

UDC 69.003

Vlasenko V.A.

Formation of sustainable competitive advantages in the development of a construction company strategy based on value innovation

The current situation, characterized in risk management as “external shocks”, leads to the need to adapt the strategy of enterprises to focus on the formation of sustainable innovative competitive advantages that create opportunities for technological breakthrough. The Russian economy still has a low level of innovation activity, high dependence on imported technologies in the most important sectors of the economy, including construction, a number of government programmes promoting innovation have not yielded the expected results. Changing this situation requires new approaches, including the identification of trends in the formation of innovative values. This task is particularly relevant for enterprises in the construction industry, designed to become a driver of economic development in accordance with industry strategic guidelines. The need to increase the competitiveness of Russian construction enterprises in conditions of economic instability and external shocks, which entails the search for possible ways to form and retain competitive advantages. The practical significance of this study lies in the argumentation of sources and methods of formation of sustainable competitive advantages, the key of which is innovation, from the position of value-oriented approach. The application of value innovation, as a source of sustainable competitive advantages has led to the growth of the main indicators of enterprise development. The article presents a methodological toolkit, which consists of the procedure and strategy for the formation of value innovation, as well as the scheme of “six ways” of value innovation, forming sustainable competitive advantages in the development of the strategy of the construction enterprise based on value innovation, implemented on the example of a large infrastructure construction enterprise JSC “RZDstroy”.

Keywords: *strategy, construction company, value innovation, efficiency, competitive advantage*

The relevance of the topic of the article is due to the need to increase the competitiveness of Russian construction enterprises in conditions of economic instability and external shocks, which entails the search for possible ways to form and retain competitive advantages. Moreover, we agree with the opinion of researchers [1–3] about the need to form and develop sustainable competitive advantages in modern conditions, that is, innovations of all types that allow not only to maintain the volume of construction and commissioning of facilities at the existing level in the conditions of shortage of construction materials and equipment, severe sanctions pressure, changes in the principles of globalization of the world economic economy, but also to achieve growth in volume along with a breakthrough in the direction of technological sovereignty of the industry, which should become a driver of technological development¹.

The concept of sustainable competitive advantages postulates their duration and uniqueness, the difficulty of copying, and most importantly, the ability to ensure the strategic orientation of competitiveness in the conditions of transformation of the external and internal environment [4, 5]. The essential component of sustainable competitive advantages is seen in the possibility of accelerated adaptation of the enterprise to changing

environmental conditions based on the innovative ability to create new value for stakeholders. At the same time, the practical significance of this study lies in the argumentation of the sources and methods of forming sustainable competitive advantages, the key of which is innovation, from the standpoint of a value-oriented approach.

The value creation implemented in modern business modelling concepts (A. Osterwalder's business model, “blue ocean” concept, value chain, and so on) proceeds from the creation of a certain need and means to satisfy it in the consumer [6–9]. The long-term period of foresight forecasting, along with existing trends and limitations of the investment and construction sphere development determined by external shocks, leads to the need for value innovation, that is, a qualitative leap in the dynamics of product value for the consumer (both final and intermediate construction products) and the producer. Value innovation comes from the reorientation of the economic thinking of the enterprise from competition-based to the prospects of discovery or creation of new demand. Foresight, presenting, on the one hand, a vision of the goals of innovative development [2], on the other hand, creates the need and the corresponding value innovation within the framework of long-term strategic planning.



Vlasenko Vyacheslav Aleksandrovich,

Candidate of Engineering Sciences, doctoral student; Moscow State University of Civil Engineering (National Research University) (MGSU); 26 Yaroslavskoe shosse, Moscow, 129337, Russian Federation; RZDstroy; bldn 1, 12 Elizavetinsky lane, Moscow, 105005, Russian Federation; SPIN-code: 8541-4739, Scopus: 56437610100, ResearcherID: W-1655-2018, ORCID: 0000-0002-0771-5661; vslava@mail.ru

¹ Strategy of innovative development of the construction industry of the Russian Federation for the period up to 2030. URL: https://view.officeapps.live.com/op/view.aspx?src=http://www.minstroyrf.ru/upload/iblock/906/2_finalnaya-versiya-proekta-strategii_irso_28_06_206-s-dopolnieniem.docx

Integrating the foresight methodology with the concept of value innovation and the principles of P2M project management², the procedure of value innovation formation in construction is formulated (Fig. 1).

