VOLUME AND STRUCTURE **OF RUSSIAN SOFTWARE COMPANIES' SALES IN THE DOMESTIC MARKET AND ABROAD**

THE COUNTRY WILL ACHIEVE MORE BY BRINGING TO THE MARKET THE WHOLE INDUSTRY THAN INDIVIDUAL BRANDS

Lev MatveevChairman of the Board of Directors of SearchInform





IT companies are generally doing well, both in Russia and abroad. The pandemic popularized remote work, the rapid transition to digital has opened up additional opportunities for businesses.

However, it is not the same for all IT companies, especially when it comes to exports. Companies that specialize in entertainment products, such as online games, social networks and so on, have strengthened their positions. And companies developing corporate software, in which personal meetings, negotiations are important, on the contrary, have faced a decline in the export.

When whole countries were in lockdown, it became very difficult to open new representative offices, hold events, etc. And frankly speaking, it didn't make much sense. B2B business model implies working through representative offices, partners, offices. Companies that had just started to explore new markets, experienced the negative consequences to the full extent. The vendors, who had firmly established themselves abroad before the crisis, did not notice strong changes. They follow a well-trodden path and do not experience serious difficulties.

When it comes to the export of information security solutions, Russian software is in demand for foreign customers as it was before the pandemic. Traditionally, the United States, Canada and partly Europe are the exceptions. Latin America, Africa, Southeast Asia and so on are positive towards our infosecurity products.

I'd like to add that abroad when it comes to information security, organizations lean to MSSP approach since it is economically profitable. Having noticed the demand for the outsourcing format, we developed SearchInform for MSSP. If you notice such trends and adapt your products to them, then it will be easier to bring software to new markets.

But in fact, from the Russian exports point of view, there is a lot to work on. We need a clearer and more systematic workstyle. We submitted proposals to development institutions, in particular Russian Export Center, on how to support domestic companies in a fundamentally different way. I hope that we will successfully implement them together.

For example, it would be effective to open representative offices of the Russian

IT industry in other countries. Such hubs would be located in foreign capitals with a developed infrastructure, their own call center, well-established relations with local authorities and Russian trade unions. This should be a comprehensive systematic work, including marketing and PR support, interesting events for local companies, and so on.

Russian companies, which are becoming the residents of such representative offices, will be quickly able to enter new markets on a large scale. Russian IT industry will receive a new impetus, raising its own status and prestige. And even for the country it is more profitable to bring to new markets not individual developers, but the whole industry.

I understand that it will not be possible to implement everything quickly. However, in order to firmly establish the brand "Made in Russia" in IT industry in three to five years, the first steps should be taken now.

Key indicators of the Russian software industry

According to RUSSOFT estimates, there are at least 4.2 thousand sustainable companies in Russia that pursue professional software development, apart from startups generating no regular income. Annually, the number of software companies grows by about 2.5-4%.

According to RUSSOFT, at least 2.5 thousand Russian software companies conduct international business.

According to the data of the Central Bank of the Russian Federation, in 2017, about 9 thousand companies received money from abroad for the "computer services"

provided (see explanations on what is meant by computer services below in section Prospects for software industry main indicators changing). The difference between 2.5 thousand and 9 thousand, as well as in the total number of software companies, is explained by the fact that the same company, in the understanding of RUSSOFT, can sell its services and solutions through several legal entities associated therewith. In addition, income from "computer services" can be received by companies that cannot be considered software companies, since software development is not their main activity.



Number of sustainable Russian software companies	min. 4.2 thousand
Number of companies with export income	min. 2.5 thousand

Total number of core employees, thousand people

Software developers working in all industries (including IT services of enterprises in various areas of activity)	>640
Software developers working in the Russian software development industry (total), of which:	>200
- in development centers abroad	>10
- in Russia	≈190
Employees of service companies (including those working for foreign customers)	≈100 (45)
Employees of product companies	≈80
Employees of Russian R&D centers of foreign companies	≈10



The IT services industry faces major challenges: uncertainty, market acceleration, shortage of specialists, need for agile partnership. The response to the challenges is services productization. The Service-as-a-Product approach combines market wisdom with the company's expertise. It encompasses trust-based partnerships, mature business processes and guarantee commitments. For Russian companies, productized services are a way to move beyond the rentier economy and enter western markets with a competitive offer. Those understanding it will win the market.

