THE SHIFT TO LOCALIZED OPEN INNOVATION: THE IMPACT OF SANCTIONS ON CO-CREATION IN RUSSIAN COMPANIES

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Purpose: to explore the co-creation practices of Russian companies, focusing on their preferred partners, organizational forms, key drivers, and barriers influencing customer-oriented innovation processes, and how these elements have changed in a constrained environment caused by recent sanctions. **Methodology:** the empirical study was conducted through an exploratory survey of managers responsible for innovation and new product development in large Russian companies, with data collected in March and April 2023. **Findings:** prior to the sanctions, Russian companies actively engaged in co-creation with diverse partners and employed mature practices while facing barriers such as employee skill gaps. Sanctions have shifted the role of co-creation from fostering growth to ensuring resilience, pushing firms to rely more on local talent, favour incremental improvements, and carefully select projects due to budget constraints. **Originality and contribution:** this is the first empirical cross-industry study done on the usage of co-creation by Russian companies, confirming that despite limited prior research, Russian firms actively use co-creation for innovation with a higher-than-expected level of maturity. It reveals how sanctions have reshaped co-creation dynamics, shifting its focus from growth to resilience, promoting reliance on local talent, and fostering a "localized open innovation" model that prioritizes internal capabilities and incremental improvements. Moreover, it offers managers and policymakers the opportunity to better understand where they are and what they may need to do in the future.

Keywords: co-creation, open innovation, Russia, sanctions, economic crisis.

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INTRODUCTION

Co-creation is a specific form of open innovation in which a company collaborates with individual external contributors — such as consumers, students, researchers, independent experts, or innovation enthusiasts — and incorporates their input into the company's innovation projects [Tekic, Willoughby, 2019]. While it is well-documented that co-creation has been extensively used as a tool for innovation and product development by leading companies in the US and Europe since the late 2000s [Antorini, Muñiz, 2013; Bartl et al., 2012; Bilgram, Bartl, Biel, 2011; Boudreau, Lakhani, 2013; Filieri, 2013], it is less widely known that, around the same time, co-creation also gained prominence in the innovation efforts of Russian companies. Notable examples include large-scale crowdsourcing projects like Idea Exchange and Sberbank-21, conducted by Sberbank [Dolzhenko, Bakalenko, 2016], which engaged hundreds of thousands of participants and generated billions of rubles in value [itWeek, 2012; Lenta.ru, 2011; RBC, 2010]. Another significant example is the crowdsourcing platform Active Citizen, which the City of Moscow has been using since 2014 [Yudina, Zakharova, 2016].

However, despite these promising examples, the academic and practitioner literature on co-creation in Russia remains surprisingly sparse, both in English and Russian. While companies like Sber, Yandex, MTS, and the Moscow City government continue to employ crowdsourcing, hackathons, and other co-creation practices, systematic empirical evidence regarding the extent, forms, and outcomes of co-creation practices in Russian companies is limited. For instance, a search query for "(co-creation OR cocreation OR crowdsourcing) AND (Russia OR Russian)" within article titles, abstracts, and keywords section related to Business, Management, and Accounting contributions in the Scopus database results only in a handful of studies. This lack of research is problematic, as it may hinder Russian companies from fully understanding and leveraging the potential of co-creation to build more user-centric, and thus more relevant and successful products.

The importance and urgency of exploring co-creation in Russia have been further amplified by the unprecedented sanctions imposed by Western nations since February 2022 [Demidova, 2022; Gaur, Settles, Vaatanen, 2023; Statista, 2024; Zemtsov, Mikhailov, Barinova, 2023]. These sanctions aim to restrict Russia's access to global markets, advanced technologies, and reduce the flow of people, goods, capital, and ideas, imposing significant constraints on Russian companies. Consequently, these measures have dramatically altered the competitive landscape in Russia, forcing firms to re-examine their innovation processes, including the role of open innovation, as they transition from operating in a globally connected environment to a locally restricted one.

While the positive role of open innovation in globally constrained environments — such as during the 2008 financial crisis or the COVID-19 pandemic — has been well-documented [Bertello, Bogers, De Bernardi, 2022; Chesbrough, 2020; Laperche, Lefebvre, Langlet, 2011; Patrucco et al., 2022; Yun, Zhao, Hahm, 2018], the dynamics of open innovation in the context of a (highly) isolated country remain largely unexplored. Specifically, it is unclear whether companies become more or less open and whether their existing practices, partners, and motives remain consistent or undergo significant changes.

Against this backdrop, this paper addresses two key questions.

1) *How do Russian firms use co-creation?*

2) *How has the constrained environment caused by sanctions transformed this usage?*

More specifically, this research aims to analyze why or why not, when, with whom, and how Russian companies engage in co-creation to organize customer-oriented innovation processes, both before and during the sanctions. Drawing on a survey of 87 innovation managers from companies with prior co-creation experience, this exploratory

research not only sheds light on the dynamics of co-creation in Russia but also offers broader insights into the impact of constrained environments on co-creation and open innovation practices.

This study makes several significant contributions to the literature on co-creation and open innovation. First, it provides pioneering insights into the state of co-creation in Russia, demonstrating that despite limited prior research, Russian companies actively engage in co-creation with a diverse range of partners and employ relatively mature practices. Prior to the sanctions, co-creation in Russian firms primarily focused on generating new product ideas and solving specific problems, rather than identifying unresolved issues or broader market needs, with employee skill gaps posing a significant barrier. This study thus adds to the limited understanding of co-creation in Russia [Dolzhenko, Bakalenko, 2016; Korelina, Oyner, 2015; Oyner, Korelina, 2016; Yudina, Zakharova, 2016], and, more broadly, outside of developed markets [Bogers, Burcharth, Chesbrough, 2019; De Paulo et al., 2017].

Second, the research shows that under sanctions, co-creation remains a critical practice, albeit with a shift from driving growth to ensuring survival. Under sanctions, Russian firms use co-creation to drive incremental innovation and rely more on internal and local resources, such as non-R&D employees and students. These findings highlight the adaptability of co-creation and its potential to foster resilience in resource-constrained environments.

Finally, the study identifies key differences between globally constrained environments, which facilitate international collaboration, and locally isolated environments, where sanctions drive a shift toward "localized open innovation". This localized approach prioritizes domestic talent, internal networks, and context-specific solutions, fostering participatory innovation cultures that have the potential to enhance long-term resilience. These findings contribute to the literature on open innovation in constrained environments, adding to existing evidence from the 2008 financial crisis [Laperche, Lefebvre, Langlet, 2011; Yun, Zhao, Hahm, 2018] and the COVID-19 pandemic [Bertello, Bogers, De Bernardi, 2022; Chesbrough, 2020; Patrucco et al., 2022].

The remainder of the paper is organized as follows: first, we review the literature related to the key elements of co-creation; next, we detail the data collection process; we then outline and discuss the main findings of our study; finally, we conclude with implications for research and practice, as well as limitations and suggestions for future research.

LITERATURE REVIEW

Co-creation

Co-creation, as a form of open innovation in which a company collaborates with individual external contributors and includes their input into the company's innovation projects [Tekic, Willoughby, 2019], represents a departure from the traditional, linear innovation process, where companies develop products internally and then release them to the market. Instead, it involves a more iterative and participatory approach, where external contributors are actively involved in various stages of the innovation process, from ideation to product development and refinement [Prahalad, Ramaswamy, 2004].

Although the concept of co-creation is not new, the involvement of individual external contributors in corporate innovation projects has intensified in recent decades largely due to a boom in the Internet and information technologies adoption. These technological advancements have facilitated greater connectivity and collaboration, enabling companies to embrace the collective intelligence and creativity of individual external contributors on a larger scale [Füller, 2010; Haavisto, 2014].

Companies employ crowdsourcing platforms and online communities to engage external contributors virtually. Through crowdsourcing, companies delegate tasks once

handled internally to an undefined group of individuals through an open call [Jeppesen, Lakhani, 2010; Pollok, Lüttgens, Piller, 2019] via digital contests on platforms such as Wazoku Crowd, eYeka, HYVEcrowd, and jovoto, scrupulously designed to attract solvers [Acar, 2019; Tekic, Alfonzo Pacheco, 2024]. On the other hand, co-creation in virtual or online communities has a collaborative character [Hienerth, Von Hippel, Berg Jensen, 2014]. As technological infrastructure has advanced — particularly with the rapid expansion of social networking platforms that facilitate and enrich social interactions — virtual communities have grown in size, popularity, and influence.

Offline co-creation occurs through lead user workshops and hackathons, enabling companies to foster creativity and stimulate innovation among selected co-creators [Tekic, Willoughby, Füller, 2023]. Lead users — early adopters who anticipate market needs — provide valuable insights for breakthrough innovations [Lilien et al., 2002; Von Hippel, 1986]. Hackathons, in turn, are intense innovation-focused events, emphasizing swift problem-solving through collaborative efforts within a condensed time frame, often spanning just a couple of days [Lifshitz-Assaf, Lebovitz, Zalmanson, 2021].

