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SWOT-analysis

VK Cloud

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Course project meets / doesn't meet the requirements

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CONFIRMATION

of the originality of the course project text

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1st year students of International Bachelor in Business and Economics Programme, HSE Saint Petersburg School of Economics and Management confirm, that Course project "Extended SWOT analysis and alternative strategies of the VK Cloud company"

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CONFIRMATION

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"Extended SWOT analysis and alternative strategies of the VK Cloud company"

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INTRODUCTION

VK is a company that has long become more than just a messenger. Now it is a huge platform with a wide range of products, such as social networks, education, marketplaces and entire ecosystems (Source: VK Company website). For students of the School of Economics and Management, this is a great opportunity to get acquainted with a well-known company and work with its new developments, as well as participate in the creation of a new look at the product. We chose VK, as it is a key technology company in Russia, which sets the direction for the development of the technology business.

VK Cloud is a business digitalization ecosystem based on modern infrastructure and cloud platform tools, which operates in the field of IT and services and specializes in Kubernetes, IaaS, Hadoop, Consulting and High Load. This service allows you to create and modernize IT systems for any purpose using technologies for building high-load reliable systems. In two years, VK Cloud has grown from a startup within the company to one of the best business clouds in Russia. The company's goal is to build the largest and most reliable Russian cloud platform that would not be inferior to such giants as AWS and GCP.

The company's core values are openness and honesty. The company is open to changes and bold ideas - each employee can influence the content of products. VK Cloud prioritizes customer convenience and strives to create market-changing services.

Their headquarters are in Moscow, and the size of the company ranges from 500 to 1000 employees.

SWOT analysis was used for the study, as it is one of the basic and universal tools of a professional manager when conducting strategic analysis to determine the directions for the development of companies of various sizes, structures, forms of ownership and areas of activity (Source: SABDA Journal, 2023). This method is applicable in the management of organizations in any of the three sectors of the market economy, including the commercial economy, as well as for the strategic analysis of their individual products.

The goal of the project was to study the product provided by the company and propose changes that would help in its development.

The objectives were as follows:

1) Study the product received by the company and get acquainted with the functionality of the product, its task;

2) Identify shortcomings in the use of the product, analyze them;

3) Compare this product with other products that work in the same industry;

4) Suggest possible ways to get rid of flaws or change the product to not only attract new customers and retain existing ones, but also to improve the way it works now.

During the analysis of the project, factors from various sources, external and internal environment, were used and they were also analyzed. These factors contributed to the PEST analysis, the Porter's Five Forces Analysis, and the KSF analysis of the product in question, as well as the competitors' products, which were further used in the SWOT analysis mentioned below.

As sources of information, we used the website of the platform in question, sites with information about VK, sites with statistics that were used in the analysis of external and internal factors, as well as interviews with an employee of the company and some scientific articles.

PART 1. PEST ANALYSIS

The external environment of a business consists of the various entities it interacts with, including customers, suppliers, competitors, and governmental authorities. It is crucial for companies to continuously monitor this external environment in order to identify patterns and trends and prepare for future actions. The external dynamics of a company are shaped by two main components: the macro-environment and the micro-environment. The macro-environment includes factors that impact businesses on different levels, from local to global. These factors affect all economic entities regardless of ownership structure or the nature of products and services offered.

To analyze the macro-environment, companies often use a strategic management tool called PEST analysis. This tool helps in identifying, analyzing, organizing, and monitoring external factors that may affect a company in the present and future. PEST analysis is a key instrument for evaluating a company and is often used as a basis for conducting a SWOT analysis. By integrating PEST analysis into a SWOT assessment, companies can categorize external factors as either opportunities or threats.

The acronym PEST represents the primary factors that need to be examined in a company's external environment: Political, Economic, Social and Technological. By considering these factors, companies can better understand their external environment and make more informed decisions about their future strategies.

First of all, it is necessary to consider the components of the macro environment of the company and what impact they have on it. VK Cloud is a cloud provider using information technologies. The market of Information Technologies (IT) is actively developing, having a direct impact on the company VK Cloud. The process of digitalization is directly related to its development. The Internet is becoming a sales market and a channel for promoting goods and services, and the demand for working with new technologies is increasing. For example, according to data published by tender management experts "Tenderplan", the demand for artificial intelligence (AI) among government companies and organizations in 2023 has almost doubled. The development of digital technologies requires continuous improvement in the power of equipment, but procuring new ones requires large investments. Clouds are becoming one of the key areas for digital development and business continuity. Stack Group predicts that the cloud market will grow by about 50% in 2024. VK Cloud allows companies to reduce amortization costs, which makes the product increasingly in demand in the market. Inextricably linked to this is the increasing loyalty of companies to cloud services. According to Yandex Cloud and SALT data for 2023, 9 out of 10 Russian companies changed their strategy for launching digital products. At the same time, those who used clouds earlier were able to increase the number of pilots. However, such a rapid development of the digital market, in particular the cloud market, can have a negative impact on a company. For example, the acquisition of cloud services allows a company to reduce the staff and budget of the IT department and reduce dependence on it, which leads to dissatisfaction among employees who are deprived of some of their responsibilities. In his article "Oblachnie servisy: stimuly polzovateley k adaptacii" A. B. Kuryatnikov concludes that the reluctance of IT directors to lose part of their authority may be one of the factors preventing the introduction of cloud services. Another barrier A. B. Kuryatnikov named the lack of highly qualified IT specialists. This may be due to the fact that the level of technical education in Russia does not keep up with the development of new technologies. In the article "Problemy podgotovki kadrovv sfere informacionnyh tehnologiy" by Y. O. Klimova it is

said that cooperation between IT companies and higher educational institutions (HEI), which affects the quality of training of future specialists, is poorly developed.

Due to its nature, the cloud market is closely related to the security and licenses required to operate. Since company data, including confidential data, is stored in clouds, and company websites and applications are managed using cloud services, the requirements for security and disaster resistance of cloud providers are quite high. Each domestic provider must comply with Federal Law No. 152 "On Personal Data", Federal Law No. 149 "On Information, Information Technologies and Information Protection" and Federal Law No. 126 "On Communications", as well as be registered in the register of Roskomnadzor. Moreover, despite the government's interest in the development of information technologies, the article by A. A. Yakovlevs and M. G. Kuzmyk, "Vliyanie pandemii i gosudarstvennoy antikrizisnoy politiki na rossiyskiy IT-sektor", published in 2021, notes the pressure from law enforcement agencies on the industry, which negatively affects the development of companies in the IT sector.