Aleksander Kalinin CEO, Sibedge



Sales volume of the Russian Software Development Industry

According to the results of 2020, the total turnover of Russian software enterprises amounted to £1,305 trillion, with an increase of 16.5%. Revenues from exports and sales within Russia (in rubles) increased equally — by about the same 16.5%.

If we compare it with the increase in total revenue in previous years, we can see a slight slowdown (in 2019 it amounted to 17.8%, and in 2018 — 19.5%). However, when measured in dollars, the slowdown will look more significant: the growth rate of total

revenue decreased from 14.9% in 2019 to 4.5% in 2020 (to \$18.1 billion).

The increase in total exports in dollar terms in 2020 was 4.3%, and a year earlier — 17.5%. In this case, it was affected by a significant decrease in the average annual ruble exchange rate against the dollar (by about 12%). Sales abroad, therefore, reached \$8.6 billion, and the domestic market provided \$9.5 billion (\$\phi684\$ billion).

The increase in total revenue in dollar terms was below 10% for the entire time

1.305 trillion RUB

The total turnover of Russian software enterprises

of the RUSSOFT annual study only in crisis years (in 2009 and 2015). In the remaining years of the RUSSOFT study, Russian software companies always had at least a 10 percent increase in these indicators.

Average increase in turnover and foreign sales of Russian software companies in 2014-2020 years

	2014	2015	2016	2017	2018	2019	2020
Turnover, ₽	+25.5	+40	+27	+4	+19.5	+17.8	+16.5
Turnover, \$	+5	-10	+16	+19	+10.6	+14.9	+4.5
Foreign sales, \$	+11	+12	+13	+16	+10	+17.5	+4.3

In June 2020, it was difficult to expect that it would be possible to avoid a reduction in total income and staff by the end of the year: significant delays in payments began, the prospects for concluding new contracts became vague, and IDC and Gartner analysts promised compression of both the Russian and global IT market by several dozen percents.

By September, it became clear that the software industry was recovering quickly, and its growth was quite likely. Moreover, the first quarter was quite successful, since the industry has not yet been affected by the pandemic. Against the background of those concerns in Q2 2020 and situations in the other sectors of the

country's economy, the past 2020 can be recognized as more than successful for software developers (see comparison with the indicators of other industries in section Distribution of foreign sales depending on business model).

Since the RUSSOFT Association tries to reflect the development of the industry from different perspectives, the indicators of the total turnover of companies and its changes are given in various units of measure. In addition, it introduced its own dual currency index, which is calculated as the average growth in foreign currency and ruble revenues, taking into account the weight of income from foreign sales and domestic market

sales. According to the results of 2020 year, this index amounted to 1.104 (corresponds to growth by 10.4%), according to the results of 2019 year it was slightly higher – 1.165 (16.5%), remaining at the level of the previous two years. This indicator appears to have stabilized around 1.15. Most likely, such an indicator would have been achieved at the end of 2020 if it were not for the pandemic (see more information on its impact in Chapter 4, which analyzes the conditions for business).

It is important to recall that from the 2019 study the base currency for summing up the results of the previous year, has been the Russian ruble (before it was the US dollar). While earlier RUSSOFT collected information on the turnover of companies in dollars (questions in the questionnaire were appropriately formulated) and made all calculations in them, recalculating indicators in rubles at the average annual rate if necessary, the 2019 data is based on indicators in ruble terms, which are then additionally converted into dollars to make comparisons at the international level possible.

Direct comparison of the total sales of the software industry in 2019 with the 2018 data will be incorrect.

