

The Essence and Contents of Methodological Approaches to Business Processes of Industrial Enterprises Complex Management

Nikolay M. Tiukavkin^{1*}

Alexey G. Saskin²

Eugenia V. Saksina³

Vitaliy L. Skitnevskiy⁴

Ivan A. Sedov⁵

Olga V. Reutova⁶

Yulia S. Krasilnikova⁷

¹ Doctor of Economic Science, Professor, Head of Economics' Innovation Department, Samara National Research University named after Academician S.P. Korolev, Samara. Russia. E-mail: tnm-samara@mail.ru.

² Doctor of Economic Science, Professor of Innovation Activity Management Department, Nizhny Novgorod State Technical University named after R.E. Alekseev, Nizhny Novgorod, Russia. E-mail: a.g.saksin@mail.ru.

³ Candidate of Economic Science, Associate Professor of Innovation Activity Management Department, Nizhny Novgorod State Technical University named after R.E. Alekseev, Nizhny Novgorod, Russia. E-mail: elena.saksina@nntu.ru.

⁴ Candidate of Psychological Science, Professor of the Department of Theory and Methods of Physical Education, Nizhny Novgorod State Pedagogical University named after Kozma Minin, Nizhny Novgorod, Russia. E-mail: skitnevskiy_vl@mininuniver.ru.

⁵ Senior Teacher of the Department of Physical Education, Nizhny Novgorod State Pedagogical University named after Kozma Minin, Nizhny Novgorod, Russia. E-mail: ivansedov@yandex.ru.

⁶ Senior Teacher of the Department of Theory and Methods of Physical Education, Nizhny Novgorod State Pedagogical University named after Kozma Minin, Nizhny Novgorod, Russia. E-mail: olya.reutova2013@yandex.ru.

⁷ Senior Teacher of the Department of Physical Education, Nizhny Novgorod State Pedagogical University named after Kozma Minin, Nizhny Novgorod, Russia. E-mail: Krasiljuliapocht@yandex.ru.

ABSTRACT: The relevance of the problem is determined by the fact that industrial enterprise management is the basic process of its activities. In order to improve its competitiveness top-management of industrial processes, enterprises constantly upgrade management techniques to increase profit, reduce production costs, minimize unprofitable parts of production activity. All this demands research of methodological tools of business processes management. The basic management methods are presented in this article. The goal of this article is to consider the essence and contents of methodological approaches to business processes for industrial enterprises management and to present their classification. This classification depends on their functions. The main part of the article is given to research of methodological tools for business processes management, basic methods are presented. This article reveals the benefits of process management as a factor of quality improvement and creating product value for customers, the benefits of excluding unnecessary procedures in industrial enterprise activity. This article can be useful for industrial enterprise's SEO, economy and management specialists.

Keywords: management, methodological approaches, business process management, industrial enterprises, management principles, effectiveness, functions, quality management.

INTRODUCTION

There are not universal production management techniques, but there are some common principles for building management systems and business organization for industrial enterprises. Process approach is the basic method for effective management organization (Pushkarev et al., 2019; Kozhabergenova, et al, 2018). The effectiveness of manufacturing processes for industrial enterprises is based on «business process» economic category. The essence of the process itself (lat. processus – advance) is coherent changing and shifting states carried out during development of these states, facts and changes. In the narrow sense, it is structured complex of specific actions, which leads to achieving specific results.

The ISO 9004:96 states that any work can be done as a specific process. There are two approaches to the concept of process. The process is the enterprise's organized activity or it is the organization of available resources. These approaches of industrial enterprise management are basic and match to optimal management features, moreover they are used as basic approaches, presented in ISO 9000:2000, appeared in late 1960-s during the development of SADT or Structured analysis and design technique (Fiedelman, 2002). This methodology began to apply not earlier than 1975. Later it was reorganized into US federal Standard IDEFO. Further industrial enterprise management processes study implemented after publishing works of M. Hammer and J. Champy (2011) in the middle of 1980-s. In 1988 the process approach is included in the Baldrige model, and in 1991 in the model for development of perfect business European Quality awards. Theoretical basis for researches in sphere of formatting the contents of business processes are works of such scientists as B. Andersen (2003), M. Robson (1997), M. Hammer and J. Champy (2011), J. Champy (2011), K. Blanchard (2004), I.S. Bubnova et al. (2018), K.S. Ezhov et al. (2019), V.G. Eliferov and V.V. Repin (2005) and others.