The result of creating value innovation is not just an increase in the volume of innovative products due to the demand for innovative value, but also an increase in the volume of construction products certified according to various criteria ("green" certification, attribution of the project to sustainable development projects, creation of new markets, and so on).

The proposed procedure was tested on the example of JSC "RZDstroy". When developing the Development Strategy of JSC "RZDstroy" until 2018³, the proposed procedure was already used in planning the implementation of innovative projects, however, a problem-oriented approach was used as a starting point for value innovation by searching for "bottlenecks", technical and technological directions of railway construction development (Fig. 2) [10, 11].

Currently, there is a change in the innovation strategy in the direction of reorientation to import substitution technologies and the creation of appropriate Russian technologies, as well as the production of innovative building materials and structures in Russia. This will make it possible to obtain a final product that meets or exceeds foreign analogues in terms of its characteristics, while realizing the effect due to cost savings, as well as reducing the risks of dependence on imports in the unstable geopolitical situation and economic sanctions.

Let's consider the scheme of "six ways" [3, 12] for JSC "RZDstroy" in two time horizons: 2013 (as an empirical confirmation of the reliability of the proposed toolkit) and 2021 (Fig. 3).

The strategic outline of the railway construction industry is as follows (Fig. 4).

Analyzing the strategic outline and strategic profile, we consider it appropriate to implement as an innovation the value of construction and installation works using innovative technologies of the ballastless