This is due, firstly, to the fact that several large industry players at once ceased to meet the criterion of a Russian company after their sale to foreign corporations or

transfer of their main business outside Russia. Therefore, instead of the expected volume of foreign sales of \$11.2 billion in 2019, only \$8.25 billion turned out.

Secondly, the data for several years made it possible to conclude that initially the volume of sales in the domestic market was underestimated. The fact is that until 2013, the study was dedicated only to the export operations of software companies. Only those companies that had sales abroad participated in the survey. Thus, data on at least 15-20% of companies (in some years this figure reached 30%), which operate only inside Russia, was not taken into account. Over time, the collected sales data in the domestic market became more complete and were verified, which made it possible to make more accurate calculations.

Thirdly, rejection of the dollar as the main unit of measure made it possible to obtain more accurate primary data from the surveyed companies.

To avoid misunderstanding caused by apparent discrepancy between sales volumes and growth rates in 2018 and 2019, starting in 2019, a new table was created to sum up the results. The changes in indicators indicated therein relate only to the range of companies that are still considered Russian (they were in previous years). At the same time, despite the change in the absolute values of turnover associated with a change in the composition of respondents, a comparison of the growth rate (reduction) for all the years of the study is quite justified (including in 2018 and 2019).

Main economic indicators characterizing the Russian software industry in 2013-2018 (growth/fall compared to the same indicator of the previous year)

	units of measure	2013*	2014	2015	2016	2017	2018
Total turnover of Russian software companies	₽	363 billion	456 billion (+25.5%)	630 billion (+40%)	802 billion (+27%)	834 billion (+4%)	997 billion (+19.5%)
	\$	more than 11 billion	12 billion (+5%)	10.34 billion (-10%)	12 billion (+16%)	14.3 billion (+19%)	15.82 billion (+10.6%)
Foreign sales volume	\$	5.4 billion (+17%)	6 billion (+11%)	6.7 billion (+12%)	7.6 billion (+13%)	8.8 billion (+16%)	9.68 billion (+10%)
Share of foreign sales in total turnover	%	49%	50%	65%	63%	62%	61%
Domestic sales volume	₽	178 billion	240 billion (+35%)	220 billion (-8%)	294 billion (+34%)	321 billion (+9%)	387 billion (+20.5%)
	\$	5.6 billion	6 billion (+7%)	3.64 billion (-39%)	4.4 billion (+21%)	5.5 billion (+25%)	6.14 billion (+12%)
RUSSOFT dual currency index		_	1.23	1.1	1.21	1.13	1.14

 $^{^{\}star}$ — before 2013 RUSSOFT did not determine the total turnover, therefore there is no data on turnover growth compared to 2012.

Main economic indicators characterizing the Russian software industry in 2019-2020 (growth/fall compared to the same indicator of the previous year)

unit of measure	2019	2020
₽	1.120 trillion (+ 17.8%)	1.305 trillion (+16.5%)
\$	17.34 billion (+14.9%)	18.1 billion (+4.5%)
\$	8.25 billion (+17.5%)	8.6 billion (+4.3%)
%	47.6%	47.5%
₽	587 billion (+15.7%)	684 billion (+16.5%)
\$	9.09 billion (+12.9%)	9.5 billion (+4.5%)
%	+14.4%	+11.1%
_	1.17	1.104
	\$ \$ % \$	P 1.120 trillion (+ 17.8%) \$ 17.34 billion (+14.9%) \$ 8.25 billion (+17.5%) % 47.6% P 587 billion (+15.7%) \$ 9.09 billion (+12.9%) % +14.4%

Prospects for software industry main indicators changing

In the last 4-5 years, company expectations have become too overestimated. Real growth indicators were 5-10 percentage points lower than forecast. The exception is 2019, when the forecast for the growth of total turnover was 100% correct.

In 2020, due to the pandemic, the situation turned out to be such that by the second half of March it became pointless to make any forecasts about the results of the entire year. Therefore, with the survey launched at the end of February, part of the questions regarding the plans for the current and next year had already became unnecessary. By June, you could only count on a slight increase in the year. At the same time, the pessimistic scenario remained still relevant, and it suggested a significant reduction in sales.