RESEARCH METHODOLOGY

Glossary

- Management – informational focused process of influence on collectives of people, conditioned by influence of objective economic laws of society and provides purposeful behavior of these collectives when changing interior and exterior conditions through the managing decision-making.
- Methodological approaches – the ways of comprehensive impact on a problem in order to develop an optimal decision.
- Business process management – systematic approach to management, directed on improvement of organization processes. ... Each process must be tuned to ensure that the results of the processes lead to achieving business goals.
- Industrial enterprises complex – the complex of research, test organizations and manufacturing enterprises, performing development, manufacturing, storing, arming military or special tech, ammunition, armament etc. predominantly for government armed forces and paramilitary formations and also for export. (Military industrial?)
- Management principles – fundamental ideas, regularities and behavior rules for CEO by performing management functions.
- Effectiveness – achieved results/resources used ratio.
- Functions – relationships between elements, when changing one element lead to changing in another one.

- Quality management – the activity, directed on planning, goal setting, provisions, control improving quality of production and services, produced by the enterprise.

Review on a problem of the essence and contents of methodological approaches to business processes for industrial enterprises management.

Analysis of foreign and domestic scientific journals allows gathering many definitions of business entity progresses category, which is quite close to the concept of business processes. Building process as separate «black box» model, where are entrance and exit exist, was first made by cybernetic N. Winer in the middle of the 1990-s (Winer, 2003; Ajalloeian, et al, 2015). In presented model entrance means raw materials, energy, materials, information, blueprints, executors, tools and equipment, environmental impact factor and so on, and exit is result: production (services), decisions, information etc. Business processes model makes changing raw materials at the entrance to required results using production technology considering impact factors.

The concept «process organization» was first presented by M.E. Porter and V.E. Millar (1985). He determined that connections and interactions between all links of chain of value creating are the basic principle of any enterprise's activity. W.E. Deming (2011) made a contribution into the process organization theory by introducing the concept «data flow diagram», reflected interactions inside the organization (starting from supplier to consumer) as a process, which can be evaluated and improved, just like all other processes.

Well-known quality scientists made researches of business processes in the field of processes theory (Davenport, 1990). For example, M. Hammer and J. Champy (2011) introduced the concept «reengineering» for analysis of development of enterprise, which is oriented on customers and builds its activity on strategic business processes. Scientific literature, presenting researches of different process and process-oriented approaches to effectiveness of industrial complex enterprise's functioning improvement, contains significant number of business process concepts, which are determined depending on research purpose. Often these works are focused on one attribute of business processes or several ones. Particularly T.H. Davenport (1990) presents manufacturing of product or service as one of the main task for business processes, W.E. Deming (2011) describes business processes as a target for organizing enterprise's activity, E. Zinder (1985) equate terms «business process» and «project», M.E. Porter and V.E. Millar (1985) presents business processes as a value extraction mechanism.

Thus, the problem of such researches is determination of the essence and contents of methodological approaches to business processes for industrial enterprises management. The object of the research is the classification of business processes of industrial complex enterprises. The subjects of the research are business processes of industrial complex enterprises themselves. The goal of the research is to review contents of methodological approaches to business processes for industrial enterprises management and present the classification of business processes by their functions. The hypothesis of the research is assumption that presented business processes classification can help to manage business processes for industrial enterprises.

RESULTS

The problem of the essence and contents of business processes for industrial enterprises management.

