Digital 2024 : Key findings from the annual Datareportal report. – 2024. – URL: https://www.byyd.me/ru/blog/2024/02/digital-2024-datareportal/ (date of access: 01.11.2024).

2. Беквит, Г. Четыре ключа к маркетингу услуг / Г. Беквит. – 4-е изд., испр. и доп. – М. : Альпина Бизнес Букс, 2019. – 252 с.

Beckwith, G. Four keys to service marketing / G. Beckwith. – 4th ed., rev. and exp. – M. : Alpina Business Books, 2019. – 252 p.

3. Лавлок, К. Маркетинг услуг: персонал, технологии, стратегии / К. Лавлок. – М. : Вильямс, 2005. – 997 с.

Lovelock, K. Service marketing: personnel, technologies, strategies / K. Lovelock. – M. : Williams, 2005. – 997 p.

4. Майкл, А. Мобильный маркетинг. Создание конкурентного преимущества с помощью беспроводных технологий / А. Майкл, Б. Солтер. – М. : ИТД, 2007. – 396 с.

Michael, A. Mobile marketing. Creating a competitive advantage with the help of wireless technologies / A. Michael, B. Salter. – M. : ITD, 2007. – 396 p.

5. Демченко, Е. В. Рынок услуг мобильной связи: драйверы роста, инновации, потребительские предпочтения / Е. В. Демченко // Научные труды БГЭУ. – 2024. – С. 66–72.

Demchenko, E. V. Mobile communications services market: growth drivers, innovations, consumer preferences / E. V. Demchenko // Scientific works of BGEU. – 2024. – P. 66–72.

6. Официальный сайт Министерства связи и информатизации Республики Беларусь. – 2024. – URL: https://www.mpt.gov.by/ru/set-sotovoy-podvizhnoy-elektrosvyazi (дата обращения: 01.11.2024).

Official website of the Ministry of Communications and Informatization of the Republic of Belarus. – 2024. – URL: https://www.mpt.gov.by/ru/set-sotovoy-podvizhnoy-elektrosvyazi (date of access: 01.11.2024).

7. State of mobile 2024: тенденции мобильного рынка. – 2024. – URL: https://www.byyd.me/ru/blog/2024/01/state-of-mobile-2024/ (дата обращения: 01.11.2024).

State of mobile 2024: mobile market trends. – 2024. – URL: https://www.byyd.me/ru/blog/2024/01/state-of-mobile-2024/ (date of access: 01.11.2024).

Статья поступила в редакцию 01.11.2024.

УДК 339.9

E. Dudko
T. Kuprevich
BSEU (Minsk)

VENTURE FINANCING IN THE DIGITAL ECONOMY: CURRENT TRENDS AND DEVELOPMENT DIRECTIONS

The article provides a study of venture financing functioning and identifies its features, global trends, development directions of venture financing in the context of digitalization, taking into

account modern development trends of the digital economy. In the course of the study, the specific advantages of digital technologies for innovative venture projects were highlighted.

Keywords: *venture financing; entrepreneurship; venture capital; competitiveness; innovation; digitalization; digital economy; Republic of Belarus.*

Е. Н. Дудко
кандидат экономических наук, доцент
Т. С. Купревич
кандидат экономических наук, доцент
БГЭУ (Минск)

ВЕНЧУРНОЕ ФИНАНСИРОВАНИЕ В ЦИФРОВОЙ ЭКОНОМИКЕ: СОВРЕМЕННЫЕ ТЕНДЕНЦИИ И НАПРАВЛЕНИЯ РАЗВИТИЯ

В статье приведено исследование функционирования венчурного финансирования и определены его особенности и мировые тенденции, выявлены направления развития венчурного финансирования в условиях цифровизации с учетом современных направлений развития цифровой экономики. В процессе исследования выделены специфические преимущества цифровых инструментов для инновационных венчурных проектов.

Ключевые слова: *венчурное финансирование, предпринимательство; венчурный капитал; конкурентоспособность; инновации; цифровизация; цифровая экономика; Республика Беларусь.*

The development of venture financing in the global economy promotes the increased interest of entrepreneurs in the commercialization of intangible assets and the development of R&D, which in turn promotes scientific and technological development, an increase in goods with higher added value, the attraction of investments and the increase in the competitiveness of high-tech sectors of the national economy. At the same time, the state policy pursued in this area testifies to the importance of the economic and legal aspects of venture investment in the context of ensuring national security.