In 2021, the situation in the global economy became more predictable in order to make software sales forecasts both in Russia and abroad based on the expectations of the surveyed companies.

According to this forecast, the turnover growth rate in 2021 should increase relative to 2020 — from 16.5% to more than 20%, and the total turnover will exceed \$1,6 trillion. If the average annual dollar exchange rate is about 75 rubles, which can be counted on, then in dollar terms this figure will exceed \$21 billion.



According to IDC, the volume of the Russian IT market amounted to RUB 1.83 trillion in 2020, which is 14% higher than the previous year. The share of the IT market in relation to the total volume of Russia's GDP is 1.7%.

Despite the pandemic, we expect further market growth in 2021. With the current hybrid work scheme, this year will be especially effective for companies that develop collaboration software for any devices, anywhere in the world. We think that the most popular IT solutions in the coming years will include big data analytics tools, AI technology and cloud solutions.

Dmitry Komissarov MyOffice CEO



Software companies rely more on the domestic market (on the growth of the entire economy, on the digitalization and import substitution processes). Its sales are much easier to forecast with not so clear prospects for traveling abroad, which are necessary to find new customers and execute new contracts. Regarding the volume of exports in the end of 2021, the surveyed companies were extremely cautious. The vast majority of them expect that it will not change even in ruble terms. Most likely, such an expectation in most cases is similar to the answer "don't know". Therefore, the foreign sales growth in the forecast based on the surveyed companies' expectations, will increase by 13% only (that is, less than in the end of 2020). In USD, the increase will be about 9% — up to \$9.3 billion.

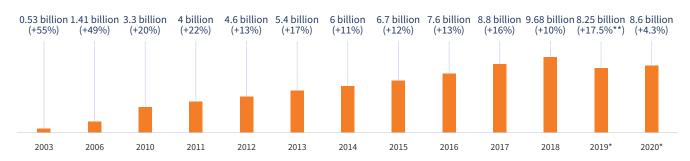
It is possible that the foreign sales volume will increase more if borders open in the fall and it becomes possible to promote their solutions and services in the markets most significant for Russian software developers. In any case, a significant part of the surveyed companies expect to enter new markets (23% of respondents plan to make a foreign debut in 2021). However, most likely, even with the possibility of active marketing in the second half of 2021, this will fully affect only the export performance of 2022.

Foreign sales and export earnings

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The total foreign sales of software industry companies by the end of 2020, despite the difficulties of concluding new contracts, nevertheless increased. The growth was insignificant — only by 4.3%, but it is still there.

Volume of foreign sales in 2003-2019 (growth for the year), \$



^{* —} it is wrong to correlate the absolute values of 2018 and 2019 in this case, taking into account the fact that some companies are no longer considered Russian

It is not yet possible to reach the level of \$10 billion in foreign sales. Most likely, this will not be possible according to the results of 2021. However, if in 2019 there were no sales of a number of Russian software companies (Luxoft, Parallels, Transas, Auriga, MERA) to foreign partners, then the total volume of IT industry foreign sales in 2019 would exceed \$11 billion.

Foreign sales of software companies should not be confused with their export revenues from the sale of software and its development services. Each of these concepts has a corresponding quantitative dimension. Consequently, there are three different indicators of software companies' business abroad: aggregate volume of foreign sales, volume of exports of "computer services", export earnings. They may differ from each other quite significantly.

The volume of computer services exports is determined by the Central Bank of Russia based on information received from banks according to the corresponding group of the OKVED (Russian National Classifier of Types of

Economic Activity) classifier. According to 2020 results, their volume increased by 13.5% to \$5.094 billion, which is 59% of the total foreign sales of Russian software companies. However, such a big difference, which often raises questions and puzzlement, has a logical explanation.