Development, modification and addition management methodologies for business processes are directed on acquiring certain level of their effectiveness, which is

characterizes by improving activity parameters in financial and other areas of enterprise's activity. Modern approaches to business processes management are presented in table 1. (Kalyanov, 2003; Kaplan, 2003; Kuvshinov, 2011; Kotler, 2003; Maslennikov & Krylov, 2011; Thompson, 2002).

Table 1. Modern approaches to business processes management.

Approach/method	Content
Total Quality Management (TQM)	Improvement of product quality, organization of processes and personnel qualification level improvement. TQM includes two mechanisms: standardization of the product and standardization of the product manufacturing process. Company management standards: -MRP (Material Requirements Planning) – planning needs in raw materials for performing manufacturing order; -MRP II (Manufacturing Resource Planning) – planning enterprise's resources, production capacities, raw materials, demands for product; -ERP (Enterprise Resource Planning) – complex planning all enterprise's resources, including financial, according to manufacturing program; -Extended ERP (ERP II) – software upgrade for resources planning system for interorganizational level of interactions
SIPOC (supplier, input, process, output, customer)	Forming the chain «supplier — process entrance — processing — result — client». This method is used in «6 Sigmas» approach.
Quality management system (QMS)	QMS ISO 9001 is a set of methods, resources, business processes, structure organization, which allows controlling quality.
DMAIC (define, measure, analyze, improve, control)	This is the method of systematic solving questions of business processes improvement. You need to perform 5 steps «define – measure – analyze – improve – f control». This sequence allows solving questions systematically, so they will not appear later.
Business Process Re-engineering	Method allows to drastically change structure and sequence of business processes for rapid development of enterprise's activity effectiveness and to acquire new or previously unused properties of product.
Theory of constraints (TOC)	The essence of this theory is that at one moment of time in any system there can be only one constrain. This narrow spot determines productivity of all system. Widening it allows to increase the productivity of the system. This means that there is no need to spread efforts on whole system, but to concentrate only on this narrow spot.
Just-in-time (JIT) approach	Methodological approach, which is in the basis of two others – thrifty and extending production. The organization of information and material flows lines up so that all necessary resources came to the right place, when they are needed and in required quantity.
Business Process Re-engineering	This approach is directed on drastically change structure and sequence of business processes for rapid development of

	enterprise's activity effectiveness and to acquire new or previously unused properties of product.
6 Sigma	The rule of «6 Sigma» is a high-tech method for business processes accurate tuning, which is used in order to minimize the occurrence of defects during specific actions (named after mathematical category «standard deviation», marked with ancient greek letter σ). According to scheduled calculations the production quality indicator must not be higher than 3.4 of deviation out of 1 million operations while using such method.
Business processes modeling	The development of interactive models and using processes in programming allows getting certain data. Information, in its turn, helps to find answers on the questions on determining narrow spots in processes, required amount of resources, number of clients to serve etc.
P2M Standard	This project management methodological standard based on Kaizen concept. The main principle is principle of managing and increasing of additional cost for customer. It is making accent on innovations and on satisfaction of expectations of all interested parties.
5S method	This is Lean Production tool, which allows to organize manufacturing space in the most effective way. It consists of 5 steps: 1.Seiri: Sort all works on necessary and unnecessary. 2.Seiton: Make the workflow smooth and easy. 3.Seiso: Sweeping and cleaning the workspace and inspecting it regularly. 4.Seiketsu: Standardize all work processes. 5. Shitsuke: Develop self-discipline among the workers.
Lean Production	Lean production or lean manufacturing) is the management concept, based on intention to nullification all losses. (Created in Toyota Corp.).
Kanban	This manufacturing organization tool based on «Just-in-time» and «Lean production» principles. This approach recommended itself well in small production and projects. Based on absolute transparency of all process and correct organization of one process result's transition for using it in another.
Pull production	In this approach processes determine time and resource limit, allow to use production results further. It allows to level resources using and to optimize production and supply reserves.
SCRUM	The tool for flexible approach, using when haste and flexibility in development and realization of projects or processes is needed. The basis of it is interaction with clients, who will be product's consumers, quality control, performing the most important parts only, short working cycles. The cycles must be organizing in the way the client gets working part of the project, that can be evaluated, at the end of each cycle.
Kaizen	Methodological approach focused on constant improving of main and auxiliary business processes management and enterprise activity. Directed on employee's quality improvement using

	standardization tools and concentrating on reducing losses in business processes.
--	---

DISCUSSIONS

The problem of the essence and contents of methodological approaches to business processes for industrial enterprises management.