Analyzing the macro environment of VK Cloud, one cannot but pay attention to the current situation in the last two years due to geopolitical events. During 2022 and 2023, all foreign companies left the Russian market of cloud providers, which forced Russian users to switch to domestic analogs. This had a positive impact on VK Cloud, which was confirmed during interviews with the company. According to CNews Analytics, the departure of Western vendors brought record revenue to Russian IaaS providers (IaaS stands for Infrastructure-as-a-Service, its providers offer rental of computing resources in their public cloud). The increase in the company's revenue allows the company to spend super profits on investing in themselves. However, along with this, foreign equipment suppliers left the Russian market, so Russia started its own production of servers. Russian IT vendor "DataRu" announced on September 18, 2023 that it has launched production of servers to work with AI and machine learning technologies, neural networks and high-performance computing. Clients of IT companies can build a fully import-independent basic IT infrastructure with support in Russia. Also, due to political events in Russia, the ruble has depreciated significantly, which has led to an increase in the price of components, and as a consequence, to an increase in the cost of equipment, which leads to a forced increase in prices for cloud services, that is loss of potential customers. According to a study by 3data and IKS-Consulting in Moscow and St. Petersburg by the end of 2023, the cost of data placement and rack rental in commercial data centers increased by 2% and 13% respectively.

At the same time, the government is interested in the development of IT technologies, so it takes some measures to support companies in the field of information services. For example, it offers various tax incentives: 0% profit tax rate (as decided by the President) for IT companies. Zero value added tax (VAT) rate for domestic software. Preferential mortgage rate for employees of IT-companies. Also recently Russia has made great progress in the field of electronic engineering, according to the Deputy Prime Minister of the Ministry of Industry and Trade in 2023 expected growth of electronic engineering products 10%. VK Cloud works with Russian equipment suppliers, and due to the progress in technology, domestic equipment is becoming more affordable and there is more variability in the choice of suppliers.

It is worth noting separately the economic growth in general. According to Rosstat, gross domestic product (GDP) growth for 2023 amounted to 3.6%, with consumer demand making a significant contribution. Such economic development speaks about the increase and development of existing businesses, and thus to their further virtualization, that is to the increase in users of cloud services.

All the above factors can be divided into four spheres of influence: political, economic, socio-culture and technological. Summarized and structured results of the PEST analysis of VK Cloud are presented in Table 1.

Table 1. PEST analysis of VK Cloud

External Environment factors	Characteristic of the factor influenced by				Influence on the company
	time	type	dynamics	relative importance	
Political factors					
Relationships with government	N/F	-	>	Important	Multiple government audits of IT companies.
Withdrawal of foreign companies due to geopolitical situation	N/F	+	=	Very important	Sanctions from foreign services have forced Russian companies to switch to domestic providers, which leads to revenue growth.
Tax policy	N/F	+	=	Very important	Various tax incentives for IT companies attract new employees, leading to the expansion of VK Cloud.
Economic factors					
Cloud storage market growth	N/F	+	>	Important	The environment is becoming more competitive, which encourages the company to develop and innovate in order to maintain and increase its market share.
Exchange rate changes	N	-	<	Very important	Due to the growth of the dollar and the euro, prices on the Russian market are rising, which increases the cost of equipment. In order not to lose profit, VK Cloud is forced to raise prices, which becomes possible due to the company's transition from foreign hosting to Russian hosting.
Economic growth	N	+	>	Substantial	The economy is developing, existing companies are appearing and expanding, investments are growing, which leads to the expansion of VK Cloud's client base, as well as the development of the company.
Socio-cultural factors					
Increasing loyalty to cloud services	N/F	+	>	Very important	Increased demand for cloud services leads to an increase in VK Cloud

External Environment factors	Characteristic of the factor influenced by				Influence on the company
	time	type	dynamics	relative importance	
					customers, and hence increased profits.
Employee protest regarding the adoption of cloud services	N	-	<	Substantial	Unrest among employees negatively affects the work of companies, causing directors to refuse to implement cloud services. VK Cloud loses potential clients.
Shortage of highly qualified IT professionals	N/F	-	=	Very important	With the current development of technologies, the level of technical education in Russia does not allow to educate highly qualified workers, which creates and will create a problem of staff shortage at the current growth rate of the company.
Technological factors					
Digitalization	N/F	+	=	Important	Increases the demand for cloud services among companies, leading to an increase in consumers and consequently increased profits.
Development of electronic machine building in the Russian Federation	N/F	+	>	Important	Greater variability in supplier selection is emerging.
Launch of AI server production in Russia	F	+	>	Very important	Independence from foreign manufacturers.
Requirements for computing power and information protection for server providers	N/F	-	=	Very important	The company has to invest in special equipment and software, undergo inspections and obtain additional licenses. Costs increase significantly.
Need to be in the Roskomnadzor register to provide services legally	N/F	+	<	Substantial	Computing power must be located in Russia, which may limit the company. However, this requirement generally had a positive impact on VK Cloud, as it also became one of the factors that forced large foreign players to leave the market.

The following factors were identified as the most important: the departure of foreign companies and increased loyalty to the “clouds”, which radically changed the Russian market of cloud providers, sharply increasing the demand for domestic providers, and therefore it is necessary to build new data centers and improve technical characteristics; tax policy regarding IT companies, which allows companies to exist in difficult times and actively develop, there by developing the IT sector of Russia; changes in the exchange rate, since because of them companies are forced to increase prices, which negatively affects the demand for cloud services as such; lack of highly qualified workers, which is why companies with rapidly developing technologies are forced to adapt to this factor without developing as quickly as possible; launching servers using AI technologies, which will allow providers in the future, due to the duration of implementation, to offer new services and optimize their work, and process optimization may lead to a change in the approach to work; growing safety requirements, as this requires large financial investments from companies to improve these factors. Unlike tax policy, relations with the state are not a factor of particular importance, since the state is more interested in the development of the IT sphere and rather supports it than limits it. At the same time, the development of machine technology in Russia is also not very important due to the fact that so far domestic equipment is only “catching up” with foreign equipment, which has already been used by domestic cloud services.

It would also be essential to note that almost all factors, except for changes in the exchange rate, economic growth, the launch of servers using AI and the protest of workers against the introduction of cloud services, are already in effect and will be in effect in the future. It is assumed that at the moment there have been no events in Russia and the world leading to strong currency volatility, the dollar and euro exchange rates have practically not changed during the year and do not plan to change. Economic growth was also caused by the decline earlier, so it will gradually decrease. It is also suggested that the protest of employees will affect less and less, due to more important factors: increased loyalty to the clouds and digitalization. In turn, the invention of servers using technology has no effect yet, since they have not yet been implemented, and their implementation takes a long time, since it will be necessary to rebuild data centers.