Explanation of the Central Bank of Russia

Foreign trade statistics on "computer services" are developed on the basis of the international methodology set out in the UN Manual on Statistics of International Trade in Services, 2010. Computer services include operations related to the development and implementation of software: the development, creation, delivery and provision of documentation for custom software; acquisition of ready-made software supplied electronically; acquisition of software licenses excluding right to reproduce and distribute.

In addition, this category of services includes services related to data processing, development, recovery, server hosting, database storage and management; web page development, design and hosting services; installation, repair and maintenance services for computer equipment and software; provision of consulting services related to software and computer operations, as well as training within consulting. The main sources of information in the formation of foreign trade statistics in services in the Russian Federation are the information contained in the statements of credit institutions approved by the Bank of Russia.

"Foreign sales of software companies" and "export of computer services" are two completely different indicators, which should not be equal. Firstly, software companies receive income not only from computer services, but also for software licenses when selling software and hardware systems, when selling

 $^{^{\}star\star}-\text{growth only for companies that are still Russian (excluding those that have lost this status)}$

advertising (in free applications), various non-computer services, from scientific research.

Secondly, companies transfer to Russia the proceeds from sales of their software abroad not only under the codifier "provision of computer services", but also as "payments for the use of intellectual property", "transfers to individuals"

or "investments". It is known that two large Russian software companies that successfully operate abroad are not among the top 10 exporters of computer services, but were in the top 10 in the section "Fees for the use of intellectual property".

Thirdly, a significant part of the proceeds received remains outside of Russia. Some

of the money remains in legal entities created by Russian companies in other countries in accordance with world practice, in order to be closer to the client (in the conditions of modern geopolitics, such practice becomes especially relevant). It can be invested in marketing, to maintain its own foreign development centers and sales offices, as well as remain in the owners' bank accounts.

Comparison of computer services exports volume (statistics of the Central Bank of Russia) and volume of foreign sales of software companies (RUSSOFT estimation)

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Foreign sales of Russian software companies (RUSSOFT data)	Absolute value, \$ billion	4	4.6	5.4	6	6.7	7.6	8.8	9.7	8.25*	8.6
	Change per year	+22%	+13%	+17%	+11%	+12%	+13%	+16%	+10%	+17%	+4.3%
Export of computer services (according to the Central Bank of Russia)	Absolute value, \$ billion	1.666	1.995	2.508	2.651	2.455	2.664	3.417	4.06	4.49	5.094
	Change per year	+30.9%	+19.7%	+25.7%	+5.7%	-7.4%	+7.7%	+28.3%	+18.8%	+10.5%	+13.5%
Share of "computer service (Central Bank data) in fore software companies (RUSS	ign sales of	42%	43%	46%	44%	37%	35%	39%	42%	54%	59%

^{* —} it is wrong to correlate the absolute values of the total volume of foreign sales in 2018 and 2019 in this case, because the 2019 figure was calculated according to the changed method, taking into account the fact that some companies ceased to be considered Russian.

Domestic sales

Within the total sales in the domestic market of P684 billion, approx. P242 billion comes from service companies, which receive the main income from custom development, and P442 billion — from software developers. Since the custom software development share of the companies is known (69% for service and 20% for product), it is possible to estimate the volume of software development orders that Russian companies received in Russia. It is P255 billion (16% more than a year earlier).

Similar calculations can be made regarding domestic software products sold in Russia. Service companies are also developing them, but in their total turnover they amounted to 6.3% in 2020 (a year earlier, 8.3%, and in 2018 — 6.3%). The main area of product companies yields 70% of sales in the domestic market (a year earlier — 72.5%). As a result, sales of domestic software

products within Russia amount to approximately ₹325 billion (an increase of 8% over the year).

In total, sales of custom software and software products by the end of 2020 reached \$250 billion. The difference between this indicator and the total sales of service and product companies (\$264 billion) is software sale as part of software and hardware systems, revenues from various IT services, including SaaS, and other sources of revenue.