Despite its widespread use, the term “venture investment” does not have a uniform interpretation in scientific literature and regulatory legal acts, which can act as a restraining factor in the process of financial and economic activity of participants in the venture financing market. The purpose of this article is to analyze global trends in venture financing and its features in the Republic of Belarus, to determine the directions of venture capital (VC) development in the digital environment due to the insufficient development of terminological aspects in Belarusian applied science.

The main priorities of the innovation policy of any developed country are the commercialization of scientific and technological achievements and the development of innovative entrepreneurship, taking into account the economic aspects of protecting rights to intellectual property. In modern conditions, to achieve these goals, it is advisable to rely on the venture investment process, which is understood as “risky long-term investments in the capital of created innovative companies that contribute to the development and expansion of business, in exchange for a share

in the authorized capital or a block of shares for the purpose of their subsequent resale" [1].

The emergence of venture financing dates back to the middle of the 20th century, namely in 1946 the American Research and Development Corporation (ARDC) was founded. However, the first company created by venture financing is rightfully considered to be Fairchild Semiconductor International, founded in 1957 by eight physicists and engineers (Julius Blank, Victor Grinich, Eugene Kleiner, Jay Last, Gordon Moore, Robert Noyce, Sheldon Roberts and Gene Hourney). In 1957, they turned to the aspiring financier Arthur Rock, who was the first to use the term "venture capital". This business angel became interested in the project and found a company that could finance it – Fairchild Camera and Instrument Company [2].

Foreign experience shows that innovative entrepreneurs most often encounter problems at the "seed" stage. At this stage, such venture financing institutions as business angels can provide effective support to innovations. Business angels can be both legal entities and individuals, private investors who want not only to invest in the early stages of a company's development, but also to provide consulting support. The evolution of venture financing has led to the spread of two main sources of venture investment, namely:

– business angels – investors (both individuals and legal entities) with practical experience in business and wishing to participate in an innovative project;

– venture funds – funds that invest in the equity capital of innovative startups at different stages of growth.

The venture capital market is experiencing significant growth and development worldwide. According to international estimates, venture investment activity has slowed down after the unprecedented growth of the market in 2021/2022, but the number of deals using venture financing is still at an all-time high (figure 1).

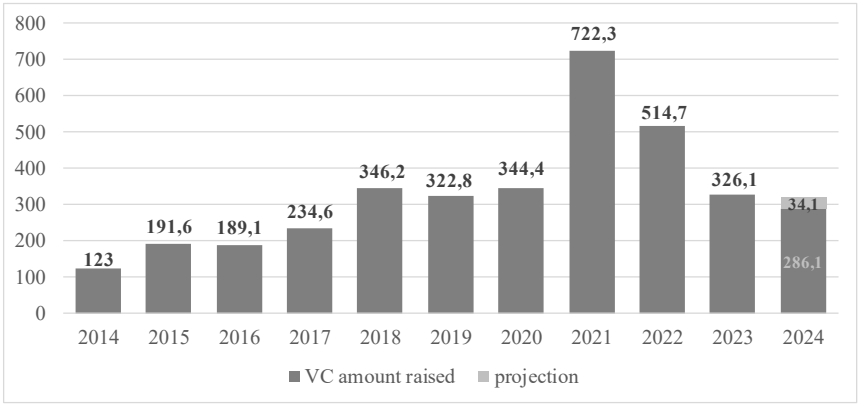

Figure 1. Global Total VC Invested in 2014–2024, billion US dollars

Note – Source: compiled by the authors based on [3, 6].

In 2023, more than 320 billion US dollars was invested in tech companies worldwide, and a similar amount is expected in 2024. Below, we break down venture capital into three distinct stages (figure 2):

– early stage (rounds between 0 and 15 million US dollars);
– breakout stage (rounds between 15 and 100 million US dollars);
– late stage (rounds above 100 million US dollars).

