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FEATURES AND PROSPECTS OF OUTSOURCING IN THE FIELD OF INFORMATION TECHNOLOGIES.

І.Є. Андрушак, Ю.Я. Матвіїв, О.М. Сіваковська, М.І. Потейчук, В.П. Марценюк. Особливості та перспективи аутсорсингу у сфері інформаційних технологій. У даній статті буде розглянуто світовий ринок інформаційних технологій, його фірмова, географічна, товарна структура і основні напрямки розвитку, а також ринок аутсорсингу як драйвера розвитку ІТ-послуг. Виділено найбільш затребувані ІТ-послуги аутсорсингу. Виявлено та описано основні критерії, за допомогою яких можна створити класифікацію наданих ІТ-послуг.

Ключові слова: аутсорсинг, інформаційні технології (ІТ), інформаційні послуги.

И.Е. Андрушак, Ю.Я. Матвиив, М.И. Потейчук, А.Н. Сиваковська, В.П. Марценюк. Особенности и перспективы аутсорсинга в сфере информационных технологий. В данной статье будет рассмотрен мировой рынок информационных технологий, его фирменная, географическая, товарная структура и основные направления развития, а также рынок аутсорсинга как драйвера развития ИТ-услуг. Выделены самые востребованные ИТ-услуги аутсорсинга. Выявлены и описаны основные критерии, с помощью которых можно создать классификацию предоставляемых ИТ-услуг.

Ключевые слова: аутсорсинг, информационные технологии (ИТ), информационные услуги.

I. Andrushchak, Yu. Matviyiv, M. Poteychuk, O. Sivakovskaya, V. Martsenyuk. Features and prospects of outsourcing in the field of information technologies. This article will consider the world market of information technologies, its brand, geographic, commodity structure and main development directions, as well as the outsourcing market as a driver for the development of IT services. The most popular IT outsourcing services are highlighted. Identified and described the main criteria by which you can create a classification of the provided IT-service.

Key words: outsourcing, information technologies (IT), information services.

Formulation of the problem. The rapid development of computer technologies and their active implementation in all spheres of human activity not only facilitated the solution of many problems, but also entailed a number of difficulties. The sphere of computer technologies is one of the most complex branches of science and at the same time, one of the most necessary at the present stage of the development of society. No organization or enterprise can do without a computer and connect to a global network, which entails the need for competent specialists who can ensure the uninterrupted operation of the computer system of the enterprise. The presence in the staff of a personal IT specialist raises a number of constant financial costs, which are not budgeted by every company. At the same time, mostly large enterprises and corporations require daily monitoring of the overall operation of the computer system. In small organizations and enterprises, there is usually no need for a permanent IT specialist. Therefore, IT outsourcing is the optimal option for efficient operation of the enterprise.

Setting up tasks. IT outsourcing companies choose when they need to reduce their own non-core from the point of view of the core business IT staff. Also, the company may be moved by the desire to reduce the number of contracts with different contractors, for example, for the supply of various equipment (with each supplier its contract), the organization of telephony, the Internet, etc. If the enterprise chooses a complex IT outsourcing, then a lot of contracts can replace the relationship with the only contractor. In addition, literate specialists in the regions are clearly not enough, therefore it is rather difficult and expensive to form your own IT team. Using the model of outsourcing, the enterprise transfers responsibility for ensuring the quality of the transferred processes to an external provider, while the responsibility for forming the parameters determining the quality of the process lies with the enterprise itself. These parameters must be fixed in the SLA and controlled by the IT service of the enterprise-customer. This is true, except when it comes to outsourcing business processes. In this case, the responsibility for implementing the business process lies entirely with the external provider. The advantage of outsourcing is the better and less expensive execution of the transferred function.