Thus, the macro environment of the company can be characterized as a fast-growing market with actively developing technologies, which has undergone changes due to the geopolitical events of the last two years, in which the state is interested, which both imposes requirements on cloud providers and supports them.

PART 2. PORTER'S FIVE FORCES ANALYSIS

One alternative to organize information about a business from an external perspective, but with a greater focus on market and rival evaluation, is analysis of porter's 5 forces. Porter's five forces assessment is used to evaluate the external surroundings of a business or a company.

The Five Forces model is a widely used instrument by consultants for examining an external environment that enables an evaluation of the appeal of an industry in relation to rivalries, along with the existing status of a business within the industry and creating a strategic plan of action, strategies, projects, etc. to optimize the utilization of competitive benefits. The analysis evaluates five competitive forces:

- Industry competitors;
- Threat of new entrants;
- Bargaining power of buyers;
- Bargaining power of suppliers;
- Threat of substitutes.

According to iKS-Consulting, there are many players in the market, but about 45% of the market is accounted for by the two leaders, 68% by the top five. In the preliminary rating VK Cloud ranks 12th and holds a market share of 2%. At the same time companies are actively developing, adopting new technologies and improving their performance as the cloud market is growing quite fast. According to statistics, it has grown by 33.9% over the past year. However, many services offer almost similar set of tools for businesses, but there are differences in the form of additional services. Despite the fact that the market is quite differentiated, the price elasticity of demand is small, because, according to the interview, consumers are reluctant to switch to another product, which allows to slightly increase prices to cover the costs. Based on this information, the table 2.1 below has been made.

Table2.1. Industry competitors

Evaluation parameter	Evaluation		
	3	2	1
Number of players	Market is highly saturated	**An average number of market players**	Market is poorly saturated
Market growth rate	Market is in the phase of stagnation or decrease	Market is growing, but slowing down	**Market is growing rapidly**
Product differentiation level	Products are standardized	**The product is partly standardized: it maintains its key properties but offers unique additional benefits**	Goods differ significantly from each other
Restriction on price increases	Fierce price competition in the market	**Raising prices can be considered solely to offset rising costs**	Raising prices is always possible to offset costsincrease and increase

When analyzing the market, it is necessary to take into account the threat of new entrants. The barriers are high, it takes a lot of money to enter the market, as in many high-tech

products. According to an article published on the Citylecom website in 2020, on average companies spent about 100-150 million rubles on a data center (DC) of about 100 square meters in size, not counting maintenance and repair costs. Finding a team to service the product is difficult given the shortage of IT specialists on the labor market in Russia. These factors make initial investment high. In order to establish a cloud provider it is necessary to have many licenses and security guarantees, which makes it difficult to enter the market. As stated by DataDome, maintenance of data centers, introduction of new technologies, development and improvement of existing ones - all this requires huge costs, so in this market there is a positive effect of scale, which means economies of scale are high, as you can attract a lot of customers by fine-tuning your service. When the cost of a product or service depends on the number of customers, competitors have problems because an established company has a large customer base, which is called the network effect. In addition, brand loyalty is high because cloud services already existing on the market enjoy a high degree of customer loyalty, as they have proven to be reliable platforms for many medium and large businesses in Russia. Taking into account all these factors, the table 2.2 below has been made.

Table 2.2. Threat of new entrants

Evaluation parameter	Evaluation		
	3	2	1
Barriers to entry	Low, a lot of opportunities to start this business	Some difficulties to entry, but barriers not high	**High, needs a lot investment, licenses and so on**
Economies of scale	Weak influence of scale, easy to grow	Influence not strong, but important	**Strong influence of scale, few opportunities to grow**
Brand loyalty	Buyers easily change the company for the new one	It is not difficult to change company for the new one, but big companies more preferable	**High level of brand loyalty**
Government policies	There are not any restrictions, licenses, companies free to entry	There are some policy in this area to reduce entry	**There are a lot of governments barriers, inspections, really difficult to get licenses**

During the interview, the company stated that it operates in the B2B markets, plans to launch a B2G project, but so far in test mode. According to the information obtained from the interview, the cost of switching to another product or system is high. Once they choose a specific one and start working with it, it is difficult to switch to another platform. Based on reviews and various forums of cloud data center users, we have concluded that a firm can choose a service based on the price, however when a company is already using the service, the price factor is not as important. Any information about the product is available and in the public domain. If there are

any difficulties, you can always ask for a consultation. Based on this information, the table 2.3 below has been made.

Table 2.3. Bargaining power of buyers

Evaluation parameter	Evaluation		
	3	2	1
Size of each customer	Few large firms	**There are large firms, but they do not dominate**	Large number of similar consumers
Switching costs	Free	Not big price	**Expensive**
Price sensitivity	High	Medium	**Low**
Buyer's information ability	**All information is open and free**	Not all information is available	All information is a secret.

According to the information from the interview, the product has many alternative suppliers, it is not very difficult to find a substitute as there is a wide range of choice due to competition in this field. VK Cloud works with any x86 hardware and has several vendors in mind beyond the ones it works with, so switching from one to another is not an issue. The switching period is also quite short, approximately from one to two months. The sale is direct to consumers, according to the product's website. When it comes to machinery, the product is not unique, because although suppliers provide their own products, they share common characteristics with other suppliers' equipment on the market. Based on this information, the table 2.4 below has been made.

Table 2.4. Bargaining power of suppliers

Evaluation parameter	Evaluation		
	3	2	1
Number of suppliers	Small number	Average number	**Big number**
Changing suppliers	Requires large amount of time and costs	Difficult but possible	**Easy and fast**
Selling directly to consumers	Companies act only through intermediaries	Part of the goods is sold through intermediaries	**Suppliers sell directly to consumers.**
Uniqueness	The product is unique, it is difficult (impossible) to find a substitute	Some characteristics of the product are similar to those on the market, but it is not so easy to find a substitute	**The product by its characteristics is similar to most on the market.**

To analyze the threat of substitutes, we decided to refer to the interview. The only substitute for cloud services is on-premise software, where companies install and run software on their own servers. However, according to a project worker, this analog is expensive, as it requires a large number of developers, managers and equipment to operate. Even if it is possible to replace the

product, it will not have the same functionality. The substitute is less convenient than the original product, as it requires a large amount of company resources to maintain uninterrupted operation. Based on this information, the table 2.5 below has been made.