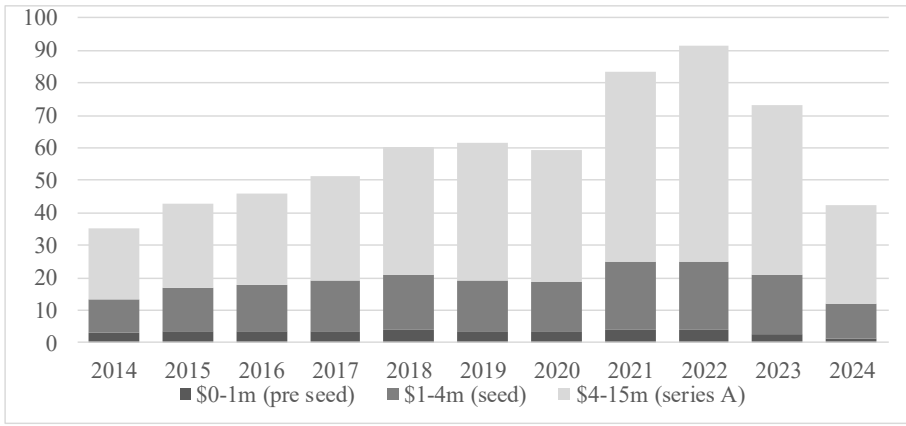

Figure 2. Global early-stage VC investment ($0-15M rounds) in 2014–2024, billion US dollars

Note – Source: compiled by the authors based on [3].

The separation of individual stages provides a more consistent segmentation of the startup and venture capital landscape. Significant differences are visible not only between the value of early, breakout and late stage deals, but also within individual stages. The Breakout stage is presented in the figure 3.

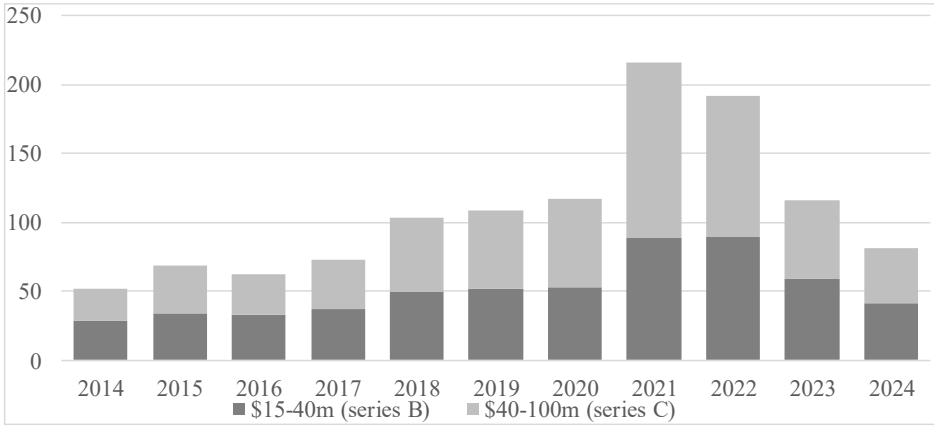

Figure 3. Global breakout-stage VC investment ($15-100M rounds) in 2014-2024, billion US dollars

Note – Source: compiled by the authors based on [3].

Late stage funding reached over 114 billion US dollars in 2024, accounting for over 35 % of total VC invested (figure 4).

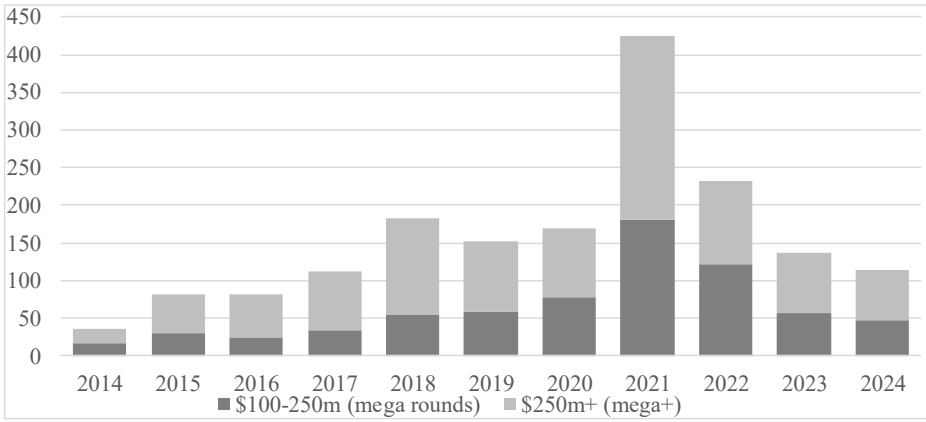

Figure 4. Global late-stage VC investment ($100M+ rounds) in 2014–2024, billion US dollars

Note – Source: compiled by the authors based on [3].