External contributors in co-creation include customers, lead users, experts, students, entrepreneurs, suppliers, and hobbyists [Adamczyk, Bullinger, Möslein, 2012; Füller et al., 2012; Tekic, Tekic, Todorovic, 2015]. They fall into two groups: expert and consumer co-creators [Tekic, Willoughby, 2017]. Expert co-creators possess specialized knowledge and problem-solving skills, contributing insights beyond a company's internal expertise [Schweisfurth, Raasch, 2015]. They are motivated by a passion for innovation and include field experts, students, and innovation enthusiasts. Their contributions often stem from a deep understanding of specific domains or industries, allowing them to offer valuable insights and solutions that may not be readily accessible to a company's internal teams. On the other hand, consumer co-creators represent individuals whose contributions are grounded in their experiences, needs, and preferences as users of a company's products or services [Candi, Van den Ende, Gemser, 2015; Greer, Lei, 2012]. Their insights are derived from firsthand interactions with the company's offerings, providing valuable feedback on usability, functionality, and overall user experience [Borisov, 2021; Rozhkov et al., 2014].

Generative AI (GenAI) is emerging as an active co-creator, improving strategic viability in idea generation. Studies demonstrate that human-GenAI collaborations generate more viable ideas, though human-generated ones tend to be more novel [Boussioux et al., 2024; Eisenreich et al., 2024]. However, GenAI interactions also pose risks — collaboration failures may lead to frustration and diminish the co-creation experience [Castillo, Canhoto, Said, 2021].

Co-creation under constraints

Constraints — such as regulations, deadlines, or resource scarcity — limit innovation [Acar, Tarakci, Van Knippenberg, 2018]. Western sanctions on Russia, which were imposed in 2014, and intensified in 2022, represent a clear form of constraint as they limit access to critical resources, including technology, funding, and international markets, leaving Russian firms to operate in a resource-scarce environment [Gaur, Settles, Vaatanen, 2023; Statista, 2024]. Resource scarcity stands out as one of the most impactful constraints, given the critical role resources play in driving innovation [Weiss, Hoegl, Gibbert, 2017], particularly if resources are valuable, rare, imperfectly imitable, and non-substitutable [Barney, 1991]. The unavailability of advanced technology, for example, limits opportunities for R&D and product development, forcing firms to innovate with locally available resources or, if possible, to find new and less established suppliers from friendly countries. Similarly, restrictions on financial flows reduce firms' capacity to participate in international trade

and invest in large-scale innovation projects, further exacerbating their dependence on internal and limited external resources.

While the literature dominantly emphasizes the negative impacts of resource scarcity on innovation [Coad, Pellegrino, Savona, 2016; Gassmann, Von Zedtwitz, 2003; Weiss, Hoegl, Gibbert, 2017], some studies argue that resource-constrained firms can efficiently leverage their available resources and external opportunities to generate innovation [Cunha et al., 2014; Hoegl, Gibbert, Mazursky, 2008; Katila, Shane, 2005], even radical one [Keupp, Gassmann, 2013] as necessity is the mother of innovation. For instance, limited access to funding or other critical inputs may compel organizations to creatively repurpose available resources or recombine them in novel ways, a concept commonly referred to as bricolage [Garud, Karnøe, 2003]. Under certain circumstances, resource limitations act as a stimulus and encourage managers to take calculated risks, shift strategic priorities, and adopt exploratory approaches to innovation [Katila, Shane, 2005; Latham, Braun, 2008] or engineers to think outside the box [Hoegl, Gibbert, Mazursky, 2008] becoming innovative because of resource constraints [Keupp, Gassmann, 2013]. Beyond individual resource adaptations, scarcity can reshape the broader innovation ecosystem by driving the emergence of new organizational structures and strategies that foster resilience, often resulting in more focused, sustainable innovation trajectories over the long term [Babina, Bernstein, Mezzanotti, 2020].

Collaboration with external partners is one way to overcome such constraints, as it allows firms to learn from others, increase their absorptive capacity, and access complementary resources [Nalmpanti, Wong, Oghazi, 2024]. The existing evidence from the 2008 global financial crisis [Laperche, Lefebvre, Langlet, 2011; Yun, Zhao, Hahm, 2018] and the COVID-19 pandemic [Bertello, Bogers, De Bernardi, 2022; Chesbrough, 2020; Patrucco et al., 2022], suggests that a constrained environment (shaped by a major global crisis) drives a wider use of open innovation strategies and the adoption of various collaborative responses. That is, resource constraints often push organizations toward collaboration as a means of pooling resources, sharing risks, and accessing complementary capabilities. In environments where firms face limited access to key inputs, partnerships become a practical strategy to bridge gaps. While isolation (i. e., sanctions) may have the same effect as global crises, and push organizations toward collaboration as a survival strategy, the complexity and effectiveness of these strategies in a sanctions-driven context is unresearched, and requires careful evaluation.

CO-CREATION IN RUSSIA

Insights from the literature

While systematic studies on co-creation practices in Russian companies are rare, anecdotal evidence indicates that co-creation is not new to Russian businesses. In early 2010, Russia's largest bank, Sberbank, launched an internal crowdsourcing project called the Idea Exchange (Rus. — биржа идей) [RBC, 2010; Sberbank, 2012]. By the end of 2012, this initiative attracted 200,000 employees who contributed approximately 100,000 ideas. From these submissions, around 12 % were implemented, yielding about 13 bln rub. in economic value, with only 41 mln rub. invested [itWeek, 2012].

Building on this success, Sberbank introduced an ambitious crowdsourcing project, Sberbank-21, in autumn 2011 as part of the bank's 170th-anniversary celebrations [Dolzhenko, Bakalenko, 2016]. Focusing on three topics — Sberbank 2021, Russia 2021, and Crowdsourcing 2021 — participants were asked to propose ideas to advance the bank, the country, and the practice of crowdsourcing (!) in the next 10 years [Lenta.ru, 2011; Sberbank, 2012]. Over 106,000 participants from 64 countries contributed 18,000 ideas [Dolzhenko, Bakalenko, 2016], some of which served as a basis for the bank's

2014–2019 strategy [Sberbank, 2012]. Co-creation, more precisely crowdsourcing, gained such popularity that Sberbank's CEO German Gref referred to it as "the major management breakthrough of the 21st century" [Sberbank, 2012].

After this initial period, academic studies on co-creation in Russia are rare. O. Oyner and A. Korelina [Oyner, Korelina, 2016] found that Moscow hotels, mainly international chains, engaged in feedback, co-production, and customization, while co-creation itself was still emerging. N. Matkova [Matkova, 2018] pointed out that MTS engaged independent coders for software development. V. Vlasova and V. Roud [Vlasova, Roud, 2020] noted that most innovation-active Russian manufacturers collaborate externally, primarily with customers, though it is unclear whether these customers are individuals (representing co-creation) or other businesses (indicating different open innovation practices).

Recent consulting reports highlight the presence of co-creation in Russian firms but often focus on broader open innovation. IIDF documents crowdsourcing at X5, Otkritiye Bank, and Teva [IIDF, 2024], while another IIDF report shows that over 80 % of Russia's largest firms engage in collaborative innovation, though only 28 % employ competitions or hackathons [IIDF, 2023]. Similarly, Corporate Innovation Review 2022 found hackathons to represent just 15 % of open innovation activities [Kancerov, 2023]. These insights suggest that Russian companies utilize co-creation but tend to prioritize other open innovation practices. On the other hand, recent evidence highlights that individuals from Russia excel in both the quantity and quality of their contributions to co-creation, showcasing their potential when motivated effectively [Tekic, Korneva, 2024].

Insights from companie's practices

Co-creation is increasingly shaping innovation strategies in Russian companies and public initiatives, enabling them to tap into external expertise and broaden their impact.

Positive Technologies (PT), a leading Moscow-based cybersecurity provider [Forbes.ru, 2024], has embraced co-creation as a way to overcome internal limitations and drive growth [Gilmutdinova, Tekic, 2024]. To enhance real-world testing, PT engaged ethical hackers through Capture the Flag competitions, which evolved into Standoff 365 — a year-round bug bounty platform [Standoff 365, n. d.]. This approach reflects PT's recognition of the fact that internal knowledge represents only a portion of the expertise available in the field. By fostering a cybersecurity community, PT not only identified vulnerabilities that in-house testing might overlook but also developed a new product that facilitates co-creation across the broader cybersecurity landscape.

Yandex, Russia's largest IT company, offers another compelling example of co-creation in action. In 2022, the company launched Yandex Crowd, a platform where 15,000 freelance contributors improve services such as Search, Maps, and Autonomous Vehicles by verifying data, annotating AI training sets, and transcribing audio [Yandex Crowd, n. d.]. Additionally, Yandex harnesses external talent through hackathons like HackTheRealty [Tekic, Tekic, Svirskaya, 2024] and strengthens security via the Bug Hunt program, which enlists ethical hackers to detect vulnerabilities. These initiatives illustrate how even well-resourced companies can benefit from external expertise, echoing the insight of Bill Joy, co-founder of Sun Microsystems: "No matter who you are, most of the smartest people work for someone else" [Wikipedia, n. d.].

Beyond the corporate sector, co-creation is a driver of social and municipal innovation. MTS's 2023 True Tech Hack focused on accessibility by generating solutions for visually impaired users, with key innovations integrated into the Kion platform [MTS, 2023]. On a municipal level, Moscow's Active Citizen platform has engaged 6.8 mln residents in shaping city development since

2014, demonstrating how co-creation extends beyond business into civic participation [Horgan, Dimitrijević, 2019; Yudina, Zakharova, 2016].