The increase in revenue of domestic product companies in the domestic market amounted to 0.7% in USD (12.5% in RUB). Approximately the same indicator should be found in the software products sold by them (without other sources of income). At the same time, the Russian software market, according to IDC, increased by 16% (in RUB terms).

325 BILL

sales of domestic software products within Russia

Sales volume of Russian software companies in the domestic market in 2013-2020, RUB billion



 $^{^{\}star}$ — until 2013 RUSSOFT did not determine the total turnover and sales within Russia, so there is no data on sales growth compared to 2012.

^{** —} it is wrong to correlate the absolute values of 2018 and 2019 in this case, because the 2019 indicator was calculated actually again using a slightly changed method and based on more complete data.

Nature of changes in company turnover

Change in annual turnover of respondents' companies in USD terms (with the exception of 2019, when revenue was determined in RUB)

Turnover	at the end of 2014	at the end of 2015	at the end of 2016	at the end of 2017	at the end of 2018	at the end of 2019	at the end of 2020
Remained same	26%	4%	30%	27%	13%	4.2%	5.3%
Increased	51%	25%	42%	43%	52.5%	69.4%	62.6%
Decreased	15%	71%	11%	3.5%	15.5%	18.1%	15.1%
Don't know	7%	14%	17%	26.5%	19%	8.3%	17%

The 2019 turnover indicator is measured in RUB (in previous years — in USD), and the Russian national currency for the year depreciated slightly against the USD. This is partly why there are more growing companies in the market. However, this was not the main factor; the year of 2019 for software developers turned out to be better than the previous one in all respects. It can be noted that at the end of 2019, approximately half of the companies surveyed (51.4%) increased revenue by more than 10%. At the same time, it is true that there were quite a lot of companies that reduced turnover.

In 2020, during the pandemic period, the share of growing companies decreased, which should be the case in the crisis. But the crisis for the software industry as a whole was not as serious as could be assumed, and therefore the reduction in the share of growing companies turned out to be minor. At the same time, 47.1% of the surveyed companies increased turnover by more than 10%, 23.3% — by more than 30%, 9.2% — by more than 50% and 3.9% — by more than 100%.

In 2020, we can see the continued increase in the share of foreign companies' Development Centers. Product companies have increased exports somewhat, and service companies have the advantage of increasing sales in the domestic market. Apparently, the growth of custom development in the Russian market was facilitated by a course towards digital transformation, which requires specific changes in the business model of a particular organization, which in most cases cannot be provided with a fully packaged product.

Distribution of foreign sales depending on business model

Distribution of total foreign sales among companies with different business models according to the results of 2016-2020 (absolute value)

	2008	2016	2017	2018	2019	2020
Service companies	55%	46%	47.5%	47%	40.7%	39.3% (\$3.4 billion)
Product companies	30%	47%	46.5%	47%	49.4%	49.7% (\$4.3 billion)
Foreign companies' Development Centers	15%	7%	6%	6%	9.9%	11% (\$0.95 billion)

Distribution of total sales in the domestic market by companies with different business models according to the results of 2016-2020 (absolute value)

	2016	2017	2018	2019	2020
Service companies	29.5%	30%	32%	33%	35% (₽242 billion)
Product companies	70.5%	70%	68%	67%	65% (₽442 billion)

Distribution of total turnover by companies with different business models according to the results of 2016-2020 (absolute value)

	2016	2017	2018	2019	2020
Service companies	40%	41%	41.4%	36.4%	37.5%
Product companies	55.5%	55%	55.0%	59.2%	57.3%
Foreign companies' Development Centers	4.5%	4%	3.6%	4.4%	5.2%

Service companies

Key performance indicators of service companies in 2020

	in RUB	in USD	in RUB, including inflation
Turnover	487 billion	6.8 billion	_
Increase in turnover	+18.5%	+7%	+13%
Foreign sales volume	_	3.4 billion	_
Foreign sales growth	-	+0.5%	_
Domestic sales	242 billion	3.4 billion	_
Domestic sales growth	+25%	+11.5%	+23.8%

