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THEORETICAL FOUNDATIONS OF IMPROVEMENT OF BUSINESS PROCESSES OF ORGANIZATION

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The article dwells on the Business - process: concept, essence, classification.

Improving production and management activities in order to increase the effectiveness of an organization requires understanding of the term "business process", which makes up the conceptual apparatus of the research subject area.

To a large extent, the success of any organization depends on the effective implementation of business processes. In conditions of increasing competition, continuous improvement of business processes is necessary. The choice of methods and tools for improving business processes determines the result and effectiveness of an organization.

The term "business process" was introduced by E. Deming at the end of the 20th century. Currently, this concept is used by many authors in their studies. Table 1.1 shows various approaches to the definition of the concept of "business - process".

Author, source	Definition			
E. Deming	Any types of activities in the organization.			
Quote from [1]				
M. Porter	A business process is an entity that is defined through entry and exit points, interfaces,			
Quote from [2]	and organizational devices, partially including devices of a consumer of services (goods			
	in which the cost of a service / product is being increased)			
M. Robson,	A business process is a systemic closed process, which is a stream of work that flows			
F. Ullah	from one person to another, and for large processes, from one department to another			
[3, p.10]				
M. Hammer	A business process is a systemic closed process, which is a stream of work. This process			
J. Champi	has a beginning ("input"), a certain number of stages of activity and the result of work			
[4, p.14]	obtained "at the exit"			
E.G. Oyhman,	A business process is a set of internal steps (types) of activity, starting with one or more			
E.V. Popov [5,	inputs and ending with the creation of products necessary for the client and satisfyi			
p.12]	them in terms of cost, durability, service and quality. Or: a complete stream of events in			
	the system that describes how the client starts, leads and ends the use of the business			
I.I. Mazur	A business process is a system closed process			
V.D. Shapiro				
[6, p. 21]				
V. A. Gagarsky	A business process is a regularly repeating sequence of interrelated activities			
[7]	(operations, procedures, actions), which are used to use external resources, create value			
	for the consumer and give him the result.			

Table 1.1. - Approaches to the definition of the concept of "business process"

Source: compiled by the author on the basis of the study of economic literature.

An analysis of the abovementioned definitions showed that they do not adequately express common points, the essence of the concept of "business process", characteristic of an industrial organization. To clarify the definition of the business process essence, we will consider the elements of the business process, their content.

In the majority of the abovementioned definitions, the following things are indicated as elements: input of the business process, resource, consumer (client). Yu.F. Telnov [8, p.5], and S.M. Kovalev [9] relate to the elements

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that are directly involved in the implementation of the business process the following things: the head of the business process, the conversion function, resource, input object, result, event.

A business process is an object that functions under the influence of

subject - the head of the business process - an official or collegial management body that has at its disposal the resources necessary to perform the transformation function, and is responsible for the result of the business process.

A conversion function is one or more actions (operations) carried out in a logical sequence and aimed at changing the input object to a result with certain characteristics using resources.

Input object - an object sent from the supplier to the disposal of the owner of the process for further acquiring new features.

Result - an object directed at the disposal of the consumer, after giving him the relevant characteristics.

Resources are subjects in relation to the input object, under the influence of which the input object changes its characteristics.

An event is information that reflects the fact that the resources and input objects are ready for the conversion function, changes in time and space of the properties, characteristics of the input object, completion of the conversion function and obtaining results. An event performs an informational or procedural function.

For each state of the input object that is affected by the transform function, call descriptions of the other transform functions must be specified. Events act as management functions of the transformation and direction of material, financial, information and labor flows.

Imagine a generalized model of a business process in Figure 1.1.

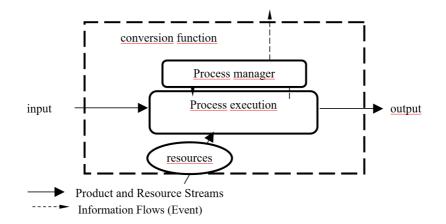


Figure 1.1. – a Generalized model of the business process

Source: authoring.