DATA AND METHODOLOGY

To explore co-creation in Russian firms, we developed a 48-item questionnaire, taking 15–20 minutes to complete. In addition to demographic questions about firms and respondents, the survey covered six key areas:

1. The organization's adoption of co-creation and strategic motives ("why").
2. Co-creation practices and preferred partners ("what" and "who").
3. Implementation of co-creation projects ("how" and "where").
4. Barriers and challenges ("why not").
5. Satisfaction with co-creation initiatives.
6. The impact of sanctions, including future plans (spring 2023 and beyond).

The questionnaire structure followed those from the literature [Brunswicker, Chesbrough, 2018; Chesbrough, Brunswicker, 2014], with additional questions tailored to the Russian context. We primarily used seven-point Likert scales, translating the survey from English to Russian and back to ensure accuracy. Two native Russian-speaking managers piloted the questionnaire, providing feedback for refinement.

Our initial outreach to innovation managers through e-mail yielded a low response rate (< 3 %), leading us to adopt snowball sampling [Parker, Scott, Geddes, 2019]. We first engaged a small network of innovation and marketing managers, asking them to share the survey with peers. The online questionnaire, distributed via Google Forms, was accompanied by a Russian-language email explaining the study's purpose and target respondents. We also reached managers through thematic social media communities.

The piloting took place in February 2023, with data collection running through March and April 2023. After filtering incomplete responses, the final sample included 87 managers overseeing innovation in Russian firms.

In our analysis, we employed basic analytical methods commonly used in descriptive and exploratory studies focused on innovation typologies and landscapes (see e. g., [Bröring, Laibach, Wustmans, 2020; Pratama, 2020]). To identify co-creation practices, partners, motivations, and barriers in Russian companies, we created categorical diagrams based on the count of companies in each category. To assess the importance and intensity of selected factors, we plotted factor distributions across Likert scale ratings. Additionally, to examine changes before and after sanctions, we employed analysis of variance (ANOVA), determining confidence levels based on p-values, a widely accepted approach in innovation research [Hervas-Oliver, Sempere-Ripoll, Boronat-Moll, 2021].

The sample

While the respondents come from a variety of industries, most of them are managers from retail of fast-moving consumer goods (FMCG), IT, financial, and transportation sectors. Furthermore, our sample is dominated by large companies, those with over 20,000 employees and annual revenue exceeding 100 bln rub. Finally, our sample is skewed towards well-established companies, with a significant portion (54 %) representing firms with over 20 years of experience in the Russian market. Full information about the sample is provided in Table 1.

Our sample is focused on innovative companies. The vast majority of participants (83.9 %) regards innovation as necessary or very important for their companies. None of the managers said that innovation is not very important or not important for their company. Further, the managers reported that products which have entered the market in the last three years represent more than 10 % of their companies' sales for 40.2 % of companies, and more than 20 % of their companies' sales for 16.1 % of

Table 1

Profile of managers' companies: Industry, employee count, revenue, and age

Participant by industry	Percentage
Industry sector	
Retail of FMCG	20.7
IT	19.5
Finance and insurance	13.8
Transportation	10.3
Food production	6.9
Education	5.7
e-commerce	4.6
Other	18.4
Company size (no. of employees in 2023)	
> 20.000	49.43
5.000–20.000	19.54
1.000–5.000	16.09
< 1.000	14.94
Company size (sales in bln rub. in 2022)	
> 100	42.53
10–100	25.29
1–10	8.05
0.1–1	14.94
< 0.1	9.19
Company age (as of 2023, in years)	
> 20	54.02
15–20	20.69
10–15	9.19
10–6	8.05
< 6	8.05

Note: $n = 87$.

companies. For 10.3 % of companies, the sales of products which have entered the market in the last 3 years represent less than 1 % of their overall sales.

The companies from the sample employ innovation teams of different sizes — from very few people to more than 100 people. A (smaller) part of these teams is focused on open innovation projects specifically. These teams are not very experienced when it comes to using the open innovation approach. The responding managers have significant experience in managing innovation in general, but limited experience (the average experience level was assessed at 3.7, on a seven-point scale) when it comes to managing open innovation projects. However, they understand the potential of co-creation for developing new products of higher quality. Finally, for the responding managers, the most important effects of co-creation are related to reducing the risk of product failure and improving the product's prototype quality in the early stages of product development. On the other hand, factors related to innovation outcome and innovation process improvement were considered least important.

RESULTS AND DISCUSSION

Preferred co-creation practices and partners

The co-creation practices used most frequently by Russian companies are workshops with user innovators, collaboration with virtual (online) communities, and innovation contests (crowdsourcing). Compared to these practices, hackathons are used 4–6 times less frequently. Other practices are rarely used (Figure 1).

The two most popular practices — workshops with user innovators and co-creation using virtual communities — demonstrate that firms in Russia frequently make use of practices that build on trust and long-term engagement or work with a smaller number of experts. The firms in our sample made only limited use of hackathons. This is somewhat surprising given the popularity of hackathons in Russia, and their frequent organization. It seems that for Russian firms, the primary function of hackathons is not the co-creation of new products and services, but the attraction and recruitment of new talent. Also, it seems that Russian companies are less enthusiastic about using innovation contests than their Western counterparts. The reason

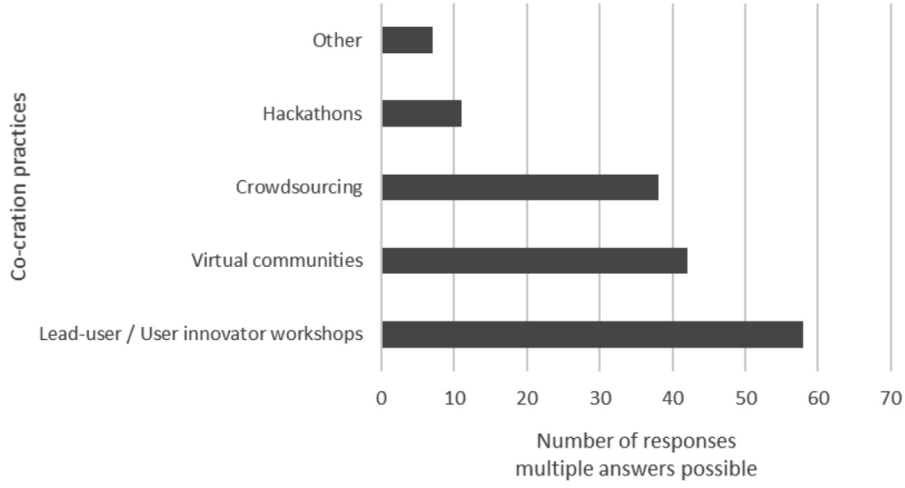

Fig. 1. The most frequently used co-creation practices, pre-sanctions period
Notes: n = 87; multiple answers possible.

for this may be the fact that crowdsourcing projects are largely insufficient as a standalone practice due to the external knowledge received being incomplete and requiring combination with other practices [Brunswicker, Chesbrough, 2018] while the companies themselves lack knowledge and experience in managing open innovation projects.

Further, we asked respondents to rate the importance of each type of prospective co-creation partner on a seven-point scale. Customers, experts and the general public were all rated above average in importance. Entrepreneurs, on the other hand, received the lowest rating in importance. Interestingly, (representatives of) suppliers, internal employees whose primary function is not innovation, consultants, and students were all rated almost equally — as being of average importance (see Figure 5, before sanctions aspect).

When it comes to the most important partners in co-creation — customers and users — this result aligns with results across the globe and open innovation practices in general [Brunswicker, Chesbrough, 2018; Chesbrough, Brunswicker, 2014]. The importance of experts is congruent with the popularity of workshops as a tool for co-creation. On the other hand, it seems that entrepreneurs are undervalued compared to the findings from Western companies [Brunswicker, Chesbrough, 2018]. The reason for this may be the significant differences in cultures between large firms and startups in Russia and/or lack of experience in collaborating with the other side.

Finally, it seems that firms have substantial room for improvement in the future as suppliers and internal employees whose primary function is not innovation do not seem to be engaged to their full extent. The first group may be very useful in co-creating solutions, while the second is considered a key for identifying problems and offering initial solutions based on their everyday (operational) experience in facing that problem.

Where and how co-creation happens

The data shows that firms use both online and offline environments for executing their co-creation projects. This result suggests that companies do not employ a single co-creation practice, but different combinations of practices which include those realized predominantly online (virtual communities and

crowdsourcing contests) and those realized offline (workshops and hackathons). Furthermore, firms from the sample prefer to realize co-creation projects independently. That is, open innovation intermediaries — consultancies specialized in working with organizations with a problem and a network of potential solvers — are not frequently used. This may signal that consultancies do not meet expected quality standards. Bearing in mind that firms do not have substantial experience in open innovation, this suggests that the overall level of open innovation skills and knowledge in the Russian economy is not high.

Companies' motivation for and satisfaction with co-creation projects

Firms turn to co-creation, and more broadly open innovation, for a variety of reasons — to acquire missing knowledge, complementary resources or financing, to spread risks, or to reduce costs. The literature suggests that the motives identified most frequently classify as growth-oriented [Huizingh, 2011].

For most firms from the sample, the primary reason to engage in co-creation with external contributors is to generate new product ideas. The motivation to make existing products better and test their own product ideas follows. Motives related to identifying problems (e. g., to understand user problems) are mentioned less frequently (see Figure 6, before sanctions aspect). Thus, we can conclude that problem-solving (as opposed to problem-identification) motives are the most important determinant for companies to engage in co-creation. At the same time, it is more typical for Russian companies to implement co-creation practices at the latter stages of the product life cycle, aiming to uncover new opportunities for incremental improvements and differentiation.