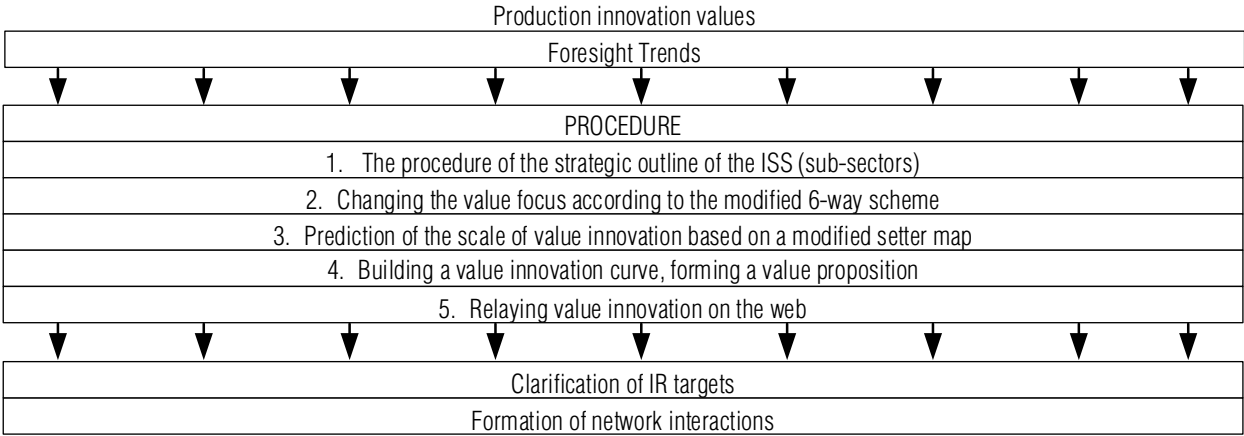


Fig. 1. The procedure of value innovation formation in construction

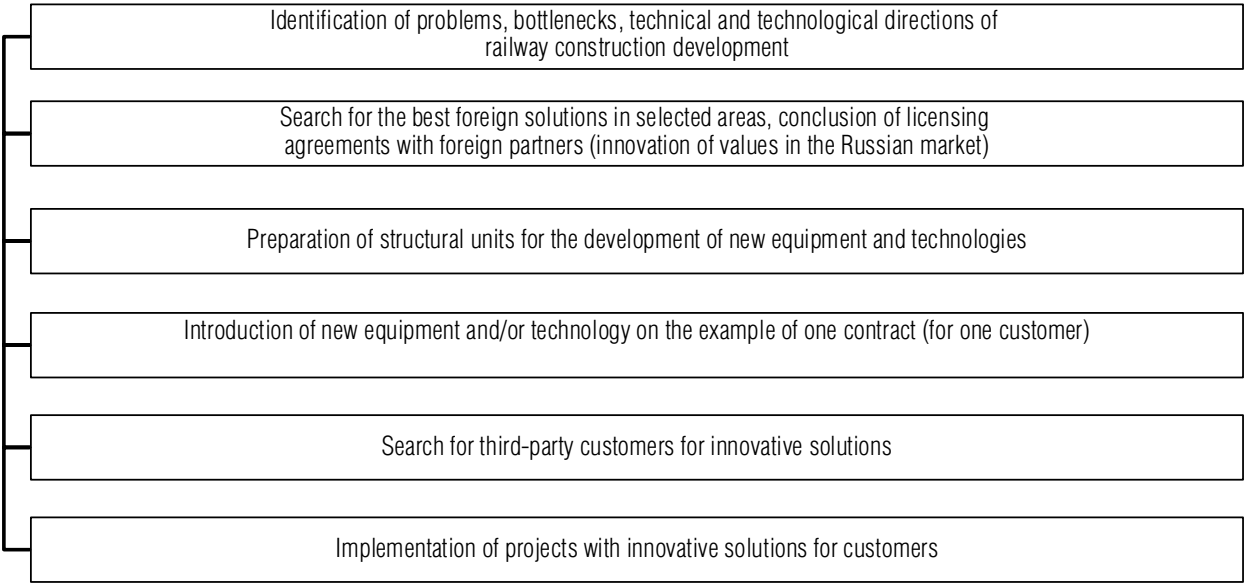


Fig. 2. The procedure of value innovation formation in the Development Strategy of JSC "RZDstroy" until 2018

2 Innovations, startups and inventions. The guidebook for project and program management for enterprise innovation. URL: <https://viafuture.ru/sozdanie-startapa/standart-p2m>
3 Development strategies of JSC "RZDstroy" until 2018. URL: <https://www.rzdstroy.ru/docs/>

Indicator	Traditional industry competition	Value Innovation
Branch	Construction of railway production of building structures	Construction of metro tunnels and railways with BSVP
		Construction of the HSR
		LVT production
		Production of BSVP VSM
Group of buyers	JSC "Russian Railways"	JSC "Russian Railways", other customers
		Private investors of HSM
Product offer volume	Maximum value for JSC "Russian Railways"	Maximum values for JSC "Russian Railways" and private investors
		Maximum values for the State Unitary Enterprise "Moscow Metro"
		Maximum values for railway users
Functional and emotional orientation	Price-quality ratio in the framework of railway construction	Maximum quality of work
		Speed of movement
Time	Adaptation to external trends	Formation of the railway construction trend
–2013		–2020

Fig. 3. Diagram of the "six ways" of innovation values of JSC "RZDstroy"

structure of the upper track, including the use of a seamless ballastless track structure using LVT (Low Vibration Track) technology of Sonneville AG. Accordingly, in 2013, a value innovation for the company was the introduction and application of LVT technology. Further, on the basis of foresight and the application of the four-action matrix,

a value innovation in the area of production of innovative materials and structures was developed — the design of the upper track slab was developed and tested, as well as the organization of production and laying of the slabs was ensured. In 2019, pilot production of track structural elements — VSP rail slabs was launched. The ballastless