External providers of IT outsourcing services work exclusively in the field of information technology and, due to narrow professional specialization, provide high-quality services, the cost of which is lower than the cost of using their own IT services. The IT outsourcer has a lot of experience in solving various problems that he faced with his clients. That is, there is a base of problem situations and methods for their possible solutions. In addition, the outsourcing company takes on the implementation of processes that divert people and resources from performing the basic functions. Thanks to IT outsourcing,

the company can significantly reduce the cost of owning its own information system. Thanks to IT outsourcing, it is possible to optimize the distribution of all company assets. At the same time, the contract concluded with the IT outsourcing company is a reliable guarantee that the computer system will function properly, and all the problems will be eliminated promptly. In addition, all new hardware and software components will be implemented competently and qualitatively. Due to the fact that the world around us is unstable, and the reaction to various business signals should be lightning fast - IT outsourcing has become quite popular. This type of outsourcing is very popular today among quite young companies that are actively developing, and who do not have the desire to expand their own staff of IT specialists [1].

Basic material presentation. Outsourcing in the field of information technology has existed in one form or another for several decades. Unlike some other management trends, the concept of subcontracting functions in the field of information technology to external service providers has passed the test of time. Outsourcing of services in the field of information technology has become a complementary to the generally accepted method. Undoubtedly, in some circumstances outsourcing causes damage and is more expensive than anticipated. It also leads to a reduction in morale and the disenchantment of those information technology professionals who had to oppose their desire to transfer to a new employer. Nevertheless, the outsourcing market continues to grow rapidly, currently supported by the economic downturn, which has caused many companies to start looking for ways to cut costs [2].

Although some suggest that the end of the era of general outsourcing agreements in the field of information technology (contracts that cover more than 80 percent of the organization's IT activities) is close, there is little evidence of this. Press reports on new major agreements or the expansion of contracts continue to appear regularly. Meanwhile, the outsourcing industry is developing, offering at the present time many different types of service providers capable of meeting a wide range of information technology requirements or specialized niche requirements, as well as providing a combination of business processes and supporting IT systems. The growth of the Internet and the increase in the availability of broadband connections open new ways of providing services.

The high demand for IT services is connected, on the one hand, with the rapid popularization of information systems in the enterprises of medium and even small businesses, as well as the unprecedented progress of e-commerce and the Internet as a whole. In addition, the transfer of functions of IT-services to special organizations is beneficial to the business. First, it allows to save considerably (according to Garner Group, the reduction of indirect costs in the transition to outsourcing is about 30%). And secondly, IT-specializing companies are able to provide high quality of their services, unlike one or two employees in the state. The term "outsourcing" (external-source-using) uses an external source / resource) provides an enterprise on a contractual basis with a number of certain business processes or production functions for the service of another company specializing in the relevant field. That is, it is a contractual relationship between legal entities and individuals to perform functions that are not within the scope of the main lines of business. For example, IT outsourcing (from English IT-outsourcing) is one of the most developed and in demand today. This is the transfer of the function of providing the IT infrastructure of an enterprise or organization (the uninterrupted operation of computers, networks, etc.) of a company that specializes specifically in subscriber servicing of specific enterprises and provides for a staff of narrow highly qualified specialists [3].

For small and medium-sized businesses, as for small organizations, IT support is necessary, but irregular, so IT outsourcing is the optimal solution for the effective operation of the company. IT outsourcing - the transfer of all works in the field of information technology of another organization under a contract. You can transfer to the company server maintenance, site and application support, repair of personal computers in the office, etc. Simply put, this form of cooperation is the provision of labor resources to the second enterprise to solve ordinary problems.

The main task of IT outsourcing is to support and further develop the IT infrastructure of the organization. Now every second company needs IT services, and the spectrum of work for different organizations is radically different [4].

