

Strategic possibilities of IT-outsourcing in the organizations activities in the context of globalization

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Abstract.

Research background: Today, modern enterprises are faced with a number of problems, using of outsourcing will contribute to the effective solution, the main advantage of which is the concentration of all efforts on the implementation of core activities without compromising support functions and processes. A special role during the digitization of the economy becomes the development and maintenance of information organization's management infrastructure based on an IT outsourcing. In modern conditions of environmental changes occur quickly enough, so the use of IT outsourcing creates technological conditions for more active network of cooperation with business partners that could be the basis for the development of organizational competitiveness.

Purpose of the article: The purpose of the article is to identify the main areas of opportunities and possibilities of IT outsourcing in business in the digital economy.

Methods: To write this article we used general scientific research methods, and methods of economic analysis.

Findings & Value added: During the study, reviewed the concept of IT outsourcing and the possibility of its integration into the organization's management system. Features of this integration are in the competencies formation which are absent in the sponsoring agency. The article studied IT outsourcing in the global market. The results of the analysis revealed the market leaders, and the most popular outsourcing strategies in a changing IT environment. The identified strategic possibilities of IT outsourcing in the activities of organizations provides for its development in further scientific research.

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1 Introduction

Development of information technology affects the efficiency of the activities of individual companies, and contributes to the overall digitalization of the economy and society. The globalization of the economy in general and information technology in particular has led to the need for companies to optimize the work associated with computing technology and information infrastructure. The level of informatization is one of the main factors for the successful development of any organization. The use of modern information services allows organizations to improve communication with business partners, it helps to increase sales, as well as reduce production costs. As a result, organizations have an objective need for IT specialists, but not all organizations can afford it. For example, small businesses do not have the ability to keep a staff of IT specialists. Large organizations with "economies of scale" focus their efforts on more important production tasks. As a result of this many organizations are forced to change existing approaches to management and development of business strategies in favor of using IT outsourcing in their activities, which is defined as a partial or complete transfer of work on the support and maintenance of IT infrastructure to specialized outsourcing companies. The use of IT outsourcing in business leads to cost savings for the sponsoring agency, it allows to reduce of products or services provided costs.

The basic concepts of outsourcing and its application in various spheres (including the IT sphere) were considered in the works of foreign researchers: J. Cross [1], E. Yordon [2], J.B. Haywood [3], P. Gottschalk [4], E. Sparrow [5], D. Tapscott [6], R. Alders [7], E. Anderson [8] etc. Among Russian scientists and researchers, the issues of IT outsourcing were studied by A. Kurbanov [9], N. Repin [10], Y. Vertakova [11,12], I. Rudaya [13], Yu. Tsygalov [14], S.Bodrunov [15] etc [16 -22].

2 Results and discussion

It is generally accepted that IT outsourcing was first officially introduced in the late 1980s in the United States during making a deal by Eastman Kodak and IBM. The essence of the deal was to create a data center for IBM by Eastman Kodak. The high profitability of outsourcing operations contributed to the fact that many IT companies with well-known trademarks in USA, began to establish new product development centers in developing countries.

Currently, the global IT market is represented by a number of large companies. Table 1 shows the ranking of the most profitable IT companies in the world in August 2020.

Table 1. Rating of the most profitable IT companies in the world

No	Company	Industry	Revenue, billion dollars	Market value, billion dollars	Number of employees, people
1	Dell Technologies	Computer software, cloud computing	92,15	44,12	157000
2	IBM	Computer software, cloud computing	77,15	111,35	352600
3	Cisco Systems	Network software	51,90	180,39	75900
4	Accenture	Business consulting, strategy, technology, processes	43,22	153,80	513000
5	Oracle	Enterprise software, cloud programming	39,07	165,77	135000

6	Fujitsu	Software, IT services and consulting, telecommunications	35,49	25,79	129071
7	Tech Data	Technology, software, IT consulting	37	5,17	14000
8	SAP	Computer software	30,86	193,03	100330
9	HP Enterprise	Software, cloud programming, Internet of things, data storage, blockchain, etc.	29,14	12,35	61600
10	Synnex	IT services and consulting	23,77	6,62	240000