Software products and out-of-the-box solutions

Product companies by the end of 2020

	in RUB	in USD	in RUB, including inflation
Turnover	750 billion	10.4 billion	_
Sales growth/reduction	+13%	+2%	+7.7%
Foreign sales volume	_	4.3 billion	_
Foreign sales growth	-	+5%	-
Domestic sales	442 billion	6.1 billion	_
Domestic sales growth/reduction	+12.5%	+0.7%	+7.2%

Software development centers of foreign corporations in Russia

Scope of services provided to foreign parent companies

 Volume by 2020 in USD
 Change in the end of 2020, \$
 Volume in the end of 2020, ₱
 Change in the end of 2020, ₱

 \$0.95 billion
 +16.4%
 ₱68.9 billion
 +30%

Foreign companies with their own research and development centers in Russia:

Accenture, Alcatel-Lucent, Allied Testing, AVIcode, Cadence, Design Systems,

Chrysler, Cisco Systems, Columbus IT, Dell, Deutsche Bank, Digia, Edisoft, EGAR Technology, EMC, EMS, Ericsson, Harman, Hewlett-Packard, Huawei, Hyundai, IBM, Intel, InterSystems, Jensen Technologies, LG Softlab, Motorola, NEC, NetCracker, Nival Interactive, Microsoft, Netwrix, Nokia, Nokia Siemens, Quest Software, RD-Software, Samsung Research Center, SAP, Scala CIS, SmartPhoneLabs, Tagrem Studio, Teleca, T-Systems.

RUSSOFT rating. Russia's largest software companies

In 2021, RUSSOFT Association launched the 7th version of the annually updated rating of Russian software development companies. By and large, it is a catalog of the largest software companies, divided into categories (divisions) depending on their size and growth rate (including, taking into account the predicted indicators in the next 2 years). There was no other complete rating of Russian software developers before the RUSSOFT Rating.

When developing the rating, the main task was not to rank companies by size, but to cover all the largest software companies in Russia and present the entire top part of the industry pyramid. It can be assumed that it was not possible to cover all companies that deserve to be rated, since there is no public information about some of them. However, it can be argued that such companies are most likely only a few, and they have a turnover of less than \$50 million.

Some media and rating agencies compiled wider ratings of IT companies, where they rated separately software development companies. However, their ratings were clearly incomplete (they covered at best half of the largest software companies), which also included system integrators, equipment manufacturers, as well as foreign software companies that reported their sales in the Russian market.

The main reason for the incomplete coverage of software companies in existing ratings is the lack of reliable information about the total revenue of companies that could be rated. RUSSOFT on principle refused to rate companies by their turnover, although it collected information about the turnover of all the largest software companies in Russia. The reason is that a significant part of such information is obtained as a result of the annual survey of software developers on the terms of its non-disclosure, and this

condition is strictly complied with. Data from ratings from other sources, such as CNews, Tadviser100, were also used, but only after verification.

In addition, it is not entirely correct to compare the indicators obtained from the audited reports of a number of companies with the data presented by company employees during the survey, or obtained as a result of expert appraisals.

Strict ranking and comparison of companies with different business models will also not be quite correct.

Nevertheless, when compiling the RUSSOFT rating, first of all, the size of companies was taken into account. In order not to disclose confidential information and to avoid strict ranking, all companies were divided into groups and included there in alphabetical order without indicating their turnover.

For each group, a fairly wide range in total revenue was determined, and the distribution of companies into these groups took place not only according to existing turnover, but also taking into account their development trend.

Companies that already have a capitalization exceeding \$1 billion fell into the top division.

Top Division (Division A)

1C

Cognitive Technologies Kaspersky

3 companies

Most likely, 1C could already have a billion turnover, taking into account its revenues not only from the sale of its own solutions, but also from its distribution activities. However, the economic crises of 2015 and 2020 (first of all, the depreciation of the ruble) extremely negatively affected its turnover in dollar terms, since the company receives the main income in Russia.