Over the past few years, the United States, China and the United Kingdom have led the world in venture capital investment (figure 5).

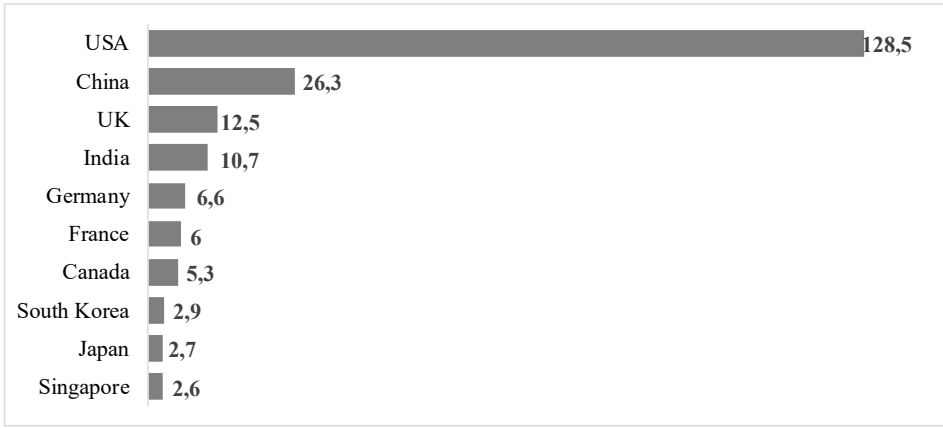

Figure 5. Leading countries for VC investment in 2024, billion US dollars

Note – Source: compiled by the authors based on [3].

At the same time, according to preliminary estimates of the results for 2024, the United States is significantly ahead of its followers (128.5 versus 26.3 and 12.5 billion US dollars).

The venture financing market in the Republic of Belarus is young, in comparison with the markets of foreign countries, and accordingly, the national legislation in the area under consideration was formed in a relatively short period of time. In the Republic of Belarus, the legal basis is based on the Presidential Decree of the Republic of Belarus "On approval of the Regulation on the procedure for creating entities of innovation infrastructure", according to which the subject of activity of a venture company may be: a) "the process of acquiring property rights of legal entities and (or)

individual entrepreneurs who carry out innovative, scientific, scientific and technical activities"; b) "consulting, management and other services to persons implementing innovative projects financed by a venture organization"; c) "financing of innovative projects".

Experts note that every fifth startup in the Republic of Belarus is a business at the stage of development, expansion, i. e. companies older than three years, the majority (81.7 %) of which are legally registered as a company. In addition, changes in the geographic structure of sales are noticeable: if earlier 56.3 % of Belarusian startups developed national trade in products and services, today only 29.8 % prefer the domestic market. It seems that the features of venture investment at the present stage are that: a) the venture investor initially foresees his exit from the project; b) the venture investor (in case of failure) risks all invested funds in exchange for high additional profit (in case of success); c) a high mortality rate of startups at the initial stages of their life cycle; d) the period of profitability for the venture investor is from 3 to 5 years from the date of investment. In the Republic of Belarus, the areas that are most attractive to startups are: innovative digital technologies in healthcare, technologies in the field of finance, artificial intelligence, consulting services, and business software.

The features of venture investment in the Republic of Belarus are: a) startups in the Republic of Belarus attract venture financing, including both venture capital fund investments and angel investments; b) the share of angel investments attracted by startups exceeds venture capital fund investments; c) 75 % of companies that have attracted venture capital fund investments received rounds of 500,000 US dollars or more; d) every fifth startup in Belarus is financed from profits. The majority (75 %) of angel round deals were serviced by Belarusian investors. Startups that attracted more than 1 million US dollars were financed by international funds. However, venture financing in the world is shifting towards later stages of the project life cycle [2].