Table 2.5. Threat of substitutes

Evaluation parameter	Evaluation		
	3	2	1
Number of product substitutes	There are many alternatives	There are substitutes, but they are an average number	**Few substitutes for the product**
Switching costs	Low cost compared to our product	Average, about the same cost	**High cost compared to our product**
Buyer propensity to substitute	Buyer can easily substitute the product	The buyer may replace the product, but will not do so immediately	**It is extremely difficult for the buyer to replace the product**
Perceived level of differentiation	The substitute is identical or the difference is insignificant	The difference between the product and the substitute is not critical	**The product and the substitute are very different**

After conducting Porter's Five forces analysis it has been determined that one of the most influential forces is Competition in the industry, which can be mainly explained by the number of competitors. Bargaining power of buyers also has noticeable degree of influence because of availability of information about products. At the same time, Bargaining power of suppliers, Threat of new entrants and Threat of substitutes have almost no influence on the product. This can be attributed to the highly advanced and technology-driven nature of the sector, which acts as a barrier to entry for new players. The result is presented in the table 2.6.

Table 2.6. Porter's 5 forces

Competitive force	Degree of influence	Description of the competitive force's influence
Competition in the industry	7	There are many players in the market, but large companies occupy almost half of the market. The market of cloud services is growing very fast, which creates conditions of competition among cloud providers.

Competitive force	Degree of influence	Description of the competitive force's influence
Bargaining power of buyers	7	Buyers have a wide choice of companies, but once they choose a specific one and start working with it, it is difficult to switch to another platform. Firm can choose a service based on the price, but when a firm is already using the service, the price factor is not as important.
Bargaining power of suppliers	4	The domestic equipment market is becoming more competitive due to technological development in Russia. The large number of firms engaged in supplying network equipment and technology from which to choose weakens the bargaining power of an individual supplier. Switching from one to another is not an issue.
Threat of new entrants	4	There are many different barriers to establishing a cloud provider, and already existing clouds have a lot of trust and credibility among users.
Threat of substitutes	4	There is only one substitute for cloud services - on-premise software. However, this analog is expensive, as it requires a large number of developers, managers and purchase of own hardware.

A lobe diagram 1 was constructed from the final table to visualize the relationships of the forces to each other.

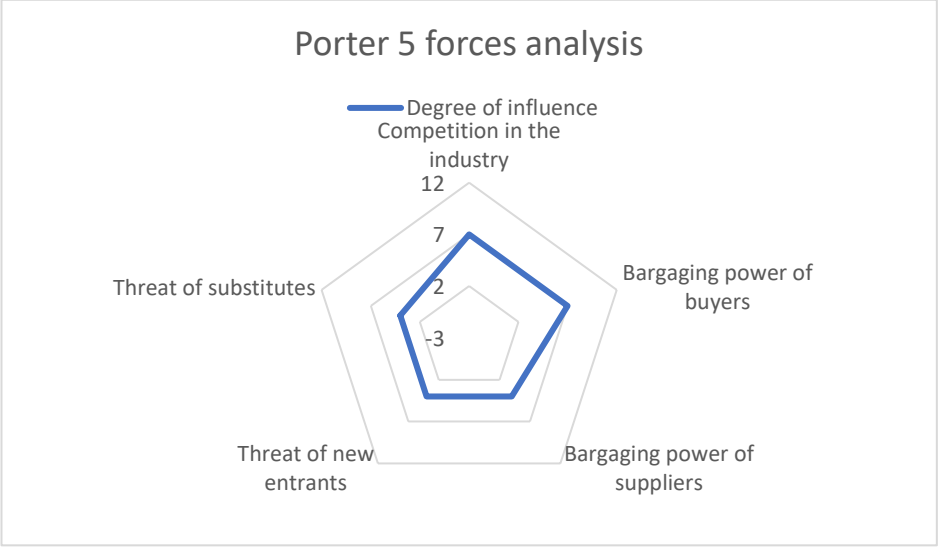

Diagram 1. Distribution of forces

PART 3. KEY SUCCESS FACTORS

When it comes to internal area of the VK Cloud it is necessary to identify and analyze key success factors. To identify them some forums (Hosting.info as an example), guides and review sources from Habr and similar ones were used. Having analyzed the characteristics that consumers pay attention to when choosing a particular cloud service, five key success factors were identified: data center locations, product price, service specifications, technical support and marketing. As for competitors, based on the services provided by cloud providers PAAS and IAAS and the share of their companies in the Russian cloud market the following companies were selected: Yandex Cloud, Cloud.ru, MTS Cloud and Selectel.

First of all, when choosing a cloud service, a domestic company should pay attention to the zone of cloud availability, which is indicated by the location of the provider's data centers. This is essential for domestic companies registered and operating not in Moscow due to the fact, that they cannot use public cloud in their regions since objects (for example, virtual machines) can only be created in the availability zone. The largest number of regions covers MTS Cloud, it is available in four regions: Moscow, St. Petersburg, Novosibirsk, Vladivostok and Uralsk. Selectel has located data centers in Moscow, St. Petersburg and Novosibirsk. Yandex Cloud data centers are located in the Central Federal District: Vladimir, Ryazan, Kaluga and Moscow regions. Cloud.ru is located only in Moscow and Khimki (Moscow region), while VK Cloud data centers are located only in Moscow. It should also be noted that own data centers are more secure than leased ones since third parties do not have direct access to company data. Yandex Cloud, MTS Cloud (there are several rented ones), and Selectel (their own data centers are located in St. Petersburg and Leningrad region) have their own data centers, VK Cloud and Cloud fully rent data centers. Thus, VK Cloud is inferior to its competitors in terms of data center locations in Russia.

An important factor in choosing a cloud service is the price of its products, because at some main characteristics such as service level agreement (SLA), number of services and security certificates all of the largest cloud providers similar, it means, that potential clients can easily choose between them and pay attention to the price. Since each user needs an individual configuration, which is a set of technical characteristics under which the software is tested (definition from the testit.softwear website), it was decided to evaluate the minimum possible configurations in each of the competitors. To compare prices among cloud providers, we chose the cost of using a virtual machine with basic settings per month (1 x vCPU, 2 x GB RAM, 50 x Basic SSD) and SSD disk size (10GB), presented in the table 3.1.