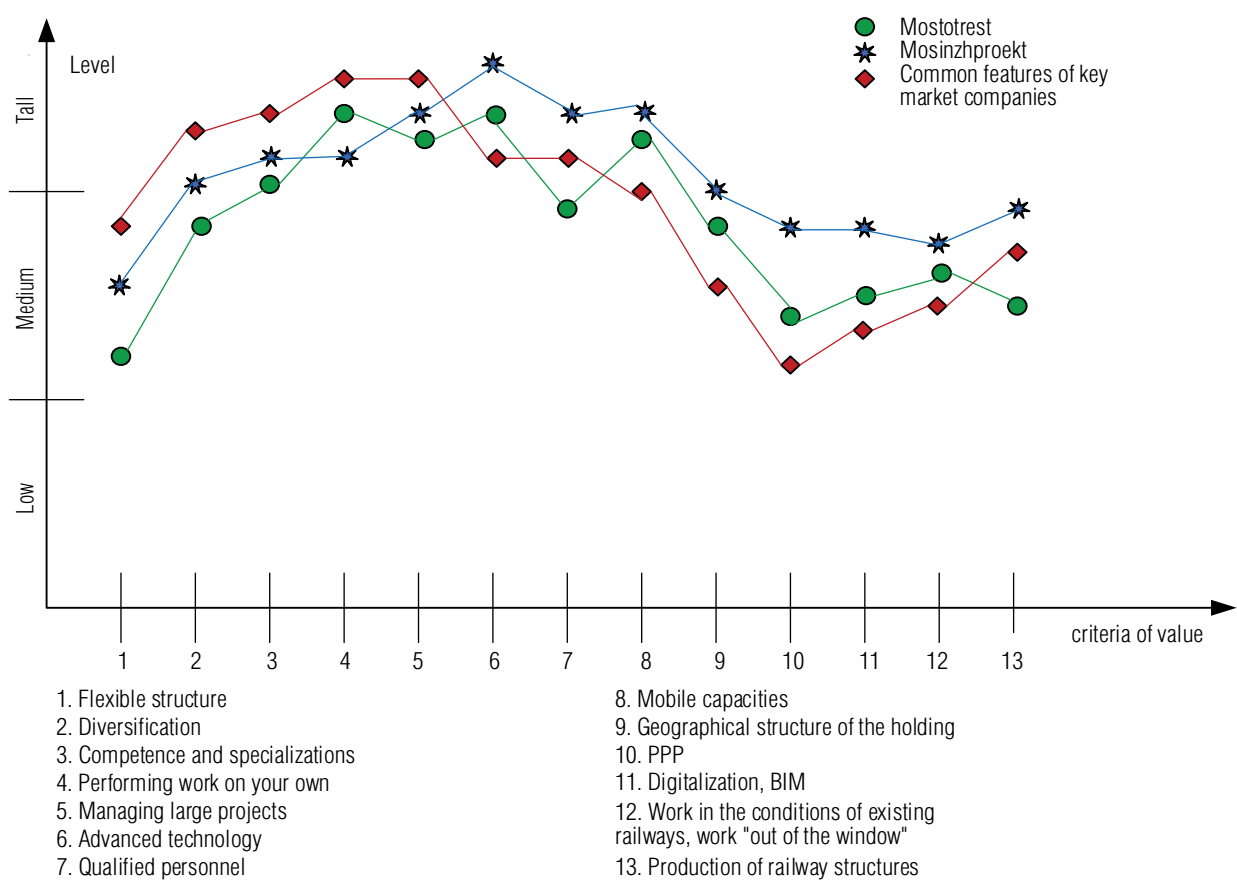


Fig. 4. Strategic outline of the railway construction industry

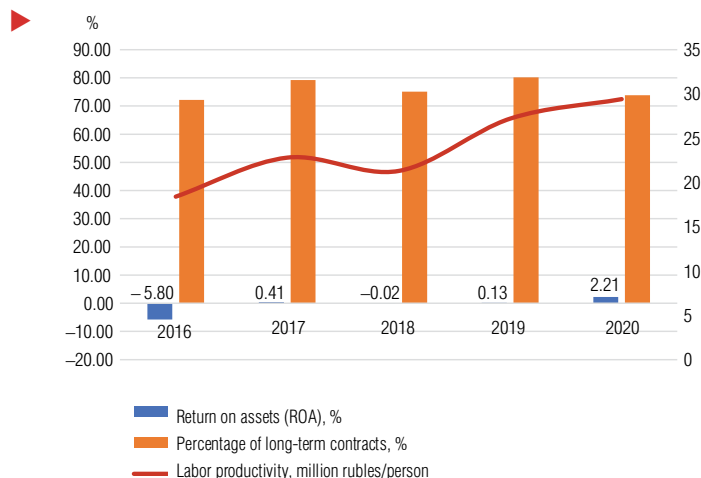


Fig. 5. Analysis of the results of the activities of JSC "RZDstroy" with the use of sustainable competitive advantages based on value innovation

track structure developed by JSC "RZDstroy" is in line with global analogues (China, South Korea, Germany) in terms of its characteristics.