When asked to rate the importance of co-creation projects for their firms, managers reported that, on average, they are important, but not too important (the average importance level was 4.39 on a seven-point scale). Managers of 16 companies (18.4 %) assessed that co-creation projects are extremely or very important for their firms while only three managers (3.4 %) said that these projects are not important or not important at all for their firms.

We also investigated firms' satisfaction with the performance of co-creation projects, asking respondents to assess their satisfaction on a scale of 1 (highly dissatisfied) to 7 (highly satisfied). The average satisfaction level was 4.31, indicating a relatively positive view of co-creation efforts. More than 50 % of the respondents (45 out of 87) said they were satisfied, with around 30 % of them assigning a score of 6 or 7, indicating a very high degree of satisfaction. However, around 20 % of the managers assigned a score of 2 or 1, indicating a very low degree of satisfaction. This suggests that there are substantial groups of firms that are very satisfied and very unsatisfied with the performance of their co-creation projects, which may lead to further polarization between those who do and do not use co-creation.

Challenges and barriers to co-creation

The literature and practice-based experience confirm that there is a range of challenges and constraints that large firms face when they implement co-creation. To explore the challenges Russian firms encounter, we asked respondents what they perceived to be the most frequent and most important barriers to using co-creation projects. Importance was assessed on a seven-point scale, from 1 (not important at all) to 7 (highly important).

Firms consider available human resources to be by far the most frequent and most significant challenge in running co-creation projects. Namely, 66 of 87 (75.8 %) of managers reported employees' lack of knowledge/competencies and insufficient ability to adapt to new practices as the most frequent challenge they face (multiple answers possible for this question). In "second place", around

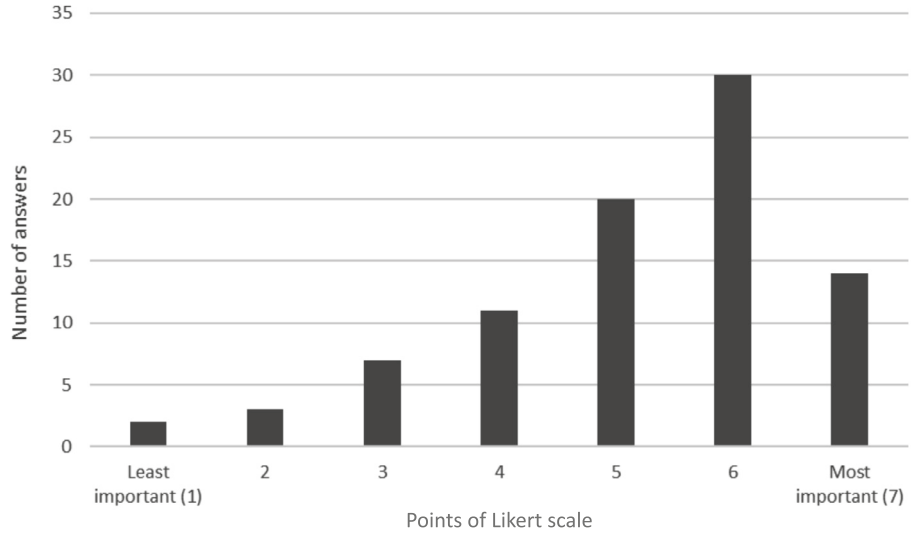

Fig. 2. The importance of "employees' lack of knowledge" barrier

30 % of managers recognize internal bureaucracy, administrative barriers, contradictory rules, and lack of open innovation culture in Russia as major barriers (see Figures 8 and 9, before sanctions aspect). The effectiveness of intellectual property agreements with co-creators appears to be the barrier our respondents faced least frequently.

When asked to rate the importance of barriers to successful co-creation in their firms, managers reported that, in principle, the only barrier that matters (but matters a lot!) is employees' lack of knowledge/competence and insufficient ability to adapt to change. The average importance level of this barrier was 5.18, indicating its high significance. Almost three quarters of the respondents (64 out of 87 managers) said this is an important barrier while very few assigned low importance to it (Figure 2).

Co-creation under sanctions

When asked to assess the potential of co-creation during the next 3–5 years (from spring 2023), managers reported that they see co-creation as a promising tool for developing (new) products (the average potential was assessed at 5.11 on a seven-point scale). Two-thirds of the respondents (58 out of 87) said that co-creation has potential, with more than 40 % of them assigning a score of 6 or 7, indicating a very high potential. Only a few companies did not recognize the potential of co-creation for developing new products in the next 3–5 years. Furthermore, we asked the managers about their expectations regarding the intensity and the scale of co-creation activities in their companies in the next 3–5 years. The results show that the managers expect the intensity of co-creation activities to grow (Figure 3), but not their scale (Figure 4). This is likely a reflection of expected budget limitations and increased cost control within firms, which could result in careful selection of co-creation projects, less experimentation, and a bigger focus on "proven" value generators.

While preferred co-creation practices have not changed since the introduction of sanctions, preferred partners have. When asked to rate the importance of each type of prospective partner for their co-creation activities during the ongoing crisis caused by sanctions, the picture slightly differs from the pre-sanctions period data. The sanctions

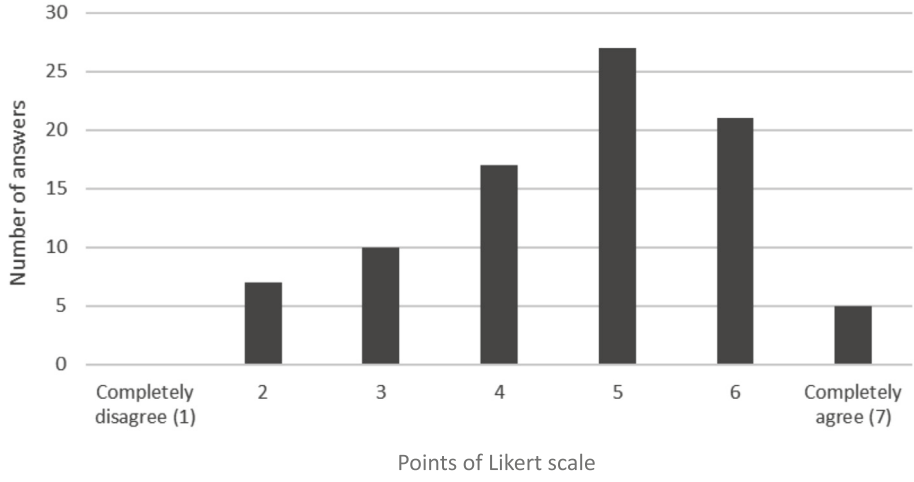

Fig. 3. The expected intensity of co-creation activities of our company will grow over the next 3–5 years (during the sanctions period)

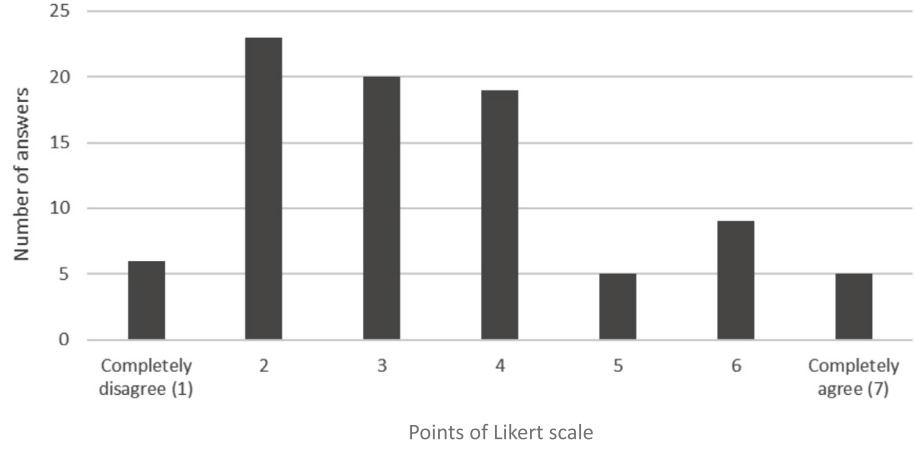

Fig. 4. The expected scale of co-creation activities of our company will grow over the next 3–5 years (during the sanctions period)

visibly shifted the significance of co-creation partners, increasing the significance of students, employees, and the general public as prospective partners for companies, while diminishing the significance of suppliers and entrepreneurs. The significance of consultants, experts, and customers remained at the same level (Figure 5). For five out of eight types of partners, there is a statistically significant difference (measured with p-value from the multiple analysis of variance) in their importance before and during sanctions.