Thus, in our opinion, a business process can be defined as a function of effectively converting an input object into a result, which is performed using resources under the guidance of the process owner, with the subsequent reflection of the completion of the conversion with the help of the event.

Inputs of a business process — objects that change during the process (materials, procurement, information, etc.) that are transformed by the process to create output flows. Output streams are the results of the process (products, services, etc.), i.e., the result of the conversion of input streams. Also the output streams are indicators of the effectiveness and efficiency of the business process - indicators of the product, process efficiency and customer satisfaction.

The resources of the business process are contributing factors distributed by the owner of the business process during the planning of work on the process and taken into account when calculating the effectiveness of the process, as the ratio of the resources spent on the obtained result of the process (people, information, equipment, materials, facilities and environmental requirements).

An analysis of the classifications of business processes as a complex phenomenon presented in the literature of the topic allows us to consider them from different points of view. Table 1.2 presents systematic approaches to the classification of business processes.

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Author, source	Classification criteria		Types of business processes
V.V. Repin	in relation t	o process con-	internal and external
V.G. Eliferov	sumers		
[1, p.29]	in relation to the value added		main adding value and auxiliary adding value;
	by level of consideration		upper level, detailed and elementary.
CM. Kovalev V.M. Kovalev	in relation to cess technol	o business pro- ogv	productive providing
[nine]	in relation to the type of		basic ones associated with the movement or with transfor-
["""""]	flows		mation of material flows
			management processes related to the movement or to transformation of information flows
V. A. Gagarsky [7]	by degree	simple	basic, auxiliary, reference
	of hierarchy	detailed	main related
			auxiliary providing
			managing
			development processes
A.V. Scheer	by key cat-	order logis-	order processing; calculations, basic needs planning, ma-
[10, p. 19]	egories of	tics	terial management; capacity planning; capacity regulation,
	core pro-		issue of orders; detailed schedule planning; production
	cesses		data collection; quality control and monitoring
		new product	product requirements; product design; construction; com-
		development	parison of work schedules, technical planning control; programming; machine and work management,
			tool management, warehouse management; transporta-
			tion management; Maintenance; quality assurance
A. Björn [11, p.17, 23-25]	by hierarchy		production, management and support
	in relation to value creation		primary (core), creating value of organization
			supporting (auxiliary), not creating directly added value
			development processes that allow to create a value chain
			in the main and auxiliary processes at a new level of indica- tors
	actual business processes		subgroups of the main processes: product development,
			customer requirements, fulfillment of orders, customer service
			secondary, divided into groups of support processes and development processes
M. M. Cane	by role in providing the main function of the organization		basic - create value for the consumer
[12, p.45]			auxiliary - ensure the functioning of the main processes

Table 1.2. – Approaches to the classification of business processes

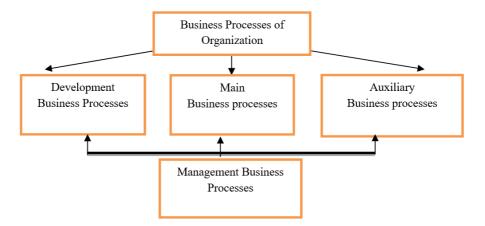
Source: compiled by the author on the basis of the study of economic literature.

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Summarizing the various approaches, we single out the most common and often used in practice classification of descriptions of business processes, in which business processes are distinguished, depending on the area of activity of the organization: main, auxiliary, management processes and development processes (Figure 1.2):



The definition of the main business processes is carried out from their consumers - subjects using the results of the process. According to V.V. Repin [1, p.40] for the consumer of the process the quality, cost and time of providing the result of the process are important.

Auxiliary processes ensure the implementation of basic business processes, create products and services for the internal consumption of the organization, without adding value directly, increasing the cost of the product (service, information), being inherently costly. S. M. Kovalev referred to them: personnel management; document management; technical and service maintenance of equipment; communication provision; financial and accounting support; administrative support; legal support; security and other processes [9].

