepreneurs are encouraged to think about how digital disruption can affect their future careers, and even wonder what kind of work their children will do when they grow up. Employers face the same challenges when deciding what opportunities, they need to develop in order to allow their business to grow in the new digital world.

Companies that successfully implement Industry 4.0 no longer need to choose between focusing on the best top or bottom line. They can improve both at the same time. According to the latest research conducted by PWC (PricewaterhouseCoopers), in the next five years, companies expect an increase in annual revenue by an average of 2.9 % and cost reductions by an average of 3.6 %. Pioneers combining high levels of investment with advanced digitization are committed to achieving even more significant results.

In general, digitalization is defined as stimulating, improving or transforming a business using digital technologies and the wider use of digitized data turned into practical knowledge, with a particular advantage.

Technology is an exciting wide spectrum that includes artificial intelligence, smartphones, blockchain, self-management technologies, software as a service, the Internet of things, streaming multimedia services and much more. Such diversity can give further development to any company, become its potential growth point and hidden reserve, if it is not used in a timely manner. These fears are not surprising, since the march of automation and digital technology, including the capabilities of robotics and artificial intelligence (AI), is gaining momentum and attracting investment from some of the largest companies in the world.

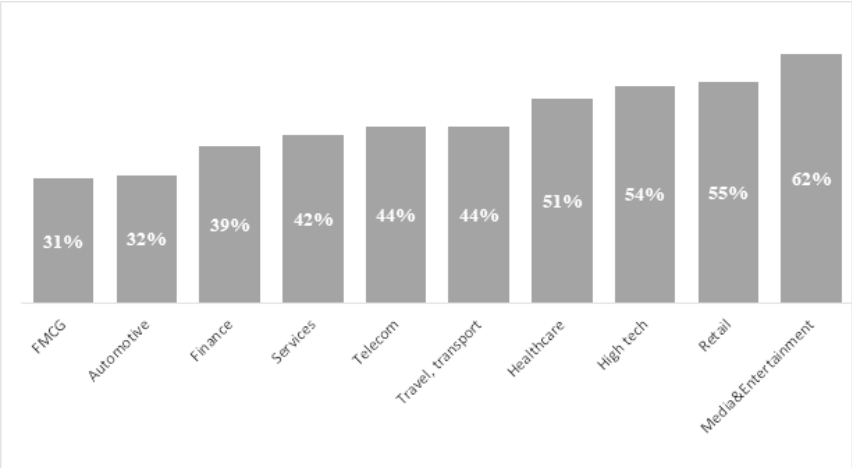


Figure1. Digital penetration by industry, %
*Source: Formed author based on [3]*

A study by IDC (International Data Corporation) says that the costs of digital transformation projects will amount to $ 1,25 trillion in 2019 and to $ 1,97 trillion in 2022. The company concludes that 38 percent of all technology costs were spent on digital transformation, and that two-thirds of all firms launched IT initiatives in support of digital transformation.

One recent example is automated process automation, a breakthrough technology that is starting to spread across a wide range of industries, from retail, services to pharmaceutical research and development. The digital penetration is growing in any industry, with more than 50% in

some industries (see Figure 1). Studies at Oxford University showed that 47% of total US employment is high risk, that is, jobs that can be automated over the next decade or two.

Oil and gas executives around the world are gearing up to accelerate their investment in digital technology, above all by striving to double their ambitions to save money. This is according to the EY report "New technologies can pave the way, but do you know where you are going?", A survey of 100 executives of oil and gas companies around the world, which shows that 89% expect to increase their investment in digital over the next two years. [5]

Another example: in 2016, Huawei introduced the Dong Feng Motor Group a promising hybrid cloud solution. In the first phase, Huawei deployed 300 cloud servers to support all Dong Feng office applications. The cloud is capable of handling more than 50 simultaneous projects and more than ten thousand external visitors; at the same time, this reduced Dong Feng's IT costs by about 30%. Dong Feng and Huawei together develop a cloud plan for all of Dong Feng's key business systems. In the future, they will jointly implement artificial intelligence to create complete, intelligent corporate systems.

Allianz X, the digital investment division of the Allianz Group, has made over 15 direct investments in digital insurance-related businesses worldwide today. In particular, Allianz X invested $ 96.6 million in BIMA microinsurer, which uses mobile technology to serve low-income customers. In addition, company invested $ 30 million in the C2FO market and $ 35 million in the leading mobile platform Go-Jek. [8]

As a result, according to a study conducted by Innosight, at the current pace, about half of the S&P 500 will be replaced by 2026. Innovation in digital technology and new business models is expected to be a key factor in this shift in major corporate indices. IDC predicts that by 2020, at least 55 percent of organizations will be "digitally defined" using an integrated digital strategy, a single roadmap, and an integrated technology architecture for the entire enterprise. This is up from 46 percent today, and contrasts with other firms that the research company calls "digital distraught."