The explanation for this may be companies' efforts to become self-sufficient by relying more on internal and easy-to-access, but underused partners at the moment (i. e., employees and students) as well as co-creation infrastructure and agents which organize the participation of students, consumers, and the general public through hackathons and other practices. On the other hand, it

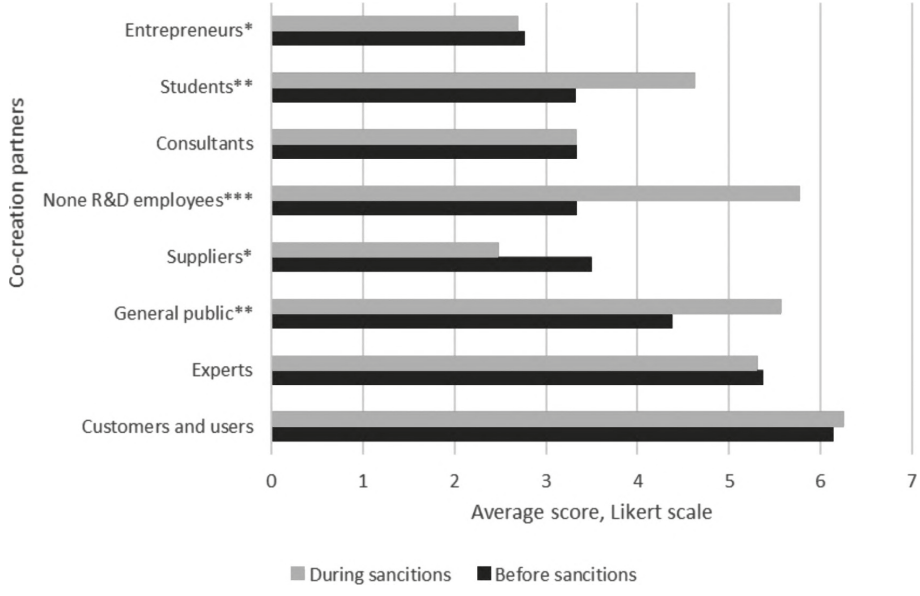

Fig. 5. The importance of co-creation partners before and during the sanctions
Notes: *** — *p-value* < 0.01; ** — *p-value* < 0.05; * — *p-value* < 0.1.

may also reflect the ongoing transition from suppliers from countries with unfriendly attitudes toward Russia to domestic suppliers and those from friendly countries. This transition has the potential to create problems with trust, capacity, and requirements management for new suppliers, leaving less time and resources for collaboration.

Though the identified differences in partner types may signal a major change, the paired Wilcoxon signed-rank test for paired average partners' importance evaluations does not show a overall significant difference in the co-creation partners' structure (p-value = 0.363). Hence, despite many notable changes, the sanctions did not produce radical changes in this context.

Furthermore, the primary motivation to engage in co-creation with external contributors is evolving in a time of crisis, denoted by a shift from getting new product ideas to improving existing products, testing product ideas, and identifying user problems. Across all reasons for co-creation, the findings show statistically significant differences. These differences are significant in intensity (Figure 6 shows the differences in terms of initial importance evaluations by respondents) and frequency (Figure 7 shows the difference in terms of the number of respondents who evaluated reasons at a level of 5 and higher).

Under the current circumstances, co-creation is seen as a tool for de-risking the introduction of new products (through an increased focus on understanding user problems and testing out product ideas). This suggests that in the ongoing crisis, firms will shift their focus toward incremental innovations and improvements of existing products instead of introducing new ones.

In terms of the overall change in reasons for co-creation, the Wilcoxon test does not show a significant change in the situation before and after the introduction of sanctions (*p-value* = 0.4). Again, despite the changes being visible, they do not indicate a radical change in the situation.

The findings related to the perception of the importance of barriers to successful co-creation also show some notable changes. Cost of innovation, employees' lack of

Fig. 6. The importance of reasons for using co-creation
Notes: *** — *p-value* < 0.01; ** *p-value* < 0.05; * *p-value* < 0.1.

Fig. 7. The importance of this reason for co-creation (i. e. rated 5, 6 or 7) for our company
Notes: n = 87; multiple answers were possible; *** — *p-value* < 0.01; ** — *p-value* < 0.05; * — *p-value* < 0.1.

knowledge, and insufficient budget significantly increased in importance (Figures 8 and 9). All three barriers relate to internal resources which suggests that Russian companies have experienced resource limitations as a result of the sanctions.

In terms of frequencies of evaluations equal to and above 5, the findings also show a growth in significance of the lack of support from top management. Evidently, the dynamic turmoil produced by the sanctions has shifted the attention of top managers from long-term innovation goals to short-term problems related to the firm's survival.

In comparing the overall structure of barriers before and after the sanctions, the

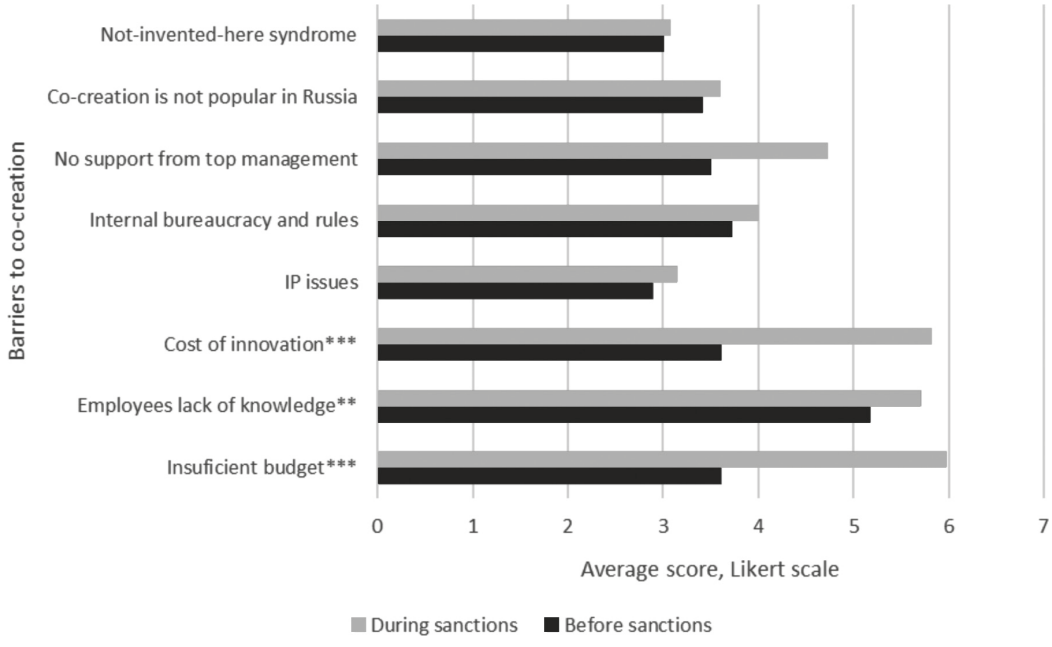

Fig. 8. The importance of barriers the company faced while implementing co-creation projects
Notes: *** — *p-value* < 0.01; ** — *p-value* < 0.05; * — *p-value* < 0.1.

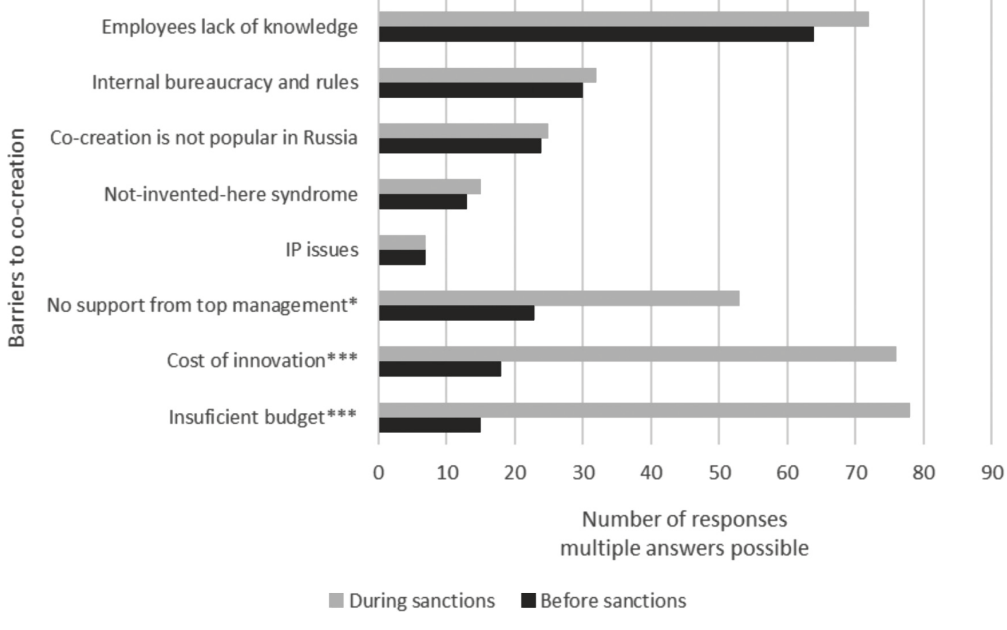

Fig. 9. This barrier is important (rated 5, 6 or 7) for our company
Notes: *** — *p-value* < 0.01; ** — *p-value* < 0.05; * — *p-value* < 0.1.

Wilcoxon test shows a statistically significant change (p-value = 0,014). This radical change can be attributed to a lack of resources and a change in internal factors such as top management support. Hence, the barriers could be navigated not only by accessing more resources through potential policymaking actions (e. g. government subsidies), but by the efforts of managers and shareholders.

CONCLUSIONS

While academic research on co-creation has been growing over the past 15 years [Boussioux et al., 2024; Skandalis, 2023; Tekic, Willoughby, 2019], the state of co-creation in Russia remains fairly underexplored. This study provides an important addition to the literature, offering researchers and practitioners a detailed view of co-creation practices within Russian firms as well as a unique perspective on the impact of an environment heavily constrained by economic sanctions on co-creation. Our findings offer several important contributions to research, theory, and practice.