By definition of E.E. Oykhman [5, p. 47] development business processes are projects that are implemented once and end their existence, new projects replace them, and this situation repeats many times. Management business processes cover the whole range of management functions at the level of each business process and the organization as a whole, ensuring its survival, competitiveness and development. Distinctive features of management business processes is their typical structure, which is represented by a standard chain of management cycle, consisting of five stages: planning, organization, accounting, control, regulation. In addition, management business processes are determined by the specifics and strategy of the organization, as well as the number of management objects that exist in the organization and which must be managed.

Managing impacts of a business process are regulatory documents or activities that define, regulate and / or affect a business process. They cover procedures, methods, plans, standard methods, strategy and legislation. The analysis allowed us to draw the following conclusions:

1. The analyzed definitions ambiguously interpreted the essence of the concept of "business process of an industrial organization".

2. The author's vision of the essence of the business process of an industrial organization was presented, as well as a generalized model of the business process and the characteristics of its elements: the head of the business process, the conversion function, resource, input object, result, event.

3. Various approaches to the classification of business processes were systematized.

4. The most common classification of business processes by the criterion of the activity area of the organization is acceptable as it reflects the essence of a business process.

REFERENCES

- 1. Repin, V.V., Eliferov, V.G. The process approach to management. Business process modeling / V. Repin, V. Eliferov. –M .: publishing house Mann, Ivanov and Ferber, 2013. 544 p.
- Rib, S. I. Different approaches to the allocation and description of business processes [Electronic resource] / S. I. Rib, I. V. Kremleva - Access mode: http://www.betec.ru/index.php ? id = 06 & sid = 50. - Access date: 03/23/2019.