Source: according to [23]

Table 1 shows the world's most profitable IT companies. The undoubted leader is the American company Dell Technologies, whose revenue amounted to 92,15 billion dollars. The second place is occupied by IBM, which specializes in computer software and cloud computing. In terms of revenue, the third position belongs to Cisco Systems, a network software company, but the company has one of the highest market values at \$ 180,39 billion dollars. The TOP-10 is completed by Synnex, which is not quite a typical IT company, but acts as an outsourcing intermediary firm between a technology manufacturer and a potential buyer. It should be noted that many companies from the presented rating are outsourcing service providers, such as: Dell Technologies, IBM, Accenture, Tech Data, HP Enterprise, Synnex. So according to the annual ranking of the best outsourcing service providers (Global Outsourcing 100), compiled by IAOP, Accenture is a leader with strong IT capabilities, positive customer reviews and recommendations, and various levels of awards and certifications.

Currently, most large outsourcing companies offer clients a wide range of services: application support outsourcing; application development; hosting applications; IT security; network management; technical support services and others. Clients of IT outsourcers at the global level are transnational industrial corporations, large banks, government agencies.

The dynamics of the Russian market of IT services is shown in Figure 1.

Estimating the volume of the market of IT services, Tadvisor includes the volume of the IT outsourcing segment.

The data in the figure illustrates the progressive growth from 2010 to 2013, then there is a decline until the end of 2016. In 2017 compared to 2016, the market growth was 20,7%, in 2018 there was a decrease (-1%). The results of 2019 showed an increase of 8%. At the beginning of 2020, the COVID-19 pandemic significantly affected the Russian market. The crisis has pushed many companies to accelerate digital transformation and adapt to a changing business environment. The positive dynamics in the telecommunications and education sectors is associated with the launch of solutions for organizing telecommuting and on-line learning. Banking, retail, industrial and energy companies are also active clients of IT service providers. The largest and most solvent customers are public sector organizations.

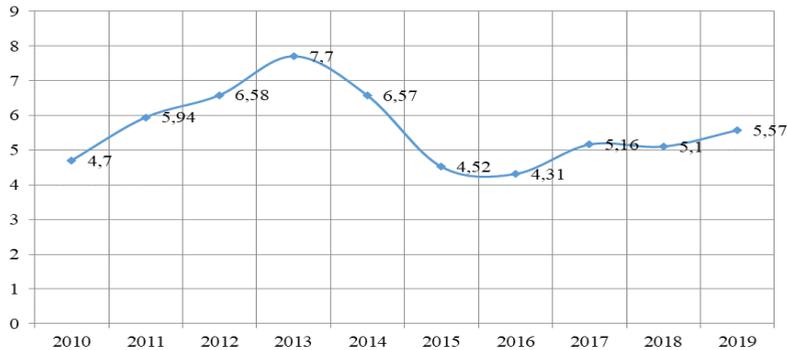


Fig.1. Dynamics of the Russian market of IT services, billions of dollars

Source: [24]

An organization's decision to use outsourcing services is strategically important, because it has a significant impact on the further development of the business. The business practice of various organizations shows the benefits of using information technology outsourcing:

- optimization of business processes;
- concentration of efforts on core activities without distraction to non-core areas;
- first line support for the smooth running of the organization's information systems;
- reduction of financial costs for building and maintaining the organization's IT infrastructure, and constant reeducation of personnel employed in the field of information technology.

However, IT outsourcing is not always the best way to solve problems, since it has some significant disadvantages, namely: the threat of leakage of important information, the danger of transferring a large number of important functions into the wrong hands, the threat of separation of the management from business practice.

In a situation where an organization intends to use IT outsourcing, it is necessary to follow a certain sequence of management decision making (Fig. 2).