Contribution to the literature: co-creation in Russia

Firstly, we have found that co-creation is seen as an important and beneficial mechanism for new product development and innovation activities by managers of Russian companies. Additionally, companies that employ co-creation implement a variety of practices and work with a diverse set of partners, demonstrating a higher-than-expected level of maturity. Our results confirm what anecdotal evidence suggested — that although there has been a lack of research on co-creation in Russia, it is practiced by Russian companies. Through a pioneering exploration of the state of co-creation in Russia, this study contributes to the limited research on co-creation in the country [Dolzhenko, Bakalenko, 2016; Korelina, Oyner, 2015; Oyner, Korelina, 2016; Yudina, Zakharova, 2016] and, more broadly, to the evidence about open innovation practices outside of developed markets [Bogers, Burcharth, Chesbrough, 2019; De Paulo et al., 2017].

Secondly, our results indicate that the primary motivation for Russian companies to engage in co-creation with external individual contributors before sanctions generated a resource-constrained environment was to get new product ideas and solve problems rather than to explore broader market needs (i. e., identify problems). At the same time, a significant barrier is the lack of adequate knowledge and skills among employees. This insight suggests that while co-creation is practiced within Russian firms, there is still a strong need for skill development to optimize the value derived from such initiatives. These findings are congruent with the evidence from broader literature on (open) innovation in Russia, reinforcing existing knowledge. For instance, V. Vlasova and V. Roud [Vlasova, Roud, 2020] found that the key motivation for collaborating with various partners is to improve existing products and launch new ones, while V. Vlasova and coauthors [Vlasova, Boiko, Kuznetsova, 2024] identified human resource quality as a critical barrier to developing innovation practices. These consistencies support the validity of our research.

Contribution to the literature: co-creation in a constrained environment

Our results suggest that sanctions have reshaped how Russian firms perceive and use co-creation, introducing significant barriers such as budget constraints and stricter cost management. As a result, firms are expected to prioritize incremental innovations and improvements over radical breakthroughs, relying more on easily accessible but underutilized partners such as non-R&D employees and students. Companies that engaged in co-creation before the sanctions continue to do so, but financial constraints are likely to limit the scale and

experimentation of projects, shifting the focus toward proven value generators.

This shift aligns with the Resource-Based View (RBV) of firms [Barney, 1991], emphasizing the need to maximize internal resources and optimize existing capabilities in constrained environments. As our research demonstrates, for Russian firms under sanctions this means drawing as much value as possible from underutilized resources, such as tapping into the potential of employees and students who can contribute to co-creation projects at a relatively low cost. Moreover, firms have continued to rely on co-creation practices established before sanctions, as these pre-existing capabilities support resilience by allowing firms to maintain a baseline of innovation activity despite external challenges. Finally, the strategic shift toward incremental innovations and smaller-scale projects — favouring initiatives with a proven track record — aligns with RBV's focus on resource efficiency (and risk mitigation).

These findings highlight the value and adaptability of co-creation in resource-constrained environments. First, while its purpose has shifted from driving growth before sanctions to focusing on survival and resilience under sanctions, co-creation remains a viable innovation strategy even under severe constraints. Second, the increased reliance on local, accessible partners and the emphasis on incremental improvements illustrate the flexibility of co-creation in aligning with firms' evolving needs and limitations.

Our findings also reveal significant differences in the role of open innovation in globally and locally constrained environments. In global crises such as the 2008 financial crisis or the COVID-19 pandemic, firms worldwide leveraged open innovation to rapidly access external knowledge and resources, addressing resource gaps and collectively tackling economic or supply chain challenges [Chesbrough, 2020; Laperche, Lefebvre, Langlet, 2011; Patrucco et al., 2022; Yun, Zhao, Hahm, 2018]. In contrast, the isolation shaped by sanctions forces Russian firms to operate within local networks and rely on domestically accessible co-creation partners. This shift has intensified the use of local talent pools, such as students and non-R&D employees, replacing reliance on the global talent pool. As a result, sanctions have redefined collaborative innovation in Russia, giving rise to what can be described as "localized open innovation". This inward-facing approach prioritizes internal capabilities and domestic networks over global exchanges, emphasizing fit-for-context solutions, incremental changes rather than radical experimentation, and sustained internal skill-building over reliance on external expertise.

Finally, the findings suggest that sanctions may reshape not only innovation practices but also the organizational cultures supporting them. The pivot toward internal and localized resources has the potential to institutionalize more inclusive and participatory innovation cultures. This shift could yield long-term benefits, fostering resilience, agility, and sustained innovation beyond the crisis period.

Implications for practice

The findings presented have several implications for practice. First, companies should invest in employee education and skill development, as a lack of expertise remains a major bottleneck to profiting from co-creation. Engaging students as co-creation partners is another opportunity, especially with many startups leaving Russia due to sanctions. Students provide fresh ideas, knowledge, and skills to sustain innovation. Third, to profit from engaging non-R&D employees in the innovation process, firms should build more inclusive and participatory innovation cultures. Reliance on internal and domestic partners, while practical, risks reducing diversity and creativity. Firms must actively counterbalance this by investing in training programs, fostering cross-disciplinary collaboration, and leveraging overlooked partners

such as students or non-R&D employees. By broadening the definition of "accessible resources", firms can mitigate the constraints of isolation. Finally, as the study highlights a skills gap in managing co-creation and open innovation, universities, corporate training centres, and edtech startups can address this by developing programs that equip professionals with expertise in innovation, product development, and marketing.

Limitations and further research

Our study has inherent limitations due to its design, scope, and operationalization, offering opportunities for future research. First, we focused only on firms that have previously engaged in co-creation at least once, meaning our findings do not reflect its prevalence across all Russian companies. Future studies should explore the overall presence and frequency of co-creation in a representative sample, including industry- and size-specific insights. Second, our sample is biased toward large, service-oriented firms, with few manufacturing companies. Given that SMEs and large firms manage open innovation differently [Van der Vrande et al., 2009], future research should examine co-creation across various industries and company sizes. Third, co-creation is relevant beyond business, particularly in governmental and cultural sectors. Notable examples, like Moscow's Active Citizen platform, suggest the need for further exploration of public-sector co-creation in Russia. Finally, there is the question of whether the inward focus of localized open innovation has the potential for radical breakthroughs like innovation under "ordinary" constraints [Keupp, Gassmann, 2013] or if such a focus would undercut long-term competitiveness. Addressing these limitations will be vital for both theory and practice.

REFERENCES

Acar O.A. 2019. Motivations and solution appropriateness in crowdsourcing challenges for innovation. *Research Policy* **48** (8): 103716. https://doi.org/10.1016/j.respol.2018.11.010

Acar O.A., Tarakci M., Van Knippenberg D. 2018. Creativity and innovation under constraints: A cross-disciplinary integrative review. *Journal of Management* **45** (1): 96–121. https://doi.org/10.1177/0149206318805832

Adamczyk S., Bullinger A.C., Möslein K.M. 2012. Innovation contests: A review, classification and outlook. *Creativity and Innovation Management* **21** (4): 335–360. https://doi.org/10.1111/caim.12003

Antorini Y.M., Muñiz Jr. A. M. 2013. The benefits and challenges of collaborating with user communities. *Research-Technology Management* **56** (3): 21–28. https://doi.org/10.5437/08956308X5603931

Babina T., Bernstein A., Mezzanotti F. 2020. *Crisis Innovation* (No. w27851; NBER Working Paper). https://doi.org/10.3386/W27851

Barney J. 1991. Firm resources and sustained competitive advantage. *Journal of Management* **17** (1): 99–120.

Bartl M., Füller J., Mühlbacher H., Ernst H. 2012. A managers perspective on virtual customer integration for new product development. *Journal of Product Innovation Management* **29** (6): 1031–1046. https://doi.org/10.1111/j.1540–5885.2012.00946.x

Bertello A., Bogers M.L. A.M., De Bernardi P. 2022. Open innovation in the face of the COVID-19 grand challenge: Insights from the Pan-European hackathon 'EUvsVirus.' *R&D Management* **52** (2): 178–192. https://doi.org/10.1111/RADM.12456

Bilgram V., Bartl M., Biel S. 2011. Getting closer to the consumer–how nivea co-creates new products. *Marketing Review St. Gallen* **28** (1): 34–40. https://doi.org/10.1007/s11621-011-0005-5

Bogers M., Burcharth A., Chesbrough H. 2019. Open innovation in Brasil: Exploring opportunities and challenges. *International Jour-*

nal of Innovation **7** (2): 178–195. https://doi.org/10.5585/iji.v7i2.417.2318–9975

Borisov A.B. 2021. Models for integrating consumers into the process of joint value creation (in Russian). *Креативная Экономика* **15** (9): 3475–3490. https://doi.org/10.18334/ce.15.9.113500

Boudreau K.J., Lakhani K.R. 2013. Using the crowd as an innovation partner. *Harvard Business Review* **91** (4): 61–69.

Boussioux L.N., Lane J., Zhang M., Jacimovic V., Lakhani K.R. 2024. The crowdless future? Generative AI and creative problem solving. *SSRN Electronic Journal* (No. 24–005). Elsevier BV. https://doi.org/10.2139/SSRN.4533642

Bröring S., Laibach N., Wustmans M. 2020. Innovation types in the bioeconomy. *Journal of Cleaner Production* **266**: 121939. https://doi.org/10.1016/J.JCLEPRO.2020.121939

Brunswicker S., Chesbrough H. 2018. The adoption of open innovation in large firms: Practices, measures, and risks. *Research-Technology Management* **61** (1): 35–45.