ELECTRONIC COLLECTED MATERIALS OF XII JUNIOR RESEARCHERS' CONFERENCE Economics

- 3. Robson, M. Ullah, F. Reengineering of business processes / M. Robson, F. Ullah M .: UNITY, 2010. 110 p.
- 4. Hammer, M., Champi, J. Corporation reengineering: a manifesto of the revolution in business / M. Hammer, J. Champi. M .: publishing house Mann, Ivanov Ferber, 2007 --- 287 p.
- 5. Oykhman, E.E., Popov, E.V. Business reengineering: Organization reengineering and information technology. M .: Finance and statistics 1997. 422s.
- 6. Mazur, I.I., Shapiro, V.D., Olderogge, N.G. Project management. textbook. allowance / under the general. ed. I.I. Masuria - 2nd ed. - M .: Omega-L, 2004 .-- p. 664
- 7. Gagarsky, V. A. Business processes: basic concepts [Electronic resource] / V. A. Gagarsky. Access mode: http://www.elitarium.ru/biznes-process-organizacija-menedzher-upravlenie- resursy- predprijatie. - Access date: 02/25/2019.
- 8. Telnov, Yu.F. Business Process Reengineering: Component Methodology. / 2nd ed., Trans. and add. M.: Finance and Statistics, 2004. 320 c.
- Kovalev, S. M. The technology of structuring and describing the organization step by step [Electronic resource] / S. M. Kovalev, V. M. Kovalev - Access mode: http://www.betec.ru/index.php?id = 36 & sid = 03. -Date of access: 02.21.2019.
- Scheer, A.V. Modeling of business processes / A.V. Scheer; trans. from English 2nd ed., Revised. and add. -M .: Vest- MetaTehnologiya, 2000 .-- 205 p.
- 11. Björn, A. Business processes. Tools for improvement / A. Björn; trans. from English S.V. Arinicheva; scientific ed. J.P. Adler. M.: RIA "Standards and Quality", 2003. 272 p.
- 12. Systems, methods and tools of quality management: textbook. allowance / M. M. Cane [et al.]. St. Petersburg: Peter, 2008 .-- 560 p.
- Management to achieve sustainable success of the organization. Quality management approach: STB ISO 9004-2010. - Enter. 05/20/10. - Minsk: Gosstandart Resp. Belarus: Belarus. state Institute of Standardization and Certification, 2010. - 46 p.
- 14. Vilensky, P.L., Livshits, V.N., Smolyak, S.A. Evaluation of the effectiveness of investment projects: Theory and practice / P.L. Vilensky, V.N. Livshits, S.A. Smolyak 4th ed. supervisor and isp. M .: Delo, 2008 .-- 1104 p.
- 15. ISO 9001: 2000 for small and medium-sized businesses. N. Novgorod: Priority, 2002 .-- 120 p.
- 16. Deming, U. E. The new paradigm of managing people, systems and processes / U. E. Deming. M .: Alpina Business Books, 2007 .-- 370 p.
- 17. Astashova, Yu. V. Process control of an industrial enterprise: dis. Cand. econ. Sciences / Yu. V. Astashova. -Chelyabinsk, 2006 .-- 193 p.
- Standard ISO 31000 Risk Management [Electronic resource] / International Organization for Standardization iso.org. Access mode: http://www.iso.org/iso/en/home/standards/iso31000.htm.- Access date: 04/21/2019.
- Balashova, E. S. Indicators for assessing the organizational effectiveness of business processes / E. S. Balashova // Scientific and Technical. Vedas St. Petersburg. state Polytechnic un-that. Ser .: Economics. 2014. No. 2 (192). S. 185-190.
- 20. Rubtsov, S.V. Clarification of the concept of "business process" / S.V. Rubtsov // Management in Russia and abroad. No. 6. 2011 .-- S. 34 40.
- 21. Tabachnikas, B.I. Concepts of reengineering and business process management / Problems of the economy [Electronic resource]. Access Mode: http://www.m-economy.ru. Access date: 02/25/2019.
- 22. Avdonina, M.S. Organization Management Tool Business Engineering / M.S. Avdonina. International scientific-practical conference. Collection of articles "Innovative Technologies". - Penza, 2003. - S. 106–107.
- 23. Shirokova, G.V. Organizational Change Management: A Training Manual / G.V. Shirokova. SPb .: Publ. House of St. Petersburg. state University, 2005 .-- 432s.
- 24. Landau, Yu.V., Ponomarev, M.A. Two approaches to improving business processes [Electronic resource] / Science and education. Access mode: http://journalnio.com/index.php? Itemid = 119 & id = 1980 & option = com_content & view = article. Access date: 02/05/2019.
- 25. Krivoruchko, O.N. Integration of methods for improving enterprise business processes [Electronic resource] / Scientific electronic library eLibrary.ru Access mode: http://elibrary.ru/item.asp?id=25518825/- Access date: 02/15/2019.
- 26. Kozachenko, A.V. Practical approaches to improving business processes [Electronic resource] / Elitarium 2.0. Access mode: http://www.elitarium.ru/uluchshenije_biznes_processov. Date of access: 02/06/2019.
- 27. Nitsenko, K.V. Change management: features of improving business processes [Electronic resource] / Cyber-Lenink Scientific Electronic Library. Access mode: http://cyberleninka.ru. - Date of access: 02/15/2019.