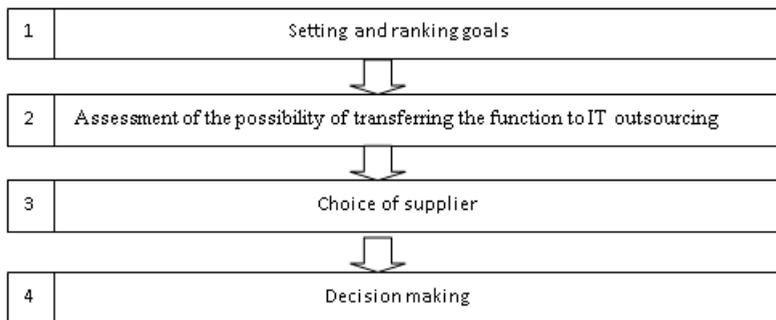


Fig.2. The process of management decision-making of an organization during the transition to IT outsourcing [9]

The first stage is setting and ranking goals. This stage assumes that the company making a decision on IT outsourcing must determine what kind of effect it wants to get from the transfer of some functions to a outside agency. Further, the goals will determine the significance of certain criteria in determining the result.

The second stage is to assess the possibility of transferring the function to IT outsourcing. Outsourcing is not always applicable and has a positive effect. There are a number of factors that make outsourcing undesirable. Such factors must be taken into

account when making decisions about the transition to IT outsourcing. Such factors may include: the materiality of the function for the business (you should not transfer to IT outsourcing functions, the poor quality or untimely performance of which can lead to the stoppage of the enterprise and serious losses); functions, the poor performance of which may entail the dissemination of confidential information, is best left to internal service; transferring to IT outsourcing only those functions whose execution process can be formalized.

The third stage - the choice of a supplier is a key stage in making a decision. This stage includes: assessing the reliability of the supplier, on which the quality of the services provided depends, and assessing the risks of improper performance of the function. The final fourth stage is making a decision on the use of IT outsourcing in their activities. In the case of the right organization, outsourcing is an increase in the flexibility of company management and the speed of decision-making. From the above, it follows that the transition to outsourcing has positive aspects, but the existing risks should be taken into account, and the adoption of the final management decision requires the involvement of a wide range of specialists for a detailed study and analysis of economic and legal consequences.

The benefits obtained from the use of IT outsourcing allow organizations to increase profits and business competitiveness as a result of the implementation of modern IT solutions.

Currently, IT outsourcing is the leader of modern types of outsourcing (Fig.3).

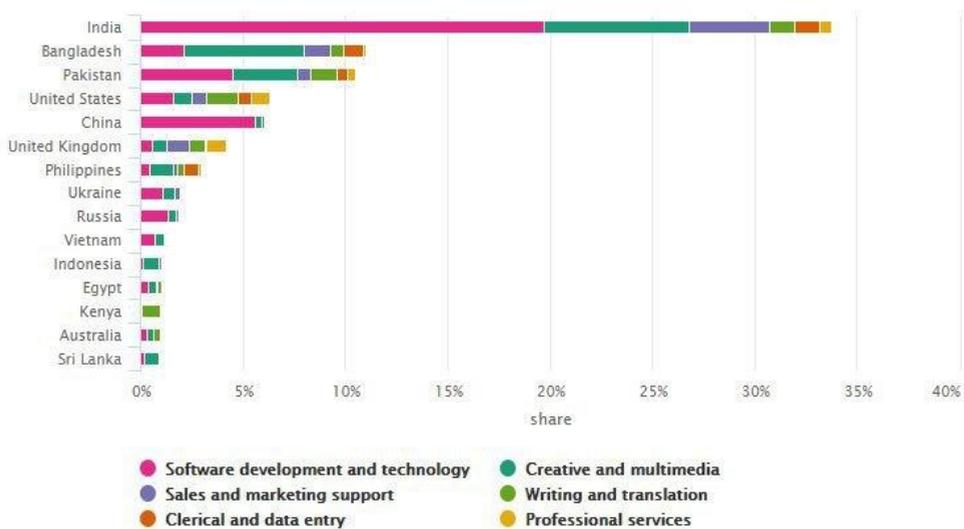


Fig. 3. Structure of the global IT outsourcing market, 2019

Source: [24]