The results of the ecosystem research show that the funding needs of Belarusian startups at the current stage of development are at least 250 million US dollars. At the same time, only a third of Belarusian startups have calculated the possibility of attracting investments from national investors, in particular companies that need funding at the pre-seed stage. At the same time, 40 % of startups intend to attract venture funding, mainly from foreign funds.

A distinctive feature of the market of the Republic of Belarus was the predominance of women founders of startups compared to male founders (19.7 %) who had MA, MBA, PhD degrees. Among men, the majority completed a master's degree after creating 1 or more startups. Experts note that startups with both female and male founders in the Republic of Belarus are rapidly developing in similar areas, but there are also distinctive features. Thus, the most popular areas of work for startups with female founders include innovative digital solutions in healthcare.

Discussing global trends, it should be noted that venture capital has long played a decisive role in financing waves of technological innovation, and the venture industry is undergoing a significant transformation caused by digitalization.

The widespread use of breakthrough digital technologies such as the Internet of Things, cloud computing, big data analytics, and artificial intelligence is shaping a new paradigm for the development of the global economy – the digital economy.

Thanks to continuous innovation, the impact of digital transformation on industries is only getting stronger, and the interaction between the digital and real economies is becoming more and more extensive every year. IoT devices, the Internet, and mobile applications are changing the way technology companies create, sell, and service their products [4].

To the features of the development of the digital economy at the present stage, the authors include the following:

– data as a source of value due to the continuous reduction in the cost of collecting, storing and analyzing it, which in turn leads to a reduction in transaction costs. The increasing ability to collect, store and process massive amounts of data has contributed to the emergence of the concept of "big data" and "data value chain";

– ubiquitous use of modern ICTs, which causes, on the one hand, an increase in their cost due to the expansion of their functionality, on the other hand, a decrease in prices for ICT services as a result of their standardization and scaling;

– increased mobility in many areas, overcoming territorial limitations and dependence on the location of the counterparty, mobility of digital products due to the low costs of replication and distribution compared to the cost of development and automation of processes;

– widespread network effects that have enabled the creation of private value, especially through so-called multi-stakeholder business models (several groups of people interacting through a platform), resulting in positive or negative externalities (payment card system, operating system, social networks, viral advertising). This effect contributes to economies of scale and scope on the supply side;

– the cross-cutting nature of the digital economy, affecting at least two areas of transformation (customers and products, employees and processes, etc.);

– intellectualization of labor, involvement of consumers in production activities, which is associated with the automation of services;

– increasing unevenness in the spread of the digital economy, its higher growth rate worldwide compared to the general economy.

Digital transformation refers to the integration of digital technologies into all aspects of business operations, resulting in fundamental changes in how organizations operate and create value. In the context of venture capital, this transformation encompasses many aspects.

The advent of big data analytics has given venture investors unprecedented insights into market trends, startup performance, and potential investment opportunities. Virtual due diligence allows venture capitalists to evaluate startups from anywhere in the world, which has expanded the scope of investment opportunities and simplified this process. The use of blockchain technology and smart contracts has increased transparency and efficiency in the management of investment transactions, while ensuring security and tamper-proof records.

According Outlier Ventures estimates, US dominates blockchain startups market, with 36.9 % of all blockchain startups located there; UK is in second place with 14.8 %; China is third with 4.5 %; Canada is next with 4 % and Germany is next with 2.8 %. The main industries where startups are using blockchain are banking (29.7 %), manufacturing (22.3 %), professional services (6.6 %), retail (6 %) and several others [5].

Over the past five years, fintech and healthcare have consistently topped venture capital investment rankings by industry, although the enterprise software sector has suffered significant setbacks (figure 6).