Based on the results of the foresight in 2021, taking into account the forecast of the emergence and development of a new segment — the construction of high-speed railway lines, for the VSP technology, as a result of the application of the four-action matrix, another innovation of the value of JSC "RZDstroy" was developed — the production of innovative VSP.

The use of value innovation as a source of sustainable competitive advantage led to the growth of the main indicators of the company's performance (Fig. 5).

This strategic step of the company showed the effectiveness of the proposed procedure of value innovation in construction as the formation of a sustainable competitive advantage when tested in the practice of JSC "RZDstroy" in the framework of the Development Strategy of JSC "RZDstroy" until 2018 and the Strategy of JSC "RZDstroy" until 2030.

REFERENCES

1. Gumba K., Uvarova S.S., Belyaeva S.V., Vlasenko V.A. Innovations as sustainable competitive advantages in the digital economy: substantiation and forecasting. *E3S Web of Conferences*. 2021; 10011. DOI: 10.1051/e3sconf/202124410011
2. Uvarova S.S., Gumba Kh., Kiseleva E., Sonin Ya. Digitalization of design and construction of agricultural facilities as a basis for ensuring their energy efficiency. *E3S Web of Conferences*. 2020; 175:11004. DOI: 10.1051/e3sconf/202017511004
3. Chan Kim V., Rene Mauborn. *Blue Ocean Strategy. How to Create Uncontested Market Space and Make the Competition Irrelevant*. Moscow, Mann, Ivanov and Ferber, 2017; 336. (rus).
4. Gumba Kh.M., Mamaev M.I. Conceptual basics of sustainable competitive advantages formation. *Izvestiya Irkutsk State Economic Academy (Baikal State University of Economics and Law)*. 2014; 1:11. URL: <https://www.elibrary.ru/item.asp?id=21252612> (rus).
5. Gumba Kh.M., Kankhva V.S., Mamaev M.I. Substantiation of the innovative foundation of interconnection between systemic competitive ability and economic stability of construction enterprises in economic transformations conditions. *Scientific Review*. 2013; 9:678-682. URL: <https://www.elibrary.ru/item.asp?id=21219320> (rus).
6. Vlasenko V.A. Methodological approach to the diffusion of digital technologies in construction in the target focus of complete digital transformation. *Economics and Entrepreneurship*. 2021; 11(136):1171-1174. DOI: 10.34925/EIP.2021.11.136.234
7. Vlasenko V.A. Modeling of regional "Points of innovative growth" from the position of foresight technologies. *FES: Finance. Economy. Strategy*. 2018; 15(9):51-55.
8. Osterwalder A. *Building business models*. Alpina Publisher, 2020; 288.
9. Uvarova S.S., Panenkov A.A., Sonin Ya.L. Digitalization of construction in the projection of the theory of organizational and economic changes. *Economics of Construction*. 2020; 1(61):31-39. URL: <https://www.elibrary.ru/item.asp?id=43323681>
10. Gumba H.M., Vlasenko V.A. Strategy of development of innovative activity in industry and construction: the rationale of the regional dimension. *Izvestiya of Higher Educational Institutions. Technology of the Textile Industry*. 2017; 2(368):14-19.
11. Sizova E.I. Zhutaeva E.N., Belyaeva S.V., Andryunina Ya.A. Prospects for the development of innovative activity in the conditions of digital transformation of enterprises. *Economics and Entrepreneurship*. 2021; 8(133):815-818. DOI: 10.34925/EIP.2021.133.8.152
12. Uvarova S.S., Belyaeva S.V., Vlasenko V.A. Innovative and digital development of investment and construction enterprises based on a value-oriented approach. *Economics and Entrepreneurship*. 2022; 3(140):1314-1320. DOI: 10.34925/EIP.2022.140.03.255

Формирование устойчивых конкурентных преимуществ при разработке стратегии строительного предприятия на основе инновации ценности

Современная ситуация, характеризующаяся в риск-менеджменте как «внешние шоки», приводит к необходимости адаптации стратегии предприятий в фокусировке формирования устойчивых инновационных конкурентных преимуществ, создающих возможность для технологического рывка. В российской экономике до настоящего времени низок уровень инновационной активности, высока зависимость от импорта технологий в важнейших отраслях экономики, в том числе в строительстве; ряд государственных программ, способствующих стимулированию инноваций, не дал ожидаемых результатов. Изменение этой ситуации требует новых подходов, в том числе выявления тенденций формирования инновационных ценностей. Особенную актуальность данная задача имеет для предприятий строительной отрасли, призванной стать драйвером экономического развития в соответствии с отраслевыми