According to ISO 9000-2001 processes determined as a «complex of interconnected and interacted activities, transforming incoming resources in end results » (GOST RISO 9004-2010, 2011). Due to main approaches to terminology of business processes definition and comparing functional and process approaches in management, we can formulate processes approaches main advantages in part of business processes forming and extracting (Abdikeyev et al., 2005):

- business processes are one of the effectiveness improvement main tools for industrial complex enterprise;
- the technique of describing and forming of business processes increases business transparency and allows to make an analysis of possible aftermath of activity risks on certain stage of works, find and correct error in time. One more business processes benefit is enterprise operational costs management, which currently becomes a key for function in terms of market economy.

Thus, authors determine business process as a system of interconnected activities, adapted to industrial complex enterprises manufacturing potential, in which, considering resources endowment, required management quality and tech processes organization, the manufacturing of final product, valuable for customers, is performed. Also, all business processes have limitation of their application and affiliation to specific kind of activity and final customer (consumer or another business process). Management is purposeful impact of subject on object, carried out for required results. There are industrial complex enterprises management approaches, which use business processes and business processes management. Business processes management means precise compliance to process structure and regulations. In case of parameter deviation, we need to form and perform corrective actions timely to return processes to regulation limits (Blanchard, 2004; Marques, et al, 2018). Industrial complex enterprises business processes management is based on using of following principles (Repin, 2013):

- standardization – using of single standards and requirements both to manufactured and acquired products;
- rhythm – ensuring the manufacturing of certain amount of product in certain time period and their exact repetition on next production stages;
- directness – resources and materials supply must be smooth for all manufacturing operations, sites and stages;
- effectiveness – comparability of results and their cost;
- automation – using scientific progress achievements, including self-regulating and self-tuning hardware and software, this will liberate personnel from direct participation in manufacturing processes and decrease laboriousness;
- alternative – the possibility of using different methods to achieve goals;
- taking influence and uncertainty factors into the account – allows to reduce risk level while performing business processes.

At the present time the main methods of business processes management are functional approach and process approach. Function is the task, that need to be solved by industrial complex enterprise for performing their activity and achieving goals. Business processes are realization of the functions in certain sequence and time period. They are

the way to solve specific business task. Business processes consist of set of functions with the description of their realization, sequence of realization, variants of realization and their interaction. The main functions of business processes are presented in table 2 (Gosstandard, 1997).

Table 2. Main business processes functions.

Business processes	Contents of business processes
Business processes of management	These processes cover all management functions of all business processes and enterprise in whole. These include processes of forming, development and realization of management impacts, strategic, tactic, operative and current planning.
Main business processes	These processes are generating industrial complex enterprises incomes and profit. These include production-manufacturing processes. They are results of enterprises manufacturing activity and consumer properties of the product.
Auxiliary processes	They are forming enterprise infrastructure and are intended to provide manufacturing processes by all kinds of services, resources and equipment.
Auxiliary business processes	These are intended to performing auxiliary manufacturing processes and oriented on their support.
Associated business processes	These processes are oriented on auxiliary manufacturing activity, which provides income.
Business processes of development	These are processes of product range and supporting technologies improvement, equipment upgrades and R&D.