To maximize the power of digital technology, organizations must focus their efforts in four areas:

• Focus on growth opportunities
• Develop a network of employees
• Use data analysis capabilities
• Develop a promising digital investment strategy

This conclusion confirms what many managers may already suspect: by reducing economic friction, digitalization provides competition, which puts pressure on revenue and profit growth. Current digitization levels have already reached an average of six points of annual revenue and 4.5 points of profit growth before interest and taxes (EBIT).[2]

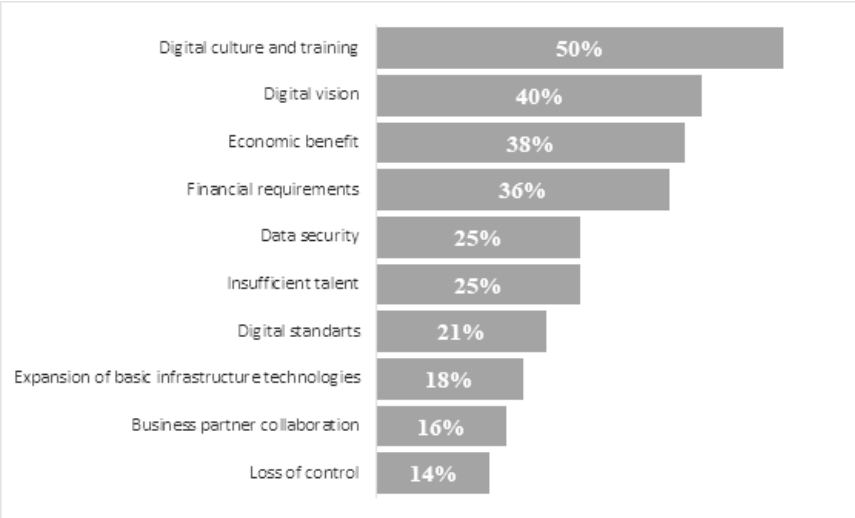


Figure 2. TOP company challenges in process of digitalization, %
*Source: Formed author based on [4]*

The lack of a digital culture and proper training was identified as a major problem for more companies than for any other (see Figure 2). This applies equally to companies that consider themselves advanced. And this applies to all sectors and regions. Lack of skills or competencies in the company's workforce is also the biggest problem that respondents face when it comes to using data analysis. Therefore, it is not surprising that more than two-thirds (69 %) refer to improving their own data

analysis technology and skill level as the single largest improvement path to expand data analysis capabilities. Some companies also say that external partnerships can play a role through the provision of technology or training, and a minority (18 %) plan to use mergers and acquisitions to acquire third-party companies.

**Conclusions and suggestions.**

In the course of the research, the importance of development in digital sphere as the basis for enterprises was contended. The rapid changes in markets and its competitiveness have made companies look for new opportunities. Even more, enterprises in such conditions are forced to develop in a rapid pace, just to save their market share. One of such drivers was implementation of Industry 4.0, followed by concept Internet of Thing. Therefore, there is great increase in importance of digitalization into every business-process. The digital needs to become a crucial part of the company's strategy. Every process or activity needs to be planned in coordination with the platform and its functioning. Embracing digital platforms is crucial for a company's competitive advantage. Not having a digital strategy means getting left behind, you can be beaten by the competition. On the other hand, company should always remember great number of drawbacks and problems of digitalization. As a result, analytical work become more essential and could help to avoid rather than overcome gap, that could possible cost a lot for a company.

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# MANAGEMENT OF ASYMMETRIC DEVELOPMENT OF ENTERPRISES IN THE DIGITAL ECONOMY

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Основною метою тез є дослідження особливостей управління асиметрією розвитку підприємства в контексті цифрової економіки. Досліджено сутність асиметрії розвитку підприємства в контексті цифрової економіки. Визначено характерні особливості інформаційних ресурсів в умовах сучасного динамічного середовища. Проаналізовано результати впровадження системи управління інформаційними ресурсами компанії.

**Ключові слова:** асиметрія розвитку підприємства, управління розвитком, ERP-система, інформаційні потоки, інформаційні ресурси.