Candi M., Van den Ende J., Gemser G. 2015. Benefits of customer codevelopment of new products: The moderating effects of utilitarian and hedonic radicalness. *Journal of Product Innovation Management* **33** (4): 418–434. https://doi.org/10.1111/jpim.12286

Castillo D., Canhoto A.I., Said E. 2021. The dark side of AI-powered service interactions: exploring the process of co-destruction from the customer perspective. *The Service Industries Journal* **41** (13–14): 900–925. https://doi.org/10.1080/02642069.2020.1787993

Chesbrough H. 2020. To recover faster from Covid-19, open up: Managerial implications from an open innovation perspective. *Industrial Marketing Management* **88**: 410–413. https://doi.org/10.1016/J.INDMARMAN.2020.04.010

Chesbrough H., Brunswicker S. 2014. A fad or a phenomenon? The adoption of open innovation practices in large firms. *Research-Technology Management* **57** (2): 16–25. https://doi.org/10.5437/08956308X5702196

Coad A., Pellegrino G., Savona M. 2016. Barriers to innovation and firm productivity. *Economics of Innovation and New Technology* **25** (3): 321–334. https://doi.org/10.1080/10438599.2015.1076193

Cunha M.P.E., Rego A., Oliveira P., Rosado P., Habib N. 2014. Product innovation in resource-poor environments: Three research streams. *Journal of Product Innovation Management* **31** (2): 202–210. https://doi.org/10.1111/JPIM.12090

De Paulo A.F., Carvalho L.C., Costa M.T.G.V., Lopes J.E.F., Galina S.V.R. 2017. Mapping open innovation: A bibliometric review to compare developed and emerging countries. *Global Business Review* **18** (2): 291–307. https://doi.org/10.1177/0972150916668600

Demidova K.V. 2022. SMEs under anti-Russian sanctions: Results of the first half of the year and possible support measures. *Russian Economic Developement / Экономическое Развитие России* **29** (11): 46–58. (In Russian)

Dolzhenko R., Bakalenko A. 2016. Crowdsourcing as an instrument of human intellectual resources involvement: The experience of sberbank russia. *Russian Management Journal* **14** (3): 77–102. https://doi.org/10.21638/11701/spbu18.2016.305 (In Russian)

Eisenreich A., Just J., Giménez Jiménez D., Füller J. 2024. Revolution or inflated expectations? Exploring the impact of generative AI on ideation in a practical sustainability context. *Technovation* **138**: 103123. https://doi.org/10.1016/J.TECHNOVATION.2024.103123

Filieri R. 2013. Consumer co-creation and new product development: a case study in the food industry. *Marketing Intelligence & Planning* **31** (1): 40–53. https://doi.org/10.1108/02634501311292911

Forbes.ru. 2024. *The leaders of the rating of the most expensive companies on the Runet — 2024*. [Electronic resource]. www.forbes.ru/tekhnologii/506698-lidery-rejtinga-samyh-dorogih-kompanij-runeta-2024 (accessed: 14.12.2024). (In Russian)

Füller J. 2010. Refining virtual co-creation from a consumer perspective. *California Management Review* **52** (2): 98–122. https://doi.org/10.1525/cmr.2010.52.2.98

Füller J., Matzler K., Hutter K., Hautz J. 2012. Consumers' creative talent: Which charac-

teristics qualify consumers for open innovation projects? An exploration of asymmetrical effects. *Creativity and Innovation Management* **21** (3): 247–262. https://doi.org/10.1111/j.1467–8691.2012.00650.x

Garud R., Karnøe P. 2003. Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. *Research Policy* **32** (2): 277–300. https://doi.org/10.1016/S0048–7333(02)00100–2

Gassmann O., Von Zedtwitz M. 2003. Trends and determinants of managing virtual R&D teams. *R&D Management* **33** (August): 243–262. https://doi.org/10.1111/1467–9310.00296

Gaur A., Settles A., Vaatanen J. 2023. Do economic sanctions work? Evidence from the Russia-Ukraine conflict. *Journal of Management Studies* **60** (6): 1391–1414. https://doi.org/10.1111/JOMS.12933

Gilmutdinova E., Tekic Z. 2024. Strategic business model transformation through open innovation: A case study of cybersecurity firm. In: M. Panić (Ed.). *XX International May Conference on Strategic Management (Book of abstracts)*; 61. Technical Faculty in Bor (University of Beograd, Serbia). https://doi.org/978-86-6305-149-2

Greer C.R., Lei D. 2012. Collaborative innovation with customers: A review of the literature and suggestions for future research. *International Journal of Management Reviews* **14** (1): 63–84. https://doi.org/10.1111/j.1468–2370.2011.00310.x

Haavisto P. 2014. Observing discussion forums and product innovation — A way to create consumer value? Case heart-rate monitors. *Technovation* **34** (4): 215–222. https://doi.org/10.1016/j.technovation.2013.12.001

Hervas-Oliver J.L., Sempere-Ripoll F., Boronat-Moll C. 2021. Technological innovation typologies and open innovation in SMEs: Beyond internal and external sources of knowledge. *Technological Forecasting and Social Change* **162**: 120338. https://doi.org/10.1016/J.TECHFORE.2020.120338

Hienerth C., Von Hippel E., Berg Jensen M. 2014. User community vs. producer innovation development efficiency: A first empirical study. *Research Policy* **43** (1): 190–201. https://doi.org/10.1016/j.respol.2013.07.010

Hoegl M., Gibbert M., Mazursky D. 2008. Financial constraints in innovation projects: When is less more? *Research Policy* **37** (8): 1382–1391. https://doi.org/10.1016/J.RESPOL.2008.04.018

Horgan D., Dimitrijević B. 2019. Frameworks for citizens participation in planning: From conversational to smart tools. *Sustainable Cities and Society* **48**: 101550. https://doi.org/10.1016/J.SCS.2019.101550

Huizingh E.K. R. E. 2011. Open innovation: State of the art and future perspectives. *Technovation* **31** (1): 2–9. https://doi.org/10.1016/j.technovation.2010.10.002

IIDF. 2023. *Innovation and import substitution: Corporate experience and development prospects in 2023.* [Electronic resource]. https://corporate.iidf.ru/ (accessed: 30.10.2024). (In Russian)

IIDF. 2024. *Cases of the center for corporate innovation and product development of the IIDF accelerator 2023–2024.* [Electronic resource]. https://corporate.iidf.ru/ (In Russian)

itWeek. 2012. *Sberbank collects ideas: Banking crowdsourcing practices*. [Electronic resource]. https://www.itweek.ru/idea/article/detail.php? ID=144760 (accessed: 30.10.2024). (In Russian)

Jeppesen L.B., Lakhani K.R. 2010. Marginality and problem solving effectiveness in broadcast search. *Organization Science* **21** (5): 1016–1033. https://doi.org/10.1287/orsc.1090.0491

Kancerov S. 2023. *Corporate Innovation Review 2022.* Vc.Ru. [Electronic resource]. https://vc.ru/u/495032-sergei-kancerov/651018-obzor-korporativnyh-innovacii-2022 (accessed: 30.10.2024). (In Russian)

Katila R., Shane S. 2005. When does lack of resources make new firms innovative? *Academy of Management Journal* **48** (5): 814–829. https://doi.org/10.5465/AMJ.2005.18803924

Keupp M.M., Gassmann O. 2013. Resource constraints as triggers of radical innovation: Longitudinal evidence from the manufacturing sector. *Research Policy* **42** (8): 1457–

1468. https://doi.org/10.1016/J.RESPOL.2013.04.006

Korelina A., Oyner O. 2015. On customer engagement in the value co-creation in the hotel industry: A content analysis of tripadvisor.com reviews. *Proceedings of the St. Petersburg State University of Economics* **6** (96): 84–91. (In Russian)

Laperche B., Lefebvre G., Langlet D. 2011. Innovation strategies of industrial groups in the global crisis: Rationalization and new paths. *Technological Forecasting and Social Change* **78** (8): 1319–1331. https://doi.org/10.1016/j.techfore.2011.03.005

Latham S.F., Braun M. 2008. Managerial risk, innovation, and organizational decline. *Journal of Management* **35** (2): 258–281. https://doi.org/10.1177/0149206308321549

Lenta.ru. 2011. *The brain of the whole world. Sberbank has launched a unique crowdsourcing project.* [Electronic resource]. https://lenta.ru/articles/2011/11/01/sberbank21 (accessed: 30.10.2024). (in Russian)

Lifshitz-Assaf H., Lebovitz S., Zalmanson L. 2021. Minimal and adaptive coordination: How Hackathons' projects accelerate innovation without killing it. *Academy of Management Journal* **64** (3): 684–715. https://doi.org/10.5465/amj.2017.0712

Lilien G.L., Morrison P.D., Searls K., Sonnack M., Von Hippel E. 2002. Performance assessment of the lead user idea-generation process for new product development. *Management Science* **48** (8): 1042–1059. https://doi.org/10.1287/mnsc.48.8.1042.171

Matkova N.N. 2018. Case study: Implementation of open innovations on the MTS company example. *Innovation* **3** (233): 92–99. (In Russian)

MTS. 2023. *MTS social projects became winners of the contest "Creating the future".* [Electronic resource]. https://moskva.mts.ru/about/media-centr/soobshheniya-kompanii/novosti-mts-v-rossii-i-mire/2023-11-15/socialnye-proekty-mts-stali-pobeditelyami-konkursa-sozdavaya-budushhee (accessed: 30.10.2024). (In Russian)