Business processes management is the foundation of effectiveness of industrial complex enterprises management and their sustainability in dynamically shifting market conditions. Modern domestic industrial complex enterprises using following methods of business processes management (Chapkina, 2007): business processes re-engineering; just-in-time method (JIT); business processes outsourcing, particularly «BKG Profit Technology» outsourcing matrix. Business processes re-engineering is the method of industrial complex enterprises business processes redesign to minimize time and financial costs. It appeared at the junction of spheres of management and informatization. There are two business processes re-engineering approaches:

- revolutionary (Hammer, 1997) – the breaking of all ways of business performing, management, structural organization etc. in order to introduce new ones;
- evolutionary (Davenport, 1990), the combination of re-engineering and processes quality improvement methods.

«Just-in-time» (JIT) method was developed in 1950-s and used in Japanese Toyota Motor Corporation. It is a set of methods, combining techniques, philosophy and ways of scientific labor organization. This method is based on «nothing-must-be-produced- until-there-is-no-need» concept. JIT is the reserve for cost decreasing. Outsourcing is also a company's business processes management method. It presumes transiting part of business functions or part of business processes to third party (the outsourcer). D.V. Khlebnikov (2002) presents «BKG Profit Technology» outsourcing matrix «BKG Profit

Technology» universal processes model. The method, presented by D.V. Khlebnikov (2002) any kind of job is viewed from two points: the conformity to enterprise activity goals and the conformity to market supply. As a result, the following management decisions are determined:

- Should we do this job or remove it from enterprise activity?
- Should we establish a new department with bearers of knowledge and skills for realization of this kind of job?
- Should we develop related competence, business processes, and activities?
- Should we secure it for hostile activity of competitors?
- Should we diversify our business?
- Should we develop our manufacturing?

According to D.V. Khlebnikov (2002) this tool is effective for business processes restructuring, if they have strategic goals but accumulate unnecessary jobs, competences and so on. If the functioning of industrial complex enterprises business system differs from owners' desires, then more constructive tool of reorganizing is required. In this case, «BKG Profit Technology» universal processes model can be used. It is necessary to have a rule, a pattern to create a model all business system activity in order to analyze strategical goals for industrial complex enterprises separate elements. D.V. Khlebnikov (2002) suggests that in this case we should use developed in USA IDEF 0 standard. Department activity is described with the help of 5 types of definitions: resources, results, management, competences, mechanisms and formal activity description in business processes lines (Repin, 2013). «BKG Profit Technology» universal model describes enterprise activity main types. Nowadays analyzing processes management methodological issues, made by N.M. Abdikeev et al., (2005), T. P. Danyko (2005), S.V. Ildmenov (2005) two key management approaches are offered. One takes interconnected processes as a basis, another – end-to end separate processes. Interconnected processes in processes management are based on four points (Andersen, 2003):

- determining of enterprise's business processes;
- forming and determining process and system approach for the whole organization;
- determining of actions that need to be done in order to implement process approach on the enterprise;
- forming a network or system of enterprise's interconnected processes.

According to the first method of management, business processes are steady and focused sets of interconnected types of economic activity, which transform incoming resources into results valuable for customers using specific techniques (Abdikeev et al., 2005). Second methodological approach of management is based on determining «end-to end» processes on industrial complex enterprises (Kulyabov & Korolkova, 2008). «End-to end» business processes theory founders determine it as a focused sequence of operations, works, procedures, which lead to result. Process management methods researches show advantages of the processes-oriented approaches (Kalyanov, 2003).

- Reducing CEO load, because of dispersing of responsibility between process managers;
- High level of motivation, the interest of executors in product quality improvement, quality of their job;
- Significant dynamism of manufacturing system and all its processes because of vertical integration of resources flow and interest in resources circle acceleration, including information;
- Bureaucracy influence is reduced, that allows saving financial and time resources;

- Adaptability and flexibility of management system due to manufacturing system's self-regulation and orienting on end customer;
- Control and management system transparency, simplification of organizing and coordinating procedures;
- The possibility to use complex informatization of manufacturing processes (Kaplan, 2004).