- 28. Efremova, L.I., Kurganov A.N. Methodological approaches to improving the business processes of the enterprise [Electronic resource] / Scientific electronic library eLibrary.ru. Access mode: http://elibrary.ru/item.asp?id=25815320. - Date of access: 02.16.2019.
- 29. Methods of improving business processes [Electronic resource] / Operational management. Access mode: http://econom-lib.ru/3-49.php. Date of access: 02.17.2019.
- Syso, T.N., Melnikova, E.E. Methods used in business process management [Electronic resource] / Access mode: http://www.nsu.ru/exp/ref/Media:4ef1a2998846c8c0130002856_Melnikova.pdf. - Access date: 02/18/2019.
- 31. 31 Skripko, L.E. The process approach to quality management: textbook. allowance. SPb .: SPbSUEF, 2011 .-- 105 p.
- 32. Harrington, J., Esseling, KS, Nimwegen H. Van. Business Process Optimization [Electronic Resource] / Elitarium 2.0. Access date: http://www.elitarium.ru/uluchshenije_biznes_processov. Access date: 02/18/2019.
- 33. Dolzhenko, R.A. The essence and evaluation of the effectiveness of the use of optimization technologies "Lin" and "Six Sigma" [Electronic resource] / Scientific electronic library eLibrary.ru. Access mode: http://elibrary.ru/item.asp?id=21640754. Date of access: 02.19.2019.
- 34. Kovalev, S.M., Kovalev, V.M. Methods of analysis and optimization of business processes / [Electronic resource] / S. M. Kovalev, V. M. Kovalev. Access mode: http://www.betec.ru/index.php?id=6&sid=53. –Date of access: 02.20.2019.
- 35. 35.Menyaev, E.V. Methods for improving business processes / E.V. Menyaev // Bulletin of the Omsk University. Series "Economics". 2010. No. 1. S.125 129.
- 36. Chuprov, K.K. Express method for diagnosing the company's business processes [Electronic resource] / Access mode: https://www.cfin.ru/management/controlling/fsa/express.shtml. Date of access: 01.03.2019.
- 37. Dubinina, N.A. Performance indicators for business process efficiency [Electronic resource] / Access mode: cyberleninka.ru/article/v/pokazateli-otsenki-biznes-protsessov-predpriyatiya. Date of access: 03/10/2019.
- 38. Kozerod, L. A. Methodology for assessing the economic efficiency of enterprise business processes // Bulletin of NSU. Series: Socio-economic sciences. 2009. T. 9. Issue. 1. S. 83-90.
- 39. Titova, E.S., Sergutkina, G.A. Methodology for assessing the effectiveness of business processes in the agroindustrial complex [Electronic resource] / Access mode: https://elibrary.ru/item.asp?id=25429546. –Date of access: 03/10/2019.
- 40. Volynsky, V.Yu., Kozhin, M.A., Zaitsev, V.A. Assessment of the degree of priority of business process optimization [Electronic source] / Scientific electronic library eLibrary.ru. Access mode: http://elibrary.ru/item.asp?id=17706778. - Date of access: 03/19/2019.
- 41. Antipov, D. V. Development of a model for evaluating indicators of sustainable development of an organization / D. V. Antipov // Vector of Science Togliatt. state un-that. 2010.– No. 4. - S. 186–189.
- 42. Gorbunova, O.N. A methodology for analyzing business processes in a balanced scorecard system of an enterprise [Electronic resource] / Scientific electronic library eLibrary.ru. Access mode: http://elibrary.ru/item.asp?id=25345932. Access date: 03/22/2019.
- 43. Radivonik, A. N. Methodology and evaluation of the effectiveness of the implementation of benchmarking as a strategic tool of the financial policy of corporations in the Republic of Belarus [Electronic resource]. Access mode: http://bseu.by:8080/bitstream/edoc/73832/1/Radivonik_A.N._s._124_126.pdf. Access date: 03/22/2019.
- 44. Efremov V.S. Organizations, business systems and strategic planning // Management in Russia and abroad. 2013. No. 2. P.34 38.
- 45. Decree of the Council of Ministers of the Republic of Belarus dated March 15, 2012 No. 229 "On improving relations in the field of procurement of goods (works, services) at own expense" [Electronic resource] Access mode: http://www.pravo.by/ document /? guid = 3871 & p0 = P31300590. Date of access: 04.04.2019.
- 46. Decree of the President of the Republic of Belarus "On Certain Issues of State Procurement of Goods (Work, Services)" dated December 31, 2013 No. 590 as amended. and add. [Electronic resource] Access mode: http://www.pravo.by/document/?guid=3871&p0=P31300590. Date of access: 04/06/2019.
- 47. Vernikovskaya, O. V. Distinctive features of the organization of public procurement using exchange trading in the Republic of Belarus / O. V. Vernikovskaya // Transactions of BSTU, series 5 2017. No. 2. P. 72–79.
- 48. Dashkevich, V.A. Improving procurement activities in the energy sector of the Republic of Belarus [Electronic resource] Access mode: https://www.sb.by/articles. Date of access: 04/26/2019.