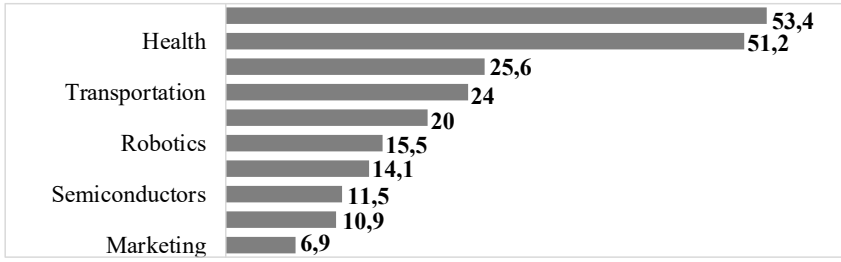

Figure 6. Global leading industries by VC investment in 2024, billion US dollars

Note – Source: compiled by the authors based on [3, 6].

However, according to preliminary estimates, in 2024 top 10 deals globally split among 6 countries: Anduril ($1.5 billion, US, Series F), Safe Superintelligence ($1 billion, US, Early-stage VC), Clio ($900 million, Canada, Series F), Mynt ($788.4 million, Philipines, Late-stage VC), Baichuan AI ($688.5 million, China, Early-stage VC), Groq ($640 million, US, Series D), Cohere ($500 million, Canada, Series D), Helsing ($483.7 million, Germany, Series C), ICLeague ($415 million, China, Series B), Voodoo ($385.9 million, France, Late-stage VC) [6].

Looking at the leading market segments, it can be concluded that generative AI has attracted significant venture funding in 2024 compared to previous years and the global average (figure 7).

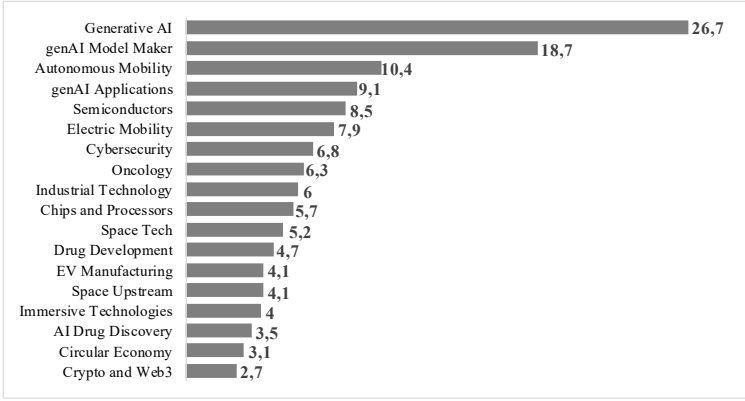

Figure 7. Global leading tech segments by VC investment in 2024, billion US dollars

Note – Source: compiled by the authors based on [3, 6].

Globally, AI continued to attract the largest share of VC investment, accounting for the largest deals. While core AI companies continued to garner strong levels of investment – including Safe Superintelligence ($1 billion) in the US, ad Baichuan AI ($688 million), Moonshot AI ($300 million) in China and Sakana AI ($200 million) in Japan – industry applications of AI also saw robust interest from VC investors. VC investors globally also showed interest in startups with offerings tangential to the AI space, including companies looking to reduce the energy requirements associated with many AI solutions.

Digital tools can not only automate much of the routine processes by combining and analyzing data from various sources, including financial records, market analysis, and social media trends. There is no doubt that the adoption of digital technologies has significantly increased the accuracy and efficiency of investment decision-making processes. Digital transformation has changed the landscape, offering a deeper understanding of its impact on the venture investment process.

Venture investors are now using data-driven due diligence and big data tools to examine a variety of data points, ranging from market trends and consumer behavior to the financial health of a startup. This shift to data-driven analysis not only speeds up the decision-making process, but also improves the accuracy of investment assessments.

By analyzing historical data and identifying patterns through predictive analytics, machine learning algorithms can provide information about the likelihood of a startup's growth and profitability, allowing investors to make more informed choices while reducing the risks associated with investment decisions.

Digital technologies can assess risk factors associated with potential investments, helping investors make more informed allocation decisions. In addition, predictive models can identify potential problems in a portfolio, allowing for proactive risk mitigation strategies.

Digital mobility not only speeds up the deal-making process, but also increases opportunities for global collaboration regardless of geographic distance.

Digital tools enable real-time portfolio monitoring and management, which increases the ability to quickly respond to market changes, enabling proactive portfolio management and risk mitigation. AI-based tools enable venture capitalists to optimize portfolio management by continuously analyzing and adapting to market changes. These systems can track the performance of portfolio companies, assess risk factors, and recommend strategic adjustments.