Business processes management must be centered on creating product's value for the end customer and exclude any unnecessary or excess procedures (Drucker, 2011). The result of correctly organized business process is forming a product's value for the end customer and enterprise's efficiency. Industrial complex enterprises are using manufacturing business processes control system (BPCS). They are subsystems of an enterprise main control system. Enterprise management sets two goals creating separate department for BPCS (Dedikov, 2002):

- providing business processes continuity. For this BPCS must solve problems of current functioning support and to adapt them to change inner and outer enterprise activity environment;
- providing enterprise business processes competitiveness. For this BPCS must solve problems of business processes perspective improvement and problems of means and tools for such improvement. In addition, it must consider questions of means for adaptation support development.

BPCS management contains two directions (Robson, 1997):

- managing connections between separate business processes. It is targeted on forming interconnections between all business processes through business processes standard transformation.
- managing each business process separately. Single business process management is similar to business processes system management, because each business process is a complex of economic activity types and their interconnections (EAT system). This management includes single business process standard management, business processes complex management business processes automation management.

CONCLUSION

As a conclusion, industrial complex enterprises business processes management's methodical approaches are presented themselves as a significant number of methodological mechanisms, approaches models and tools for correct organization and forming the activity of whole business processes system. The effectiveness of business processes realization and enterprise's functioning depend on this set of industrial complex enterprises management methodological support. Business processes management must be centered on creating product's value for the end customer and exclude any unnecessary or excess procedures (Drucker, 2011). The result of correctly organized business process is forming a product's value for the end customer and enterprise's efficiency.

Industrial complex enterprises are using manufacturing business processes control system (BPCS). They are subsystems of an enterprise main control system. Enterprise management sets two goals creating separate department for BPCS (Dedikov, 2002):

- providing business processes continuity. For this BPCS must solve problems of current functioning support and to adapt them to change inner and outer enterprise activity environment;

- providing enterprise business processes competitiveness. For this BPCS must solve problems of business processes perspective improvement and problems of means and tools for such improvement. In addition, it must consider questions of means for adaptation support development.
BPCS management contains two directions (Robson, 1997):
- managing connections between separate business processes. It is targeted on forming interconnections between all business processes through business processes standard transformation.
- managing each business process separately. Single business process management is similar to business processes system management, because each business process is a complex of economic activity types and their interconnections (EAT system). This management includes single business process standard management, business processes complex management business processes automation management.

RECOMMENDATIONS

This article can be useful for industrial enterprises CEO, specialists in economy and management. It is important to understand the main idea of processes management and to realize the benefits that can be brought by well-tuned and formalized business processes to the company and its owner in order to start using processes management effectively. It is much easier to do if to learn the essence and contents of methodological approaches to business processes of industrial enterprises complex management, presented in this article.

REFERENCES

1. Abdikeev, N.M., Danko T.P., Ildmenov, S.V. & Kiselev, D.A. (2005). *Re-engineering of business-processes*. Moscow: EKSMO.
2. Andersen, B. (2003). *Business Processes. Improvement Toolbox*. Moscow: RIA Standards and quality.
3. Blanchard, K. (2004). *The three keys to Empowerment*. Minsk: OOO Popurri.
4. Bubnova, I.S., Khvatova, M.A., Chernik, V.E., Popova, O.V., Prokopyev, A.I., Naumov, P.Yu. & Babarykin, O.V. (2018). Research of Professional Activity Features of Ecologist at Carrying Out Public Ecological Examination. *Ekoloji*, 106, 999-1006.
5. Chapkina, E.G. (2017). *Theoretical basis of restructuring. A Study book*. Moscow: Pub.Center EAOL.
6. Davenport, T.H. (1990). The New Industrial Engineering, information Technology and Business Process Redesign. *Sloan Management Review*, 1, 2-32.
7. Dediakov, S.V. (2002). Business processes and changing the organizations. *Methods of quality management*, 2, 11-14.
8. Deming, W.E. (2011). *Out of the Crisis. The New Paradigm of Managing People, Systems and Processes*. Moscow: Alpina Publisher.
9. Drucker, P.F. (2011). *Management*. Moscow: OOO I.D. Williams.
10. Eliferov, V.G. & Repin, V.V. (2005). *Business processes: regulation and management*. Moscow: Infra-M.
11. Ezhov, K.S., Cherdymova, E.I., Prokopyev, A.I., Fabrikov, M.S., Dorokhov N.I., Serebrennikova, Y.V., Belousov, A.L. & Efimova, O.S. (2019). Conflict features depending on stay duration at workplace. *Dilemas contemporâneos: Educação, Política y Valores, Special Edition VI*, article number 38.
12. Fiedelman, G.N. (2002). Business processes and organization changes. *Quality management methods*, 2, 11-14.