The advantages of IT outsourcing (English, IT-outsourcing) are undeniable. Unlike standard and now generally accepted one-time IT support services or services, IT outsourcing works on a contractual basis for a period of time set by both parties. This secures certain responsibilities on both sides and guarantees the quality of the functions performed. Before concluding the contract, the specialists of the outsourcing company conduct an audit of the IT infrastructure of the enterprise, identify vulnerabilities and main directions of development in accordance with the specialization of the enterprise or

organization. Based on the results of this diagnosis, a contract is drawn up, the main points in which are determined by the client. The company-outsourcer offers the client its work strategy and options for its implementation. Thus, the customer gets a full picture of the IT infrastructure of his company and can independently determine which segments he would like to pay close attention to, which, according to the IT outsourcing policy, is fixed in the contract. Depending on the complexity of the company's IT infrastructure, the number of scheduled visits is determined to continuously monitor all segments: from monitoring the overall operation of the system to correcting local problems, such as cable damage, dustiness of equipment, etc. In addition to scheduled visits, IT support from the outsourcing company is a quick solution to unexpected problems, such as a malfunction of office equipment or a malfunctioning network. Such issues are resolved either remotely, or by the specialist's departure to the site, which is also stipulated in the contract. Another advantage of IT outsourcing is the definition of the list of serviced segments, or services. According to the contract, it is possible to transfer the outsourcing functions of the maintenance function from the maintenance of networks to the refilling of cartridges and the repair of office equipment. At the same time, large enterprises prefer to share the functions of IT-support between different companies-outsourcers, in particular monitoring and maintenance of specific software, it is preferable to instruct a developer more competent in the features of his product [5].

Another advantage of IT outsourcing is the provision of uninterrupted operation of a whole staff of specialists. That is, regardless of the time of the day, calendar holidays or weather conditions, the customer is guaranteed the provision of a qualified specialist to solve the problems encountered. At the same time, an important advantage is that, according to the contract, the outsourcing company constantly diagnoses the operation of the company's IT infrastructure and eliminates the problem. The specialist already knows all the features of the system, which significantly reduces the time spent troubleshooting and helps to prevent them from appearing in the company. further.

Despite the fact that IT outsourcing can take a variety of forms, there are three main ones:

- resource outsourcing. In our country, this type of IT outsourcing is more common today. With this option, the client uses and manages external IT resources. However, he carries all the risks that are associated with the result of his activities.

- functional outsourcing. With this option, the outsourcing company transfers the functions. The responsibility of the service provider, as well as the criteria for its operation in this case are stipulated in the agreement. Such criteria may include: the speed of response to various incidents, the frequency of prevention, the recovery time after the failures, etc.

- strategic outsourcing. In this case, a complete transfer to a complex IT outsourcing of the entire IT infrastructure of the enterprise is carried out.

For most enterprises, the main argument for applying to IT outsourcing is budget saving. The hiring of a full-time IT specialist requires a separate workplace, the fulfillment of financial obligations provided for by law and the provision of a social package, which includes both compulsory paid leave and sick leave. This is quite costly for many enterprises. Since problems with the operation of the IT infrastructure can occur at different intervals. Problems can arise or extremely rarely, or require constant support of a specialist, while he may be absent due to leave or illness. While the outsourcing company undertakes to provide competent professionals regardless of external circumstances. Another item of expenditure may be the training of an IT specialist. Computer technologies do not stand still and are in constant development. It is almost impossible to keep track of all innovations to one specialist, while IT outsourcing policy is based on constant improvement. Outsourcing companies are interested in the continuous improvement of the qualifications of their employees in different areas of IT technologies [6].

Involvement of outside support is most often needed for:

- the development of the infrastructure of the enterprise without distracting the staff from ordinary projects.

- reducing costs for maintenance of office equipment and other tasks in 2-3 times.

- improving the efficiency of performing a number of tasks in the field of support of information technologies in the enterprise.

- Increase the level of responsibility of employees for the current state of servers, infrastructure, office equipment.

Also IT outsourcing helps to reduce the cost of maintaining the infrastructure by 30-50%. For example, it is not profitable for a company to hire a full-time system administrator, because it will often hurt, work long, or vice versa - do it too quickly, and therefore most of the working time will not do anything.

We will admit, in office there are only 5 computers and 20 units of office equipment. To handle at every failure to the masters or to the service centers is also unprofitable - private masters take expensive, service centers repair a long time. The best way is to hire an incoming system administrator from a company that provides IT outsourcing: it will monitor the operation of office equipment remotely, and periodically come for physical service. The firm will pay him less than a full-time employee, while forgetting about expensive repairs.