Thus, the main directions of digitalization of venture financing are: predictive analytics for investment success, automated due diligence processes, portfolio management optimization, identification of investment trends, risk management and mitigation, personalized investment recommendations, continuous learning and adaptation.

At the current stage of global economic development, the relevance of digital transformation in the context of intensifying international competition both at the level of individual business and at the level of entire industries forms a growing interest in the problems and prospects that become possible within the digital economy. Digitalization makes it possible not only to improve existing business models and change business processes, but also to obtain a significant leap in business and new competitive advantages. Digital transformation of international business provides a significant contribution to sustainable economic growth, increasing the competitiveness of basic industries and innovative sectors of the economy. Digital technologies allow business entities to automate simpler processes and eliminate intermediate steps in more complex processes, thus significantly increasing the flexibility of companies, which can now use their resources much more efficiently.

As the venture capital landscape continues to evolve in the digital age, staying on top of these transformations is critical for both investors and startups. By leveraging digital tools and strategies, venture firms can uncover new opportunities and navigate challenges more effectively.

References

1. Dudko, E. N. International trade of objects of intellectual property: study guide for undergraduates / E. N. Dudko, G. V. Turban, P. A. Zambryzhytskaya. – Minsk : NIHE, 2020. – 77 p.

Дудко, Е. Н. Международная торговля объектами интеллектуальной собственности : учеб.-метод. пособие для магистрантов / Е. Н. Дудко, Г. В. Турбан, П. А. Замбрижицкая. – Минск : РИВШ, 2020. – 77 с.

2. Dudko, E. N. Formation and development of venture financing in the Republic of Belarus / E. N. Dudko // Economic science today: a collection of scientific articles / ред-кол.: S. Y. Solodovnikov (chief ed.) [et al.]. – Minsk : BNTU, 2023. – Iss. 17. – P. 82–87.

Дудко, Е. Н. Становление и развитие венчурного финансирования в Республике Беларусь / Е. Н. Дудко // Экономическая наука сегодня : сб. науч. ст. / editorial board: С. Ю. Солодовников (гл. ред.) [и др.]. – Минск : БНТУ, 2023. – Вып. 17. – С. 82–87.

3. The State of Global. – URL: https://dealroom.co/guides/global (date of access: 28.11.2024).

4. Kuprevich, T. S. Digital business-models: concept, features and directions of development / T. S. Kuprevich // Sci. works / Belarus State Econ. Univ. ; editorial board: A.V. Egorov (chief ed.) [et al.] – Minsk, 2023. – P. 197–203.

Купревич, Т. С. Цифровые бизнес-модели: понятие, особенности и направления развития / Т. С. Купревич // Научные труды Белорусского государственного экономического университета. Выпуск 16 / Министерство образования Республики Беларусь, Белорусский государственный экономический университет ; ред. кол.: А. В. Егоров (гл. ред.) [и др.]. – Минск : Колорград, 2023. – С. 197–203.

5. Kuprevich, T. S. Digital transformation of international business / T. S. Kuprevich, G. V. Turban. – Minsk : NIHE, 2022. – 100 p.

Купревич, Т. С. Цифровая трансформация международного бизнеса / Т. С. Купревич, Г. В. Турбан. – Минск : РИВШ, 2022. – 100 с.

6. Venture Pulse Q3 2024. Global analysis of venture funding. – URL: https://kpmg.com/kpmg-us/content/dam/kpmg/pdf/2024/venture-pulse-q3-2024.pdf (date of access: 26.11.2024).

Статья поступила в редакцию 29.11.2024.

УДК 338.484.2

A. Yezhel
BSEU (Minsk)

DOMESTIC TOURISM IN THE REPUBLIC OF BELARUS AS A DRIVER OF ECONOMIC GROWTH

The article studies and evaluates the state of tourism, including domestic tourism, in the Republic of Belarus. Trends influencing the economic growth of tourism and other service activities are analyzed. Proposals are given for improving the management of domestic tourism development in the Republic of Belarus.

Keywords: *domestic tourism; economic growth; demand; supply; gross value added; sustainable tourism development.*