ми стратегическими ориентирами. Необходимо повышать конкурентоспособность российских строительных предприятий в условиях экономической нестабильности и внешних шоков, что влечет за собой поиск возможных путей формирования и удержания конкурентных преимуществ. Практическая значимость данного исследования заключается в аргументации источников и методов формирования устойчивых конкурентных преимуществ, ключевыми из которых являются инновации с позиции ценностно-ориентированного подхода. Применение инноваций ценности в качестве источника устойчивых конкурентных преимуществ привело к росту основных показателей развития предприятия. В статье дан методический инструментарий, который состоит из процедуры и стратегии формирования инновации ценности, а также схемы «шести путей» инновации ценности, формирующие устойчивые конкурентные преимущества при разработке стратегии строительного предприятия на основе инновации ценности, реализованные на примере крупного предприятия инфраструктурного строительства АО «РЖДстрой».

Ключевые слова: стратегия, строительное предприятие, инновация ценности, эффективность, конкурентное преимущество

СПИСОК ИСТОЧНИКОВ

1. Gumba K., Uvarova S.S., Belyaeva S.V., Vlasenko V.A. Innovations as sustainable competitive advantages in the digital economy: substantiation and forecasting // *E3S Web of Conferences*. 2021. Vol. 244. P. 10011. DOI: 10.1051/e3sconf/202124410011
2. Uvarova S.S., Gumba Kh., Kiseleva E., Sonin Ya. Digitalization of design and construction of agricultural facilities as a basis for ensuring their energy efficiency // *E3S Web of Conferences*. 2020. Vol. 75. P. 11004. DOI: 10.1051/e3sconf/202017511004
3. Моборн Р., Ким Чан В. Стратегия голубого океана. Как найти или создать рынок, свободный от других игроков. М.: Манн, Иванов и Фербер, 2017. 336 с.
4. Гумба Х.М., Мамаев М.И. Концептуальные основы формирования устойчивых конкурентных преимуществ // *Известия Иркутской государственной экономической академии (Байкальский государственный университет экономики и права)*. 2014. № 1. Ст. 11. URL: <https://www.elibrary.ru/item.asp?id=21252612>
5. Гумба Х.М., Канхва В.С., Мамаев М.И. Обоснование инновационного базиса взаимосвязи системной конкурентоспособности и экономической устойчивости строительных предприятий в условиях экономических трансформаций // *Научное обозрение*. 2013. № 9. С. 678–682. URL: <https://www.elibrary.ru/item.asp?id=21219320>
6. Власенко В.А. Методический подход к диффузии цифровых технологий в строительстве в целевой фокусировке полной цифровой трансформации // *Экономика и предпринимательство*. 2021. № 11 (136). С. 1171–1174. DOI: 10.34925/EIP.2021.11.136.234
7. Власенко В.А. Моделирование региональных «точек инновационного роста» с позиции форсайт-технологий // *ФЭС: Финансы. Экономика. Стратегия*. 2018. Т. 15. № 9. С. 51–55.
8. Остервальдер А. Построение бизнес-моделей. Альпина Паблишер, 2020. 288 с.
9. Уварова С.С., Паненков А.А., Сонин Я.Л. Цифровизация строительства в проекции теории организационно-

экономических изменений // *Экономика строительства*. 2020. № 1 (61). С. 31–39. URL: <https://www.elibrary.ru/item.asp?id=43323681>

10. Гумба Х.М., Власенко В.А. Стратегия развития инновационной деятельности в промышленности и строительстве: обоснование регионального аспекта // *Известия высших учебных заведений. Технология текстильной промышленности*. 2017. № 2 (368). С. 14–19.