Table 3.1. Prices of configurations

Configuration	VK Cloud	Yandex Cloud	Cloud.ru	Selectel	MTS Cloud
Cost of using a virtual machine, rub	1743	2755	1613	2993	1704
Cost of SSD, rub	120	120	112	372	40

At VK Cloud, MTC Cloud and Cloud.ru the difference in prices of a virtual machine is insignificant. At the same time the cost of these machines at Yandex Cloud and Selectel turned out to be much higher. We also found out that the cost of SSD disk for a month was the lowest at

MTC Cloud, the prices at VK Cloud, Cloud.ru and Yandex Cloud are almost the same. The most expensive of them is Selectel. This is important to analyze, because when expanding production firms need to increase the volume, speed and efficiency of storage, for which they need SSD. Thus, in terms of price, VK Cloud is in second place, lagging behind MTC Cloud, which is quite a good indicator.

For any users of cloud providers, the speed of their website or application is important, as well as the low probability of failures, because each failure incurs large losses for company users. For example, during the large-scale failure of the Wildberries app, the revenue decreased by almost 98% in just one day (Source: vc.ru). The volume of sales fell by almost 96%. Therefore, the technical characteristics of the services, namely the ultimate power of their processors, were considered as a criterion. This criterion is very important, because any data storage and processing requires high power. Since it seems ideologically wrong to compare hypervisors - a software or hardware system that provides simultaneous, parallel execution of several operating systems on the same server (definition from helpdeski.ru), and containers - a software package that includes everything necessary to run software, since they are fundamentally different and created for companies with different goals, we will compare processors (definition from itglobal.com). It is considered the most productive processors that the company has in order to understand its limits in this parameter. All the technical data was taken from the "cnews" site, as well as from the sites of the providers themselves. To compare processors a special resource Technical City (technical.city.ru) which makes a rating of their performance on the basis of technical characteristics and benchmarks of processors is used. The comparison results are shown in the table 3.2.

Table 3.2. Processor ranking

Name of a company	Processor	Rang
VK Cloud	Intel Xeon Platinum 8380 3.4GHz	57
Yandex Cloud	Intel Xeon Gold 6354	150
Cloud.ru	Intel Xeon Gold 6256 3.6GHz	119
Selectel	AMD EPYC 7763 2.45GHz	20
MTS Cloud	AMD EPYC 7542 2.9GHz	115

As VK Cloud’s processor has a higher position in the rating than three out four considered competitors, better characteristics has only Selectel. It is also noticeable that the other three companies are far from the two leaders.

However, in the course of using a cloud provider, questions often arise, various kinds of problems and failures appear. In this case, each cloud service has technical support, which tries to promptly solve the difficulties that arise. First of all, it is worth paying attention to the availability of free round-the-clock support, it is available at all companies except Yandex Cloud, where technical support has three tariffs. It is also worth noting the number of ways to apply for technical support, the greatest variability has VK Cloud: on the site, by mail, by phone, in Telegram bot; on the site, by mail and by phone you can apply to Selectel, MTS Cloud and Cloud.ru. In the basic tariff Yandex Cloud only mail and a special support department are available. One of the important criteria is the response time to the appeal (written) Selectel and Cloud.ru promise response time within 15 minutes, MTS Cloud depending on the request from 15 to 30 minutes, while on the site of VK CLoud it is indicated 60 minutes from the time of creating an appeal, and at Yandex Cloud

depending on the tariff from 5 minutes to 24 hours (in the basic tariff 24 hours in a separate case 30 minutes). Processing time (one of the SLA criteria) is not insignificant. It is impossible to evaluate Yandex Cloud by this indicator, as they have a unique system of response processing. In all companies except for Cloud.ru (4 hours) the time to solve critical tasks is 2 hours. However, the time of solving tasks with low priority varies: Cloud.ru - 12 hours, MTS Cloud - 16 hours, Selectel - 24 hours, VK Cloud - 48 hours. Thus, against the background of competitors VK Cloud technical support is inferior in many respects.

Marketing policy was also chosen as a KSF, because it is marketing that helps to promote its services among potential users, allows the company to be more recognizable, strengthening its position in the market. Elena Krupina, responsible for private brands of the Lenta chain and author of the course “Personal Brand and Uniqueness” at RANEPA, suggests evaluating marketing based on quantitative indicators, effectiveness and efficiency. It is impossible to evaluate the last two parameters, since the necessary data is confidential. However, some quantitative data is publicly available, this is, firstly, the presence of promotions, special offers, an affiliate program, secondly, the maintenance of social networks (regularity, number of subscribers/views) and, thirdly, the opportunity to test the product (trial period or bonus amount upon registration). All the companies under consideration offer various promotions and special offers, but Selectel also provides an opportunity to get a grant of up to 500 thousand rubles (the offer is valid until May 9). All of them also have an affiliate program, but only VK Cloud and Cloud.ru have a second way to participate in it - through a referral program - for this it is enough just to bring a client, the company itself will choose a suitable solution. To evaluate social networks, the company's accounts in VK, Telegram and YouTube were considered. MTS Cloud does not maintain an account in Telegram and is inactive in other networks. Cloud.ru is almost inactive in VK, but regularly posts in Telegram and YouTube, but in the latter, it has a relatively small number of subscribers (<2 thousand) and views. The other three companies are active in all social networks under consideration, but by the number of subscribers and views VK Cloud is inferior to Yandex Cloud and Selectel. All companies have an opportunity to test the product. But the number of bonuses and the duration of the trial period vary as it is clear from the table 3.3.

Table 3.3. Prices of configurations

	VK Cloud	Yandex Cloud	Cloud.ru	Selectel	MTS Cloud
Number of bonuses, rub	3000 for individuals and 10000 for legal entities	4000	4000	—	5000
Trial period, days	60	60	30	14	30

Thus, only VK Cloud has provided a larger number of bonuses for legal entities, and the number of bonuses for individuals is a little less than the competitors, but still quite sufficient, considering that it is an individual. The length of the trial period is the longest at VK Cloud and Yandex Cloud. To sum up, by this parameter VK Cloud is in the lead. Despite the fact that by one of the parameters VK Cloud has average indicators, by the other two it is the leader, so the marketing parameter of VK Cloud is quite developed among competitors. Based on all the criteria, a table 3.3 of key success factors was built:

Table 3.3. KSF analysis

KSF	What client's need do we try to close	Degree of the factor				
		VK Cloud	Yandex Cloud	Cloud.ru	Selectel	MTS Cloud
Marketing	Marketing eases client's decision about what company to choose as it highlights important for a customer advantages and is determined to make the purchase as easy as possible.	+++	++	++	++	+
Technical characteristics of services	Fast data processing, multitasking	+++	+	++	+++	++
Tech support	Efficiency of problem solving	+	-	+++	++	+++
Data centers location	Possibility to use this service in different regions of the country	-	+	-	++	+++
The price of products	Minimal costs for using the equipment	++	+	++	-	+++

Thus, we can conclude that the criteria due to which VK Cloud competes are developed management system and technical characteristics. But despite the strengths, VK Cloud has disadvantages, which indicates the possible vectors of development of this provider.