At the end of 2019, India is the world leader in IT outsourcing, because a number of foreign companies have outsourced IT services to such companies as TCS, Infosys and Wipro, which have provided the country with a guaranteed distribution channel in the global market. India mainly specializes in outsourcing of software development and technology. Currently, large Indian IT companies (TCS, Infosys) are investing heavily in the development of digital technologies and solutions. The second position is taken by Bangladesh due to the accessible Internet and a large number of qualified specialists. Bangladesh, unlike India, is more specialized in outsourcing services for creative and multimedia. Pakistan closes the top three among IT outsourcers. The emergence of Pakistan in the top positions of the rating can be explained by the planned tax breaks for IT investors

and technology business in the country. It should be noted that recently, the global market has seen an increase in global competition for IT outsourcing companies. Leading countries face competitors from Russia, Ukraine, Romania, Belarus and Poland. Russia occupies the 9th place in the global IT outsourcing market with a share of about 1%.

Despite Russia's lagging behind the world leaders, the internal IT outsourcing market shows stable growth, which is contribute to the overall digitalization of the economy and society, and various legislative initiatives in the IT sector.

Table 2 presents data on the leading service providers for IT outsourcing.

In the presented rating, Lanit is the leader, the volume of revenue from the provision of IT outsourcing services in 2018 amounted to 18745 million rubles, which is 8% higher than in 2017. The top five included such companies as Jet Infosystems, I-Teco Company, Croc and the Russian representative office of Itransition - Itransition RUS.

Table 2. Rating of Russian service providers for IT outsourcing

Company	Revenue from IT outsourcing services, million rubles		Growth rate,%
	2017	2018	
Lanit	17 051	18 475	108,35
Jet Infosystems	7 744	9 137	117,99
I-Teco Company	no data	8 621	-
Croc	5 722	6 106	106,71
Itransition RUS	3488	5 105	146,36
Informzaschita	1 761	2 892	164,22
ICL	1 971	2 742	139,12
AMT- Group	1 654	1 902	114,99
GC Aplana	1150	1 884	163,83

Source: [24]

IT outsourcing has long been present on the world market. In Russia, IT outsourcing has become actively used in the last 10 years: IT integrators and IT outsourcers have appeared, capable of providing the proper quality of services, protecting customer information, and providing project experience.

Despite the fact that there are examples of successful implementation of IT outsourcing in Russia, nevertheless, there are a number of main factors holding back the growth of the IT outsourcing market:

- lack of readiness of the majority of outsourcing companies to invest in the development of expertise and experience in the field of Big Data;
- the transition of large companies from the outsourcing model of IT services to the formation of their own high-quality IT departments;
- unwillingness of businesses to invest in the development of innovative solutions and technologies that allow them to obtain advantages in the market.

Thus, the main problem limiting the possible growth of the IT outsourcing market is the lack of business awareness of the benefits of outsourcing and its positive impact on business development.

3 Conclusion

Market trends show that IT outsourcing is gradually becoming a common practice for large international companies. The obvious advantages that outsourcing brings with a careful search for partners and the conclusion of effective contracts suggest that outsourcing will become a common practice for Russian companies, including in the transfer of risk management. Outsourcing services can be classified as work that increases the efficiency of

customer companies, since business processes are optimized, the company focuses on achieving strategic objectives. Outsourcing services can be interesting both for small growing enterprises and for large corporations.

Based on the results of the study, the main strategic capabilities of organizations and the prospects for using IT outsourcing in their activities were identified:

orientation of sponsoring agency not only to reduce financial costs, but also to improve the quality of services received;

- a lack of highly specialized IT specialists (e.g. strategist and business operations analyst) has led to an increased demand for IT outsourcing, where large companies can afford to hire rare staff to solve problems of a particular client;
- the virtualization process for most organizations has led to an increased demand for cloud technologies;
- increasing interest of sponsoring agency in specialists in the field of artificial intelligence and data analysis (Big Data);
- increased demand from sponsoring agency for advanced cybersecurity support.

Thus, the identified strategic directions will allow many organizations to increase their competitive advantages through the use of IT outsourcing in their business.

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