Kaspersky (previously called Kaspersky Lab) is firmly among the leaders, but is no longer growing as rapidly as it was a few years ago. Perhaps new solutions to ensure the security of the Internet of Things and more active work outside the United States and the EU will enable its acceleration and achieve USD billion turnover.

In 2020, Cognitive Technologies earned the privilege to be moved to Division A. Although there is no exact data on its turnover at the end of 2020, it can be assumed that it has a fairly high growth rate (if not at the end of 2020, then most likely in 2021).

Group B also included fairly large companies. Their turnover ranges from \$100 million to \$500 million.

Division B

ABBYY

Acronis

CBOSS

Center of financial technologies

DataArt

EPAM Systems (Russia)

GDC Services (ICL-Services)

Infotecs

JetBrains

Luxoft Professional

Nexign (Peter-Service)

SKB Kontur

Voskhod (Research Institute Voskhod)

13 companies

The newcomer to this division in 2021 was Infotecs, which works in the field of information security.

Next year, Positive Technologies may get into this division if it maintains its increase of 55% in 2020.

Voskhod (Research Institute Voskhod) has so far been left in the division, because it reduces revenue only in USD terms, and continues to grow in RUB. The company focuses exclusively on the Russian market. In the future, and in this rating in particular, it is necessary to refuse from measurement of revenue in USD.

The MERA company is excluded from division C in 2020 (after its sale to a foreign investor), but at the same time it had 4 newcomers, 3 of them from Division D — Security code, BARS Group and RDTex. Software Product (Software Product Group of Companies) was previously not included in the rating at all, because it was considered an IT integrator, and not a software developer. However, this company now positions itself more clearly as a software developer.

Division C

BARS Group

BSS

Diasoft

Forsite

Dr. Web

GDC Services (ICL-Services)

Kronshtadt (Kronshtadt group)

Positive Technologies

RDTex

RTSoft

Security code

11 companies

Newcomers to the rating in 2021, who were included into Division D, were Astra Linux (developer of secure operating systems and virtualization platforms) thanks to its 67% year-over-year growth, Neoflex (specializes in custom development and other IT services), which has increased its revenue by more than 50%, iSpring company (developer of professional tools for developing e-courses and organizing remote learning) and Business Automatics (development of web applications and client-server applications).

Directum is getting close to be included into Division D. Perhaps it already deserves to be their, but the exact amount of its revenue is not known.

There are several more applicants to be included in Division D (turnover from \$20 million to \$50 million). They are RC Module, Satellite Innovation and Contek Soft.

Perhaps it is worth including Waves Platform and Aitarget in the rating, but the question is to recognize them as software companies. Waves Platform is the developer of the Vostok blockchain platform, which is valued at more than \$1 billion as part of the second round of investments. However, the company presents itself as an Internet service provider.

Division D Devexperts ("Expert-System") ETU - JSC NIC SPb ETU

AKTIV DeviceLock Omnicomm Arcadia Digital Design Paragon

Artezio Elecard PARMA Technologies Group

ASCON EOS ("Electronic Office Systems") Parus
Ashmanov and Partners First Line Software PROMT
Astra Linux iiko Redmadrobot
Atom Security iSpring SCANEX
Auriga Galaktika SIGMA

B2B-Center ("Center for Economic Garant Soft Expert

 Development")
 Geoscan Group
 SpeechPRO ("Speech Technology

 Bercut
 Group-IB
 Center")

 BIA Technologies
 Infokompas
 SPIRIT

BIS ("Banking Information Systems")InfoWatchReksoftBFT (Budget and FinancialIntegra-SReturn on IntelligenceTechnologies)KodeksR-Style Softlab

Business Automatics Lanit-Tercom VIST GROUP
CDC Naumen Zecurion

Compass Plus Neoflex Zyfra (Zyfra Group of Companies)

CryptoPro Scientific and Engineering Center SPb 54 companies

\$8,5-\$9 billion (\$600-650 billion)

The total turnover of 82 companies included in the rating of the largest software companies is approximately