PART 4. PRIMARY SWOT

The next stage of the analysis is to draw up the primary SWOT matrix. The company's strengths and weaknesses are factors of the internal environment, so to assess them we focused on the results of KSF analysis. On its basis we found out that VK Cloud has good marketing, which in modern business strongly influences the development of the company, high technical characteristics of services and democratic prices, which attracts consumers and causes them more trust. Therefore, these factors we attributed to the strengths of the company. Speaking about the weaknesses of VK Cloud, we can highlight the low level of technical support relative to its competitors and the lack of data centers in other regions of the country except Moscow, which reduces the potential number of consumers.

To identify opportunities and threats we used Porter's 5 forces analysis and PEST analysis, the elements of which are the factors of the company's external environment. Having analyzed all the factors from PEST analysis, their term and their degree of influence on the company the six most key factors for the company were identified, presented in table 4.1.

Table 4.1. Key external factors

External Environment factors	Influence on the company
Withdrawal of foreign companies due to geopolitical situation	Opportunity
Tax policy	Opportunity
Increasing loyalty to cloud services	Opportunity
Shortage of highly qualified IT professionals	Threat
Launch of AI server production in Russia	Opportunity
Requirements for computing power and information protection for server providers	Threat

These factors have the greatest influence on the company. Our table also includes the factor of strong importance, which we did not classify as opportunities and threats: exchange rate changes. Dynamics of influence on the company reduces and has an effect only at present so it does not provide a threat for the future for the company.

Based on porter's 5 forces analysis we found out that the degree of influence of bargaining power of suppliers, threat of new entrants and Threat of substitutes on VK Cloud is low, so we did not use these forces for primary SWOT. Competition in the industry and bargaining power of buyers have the same degree of influence, however, we identified only the first one as a threat to the company. As described above, it is extremely difficult for users of cloud services to switch cloud providers if necessary, in this regard, the factor of information about companies and the size of customers do not play such a big role compared to the switching costs component, so it was decided not to consider customer power as a threat to VK Cloud despite its weight. The elements of the matrix are ranked by importance from the point in terms of the impact of the factor on the company’s activities and are presented in Table 4.2.

Table 4.2. Primary SWOT

Strengths	Weaknesses
1. Marketing 2. Technical characteristics of services 3. The price of products	1. Data centers location 2. Technical support
Opportunities	Threats
1. Increasing loyalty to cloud services 2. Launch of production of AI servers in Russia 3. Withdrawal of foreign companies due to the geopolitical situation 4. Tax policy	1. Shortage of highly qualified IT professionals 2. High competition among market leaders 3. Requirements for computing power and information protection for server providers

PART 5. EXTENDED SWOT ANALYSIS AND STRATEGIC ALTERNATIVES

Based on Primary SWOT-analysis there have been identified some strategic alternatives that are presented in the table 12.

Table 12. Extended swot matrix

	STRENGTHS S1: Marketing S2: Technical characteristics of services S3: The price of products	WEAKNESSES W1: Data centers location W2: Tech support
OPPORTUNITIES O1: Increasing loyalty to cloud services O2: Launch of production of AI servers in Russia O3: Withdrawal of foreign companies due to the geopolitical situation O4: Tax policy	• Attracting former clients of foreign cloud providers through marketing campaigns (S1O3) • Decrease costs of the service due to saving money from tax benefits for the company and its employees (S3O4)	• Colocation in other regions to meet emerging demand (W1O1O2)
THREATS T1: Shortage of highly qualified IT professionals T2: High competition among market leaders T3: Requirements for information protection for server providers	• Drawing attention of potential workers to the company through marketing campaigns (S1T1) • Attracting new clients by combination of high-quality technical equipment and low prices (S2S3T2)	• Improving technical support to ensure better information protection (W2T3)

As strategies colocation in other regions and drawing attention of potential workers were chosen as the most perspective considering company's resources and capabilities, there are their implementation algorithm, required resources and expected results below.

Detailed description of two strategies.

O1: Increasing loyalty to cloud services.

O2: Launch of AI server production in Russia.

W1: Data centers location.

WO alternative: colocation in other regions to meet emerging demand (W2O1O2).

As loyalty to cloud services is only increasing, demand on VK Cloud and its competitors is also growing. It creates favorable conditions for VK Public Cloud to start working not only in Moscow but also in other regions as some of them have a proper customer base too. It seems reasonable to start with Saint-Petersburg and, if this strategy is successful, enter markets of other major cities, for example, Novosibirsk, Ekaterinburg or Nizhny Novgorod. Moreover, we learned from the interview that the company is currently focusing on entering the B2G segment. It is a high-priced process, that is why it is advisable to keep using only colocation (renting space in a

data center). When it comes to choosing a provider, it is suggested choosing the one that has several data centers to ensure easy expansion of availability zones within the city if needed (for example, Selectel). However, it is also possible to expand cooperation with Rostelecom-data center. In addition, in order to attract large buyers, it is recommended to use some AI servers there.

Implementation algorithm:

1. Determination of the area of the rented area, technical parameters (power supply of cabinets, cable systems) and safety requirements
2. Budget allocation.
3. Choosing a commercial data center operator.
4. Signing a contract.
5. Waiting for the operator to prepare the rented space.
6. Equipment placement (including AI servers).
7. Start of work.

Required resources: budget for colocation and servers.

Expected results: increased revenue and platform recognition.

S1: Marketing.

T1: Shortage of highly qualified IT professionals.

ST alternative: Drawing attention of potential workers to the company through marketing campaigns (S1T1).

In the market the number of highly qualified personnel is extremely limited and does not meet company's needs, holding it back from growing. To solve this problem, it is suggested developing cooperation with schools and universities to raise students' awareness of market needs and show VK Cloud's interest in ambitious young people. Cooperation should include lectures of VK Cloud representatives in schools and universities. In addition, it would be a proper place to promote VK Education, which is also an effective tool for VK to find and hire the most hard-working and skilled students.