Nalmpanti A.D., Wong C.Y., Oghazi P. 2024. Collaborating for innovation: The inhibiting role of constraints. *Journal of Innovation & Knowledge* **9** (3): 100504. https://doi.org/10.1016/J.JIK.2024.100504

Oyner O., Korelina A. 2016. The influence of customer engagement in value co-creation on customer satisfaction: Searching for new forms of co-creation in the Russian hotel industry. *Worldwide Hospitality and Tourism Themes* **8** (3): 327–345. https://doi.org/10.1108/WHATT-02-2016-0005/FULL/XML

Parker C., Scott S., Geddes A. 2019. Snowball Sampling. In: P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, R.A. Williams (Eds.): *SAGE Research Methods Foundations*. SAGE Publications Ltd. https://doi.org/10.4135/9781526421036831710

Patrucco A.S., Trabucchi D., Frattini F., Lynch J. 2022. The impact of Covid-19 on innovation policies promoting Open Innovation. *R&D Management* **52** (2): 273–293. https://doi.org/10.1111/RADM.12495

Pollok P., Lüttgens D., Piller F.T. 2019. Attracting solutions in crowdsourcing contests: The role of knowledge distance, identity disclosure, and seeker status. *Research Policy* **48** (1): 98–114. https://doi.org/10.1016/j.respol.2018.07.022

Prahalad C.K., Ramaswamy V. 2004. Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing* **18** (3): 5–14. https://doi.org/10.1002/dir.20015

Pratama A.B. 2020. The landscape of public service innovation in Indonesia: A comprehensive analysis of its characteristic and trend. *Innovation and Management Review* **17** (1): 25–40. https://doi.org/10.1108/INMR-11-2018-0080/FULL/PDF

RBC. 2010. *Sberbank has earned a billion on the "Exchange of Ideas".* [Electronic resource]. https://www.rbc.ru/society/21/10/2010/5703df9b9a79473c0df15e5f (accessed: 30.10.2024). (In Russian)

Rozhkov A.G., Rebyazina V.A., Smirnova M.M. 2014. Customer orientation of the company: Results of empirical testing on the example of the Russian market. *Russian Management Journal* ***12*** (3): 33–58. (In Russian)

Sberbank. 2012. *About Crowdsourcing.* [Electronic resource]. https://web.archive.org/web/20130727213137/http://sberbank21.ru/

crowdsourcing.html (accessed: 30.10.2024). (In Russian)

Schweisfurth T. G., Raasch C. 2015. Embedded lead users — The benefits of employing users for corporate innovation. *Research Policy* **44** (1): 168–180. https://doi.org/10.1016/j.respol.2014.09.007

Skandalis A. 2023. Transitional space and new forms of value co-creation in online brand communities. *Journal of Business Research* **155**: 113392. https://doi.org/10.1016/J.JBUSRES.2022.113392

Standoff 365. (n. d.). *Standoff 365*. [Electronic resource]. https://standoff365.com/ (accessed: 28.10.2024). (In Russian)

Statista. 2024. *Sanctions on Russia over the war in Ukraine*. [Electronic resource]. https://www.statista.com/topics/10518/sanctions-on-russia-over-the-war-in-ukraine/#topicOverview (accessed: 28.10.2024).

Tekic A., Alfonzo Pacheco D. V. 2024. Contest design and solvers' engagement behaviour in crowdsourcing: The neo-configurational perspective. *Technovation* **132**: 102986. https://doi.org/10.1016/J.TECHNOVATION.2024.102986

Tekic A., Korneva D. 2024. Impact of national culture on contributors' performance in brand co-creation: insights from a crowdsourcing platform. *Journal of Brand Management*: 1–19. https://doi.org/10.1057/S41262-024-00371-Y/TABLES/12

Tekic A., Willoughby K. W. 2017. Contextualised co-creation: Innovating with individual external contributors throughout the product life cycle. *International Journal of Product Development* **22** (3): 230–245. https://doi.org/10.1504/IJPD.2017.087380

Tekic A., Willoughby K. W. 2019. Co-creation — child, sibling or adopted cousin of open innovation? *Innovation: Organization & Management* **21** (2): 274–297. https://doi.org/10.1080/14479338.2018.1530565

Tekic A., Willoughby K. W., Füller J. 2023. Different settings, different terms and conditions: The impact of intellectual property arrangements on co-creation project performance. *Journal of Product Innovation Management* **40** (5): 679–704. https://doi.org/10.1111/jpim.12668

Tekic Z., Tekic A., Svirskaya M. 2024. What is co-creation and why does Russian business need it? *Big Ideas*. [Electronic resource]. https://big-i.ru/innovatsii/issledovaniya/chto-takoe-sotvorchestvo-i-zachem-ono-rossiyskomu-biznesu/ (accessed: 28.10.2024).

Tekic Z., Tekic A., Todorovic V. 2015. Modelling a laboratory for ideas as a new tool for fostering engineering creativity. *Procedia Engineering* **100**: 400–407. https://doi.org/10.1016/j.proeng.2015.01.384

Van de Vrande V., De Jong J. P. J., Vanhaverbeke W., De Rochemont M. 2009. Open innovation in SMEs: Trends, motives and management challenges. *Technovation* **29**: 423–437. https://doi.org/10.1016/j.technovation.2008.10.001

Vlasova V., Boiko K., Kuznetsova T. 2024. Overcoming internal and external barriers for the innovative development of businesses. *Foresight and STI Governance* **18** (2): 85–96. https://doi.org/10.17323/2500-2597.2024.2.85.96

Vlasova V., Roud V. 2020. Cooperative strategies in the age of open innovation: Choice of partners, geography and duration (in Russian). *Foresight and STI Governance* **14** (4): 80–94. https://doi.org/10.17323/2500-2597.2020.4.80.94

Von Hippel E. 1986. Lead users: A source of novel product concepts. *Management Science* **32** (7): 791–805. https://doi.org/10.1287/mnsc.32.7.791

Weiss M., Hoegl M., Gibbert M. 2017. How does material resource adequacy affect innovation project performance? A meta-analysis. *Journal of Product Innovation Management* **34** (6): 842–863. https://doi.org/10.1111/JPIM.12368

Wikipedia. (n. d.). *Joy's law (management)*. [Electronic resource]. https://en.wikipedia.org/wiki/Joy%27s_law_(management) (accessed 14.12.2024).

Yandex Crowd. (n. d.). *Яндекс Краудд*. [Electronic resource]. https://crowd.yandex.ru/ (accessed: 30.10.2024). (In Russian)

Yudina E., Zakharova S. 2016. Crowdsourcing technologies for developing civil activity in Russia (on the example of the project «Active Citizen»). *Vestnik Universiteta* **1**: 263–268. (In Russian)

Yun J.H. J., Zhao X., Hahm S.D. 2018. Harnessing the value of open innovation: Change in the moderating role of absorptive capability. *Knowledge Management Research, Practice* **16** (3): 305–314. https://doi.org/10.1080/14778238.2018.1471328

Zemtsov S.P., Mikhailov A.A., Barinova V.A. 2023. Sanctions, exit of foreign companies and business activity in the Russian regions. *Ekonomicheskaya Politika / Экономическая Политика* **18** (2): 44–79. https://doi.org/10.18288/1994-5124-2023-2-44-79 (In Russian)

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«Локализация» открытых инноваций: как санкции трансформируют совместное творчество в российских компаниях

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Цель исследования: выявить в инновационной деятельности российских компаний практики совместного творчества, связанные с использованием различных типов партнеров и организационных форм совместного творчества, определить факторы успеха данных практик, барьеры при их внедрении и то, как они изменились в условиях санкционных ограничений. **Методология исследования:** исследование проводилось в марте — апреле 2023 г. посредством опроса менеджеров, отвечающих за инновации и разработку новых продуктов в крупных российских компаниях, и последующей статистической обработки собранных данных. **Результаты исследования:** до введения ужесточения санкций в 2022 г. российские компании активно развивали совместное творчество с широким кругом партнеров и применяли разные организационные формы. Основным барьером для совместного творчества явилась недостаточная квалификация сотрудников. Санкции сместили ожидаемые результаты от совместного творчества с содействия росту на обеспечение устойчивости, вынудив компании больше полагаться на местные таланты, отдавать предпочтение постепенным улучшениям и тщательно отбирать проекты из-за бюджетных ограничений. **Оригинальность и значимость результатов:** это первое эмпирическое межотраслевое исследование использования совместного творчества в России. Оно продемонстрировало, что, несмотря на ограниченное количество предыдущих исследований, российские компании активно применяют совместное творчество для инноваций с более высоким, чем ожидалось, уровнем зрелости. Результаты анализа также свидетельствуют о том, что санкции привели к развитию модели «локализованных открытых инноваций», в которой совместное творчество ориентировано

Исследование выполнено за счет проекта «Открытые инновации в России: передовой опыт для успеха в цифровом мире» (проект № 2022.011Р) в рамках исследовательской программы Высшей школы бизнеса Национального исследовательского университета «Высшая школа экономики» на 2022–2024 годы.

на краткосрочную устойчивость с акцентом на задействование внутренних ресурсов и постепенные улучшения. Результаты могут быть использованы менеджментом компаний и представителями государственных регуляторов в целях повышения эффективности совместного творчества и инновационной деятельности в целом.

Ключевые слова: совместное творчество, открытые инновации, Россия, санкции, экономический кризис.

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