Applying more and more in the work of information technology companies leads to the fact that firms try to use the labor of the most qualified personnel. At the same time, technology is increasingly dependent on the human factor, and therefore does not require constant intervention in its work. Servicing computers and repairing equipment are increasingly outsourced to almost every company in every country. Many executives believe that it is undesirable to give out to IT-outsourcing important projects with high expected returns. Some believe that it is better to entrust them to full-time specialists. It is not recommended to outsource the maintenance of rare CRM and profile software developed by another team. To transfer ordinary tasks to outsourcing did not bring additional problems, carefully choose a legal entity. Pay attention to reviews - look for them on the Internet in profile forums, thematic sites, special resources. Pay special attention to official letters of thanks sent from partners - the more of them, the better [7].

Statistics show that at the moment IT outsourcing is at the stage of active development. More and more companies and organizations are turning to IT outsourcing companies. As the transfer of functions of IT infrastructure maintenance to highly focused specialists significantly increases the efficiency of the enterprise as a whole. This makes it possible to concentrate precisely on the directions in which the company specializes. Nevertheless, the market of IT services in our country is gaining momentum every year. More and more entrepreneurs and even large firms prefer external contractors. Today, the dependence of business on IT is extremely high. Modern technologies and solutions allow not only to maintain and accelerate existing business processes, but to change the very model of the company's activity on the market, to open new lines of business. The best option for an actively developing business is cooperation with experienced IT outsourcers [8].

Conclusion

Nevertheless, the market of IT services in our country is gaining momentum every year. More and more entrepreneurs and even large firms prefer external contractors. After all, it saves not only material resources, but also strength and time. The IT services market is gradually migrating towards the model of integrated outsourcing. The new model puts new tasks before all participants of the process, requires new competences from them, and for today not all companies are ready for it. But hardly anyone can argue that speed and flexibility are key factors in the success of modern business. Complex IT outsourcing is a way to provide them.

Therefore, in our opinion, the transition to a new model of obtaining IT services is inevitable. And this is facilitated by positive examples, which are becoming more common on the market. All these and many other problems can be solved by using IT outsourcing services, which can provide high-quality modern IT services. Thanks to IT outsourcing, the management of a firm or an enterprise will be able to get rid of worries about eliminating technical problems. Exactly qualitative outsourcing in Ukraine can guarantee you prompt response to all arising calls and requests of clients.

1. Alders, R. IT Outsourcing: A Practical Guide / R. Alders; trans. with English. - M.: Alpina Business Books, 2003. - 300 p.
2. Agapov V., Yakovlev S., Pratushevich V. Review and assessment of the prospects for the development of the world and Russian information technology markets [Electronic resource] // URL: <http://www.moex.com/n8686/?nt=106>.
3. Heywood, J. Bryan Outsourcing: In Search of Competitive Advantages / J. Bryan Heywood; trans. with English. - M.: Publishing house "Williams", 2004. - 176 p.
4. Tyutina M.V. Analysis and prospects for the development of the information technology market [Text] // Innovative economics: materials IV Intern. sci. Conf. (Kazan, October 2017). - Kazan: Beech, 2017. - P. 9-13.
5. Wayle, P. IT governance: the experience of leading companies. How information technology helps to achieve Sunrise results / Peter Weil, Jinn W. Ross; trans. with English. - M.: Alpina Business Books, 2005. - 293 p.
6. Vorobiev K. Yu. Classification of outsourcing from the positions of the managerial approach // Vestnik Kostroma State University. N. A. Nekrasov. Scientific and methodical journal. Volume 19, №4. 2013 - P.53-56.
7. Information technologies of 2017 [Electronic resource] // BIT. Business & Information Technology. - 2017.-No. 01 (64).
8. Extract from the report World Electronic Industries 2012–2017 carried out by DECISION (March 2014), p. 4.