Implementation algorithm:

1. Selection potential partners among schools and universities.
2. Preparing lecture materials, including promotional information about the company.
3. Approaching potential partners with a cooperation offer.
4. Planning meetings with organizations that accepted the offer (choosing date, auditorium or coworking space).
5. Holding planned meetings.

Required resources: increased budget for marketing (for lecturers, for developing promotional strategy during a lecture and for souvenirs).

Expected results: motivation of students to become qualified in IT sphere, increased platform recognition, aroused interest in employment in VK Cloud.

CONCLUSION

In conclusion, extended SWOT analysis offered valuable perspectives on the organization's current status and potential paths for its future growth. The analysis highlighted the company's main assets, limitations, openings, and challenges, presenting a holistic view of both its inner and outer conditions

Following the assessment, a variety of strategic alternatives were suggested to capitalize on the company's strengths and opportunities, while mitigating weaknesses and threats. These alternatives include locating in other regions to meet the demand for the company's products, reducing costs through favorable tax policies, attracting future professionals to the company, and improving technical support.

The alternative "Colocation in other regions to meet emerging demand" allows to operate in new large local markets, such as St. Petersburg, Novosibirsk, Yekaterinburg, where the demand for similar products is quite high.

The alternative "Drawing attention of potential workers to the company through marketing campaigns" is aimed at eliminating threats related to the shortage of highly qualified workers in IT using methods that VK has already successfully used.

These strategic alternatives must be executed considering the company's existing resources, competencies and industry dynamics. Regular assessment and supervision of the enacted strategies will ensure their efficacy and alignment with the company's aims and targets. Moreover, the ranking of suggested alternatives by our team will enable VK Cloud to select an initiative that aligns with the company's objectives.

LIST OF USED LITERATURE

1. Analiz effektivnosti marketinga - ocenka, kriterii i osnovnye metriki: [Electronic resource] // MTS Marketer. URL: https://marketolog.mts.ru/blog/planiruem-i-schitaem-marketing-s-finansistom?utm_referrer=https%3A%2F%2Fyandex.ru%2F. (Date of the application: 27.03.2024)
2. Chto takoe VK: [Electronic resource] // VK Company. URL: https://vk.company/ru/company/about/. (Date of the application: 27.03.2024)
3. Cloud.ru: [Electronic resource]. URL: https://cloud.ru/ru. (Date of the application: 12.03.2024)
4. Data-centry povyshayut ceny: [Electronic resource] // TELECOM DAILY. 2024. URL: https://telecomdaily.ru/news/2024/01/15/data-centry-povyshayut-ceny. (Date of the application: 11.03.2024)
5. Elektronnoe mashinostroenie i drony: [Electronic resource] // TADVISER. 2024. URL: https://clck.ru/3ALLCL. (Date of the application: 11.03.2024)
6. HelpDesk and Service Desk: [Electronic resource]. URL: https://www.helpdeski.ru/. (Date of the application: 10.03.2024)
7. ITGLOBAL.COM: [Electronic resource]. URL: https://itglobal.com/. (Date of the application: 10.03.2024)
8. Itogi 2023 g. i prognoz na 2024 g. ot M1Cloud: oblachnyj rynok predlagaet gibridnye resheniya: [Electronic resource] // CNews. 2023. URL: https://www.cnews.ru/news/line/2023-11-17_itogi_2023_gi_prognoz_na_2024. (Date of the application: 11.03.2024)
9. Klimova J. Problemy podgotovki kadrov v sfere informacionnyh tekhnologij: [Electronic resource] // CyberLeninka. 2020. URL: https://cyberleninka.ru/article/n/problemy-podgotovki-kadrov-v-sfere-informatsionnyh-tehnologiy/viewer. (Date of the application: 11.03.2024)
10. Kuryatnikov A., Orlova L. Oblachnye servisy: stimuly pol'zovatelej k adaptacii: [Electronic resource] // CyberLeninka. 2018. URL: https://cyberleninka.ru/article/n/oblachnye-servisy-stimuly-polzovateley-k-adaptatsii/pdf. (Date of the application: 11.03.2024)
11. MTS Cloud: [Electronic resource]. URL: https://cloud.mts.ru/. (Date of the application: 12.03.2024)
12. Naskol'ko dorogo stroit' svoj COD dlya biznesa?: [Electronic resource] // Citytelecom. 2024. URL: https://citytelecom.spb.ru/promotion/kommercheskij-cod-ili-korporativnyj/. (Date of the application: 9.03.2024)
13. Oblachnye provajdery: kto na rynke vsekh milee?: [Electronic resource] // Habr. URL: https://habr.com/ru/articles/481632/. (Date of the application: 14.05.2024)
14. Perechen' l'got dlya IT-kompanij rasshirilsya: [Electronic resource] // Ministry of Digital Development, Communications and Mass Media of the Russian Federation. 2022. URL: https://digital.gov.ru/ru/events/41729/. (Date of the application: 11.03.2024)
15. Podrobnye sravneniya processorov i videokart: [Electronic resource] // Technical City. URL: https://technical.city/ru. (Date of the application: 10.03.2024)
16. Prakticheskie sovety po vyboru oblachnogo provajdera: [Electronic resource] // Habr. URL: https://habr.com/ru/companies/croc/articles/176803/. (Date of the application: 14.05.2024)