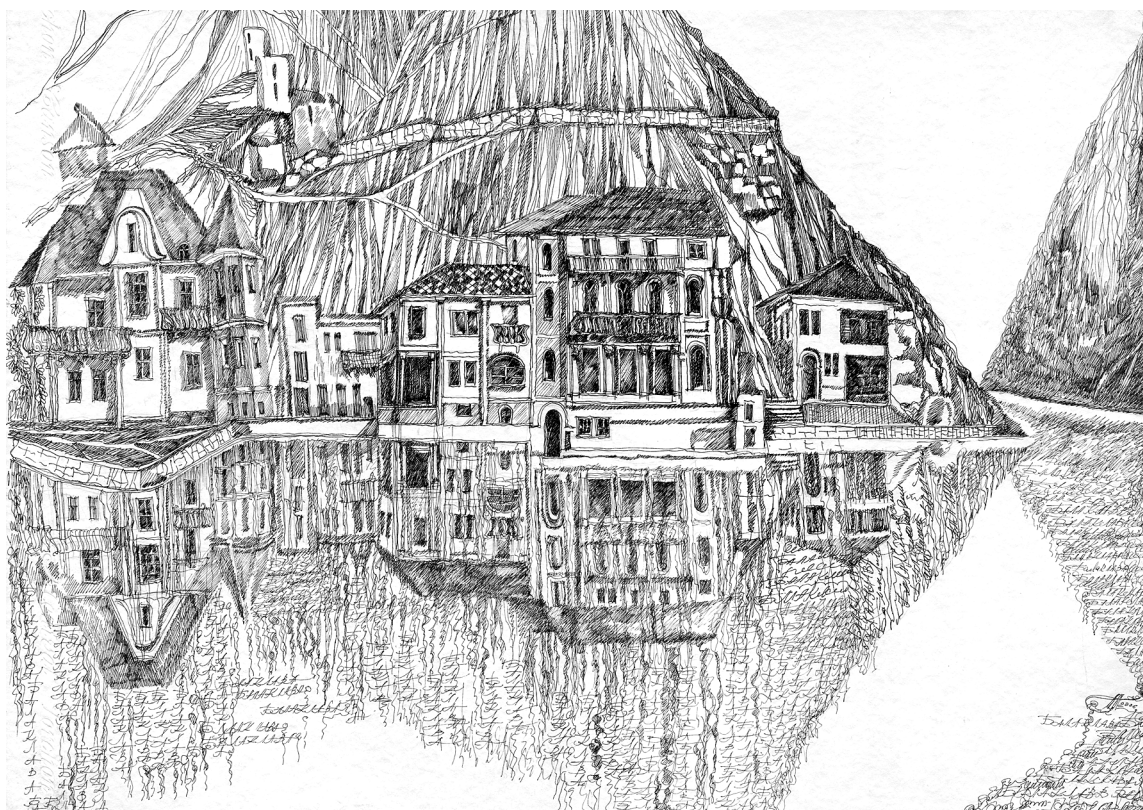
11. Сизова Е.И., Жутаева Е.Н., Беляева С.В., Андрюнина Я.А. Перспективы развития инновационной деятельности в условиях цифровой трансформации предприятий // *Экономика и предпринимательство*. 2021. № 8 (133). С. 815–818. DOI: 10.34925/EIP.2021.133.8.152

12. Уварова С.С., Беляева С.В., Власенко В.А. Инновационное и цифровое развитие предприятий инвестиционно-строительной сферы на основе ценностно-ориентированного подхода // *Экономика и предпринимательство*. 2022. № 3 (140). С. 1314–1320. DOI: 10.34925/EIP.2022.140.03.255

Об авторе: **Власенко Вячеслав Александрович** — кандидат технических наук, докторант; **Национальный исследовательский Московский государственный строительный университет (НИУ МГСУ)**; 129337, Москва, Ярославское шоссе, д. 26; **РЖДстрой**; 105005, г. Москва, Елизаветинский пер., д. 12, стр. 1; SPIN-код: 8541-4739, Scopus: 56437610100, ResearcherID: W-1655-2018, ORCID: 0000-0002-0771-5661; vlslava@mail.ru

For citation: Vlasenko V.A. Formation of sustainable competitive advantages in the development of a construction company strategy based on value innovation. *Real Estate: Economics, Management*. 2023; 3:37-41.

Для цитирования: *Власенко В.А. Формирование устойчивых конкурентных преимуществ в развитии стратегии строительной компании на основе ценностной инновации // Недвижимость: экономика, управление*. 2023. № 3. С. 37–41.



Л.И. Павлова. Балаклава. Рисунок, тушь, перо