13. Gosstandard. (1997). *GOST RISO 9001-96. Quality systems. Model for quality assurance in design, development, production, installation and servicing*. Moscow: IPK Publishing House of Standards.
14. GOST RISO 9004-2010. (2011). *Managing for the sustained success of an organization. A quality management approach*. Moscow: Standardinform.
15. Hammer, M. & Champy, J. (2011). *Manifesto of Revolution in Business*. Moscow: Mann, Ivanov and Ferber.
16. Hammer, M. (1997). *Re-engineering the corporation: A Manifesto for Business revolution. Translated from English*. St. Petersburg: Publishing House of St.-Petersburg University.
17. Kalyanov, G.N. (2003). *Simulation, analysis, re-organization and automatization of business processes*. Moscow: Finance and statistics, 240 p.
18. Kaplan, R.S. (2003). *The Balanced Scorecard: Translating Strategy into Action*. Moscow: ZAO Olymp Business.
19. Kaplan, R.S. (2004). *Strategy-focused organization*. Moscow: ZAO Olymp-Business.
20. Khlebnikov, D. (2002). The new approach to enterprise restructuring. *Company management*, 12, 24-31.
21. Kotler, Ph. (2003). *Marketing management*. St. Petersburg: Piter.
22. Kulyabov D.S. & Korolkova, A.V. (2008). *Introduction to formal methods of describing business processes*. Moscow: RUDN.
23. Kuvshinov, M. (2011). *Creation of investment climate in industrial enterprises*. Saarcken: LAP LAM- BERT Academic Publishing.
24. Maslennikov, V.V. & Krylov, V.G. (2011). *Process-cost management of a business*. Moscow: INFRA-M.
25. Porter, M.E. & Millar, V.E. (1985). How Information Gives You a Competitive Advantage. *Harvard Business Review*, 85 (July–August), 149–160.
26. Pushkarev, V.V., Cherdymova, E.I., Prokopyev, A.I., Kochurov, M.G., Shamanin, N.V., Ezhov, S.G., Kamenskaya, S.V. & Kargina N.V. (2019). Motivation and needs in the area of the spouses with different experiences of cohabitation. *Dilemas contemporáneos: Educación, Política y Valores, Special Edition VI*, article number 41.
27. Repin, V.V. (2013). *Business processes. Simulation, implementation, management*. Moscow: Mann, Ivanov and Ferber.
28. Robson, M. (1997). *A practical guide to business process re-engineering*. Moscow: Audit, UNITY.
29. Thompson, J. (2002). *Strategic Management: concepts and cases for analysis*. Moscow: Publishing House Williams.
30. Kozhabergenova, G. E., Taubaeva, S., Bulatbayeva, A. A., Kabakova, M. P., & Asanov, N. A. (2018). The Stewardship of School Counselor Education in Higher Educational Establishments. *Opción*, 34(85-2), 386-414.
31. Ajallooeian, E., Gorji, Y., & Niknejadi, F. (2015). Evaluate the Effectiveness of Social Skills Training through Group Therapy Play on Reducing Rational Aggression Boy Elementary School Student in Esfahan City. *UCT Journal of Social Sciences and Humanities Research*, 3(1), 1-4.
32. Marques, B. P., Villate, J. E., & Carvalho, C. V. (2018). Student Activity Analytics in an e-Learning Platform: Anticipating Potential Failing Students. *Journal of Information Systems Engineering & Management*, 3(2), 12.