17. Regions: [Electronic resource] // VK Cloud. URL: https://cloud.vk.com/docs/tools-for-using-services/account/concepts/regions. (Date of the application: 14.05.2024)
18. Rossijskij rynok oblachnyh infrastrukturnyh servisov 2023: [Electronic resource] // iKS-consulting. URL: https://survey.iksconsulting.ru/page44202947.html. (Date of the application: 9.03.2024)
19. Rossijskij rynok uslug po remontu komplektuyushchih dlya serverov i SKHD vyros v 5 raz: [Electronic resource] // TADVISER. 2024. URL: https://clck.ru/3AMWPU. (Date of the application: 11.03.2024)
20. Selectel: [Electronic resource]. URL: https://selectel.ru/. (Date of the application: 12.03.2024)
21. Skol'ko poteryali prodavcy Wildberries v den' padeniya marketplejsa. Sobrali analitiku po kategoriyam: [Electronic resource] // vc.ru. URL: https://vc.ru/trade/384607-skolko-poteryali-prodavcy-wildberries-v-den-padeniya-marketpleysa-sobrali-analitiku-po-kategoriyam?ysclid=lw6lmk9vf409793890. (Date of the application: 14.05.2024)
22. Skol'ko stoit ekspluataciya CODa? : [Electronic resource] // Data Dome. URL: https://datadome.ru/hub/publications/15-06-2010-13-28. (Date of the application: 14.05.2024)
23. Spros na II sredi goskompanij i organizacij v 2023 vyros pochti vdvoe: [Electronic resource] // IZ.RU. Известия. 2023. URL: https://iz.ru/1625598/2023-12-25/spros-na-ii-sredi-goskompanii-i-organizatcii-v-2023-vyros-pochti-vdvoe. (Date of the application: 11.03.2024)
24. Srabotali na sklad: pochemu ekonomika Rossii v 2023 godu vyrosla vyshe ozhidanij: [Electronic resource] // Forbes. 2024. URL: https://forbes-ru.turbopages.org/forbes.ru/s/finansy/505868-srabotali-na-sklad-pocemu-ekonomika-rossii-v-2023-godu-vyrosla-vyse-ozidanij. (Date of the application: 11.03.2024)
25. SWOT Analysis is Used in the Startup Business Development Strategy: [Text] / Susan R. // Startupreneur Business Digital (SABDA Journal) - 2023 - Vol. 2 - No. 2
26. 10 luchshih oblachnyh hostingov 2024 po otzyvam i testam: [Electronic resource] // Hostings.info. URL: https://ru.hostings.info/hostings/rating/cloud-hosting. (Date of the application: 14.05.2024)
27. Test IT test management system: [Electronic resource] // Test IT. URL: https://testit.software/. (Date of the application: 10.03.2024)
28. Uhod zapadnyh vendorov prines rekordnuyu vyruchku rossijskim provajderam IaaS: [Electronic resource] // CNews. URL: https://www.cnews.ru/reviews/oblachnye_servisy_2023/articles/uhod_zapadnyh_vendorov_prines_rekordnuyu. (Date of the application: 14.05.2024)
29. VK Cloud: [Electronic resource]. URL: https://cloud.vk.com/. (Date of the application: 12.03.2024)
30. Yakovlev, A., Kuzyk, M., Sedykh, I. The Impact of Crisis and Government's Anti-Crisis Policy on the Russian IT Sector: [Electronic resource] // HSE Institute for Industrial and Market Studies. 2021. URL: https://iims.hse.ru/data/2021/04/26/1377885208/IT_Yakovlev,%20Kuzik,%20Sedih.pdf. (Date of the application: 11.03.2024)
31. Yandex Cloud i SALT proveli issledovanie o sostoyanii rynka IT-reshenij v Rossii: [Electronic resource] // Yandex Cloud. URL:

https://yandex.cloud/ru/blog/posts/2022/09/yandex-cloud-and-salt-research?utm_referrer=https%3A%2F%2Fwww.google.com%2F. (Date of the application: 11.03.2024)
32. Yandex Cloud: [Electronic resource]. URL: https://yandex.cloud/ru/. (Date of the application: 12.03.2024)

ANNEX 1

INTERVIEW

1. As we understand it, Kubernetes clusters are a set of machines that run containerised applications. Can you please explain how they work and what they are used for in the cloud?

Once upon a time there was the usual traditional architecture, that is, a regular physical server, it has an operating system on it, and some applications already running on it. The most self-explanatory application is a website. But applications can be different, i.e., a set of different services. Then they started doing virtualisation (basically the same thing). There is a physical server, but it is sliced into many virtual servers, each of which is formed in a virtual machine, an operating system is put there, and some application runs in the virtual machine. Further, the next level is the level of cloud architecture. Here we have not just one server, but clusters, i.e., many-to-many servers that are connected to each other in one way or another. And on top of them we have virtualisation, when we impose the server on containers and inside the operating system. Within a container, there is not a full-fledged operating system, but a container OS that contains only the kernel. So containers, they are even smaller than a virtual machine. Virtualisation slices them up. And so Kubernetes is the management layer, it's the orchestrator that manages the containers.

2. We know that the VK app was removed from the AppStore for a while, and sanctions were also imposed on some of the company's executives. Did the sanctions affect the VK Cloud product, and if so, how exactly?

They have had an impact, but a positive one. As many western cloud providers left, Russian cloud providers remained. At one point there were difficulties with the supply of equipment, but everyone had them, and they were all solved in much the same way.

3. Many companies are now endeavouring to achieve sustainability goals. Does the company use the most energy-efficient technologies in its VK Cloud product to provide its services? How else does your company (VK Cloud) care about the environment?

Yes, VK is really working very hard on ESG. I know people who are involved in ESG development, but specifically in terms of servers and some other efficient cooling, no work has been done in this area yet. VK Cloud data centres are the data centres of the whole VK. Information about VK data centres is presented on the website in a separate section.

4. What share of your company's revenues comes from the B2G sector?

B2G is a strategy, we are going into the B2G sector now actively, a product that can be sold into the B2G sector will appear this year. So, for now B2G is an investment project, that is 0%. To start selling B2G we need to fulfil various requirements related to security, we are actively fulfilling them now.

5. Have there been cases in your company's history when a company for one reason or another switched to your cloud after using the cloud of a domestic competitor?

Yes, there were, of course. It is difficult to change the cloud, because the traditional architecture was simple: put a server next to it, move everything there, and recycle the old server. Virtualisation is a little bit more complicated with the cloud. Moving from cloud to cloud is a lot of risks, and when such a decision is made, usually something outstanding has to happen, someone somewhere is very upset that they decided to move. Most often there is a pilot

of software in several clouds at once, i.e. they took the pilot of company X, company Y and company Z and tested it, then one is chosen, and the other pilots are simply closed.

6. We have seen your hardware suppliers on the website in the private cloud section. Can you please tell us if you have any other suppliers in mind?

In general, as for suppliers, as I said earlier, we work with any x86 hardware. But there are some suppliers with whom we plan to produce not just separate software and separate hardware, but together - a hardware and software complex. For example, with one of the suppliers we have already been included in the Ministry of Digital Economy's register. But these are not the only suppliers and, of course, companies. We communicate with them (other suppliers) and either already have customers or go into partnership and make a full-fledged joint product in the form of packages.

7. What are the minimum server specifications required (processors, RAM, disc space)? And do you help in selecting a solution?

For a private cloud, any x86 architecture server will do. The rest of the requirements are written in a special Design guide. And yes, of course, we help you with the selection of a solution.

8. Do you provide possible instalments (monthly, annual, partner discounts, etc.)?

We have a partner programme, we have a course where we train project managers. There is a motivational programme. In the Public (public cloud), monthly payments prevail, while On-Premium, on the contrary, is annual.